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A REPORT ON HIGH RISK

CHILD ABUSE AND NEGLECT GROUPS:

APPENDIX A

STATE SURVEY REPORT

Submitted to:

National Center on Child Abuse and Neglect
Administration for Children, Youth and Families
Administration for Children and Families
U.S. Department of Health and Human Services
Washington, DC 20201

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TABLE OF CONTENTS

Chapter		Page
	EXECUTIVE SUMMARY	ix
1	INTRODUCTION	1-1
	1.1 Study and State Survey Objectives	1-1
	1.2 State Survey Design and Administration	1-2
	1.3 Limitations of the State Survey	1-4
2	CPS MISSION AND DEFINITIONS OF CHILDMALTREATMENT	2-1
	2.1 CPS Mission	2-1
	2.1.1 State Specialists' Views of CPS's Mission	2-2
	2.1.2 Changes in Mission	2-2
	2.1.3 CPS Mission Statements	2-4
	2.1.4 Summary of Findings With Respect to CPS Mission	2-5
	2.2 Definitions of Responsible Parties	2-5
	2.3 Definitions of Maltreatment	2-6
	2.3.1 Types of Abuse	2-8
	2.3.2 Changes in Definitions of Abuse Since 1985	2-20
	2.3.3 Summary of Findings on Definitions of Abuse	2-22
	2.3.4 Types of Neglect	2-22
	2.3.5 Changes in Definitions of Neglect Since 1985	2-26
	2.3.6 Summary of Findings on Definitions of Neglect	2-28
	2.3.7 Additional Types of Cases	2-29
	2.3.8 Summary of Findings on Other Maltreatment Types	2-34
3	AVAILABILITY OF SERVICES, BARRIERS TO SERVICE DELIVERY, AND EFFORTS TO OVERCOME THESE BARRIERS	3-1
	3.1 Factors Affecting Service Delivery	3-2
	3.1.1 Special Impediments to Service Delivery in the Past 2 Years	3-2
	3.1.2 Organizational Factors Affecting Service Delivery by CPS Agencies	3-2
	3.1.3 Procedural Factors	3-7
	3.1.4 Budgetary Factors	3-8
	3.1.5 Staffing Factors	**3-12**

TABLE OF CONTENTS **(Continued)**

Chapter | Page

3.2 Availability of Services 3-15

3.2.1 Services for Children 3-18
3.2.2 Services for Parents/Families 3-21
3.2.3 Services for Perpetrators 3-23
3.2.4 Overall Conclusions: Availability of Services 3-26
3.2.5 Directly Provided Versus Referred Services 3-30

3.3 Other Pressures on CPS Service Delivery and Responses to Them 3-30

3.3.1 New Types of Cases Witnessed by CPS Agencies 3-30
3.3.2 Specific Unserved and Underserved Groups 3-33
3.3.3 Programs/Projects Reported for Special Categories of Children 3-37
3.3.4 Specially Funded Programs and Projects 3-40
3.3.5 Child Abuse/Neglect Programs Funded by Other Sources 3-42
3.3.6 Summary: Special Projects and Programs 3-46

4 DEFINITIONS OF HIGH RISK AND USES OF RISK ASSESSMENT 4-1

4.1 Definitions of High Risk 4-1

4.1.1 How Risk is Defined 4-3
4.1.2 Variations in Levels of Risk 4-5
4.1.3 Disabling Conditions[1] and Definitions of High Risk 4-6
4.1.4 Summary of Current Definitions of High Risk 4-6

4.2 Current Uses of Risk Assessment by State CPS Agencies 4-7

4.2.1 How Extensively Risk Assessment is Used 4-7
4.2.2 Which Systems Are in Place 4-8
4.2.3 Types of Risk Assessment Instruments Used 4-10
4.2.4 Types of Abuse and Neglect Assessed by the Instruments 4-11
4.2.5 Cultural Bias in Risk Assessment Instruments 4-11
4.2.6 Categories of Risk Factors Included in the Instruments 4-12
4.2.7 Specific Risk Factors Addressed 4-13
4.2.8 How and When Risk Assessment is Used 4-15
4.2.9 Risk Assessment Policy 4-16

[1]The survey actually asked CPS specialists about "handicapping conditions.

TABLE OF CONTENTS (Continued)

Chapter			Page
		4.2.10 Points in the Casework Process Where Risk Assessment is Used	4-16
		4.2.11 Casework Decisions for Which Risk Assessment is Used	4-20
		4.2.12 Purposes of Risk Assessment	4-21
		4.2.13 Bases of the Application of Risk Assessment	4-24
	4.3	What Happens When Risk Assessment Identifies a Case as High Risk	4-25
		4.3.1 Differences in Service Delivery to High Risk and Other Cases	4-26
		4.3.2 The Effect of a High Risk Assessment on the Timing of Services	4-26
		4.3.3 The Effect of a High Risk Assessment on the Nature of Services	4-27
		4.3.4 The Effect of a High Risk Assessment on the Intensity of Services	4-29
		4.3.5 The Effect of a High Risk Assessment on CPS Procedures	4-29
		4.3.6 Summary: Effects of a High Risk Assessment	4-29
5	STATISTICS ON ALL CHILDREN, CHILDREN WITH DISABILITIES[2], AND BUDGETARY DATA IN CPS		5-1
	5.1	CPS Data on Numbers of Children Served	5-1
	5.2	CPS Data on Children with Disabilities	5-2
		5.2.1 CPS Definitions of Children with Disabilities	5-3
		5.2.2 CPS Data on Children with Disabilities	5-3
		5.2.3 Summary of Findings on Children with Disabilities and CPS	5-4
	5.3	Limitations on Availability of CPS Budgetary Data	5-5
6	CONCLUSIONS		6-1
	6.1	Groups Identified as Relatively Unserved/ Underserved	6-2
	6.2	Uses of Risk and Risk Assessment in CPS	6-8
	6.3	Disabling Conditions Resulting From Abuse or Neglect	6-13
	6.4	Implications for Future Federal Policy Initiatives	6-15

[2]The survey actually asked CPS specialists about "handicapped children."

TABLE OF CONTENTS (Continued)

Chapter		Page
	APPENDIX A	A-1

List of Tables

Table		
2-1	Primary mission of CPS agencies vis-á-vis abuse, as reported by States (n = 49)	2-3
2-2	Primary mission of CPS agencies vis-á-vis neglect, as reported by States (n = 50)	2-3
2-3	Bases for defining maltreatment to be within CPS jurisdiction, as reported by States (n=51)	2-7
2-4	Limitations on maltreatment defined to be in-scope for CPS (n=51)	2-9
2-5	Changes in definitions of child abuse since 1985, as reported by States (total n=25)	2-21
2-6	Changes in definitions of child neglect since 1985, as reported by States (total n=23)	2-27
2-7	Additional categories of maltreatment: whether included in CPS's scope, as reported by States (n=51)	2-29
3-1	Agencies performing specified CPS and child welfare functions, as reported by States (n = 51)	3-6
3-2	Lengths of time States retain information on unsubstantiated cases (n=50)	3-9
3-3	Degree to which selected staffing factors limit CPS's ability to deliver services, as reported by States	3-13
3-4	Percent of State specialists reporting availability of selected services for cases involving both abuse and neglect, just abuse, or neither, for clients entering the child welfare system through CPS	3-16
3-5	Percent of CPS specialists reporting availability of selected services in all or part of State, percent reporting other barriers, and number reporting no barriers, for clients entering the child welfare system through CPS	3-17

TABLE OF CONTENTS (Continued)

List of Tables (Continued)

Table		Page
3-6	Services most often named as provided directly by CPS, compared to those most often named as referred	3-31
3-7	New types of cases seen by CPS agencies in the past 5 years, as reported by States (n = 44)	3-32
3-8	Number of States reporting need for special efforts and existence of special efforts for selected categories of children	3-34
3-9	Overview of specially funded child abuse and neglect projects described by States (n = 25)	3-43
4-1	Where risk is defined, as reported by States (n = 46)	4-3
4-2	State rankings of definitions of risk (n = 48)	4-4
4-3	Risk assessment systems used by the States (n=44)	4-8
4-4	Features of risk assessment instruments (n = 42)	4-11
4-5	Categories and numbers of risk factors in risk assessment instruments, as reported by States (n = 46)	4-13
4-6	Risk factors included in risk assessment instruments, as reported by States (n = 44)	4-14
4-7	Decisions for which risk assessment is used, as reported by States (n = 47)	4-20
4-8	Purposes of risk assessment, as reported by States	4-22
4-9	How an assessment of high risk affects overall service delivery, as reported by States (n = 35)	4-26
4-10	How timing of services is affected by an assessment of high risk (n = 25)	4-27
4-11	How the nature of services is affected by high risk assessment, as reported by States (n = 21)	4-28

List of Figures

Figure		
4-1	Number of States reporting use of risk assessment at a given point of the CPS casework process (n = 43)	4-17

EXECUTIVE SUMMARY

The Study of High Risk Child Abuse and Neglect Groups was designed to address two primary objectives: (1) to identify groups which have-been underserved or unserved by child abuse and neglect programs and to report the incidence of child abuse and neglect among such groups; and (2) to provide estimates of the incidence of children who have developed disabling conditions* as a result of child abuse or neglect, as reported by States. This 'report presents the findings from the State Survey, which was one of the two principal research components used in this study.

The State Survey was designed to ascertain which '-groups .are systematically unserved/underserved under current CPS practices, to determine why these groups may not be served, and when and where they are relegated to lower priority status. Another purpose of the State Survey was to provide preliminary estimates of current definitions of "high risk" and States' uses of risk assessment in relation to suspected cases reported to CPS. A final objective of the State Survey was to provide preliminary estimates of the incidence of disabling conditions* resulting from child abuse and neglect[1]. The State Survey involved telephone interviews with the State CPS specialists in all 50 States and the District of Columbia. The interviews were conducted in the Summer and Fall of 1990.

Children Who are Unserved or Underserved

Two approaches were taken in addressing the question of whichchildren are unserved or underserved by CPS. First, children could potentially be unserved or underserved by CPS if they are members of categories that are excluded on the basis of how CPS defiies its mission and the types of cases considered to be in-scope for the agency. Such children would be less likely to come under CPS purview. Second, children and families in need of specific services could be unserved or underserved relative to others if those services are not available. The existing availability of different types of services indicated the current gaps and barriers in 'needed services.

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*The survey actually asked CPS specialists about "handicapping conditions.

[1]A parallel study approached. thii same question through interviews with CPS caseworkers: A Report on the Maltreatment of Children With Disabilities.

Categories of Children Excluded by Definition. ***Educationally neglected children*** were most often categorically excluded from CPS purview. Thirty-six States excluded educational neglect either entirely or in many cases. Fifteen did not define it as within CPS purview at **all,** and 21 States placed limitations on their involvement, such as by excluding simple truancy altogether or by including educational neglect only if it occurs in conjunction with other maltreatment? Survey results suggested that this is an arena in which **responsibility** has been shifting in recent years, so that in some communities educationally neglected children may be unserved or under-served because they fall into the niche between service systems.

Children deemed to be at risk of harm were not generally accorded the same priority status as those who already evidenced harm from abuse or neglect. Only 16 States included the concept of risk in defining the primary mission of their agencies. Elsewhere, it appeared that children who are at risk were relatively unlikely to receive CPS attention and services until their circumstances worsened to the point that they were maltreated. Even among those deemed to be at risk, imminent risk was emphasized over cumulative risk. This is indicative of a general pattern wherein priority was given to current crises at the expense of conditions with more long-term detrimental effects. One consequence of this strategy is that CPS tends to not serve the less severe cases, which may be more manageable and have better prospects for improvement.

Children who are emotionally abused and neglected may also be unserved or underserved in that they are not always specifically included under CPS purview. As a result, it may only be accorded attention when it occurs in conjunction with other maltreatment. Moreover, respondents reported that emotional maltreatment is generally more difficult to substantiate than other types of abuse and neglect.

Neglected children in general may be underserved relative to abused children, at least insofar as definitions of neglect were found to be considerably more variable than definitions of abuse, and subject to more qualifications, whether financial, religious, or cultural.

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[2] **States are not required to include educational neglect as a condition of eligiity for the State child abuse and neglect grant authorized by the Child Abuse Prevention and Treatment Act.**

Responses concerning CPS purview vis-a-vis ***children who are*** homeless 'or ***children*** whose ***caretakers*** are ***unavailable due to imprisonment, psychiatric hospitalization or substance abuse,*** and answers concerning referrals that were not directly related to abuse or neglect revealed the considerable gap between the mission/scope of CPS and the mission/scope of the larger child welfare agency. In many States, alternative mechanisms for intake into child welfare have been substantially reduced or eliminated, so the CPS agency must serve as the primary gatekeeper to all child welfare services. Thus, 'although they do not technically fall within CPS purview, children- in these categories may be unserved or underserved because alternative doorways to the services that they need are closed to them.

Constraints on Service Availability. Most States reported that their CPS agencies are operating with seriously constrained resources. Fewer than half (n= 18) said that their resources were generally sufficient to investigate all cases needing investigation, while 30 indicated that they follow special procedures to prioritize reports for investigation. Even States which said resources were generally adequate in this area voiced concerns about the scope, thoroughness, and timeliness of investigations. Staffing issues were one of the most important limits, with majorities of States claiming that staff turnover (n=46 States), unfilled staff vacancies (n =45 States), and inadequacies in worker preparation and training (n-39 States) imposed a moderate to severe limitation on CPS's ability to deliver services.

Not only do CPS agencies function with inadequate resources, they also interface with educational and larger child welfare systems that may themselves have inadequate resources for bridging service gaps. CPS may also have difficulty in coordinating services with the police and with the juvenile court system. Specialists' comments indicated that the division of labor and responsibility between CPS (or the child welfare agency) and law enforcement agencies is quite variable and not always clearcut.

To answer the question of who is unserved/underserved from the vantage of what services are needed, survey findings indicated that children and families ***with any and all types of service needs*** are unserved/underserved in many communities throughout the nation because the needed services are geographically inaccessible or there are other barriers or limitations on their availability. The most readily available services were case management and crisis intervention, which only 25 and 21 States, respectively, reported to be available statetide-and without barriers

or limitations. Far fewer States reported unproblematic availability for other types of services; in fact, 26 of 23 categories of services ***were said to be available statewide and unhampered by other barriers or limitations by only ten or even fewer States.***

Moreover, those services that were named as "barrier-free" more often tended to be more crisis-oriented (crisis intervention, medical services), whereas se&es that address chronic or more long-term problems and aim to have a more longstanding impact on the family unit (e.g., home-based/family preservation services, parent education) were much less widely available. Under the strain of scarce resources and increasing pressures on the system, CPS agencies appear to have taken a reactive rather than a proactive stance; they respond to immediate crises while failing to address underlying structural problems.

Responses concerning categories of children most often perceived as having a need for special efforts with no indication that any such efforts had been made on their behalf reinforce these conclusions. Under this approach, the most under-served were ***child victims*** of ***psychological maltreatment, children with intellectually limited caretakers, and those with psychiatrically impaired caretakers. These*** were also the children who were most likely to "fall between the cracks" under many States' definitions of emotional maltreatment and/or to fall outside (or only ambiguously within) the CPS agency's purview. Regrettably, they are also the children whose long-term developmental prospects bode least well in the absence of early intervention and treatment. Also relatively high on the list of underserved categories of children were ***children from single-parent families, rural children, children who live in dangerous neighborhoods, and children from low-income households***---in short, children whose problems, while chronic, might well be amenable to successful intervention if more services and more suitable services were available to them before their situation deteriorates into crisis.

Apart from tending to not serve cases with chronic but lower level problems, CPS agencies have failed to keep pace with the needs of several of the "crisis categories" of children and families who have been overburdening the service delivery system in the past few years. ***Substance*** abuse ***evaluation,*** substance abuse ***treatment for parents, and sex offender treatment for perpetrators*** were reported to have nonproblematic availability by fewer than **five** States. This severe lack of readily-available services for substance abusing parents was strikingly at odds with findings that drug-exposed infants and substance-abusing parents topped the list of noteworthy new types of problems coming into CPS in the past five years.

Although CPS agencies have made some efforts to remedy these gaps in service delivery, efforts for special groups of children and specially-funded projects were relatively few in number and were mostly time-limited and small in scope.

Definitions of High Risk

Of the 49 States that defined risk in some way, many more did so in worker training (42), in written policy (40), or in risk assessment (36) than in the CPS primary mission (16) or in law (12). At the same time, however, workers were reported to receive only a limited amount of training in risk assessment. Thirty of the forty States that provided such training offer fewer than 16 hours on average.

Most States simultaneously employed more than one definition of risk to children,. The most commonly given definition was ***risk of immediate hum,*** reported by 37 States as being one component of their definition and deemed first priority by 62 percent of these States. The next most commonly cited definition was ***risk of serious harm,*** reported by 3 1 States as a component of their risk definition, but considered as first priority by only 42 percent. Only 23 States included a component of future risk to the child in their definition, either as ***risk of re-report*** (16 States) or as ***risk of future maltreatment*** (7 States). These findings were noteworthy. in that the central use of risk definitions for these agencies was in risk assessment, which is meant to be a process of assessing future risk to the child. Thirty-seven States reported that disabling conditions* are included in their defiitions of risk, generally as risk factors or components of risk factors in risk assessment instruments.

Uses **of Risk Assessment**

All but 3 States reported that they use risk assessment or were planning to do so. However, survey findings indicated that the ways in which these systems have been applied reveal

*The survey actually asked CPS specialists about *handicapping conditions."

a lack of clarity about the basic goals and purposes of risk assessment, inconsistencies in when and how it is applied, and very limited worker training, research and computerization. .

Forty-two States reported use of some instrument in assessing risk, which most commonly referred to a matrix of risk factors (15 States), a scale for entering numeric values (13 States), or a scale for entering ordinal values (13 States). Most of the risk assessment systems that the States reported using are variants of a few basic models; 21 States reported that they had developed their own risk assessment systems or adapted other States' systems to their needs, and 15 reported that they use the Illinois Risk Assessment Model (CANTS) or a modified version of that system. The majority of State specialists mentioned no limitations on the types of abuse and neglect which their instruments were designed to assess and did not regard cultural bias in the instrument as a serious problem. However, States' risk assessment instruments were found to be most likely to include parental problem factors and least likely to include basic demographic and socioeconomic factors (e.g., neighborhood or community characteristics, family size or composition, parental demographic characteristics) that could systematically document information concerning the larger social and cultural context of the client family.

Thirty-four States reported that they use, or will use, their risk assessment systems statewide, and 11 indicated that they apply risk assessment only in certain counties or districts, or use different systems in different parts of the State. States varied widely in the number of points in the casework process where risk assessment was reportedly used. Most commonly, the instrument was applied at investigation (35 States) and at case closure (30 States). The greatest number of States reported using the results of risk assessment to make service plan decisions (37), child removal and placement decisions (36), and case closure decisions (35). Interestingly, the majority of State CPS specialists regarded risk assessment primarily as a means of guiding casework practice or of facilitating the collection of information about children and their families. Far fewer State CPS specialists viewed risk assessment as a means of prediction or as a clinical or screening tool, despite the fact that the latter may be closer to what risk assessment was originally intended to be.

Of the 35 States that answered the question of how a high risk finding affects service delivery, 14 reported that a finding of high risk affected both the timing and nature of services, 8 indicated that only the timing of services was affected, and 7 noted that only the nature of services was affected. Twenty of these 35 States indicated that a high risk assessment impels a faster

response time at intake; 21 noted that the primary effect of a high risk assessment at investigation is that the child is more likely to be removed from the home or to receive_ in-home family preservation services.

The risk assessment systems now in place were adopted between 1984 and 1989, and already there has been considerable flux in which systems are being used where and when. Some States appeared to have- replaced systems before they had a chance to-see if they worked. Other States borrowed different pieces of their systems from different models, a strategy likely to. generate an overall risk assessment system that does not fit together as a coherent, integrated whole. Only seven States reported having conducted research on any aspect of risk assessment, while a few others had either examined the results of research carried out in other States or were deveioping plans to 'conduct such research. Similarly, only 10 States indicated that they had computerized or automated any part of their risk assessment system, with 19 reporting a plan to computerize_ in the future. These findings make it clear that few, if any, systematic efforts have been made to collect the kind of data needed to inform policy-makers and service providers about the usefulness and impact of specific risk assessment approaches and to refine these systems over tune.

Incidence of Disabling Conditions' Due to Abuse or Neglect

Efforts were made to uncover information relevant to this question in the State Survey interviews. However, due to substantial variations in recordkeeping practices followed by CPS and child welfare agencies, it was not possible to obtain the data necessary to determine the incidence of disabling conditions' resulting from maltreatment through this methodology. A parallel study[3] approached this question through in-depth interviews with caseworkers, which focused on actual substantiated cases of child maltreatment. That study provided a more complete and precise answer concerning the relationship between abuse or neglect and disabling conditions*.

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*The survey actual@ asked CPS specialists about "handicapping conditions."

[3]A Report on the Maltreatment of Children with Disabilities, conducted by Westat under Contract 105-89-1630 from DHHS.

Recommendations

A key recommendation made on the basis of State Survey findings is that the Federal Government provide leadership in developing consensus across the States concerning more consistent use of terms and concepts. Another key recommendation suggests that the Federal Government take the lead in stimulating careful thought and discussion among experts concerning division of responsibilities between CPS and the educational system, the coordination of services between CPS and the larger child welfare and social service systems, and the interaction of CPS with law enforcement concerning reported children and their families. Federal attention is also directed toward the issue of worker training and retention, and toward ways of stimulating a redirection of service orientations from the current reactive stance to a more proactive stance that emphasizes cases in which a low-to-moderate investment of resources may be sufficient to prevent deterioration to a crisis status. Finally, it is recommended that the National Center on Child Abuse and Neglect (NCCAN) take a leadership role in helping to systematize risk assessment methodology and in supporting additional research designed to shape the long-term development of risk assessment.

1. INTRODUCTION

1.1 Study and State Survey Objectives

This report presents the findings of the State Survey, one of two principal components of the **Study of High Risk Child Abuse and Neglect Groups. The** central goal of the study was to address one of the requirements of the Child Abuse Prevention, Adoption and Family Services Act of 1988 (P.L. 100-294): to identify groups which have been underserved or unserved by child abuse and neglect programs and to report the incidence of child abuse and neglect among such groups. In addition, this study is one of two research efforts that has addressed another research mandate of P.L. 100-294: to assess the incidence of children who have developed disabling conditions* as a result of child abuse or neglect.

The other principal component of the **Study of High Risk Child Abuse and Neglect Groups,** involving secondary analyses of data from the **Second National Incidence Study of Child Abuse and Neglect (NIS-2),** has focused upon identifying characteristics of maltreated children who do not come to the attention of CPS agencies; determining the incidence of child maltreatment in these groups and subgroups; and determining how definitions of "high risk" currently used by the States relate to the risk factors for suspected abuse and neglect identified in the NE-2 database.

The State Survey was designed to meet goals complementary to those addressed by the reanalysis of the MS-2 database so that, taken together, the two principal study components could answer the primary study objective stated above. More specifically, the goals of the State Survey were:

- To ascertain which groups are systematically **unserved/underserved** under current practices;
- To determine why these groups may not be served, and when and where they are relegated to lower priority status;
- To determine the States' current definitions of "high risk" children;

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*The survey actually asked **CPS** specialists about "handicapping conditions."

- To identify the States' uses of risk assessment in relation to suspected cases of child maltreatment reported to CPS;
- To determine procedures followed and problems encountered in serving high risk children; and
- To obtain preliminary estimates of the incidence of disabling conditions* resulting from severe child abuse and neglect.

This report is divided into six chapters. Chapter 1 is the Introduction. Chapter 2 examines CPS agencies' missions and definitions of maltreatment in relation to the first two State Survey goals of ascertaining unserved and underserved groups, and determining why, when, and where these groups are relegated to lower priority status. Chapter 3 addresses these same goals from the perspective of the availability of services, barriers to service delivery, and efforts to overcome these barriers. The third, fourth, and fifth goals of the State Survey, which have to do with understanding States' definitions of risk and uses of risk assessment, are treated in Chapter 4. Chapter 5 describes the results of State Survey efforts to obtain preliminary estimates of the incidence of disabling conditions* resulting from child abuse and neglect, and considers the reasons it was not possible to adequately answer this question. In addition, Chapter 5 discusses other limitations in the data State agencies were able to provide. Chapter 6, the concluding chapter, presents an overview of State Survey findings in the context of the overall study objectives, and offers a discussion of the implications of these findings for future Federal program and policy initiatives.

1.2 State Survey Design and Administration

The remainder of this introductory chapter provides an overview of the State Survey instrument and a brief description of how it was administered.'

The State Survey instrument, or Telephone Update Guide (see Appendix) covers a range of topics on CPS policies, procedures and services. It was modelled, in part, on the questionnaire that had been used in the summer of 1989 by the American Public Welfare

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*The survey actually asked CPS specialists about "handicapping conditions."

[1]A more detailed description of the instrument, further information concerning recruitment of State agencies, and additional discussion of how the instrument was administered are provided in the Appendix to this report, which is bound separately.

Association in its CPS Risk Assessment Project Survey. In this respect, the present effort was a confirmatory survey, geared to some degree towards updating the information collected earlier by APWA.

The State Survey instrument was divided into six sections, covering CPS organization and functions, CPS mission and eligibility for services, budgetary information, services and barriers to service delivery, risk and risk assessment, and numbers of abused and neglected children. The APWA Survey specifically served as a model for the section of this State Survey that concerns risk assessment models and practices. Whenever possible, questions were designed to provide information that could address a given study goal in several different ways and with different types of data. For example, in ascertaining groups unserved and underserved by CPS agencies, questions used here asked about CPS mission and definitions of maltreatment, barriers to service delivery, availability of specific services, projects for special groups, and numbers of children in different categories at different stages of the CPS process. The current instrument was structured as a discussion guide, containing a mixture of close-ended and open-ended questions.

The State Survey consisted of telephone interviews with individuals identified as experts in CPS policies and procedures by the Directors of child welfare agencies in the 50 States and the District of Columbia. They held a variety of titles. Somewhat less than half of them were also NCCAN State Liaison Officers at the time the interviews were conducted in July and August of 1990.

As noted, the State Survey was a confirmation survey. Prior to the interview, State specialists were sent a copy of the instrument completed with information we had obtained on their State from the APWA survey.[2] They were asked to check the accuracy of this information and to prepare budgetary data and data on numbers of children served by CPS in advance of the scheduled time of the telephone interview. We also requested that the States mail us copies of their mission statements, definitions of child maltreatment, and risk assessment materials. Telephone interviews were conducted by two Westat senior staff members and two consultants who are expert in CPS policies and procedures. Most CPS specialists were cooperative, cager to discuss the issues, and interested in learing about how their State compared with other States. By

[2]The complete title of the APWA Survey is the "CPS Risk Assessment Project Survey Questionnaire on CPS Risk Assessment Practice in Public Child Welfare Agencies." APWA administered it by mail to State child welfare agencies. As of March 1990, when we obtained the APWA data, 47 States had responded.

October of 1990, we achieved a 100 percent response rate, after successfully persuading the one State that had refused to participate during the Summer of 1990 to reverse its position.

13 Limitations of the State Survey

The findings reported here are based in large measure upon these specialists' knowledge and perceptions of CPS policies, procedures and services. As such, they may not always be a completely accurate reflection of reality. Moreover, the specialists very likely differed among themselves both in their level of knowledge of variations in programs, practices and services across the different parts of their States, and in the time span of their perspective, at least partly as a function of the State's administrative structure (State versus locally-administered) as well as the length of time they had held their positions and been working in CPS. In addition, the views they expressed may also have been influenced by which CPS-related issues were in the public limelight at the time of the interviews. For example, chemically dependent newborns and substance abusing caretakers were receiving considerable media attention during the Summer of 1990; consequently, issues related to these groups may have been emphasized particularly heavily in the specialists' responses. These qualifications do not alter the implications of the findings reported here in any substantive way, but should nevertheless be kept in mind while evaluating the material presented in the chapters that follow.

2. CPS MISSION AND DEFINITIONS OF CHILD MALTREATMENT

There are important implications for service delivery in how State CPS agencies conceive their mission in relation to abused and neglected children, and how and where they define different types of maltreatment. The agency's mission defines the overall thrust and direction of services and may also suggest where relative priorities lie. Legal and policy definitions of maltreatment establish the parameters and the limiting conditions within which these agencies must work.

A central objective of the **Study of High Risk Child Abuse and Neglect Groups** has been to ascertain groups of children systematically unserved or underserved under the current practices. Children may be unserved or underserved in a variety of ways and at different points in the CPS process. A child may be excluded from service or may be allocated a lower priority for service if his/her case does not fall within the primary scope of the agency's mission or does not fit, or clearly fit, under existing definitions of maltreatment. In this chapter, we examine CPS agencies' declared missions and their definitions of maltreatment to determine which groups of children are their principal focus, which may be included at all, and which are typically or always excluded from agency services. This discussion should not be taken to imply that missions and/or service goals ought to be expanded to include the currently-excluded children. Instead, the purpose here is to identify where the "gray areas" are regarding who is targeted or included for services, thereby uncovering what groups of children may only occasionally and inconsistently receive CPS services. Also, by understanding who the children are who are explicitly excluded from CPS services, one may gain insight into those areas where interagency divisions of responsibility may need special attention at the community level to insure that extra-CPS service needs are adequately met by alternative response systems, so that CPS itself will not be overburdened by the need to screen-out reports that are inappropriate.

The discussion in this chapter is based upon State Survey responses from the **51 CPS** specialists from the 50 States and the District of Columbia, and on supplementary written materials provided by the States' primary mission statements and statutory and policy definitions of abuse and neglect.

2.1 CPS Mission

State CPS agencies can define their missions in different ways and with varying emphases that affect which groups of children may be unserved or underserved under current practices. In this light we consider: State specialists' views of their agency's primary mission with respect to abused and neglected children; changes made to State CPS agencies' missions since 1985; and written mission statements provided by the States.

2.1.1 State Specialists' Views of CPS's Mission

How do State CPS agencies define their primary mission in relation to suspected cases of child abuse and neglect? Table 2-1 presents their responses regarding abuse and Table 2-2 those responses regarding neglect. Note that these responses concerned CPS's primary mission, so each State is categorized in only one row in each of these tables. Twenty-one of the States considered it their primary mission to serve all reported cases of abuse; and 23 said this was their primary mission in connection with neglect. Notice that an additional three States in each table indicated that their primary mission included investigating all reports (combined with serving those at risk of imminent harm -- two States, or those most in need -- one State). For 13 States, the concept of risk in some form was perceived as central to CPS mission in relation to abuse; for 12 States, risk entered into the primary mission of CPS in connection with neglect. Not surprisingly, these were largely the same States in both two cases. and neglect into account, a total of only 14 States incorporated the concept of risk into their primary mission in some way.

2.1.2 Changes in Mission

State specialists were asked whether, when, and how the mission of their CPS agency had been redefined since 1985. Twenty-nine States (57 percent) reported that the mission had not changed, 21 States (41 percent) indicated that it had. One State indicated that changes were in process. The dates of the reported changes in CPS mission were distributed evenly over the period.

Table 2-1. Primary mission of CPS agencies vis-a-vis abuse, as reported by States (n = 49)

Mission	Number of States
To serve all reported cases	21
To serve children at risk of **imminent** harm	6
To serve children who have been physically or sexually abused	5
To serve children for whom prior abuse has been documented..	5
To serve children at risk of **cumulative** harm	2
To investigate all reports and serve those at risk of imminent harm	2
To investigate all reports and serve those in most need	1
To assure the safety of victims of abuse and reduce risk of future harm	1
To serve children at risk of harm of future abuse	1
To serve children at risk of **serious** abuse	1
To prevent child abuse	1
To preserve the family	1
To protect the child	1
To serve children in their custody	1

Table 2-2. Primary mission of CPS agencies **vis-á-vis** neglect, as reported by States (n = 50)

Mission	Number of States
To serve all reported cases	23
To serve children for whom prior neglect has been documented..	6
To serve children who have been physically neglected	4
To serve children at risk of **imminent** harm	4
To serve children at risk of **cumulative** harm	3
To investigate all reports and serve those at risk of imminent harm	2
To investigate all reports and serve those in most need	1
To serve children at risk of **serious** neglect	1
To serve children at risk of harm of future neglect..	1
To assure the safety of victims of neglect and reduce the risk of future harm	1
To serve children who have been physically neglected or emotionally neglected	1
To preserve the family	1
To protect the child	1
To serve children in their custody	1

Of the 20 States that specified how their mission had been altered, 10 reported that CPS had become more focused on prevention, placing greater emphasis on earlier intervention and on the provision of family-centered services. For seven of these, the alteration was described as having occurred as part of a wider effort to reorient all child welfare services to deter out-of-home placement whenever possible. An additional three States reported that among the changes had been a narrowing of the agency's mission directed at ensuring that CPS would not intrude on familial privacy or would be used only as a last resort.

2.13 CPS Mission Statements

Twenty-two States supplied copies of their agencies' written mission statements. In most cases, the statements encompassed the mission of the entire State child welfare agency. For 12 of these States, the central declared mission of the State agency was to protect the child. A few added to this the protection of the child from exploitation and from the risk of harm. Another seven States defined the central CPS mission as achieving a balance between protection of the child and preservation of the family. Advocacy for children, helping children meet their permanency needs, and helping parents recognize and fulfill their parental roles figured as central in other States' mission statements. Perhaps the most far-reaching statement included, as part of the CPS mission, identifying and correcting societal conditions that foster neglect, abuse, or dependency of children.

Only six of these 22 written mission statements included mention of risk in some fashion. Four of these six States were already among the 14 cited as incorporating the concept of risk into CPS mission on the basis of respondents' answers to the survey. The remaining two can be added to this list on the basis of the substance of their written mission statements. Thus, when respondents' answers and written documents were taken together, only a total of 16 States mentioned risk as central to the CPS mission in their jurisdictions.

2.1.4 Summary of Findings With Respect to CPS Mission

Our findings with regard to CPS mission indicated that:

- The modal, or most commmonly held, view of CPS's primary mission was to serve all reported cases of child abuse and neglect. At most, 16 States included risk as a primary component of their mission.
- Reported changes in CPS mission since 1985 indicated a movement toward emphasizing prevention and family-focused services. A few States noted restrictions in the scope of CPS's mission toward a narrower focus or one limiting CPS's intrusion on familial privacy.
- Written mission statements tended to be general, inclusive of the goals of the entire State child welfare agency, and to emphasize protection of the child.

2.2 Definitions of Responsible Parties

Definitions of what child abuse and neglect circumstances come under the purview of CPS vary from State to State. The boundaries of those cases that are considered to be in-scope can help to identify situations in which children might be unserved or underserved. In this and the next section, we examine the answer patterns concerning in-scope maltreatment, particularly in terms of the responsible parties for in-scope maltreatment, and the categories of in-scope maltreatment.

For an act of child abuse or neglect to fall within CPS's purview, the responsible party, or perpetrator, must in most cases be someone responsible for the child's care and welfare. Forty-nine States provided copies of their written definitions of child abuse and neglect. Twenty had a core definition of responsible party that included two components: the child's parents, and other persons responsible for the child's care. Twenty-nine States included the child's parent(s), the child's guardian(s), and the child's custodians in their definitions. New Mexico added the category of "Indian custodian." Nevertheless, the definition of who is included as a custodian varied. In 13 States the custodian had to be a legal custodian (11 States), or someone acting as the child's caretaker only through explicit agreement with the parent(s) (2 States). However, in at least two States, a custodian was specifically defined as an in-scope responsible party whether or not such an

agreement existed. In Vermont, in cases involving sexual abuse, the responsible party could be "anyone."

Seventeen States specifically included in their written definitions of responsible parties persons living in the same household as the child. Four States named the parent's paramour in this category; another State required that, to be considered a responsible party, the person should be in the household continually or at regular intervals, while yet another State stipulated that the person need only be in the same dwelling intermittently to be so considered.

23 Definitions of Maltreatment

The specific categories of maltreatment that were included in written State definitions varied widely. Most States in some way addressed the four generally recognized forms of child maltreatment: physical abuse, neglect, sexual abuse, and emotional maltreatment. However, of the definitions provided, none used these four categories exactly; some used only one or two categories but addressed three types of maltreatment, while others divided the four types into subcategories. Categories could also overlap so that, in some instances, neglect was considered a form of abuse, or abuse a form of neglect. By the same token, certain types of maltreatment could be considered forms of abuse, forms of neglect, or categories in themselves. For example, some States included abandonment under neglect, while others made it a distinct category. One State defined prenatal exposure to a controlled substance as neglect, and another defined parental drug addiction as physical abuse. One State categorized "failure to thrive" as abuse, another as severe neglect, yet another as a subcategory of neglect.

To help determine groups of children who might be unserved or underserved by CPS agencies, we asked CPS specialists to indicate whether specific types of abuse and neglect were defined as within CPS scope in their States in law, policy, or both. Their responses are reported in Table 2-3.

Table 2-3. **Bases**[1] for defining maltreatment to be within CPS jurisdiction, as reported by States (n= 51)

	Number of States defining in			
	Both	Policy	Law	Not Defining
Abuse:				
Physical abuse	45	2	4	--
Emotional abuse	40	4	3	4
Sexual abuse	46	-,	5	--
Neglect:				
Physical neglect	42	5	4	--
Emotional neglect	32	10	4	5
Educational neglect	22	10	4	15
Medical neglect	41	6	4	--
Abandonment	43	3	5	--
Lack of supervision	36	10	5	--
Hazardous home environment	32	11	3	5

	AK	AL	AR	AZ	CA	CO	CT	DC	DE	FL	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA	MD	ME	MI	MN	MO
Abuse:																									
Physical abuse	B	B	B	B	L	L	B	B	B	B	P	B	B	B	B	B	B	B	B	P	B	B	B	B	B
Emotional abuse	B	B	B	B	L	N	B	B	B	B	P	B	N	N	B	N	B	B	B	P	B	B	B	B	B
Sexual abuse	B	B	B	B	L	L	B	B	B	B	L	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Neglect:																									
Physical neglect	P	B	B	P	L	L	B	B	B	B	P	B	B	B	B	B	B	B	B	P	B	B	B	B	B
Emotional neglect	P	B	B	P	L	L	B	B	B	B	P	B	P	B	B	N	B	B	P	P	B	B	B	B	P
Educational neglect	P	B	B	P	N	L	B	N	P	P	P	N	P	B	B	B	N	B	N	P	B	N	N	P	B
Medical neglect	P	B	B	P	L	L	B	B	B	B	P	B	B	B	B	B	B	B	B	P	B	B	B	B	B
Abandonment	P	B	B	B	L	L	B	B	B	B	P	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Lack of supervision	L	B	B	P	L	L	B	B	B	B	P	B	B	P	B	B	B	B	B	P	B	B	B	B	B
Hazardous home environment	P	B	B	P	L	N	B	'	B	B	B	P	B	B	P	B	B	B	B	P	P	B	B	B	B	P

	MS	MT	NC	ND	NE	NH	NJ	NM	NV	NY	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT	VA	VT	WA	WI	WV	WY
Abuse:																										
Physical abuse	B	B	B	B	B	B	B	B	B	L	B	B	B	B	B	B	B	B	B	B	B	B	B	L	B	B
Emotional abuse	B	B	B	B	B	B	B	B	B	L	B	B	B	B	B	B	B	B	B	B	B	B	P	L	B	P
Sexual abuse	B	B	B	B	B	B	B	B	B	L	B	B	B	B	B	B	B	B	B	B	B	B	B	L	B	B
Neglect:																										
Physical neglect	B	B	B	B	B	B	B	B	B	L	B	B	B	B	B	B	B	B	B	B	B	B	B	L	B	P
Emotional neglect	B	B	N	B	B	B	B	B	B	L	B	P	B	N	B	B	B	B	N	B	B	N	P	L	B	P
Educational neglect	N	L	N	B	N	B	B	B	B	L	B	P	N	N	B	B	B	B	N	B	P	B	L	N	B	P
Medical neglect	B	B	B	B	B	B	B	B	B	L	B	B	B	B	B	B	B	B	B	B	B	B	P	L	B	P
Abandonment	B	B	L	B	B	B	B	B	B	L	B	B	P	B	B	B	B	B	B	B	B	B	B	L	B	B
Lack of supervision	B	B	B	B	B	B	B	B	B	L	B	P	P	B	B	P	B	B	B	B	P	B	P	L	B	P
Hazardous home environment	B	P	B	B	B	N	B	B	B	L	B	P	P	N	B	B	B	B	B	B	N	B	P	L	B	N

[1]L = Defined in law
P = Defined in policy
B = Defined in law and in policy

23.1 Types of Abuse

Physical Abuse

All 51 State CPS specialists reported that physical abuse came under CPS purview, 45 that it was defined in both law and policy. The most common qualification given was that the abuse must be "significant," "substantial," "severe," "serious," or "non-trivial." See Table 2-4, column 1.

However, our examination of statutory and policy definitions of physical abuse indicated that these were actually quite varied. Most States defined physical abuse as including: non-accidental physical injury, harm, and threatened harm. Physical injuries typically included bums, bruises, bone fractures, lacerations, and internal injuries. However, specific acts constituting physical abuse could also include inflicting impairment of bodily function, disfigurement, poisoning, hitting with a closed fist or weapon, or kicking. Several States regarded any injury at variance with the child's history as evidence of physical abuse.

Despite the fact that physical abuse is probably one of the categories with the greatest consensus concerning definitions, the considerable variability in the boundaries of maltreatment definitions was nevertheless also evident here. One State included as physical abuse knowing or intentional torture and cruel confinement or punishment; another specified exploitation or overwork of a child that endangers his/her health or moral or emotional well-being. It is noteworthy that confinement, cruel punishment, and exploitation were considered to be forms of emotional abuse in the Second National Incidence Study (NIS-2), and would definitely be classified as emotional abuse, rather than physical abuse, by a number of States who included that category. One State defined as abused a child under 6 years of age left unattended in a motor vehicle; another made driving in an intoxicated condition with a child in the car a form of physical abuse. Elsewhere, these actions could be considered forms of physical neglect.

A number of States excluded corporal punishment from their definitions of physical abuse, generally with the proviso that such punishment must be "reasonable" or "not excessive." In several such cases, "reasonable" or "non-excessive" were not explicitly defined. The first column of

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n =51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
AK		- Mental injury must be observable and substantial					
AL		- Substantial impairment or threatened impairment - Due regard for child's culture			-includes highly erratic parental behavior or a chaotic lifestyle		- Religious exceptions
AR		- As mental injury					
AZ		- Depending on severity, may be screened out; - Requires serious emotional damage	- Depending on time of incidents, may be screened out	- Depending on degree, may be screened out	-Depending on degree, may be screened out	- Excludes truancy	- Religious exceptions
CA	- Unlawful corporal punishment (e.g., cruel or inhumane treatment, traumatic conditions) prohibited'	- Religious exceptions - Must be serious emotional damage or risk thereof			- Religious exceptions	[NEITHER BY LAW NOR POLICY]	- Religious exceptions

[a] =As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
CO	• Due regard for culture	• Not specifically defined	• Due regard for culture	• Due regard for culture	• Due regard for culture	• Truancy excluded	• Due regard for culture
CT						• Depends on school board	• Treatment by a Christian Science practitioner not in itself maltreatment
DC		• Mental injury				[NEITHER BY LAW NOR POLICY]	• Religious exceptions
DE						• Only as a last resort	
FL				• Not if caused by financial inability, unless financial assistance is refused		[NEITHER BY LAW NOR POLICY]	Religious exceptions

[a]=As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n-51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
GA	• Corporal punishment permitted so long as is no physical injury					[NEITHE BY LAW NOR POLICY]	• Religious exceptions
HI						[EXCLUDED BY LAW AND POLICY]	
IA		• Not specifically defined -- included in denial of critical care		• Not if caused by financial inability, unless assistance refused		• Only when accompanied by abuse	
ID		• Treated as neglect				• Truancy of younger children (only]	• Religious exceptions
IL	• Includes excessive corporal punishment	• Due regard for culture • Testified by mental health professional			-Due regard for culture		• Religious exceptions

[a] = As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
IN	• Reasonable corporal punishment by care-taker permitted • Child must be seriously impaired or endangered	[EXCLUDED BY LAW]			[EXCLUDED BY LAW]		• Religious exceptions
KS					[EXCLUDED BY LAW]	[NEITHER BY LAW NOR POLICY]	• Religious exceptions
KY		• Substantial and observable • Due regard for culture					• Religious exceptions
LA		• Can only be reported by mental health professional		• Can only be reported by mental health professional		[NEITHER BY LAW NOR POLICY]	
MA	• Seriousor non-trivial injury	• Serious emotional injury • Observable and substantial					
MD	• Significant harm or risk thereof • Religious exceptions	• Considered neglect		• Significant harm or risk thereof • Religious exceptions	-Significant harm or risk thereof	• Must be coupled with other neglect	• Significant harm or risk thereof

[a] = As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n = 51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
ME	. Serious physical injury or impairment	- Serious mental injury or impairment				[NEITHER BY LAW NOR POLICY]	
MI		- Mental injury				[NEITHER BY LAW NOR POLICY]	- Religious exceptions
MN		- Mental injury - Observable and substantial impairment		- Religious exceptions		- Only if parents keep child home	
MO	- Reasonable discipline (including spanking) permitted					- Truancy excluded	- Religious exceptions
MS	- Religious exceptions	- Both mental and emotional abuse defined		- Religious exceptions	-includes lack of care for moral well-being -includes failure to provide special care for mental condition	[EXCLUDED BY LAW]	

[a]=As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
MT		- Mental injury				- Only if parents refuse to send child to school	
NC	- Substantial risk of injury	- Serious emotional damage				[NEITHER BY LAW NOR POLICY]	
ND	- Includes excessive corporal punishment						
NE		- Must be documented by psychologist, psychiatrist or social worker.				[EXCLUDED BY LAW AND POLICY]	
NH	- Has to be injury	- Must be indicated by a psycho-logical evaluation		- Law forbids use of financial status as reason		- Truancy excluded	- Law forbids use of financial status as reason - Religious exceptions
NJ	- Risk of harm must be substantial					- Truancy excluded	- Religious exceptions

[a] = As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
NM	• Religious exceptions • Tribal childrearing practices alone are not abuse			• Includes child placed for adoption or care in violation of law			• Religious exceptions
NV	• Must be non-accidental, resulting in temporary or permanent disfigurement • Excessive corporal punishment may be considered child abuse/ neglect	• As mental injury - must be observable and substantial impairment		• Can include excessive corporal punishment			• Religious exceptions
NY	• Substantial risk of injury, disfigurement			• If financial means offered are refused • Inoludes excessive corporal punishment		• Truancy excluded	
OH	• Excessive corporal punishment, (which creates risk of serious physical harm) is included				-Religious exceptions		• Religious exceptions

[a]=As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
OK	Ordinary force as a means of discipline is allowed	- Mental injury				- Educational neglect referred to school officials	
OR		- Mental injury - Cultural and minority differences recognized		- Religious exceptions		[NEITHER BY LAW NOR POLICY]	- Includes failure to immunize
PA	Must be "serious" physical injury Religious exceptions Not solely on grounds of environ-mental factors	- Must be "serious" mental injury - Religious exceptions - Not solely on grounds of environ-mental factors				[NEITHER BY LAW NOR POLICY]	- Included in physical neglect
RI	Corporal punishment meeting State guide-lines is permitted	- Mental injury clearly attributable to parental unwillingness or inability to provide care		- If financial means offered are refused		- School must act first	- Religious exceptions

[a] = As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
SC	Threat of substantial harm includes excessive corporal punishment	- Is called mental injury - Must be inhumane or un-conscionable	- Only if perpetrator is guardian parent/in-loco parentis	- Cannot be due to poverty per se, unless parent refuses help	- Same as emotional abuse - defined as "mental injury"	- Excludes truancy	- Lack of immunization not included
SD		- Observable and substantial impairment, with due regard for culture				- Must be other extenuating circum-stances	
TN	Excludes physical harm related to discipline	- Psychological impairment verified by a licensed clinical psychologist				- Truancy excluded	
TX	Reasonable discipline excluded Substantial harm or risk thereof	- Observable and material Impairment		- Excludes financial inability unless services offered and refused		[NEITHER BY LAW NOR POLICY]	
UT		- Difficult to prove				- In process of eliminating this category	
VA		- Must demonstrate a connection to care-taker's behavior				- School must act first	- Religious exceptions

[a]=As reported by State specialists or as indicated in written definitions provided by States,

Table 2-4. Limitations on maltreatment defined to be in-scope for CPS[a] (n=51)

	(1) Physical abuse	(2) Emotional abuse	(3) Sexual abuse	(4) Physical neglect	(5) Emotional neglect	(6) Educational neglect	(7) Medical neglect
VT			- Any person can be perpetrator				- Religious exceptions
WA	. Reasonable use of corporal punishment permitted, but a dangerous act when used with infants	- Mental injury clearly attributable to parental acts - Must be established by a mental heath professional		- Due regard for culture, beliefs, and lifestyle	-Due regard for culture, beliefs and lifestyle	- Must document other neglect	
WI		- Emotional damage must be substantial and observable				[NEITHER BY LAW NOR POLICY]	
WV		- Substantial mental or emotional injury		- Excludes cases caused by lack of financial resources			
WY		- Includes both psychological and emotional abuse				- Truancy excluded	

[a] = As reported by State specialists or as indicated in written definitions provided by States.

Table 2-4 indicates which States reported qualifications or provided definitional material indicating qualifications to definitions of physical abuse related to corporal punishment, and briefly summarizes the nature of these qualifications.

Emotional Abuse

Forty-seven CPS specialists reported that their States defmed emotional abuse; 40 indicated that this category was defined in both law and policy. Four States noted that they had no separate category for emotional abuse.

However, examination of the States' written defmitions revealed that a number of States reporting that they defined emotional abuse actually subsumed it under the category of mental injury. These States are indicated in column 2 of Table 2-4. Morever, even States explicitly defining emotional abuse showed important variations in where and how it was defined. In some States, emotional abuse was defined by its behavioral manifestations, such as anxiety, depression, withdrawal, or aggressive behavior. In others, it was identified by caretaker actions such as psychological terrorism.

Substantiation of emotional abuse usually turned on the ability to demonstrate significant impairment of the child's social, emotional, and/or intellectual functioning. Because the lack of clarity here is considerable, several States specified that emotional abuse must be serious and observable. A few indicated that it must be diagnosed by a professional, usually a physician or psychologist. Both types of qualifications are reported in the second column of Table 2-4.

Not surprisingly, given the complexities involved in defining and substantiating emotional abuse, a number of State CPS specialists considered this "a tricky area" and "difficult to prove."

Sexual Abuse

All States reported that they defined sexual abuse, 46 in both law and policy. Written definitions sometimes differentiated sexual abuse from sexual exploitation and sexual assault, and sometimes incorporated all three types into one category. Sexual abuse almost always included rape, incest, sodomy, and molestation. Some States added masturbation, "unnatural or perverted sexual practices," or "crimes against nature." Sexual abuse was typically defined as contact or interaction in which the child is used for the sexual stimulation of the perpetrator, the child, or another person.

Sexual exploitation, referred to in some States as child pornography, involves child prostitution, as well as obscene or pornographic photographing, filming, or depiction of a child for commercial purposes. In at least one State, a charge of sexual exploitation could also be applied to any person who knowingly participates in developing or distributing such photos or films.

Sexual assault was typically defined by such actions as intercourse, fellatio, cunnilingus, and fondling. However, the difference between sexual assault and sexual abuse was not clear, with one State's definition of sexual assault being virtually identical to another's definition of sexual abuse. Only 4 States indicated any qualifications to their definitions of sexual abuse. These are reported in column 3 of Table 2-4. In all but one of these 4 States, the qualifications were generally applicable across all categories of abuse. The one exception was Vermont, where, as noted, any person (not just a parent or caretaker) could be considered a responsible party to sexual abuse.

23.2 Changes in Definitions of Abuse Since 1985

As one way of determining which groups of children might have been unserved or underserved in the recent past, States were asked to indicate whether and how their definitions of physical, emotional, and sexual abuse had changed since 1985. Table 2-5 summarizes their responses.

Table 2-5. Changes in definitions of child abuse since 1985, as reported by States (total n = 25)

Changes	Number of States reporting changes
Clarified applicability to third party or institutional perpetrators	5
Added:	
Child prostitution, child pornography, sexual exploitation	5
Emotional abuse or mental injury	4
Reference to threat of/imminent risk of harm	4
Definition of at-risk children	2
Danger of abuse due to abuse of sibling	1
Disabled infants	1
Child-selling	1
Chemically exposed infants	1
Expanded definition to include:	
Acts by household and family members	1

Twenty-five States reported changes to their definitions of child abuse between 1985 and the time of the survey in 1990. Twenty-three of these States had altered their definitions of abuse between 1987 and 1990, with the highest number (7) having done so in 1988.

Although one State noted the passage of an entire new Child Protection Act during this period, most of the changes to definitions of child abuse described by the State CPS specialists were less global in nature. The single most common change, reported by 19 of these 25 States, was the incorporation of one or more new elements into the definition.

Nineteen States made additions to recognized categories of abuse, as follows: adding child prostitution, child pornography, and sexual exploitation to their definitions of sexual abuse (5 States); expanding definitions to include emotional abuse or mental injury (4 States); or adding threat of abuse or imminent risk of harm (4 States). One State defined child-selling as a form of abuse. In addition, 4 States expanded the categories of abused children to include at risk children

(2 States), chemically exposed infants (1 State) and cases of disabled infants with life-threatening conditions (1 State). It is interesting to see this last category of cases (commonly referred to as "Baby Doe" cases) classified under abuse, because these are more typically categorized under medical neglect. One State extended the definition of in-scope perpetrator to all household and family members, not limiting it to just parents and caretakers. One additional State (Florida) added substance-exposed infants to their definition of harm, which is a category separate from either abuse or neglect (and therefore this change was not included in this table).

Five States indicated that during this period they clarified their definitions of abuse with respect to whether and when third party and institutional perpetrators were defined as responsible parties in child abuse for CPS purposes.

233 Summary of Findings on Definitions of Abuse

- Although CPS specialists' answers suggested that all States did define physical abuse and sexual abuse, the vast majority of them in both law and policy, examination of written definitions indicated considerable variation in the specificity and precise content of these definitions, and in the restrictions or exclusions that applied.
- Of the three major types of abuse, emotional abuse was reported by CPS specialists, and shown in written definitions, to be the least clearly and uniformly defined and the most "tricky" to substantiate. This may mean that, in deciding how to allocate scarce investigative and service resources, CPS agencies could tend to give these cases lower priority.
- Reported changes to State definitions of abuse since 1985 focused on additions to, and clarifications of categories of sexual abuse and emotional abuse, as well as additions to definitions of risk and at-risk groups.

23.4 Types of Neglect

Physical Neglect

All 51 CPS specialists indicated that physical neglect was defined in their State; 42 reported that it was defined in both law and policy.

In some States, physical neglect incorporated medical neglect, lack of supervision, and abandonment; in others, these were treated as separate categories. Most States-defined physical neglect as failure to provide the child with the basic necessities of life, including food, clothing, shelter, education, medical care, and supervision. A number of States expanded the definition to encompass failure to intervene to protect the child from harm or threat of harm. At least two States defined as neglected a child whose sibling had been abused.

The most common qualification found in States' definitions of physical neglect was that such neglect could not be claimed if failure to provide for the child was due primarily or solely to parent's lack of financial means. The fourth column of Table 2-4 indicates those States that either mentioned financial exclusions to their definitions of physical neglect during the interview or provided written materials indicating the existence of such exclusions.

Medical Neglect

All 51 State specialists reported that their States defined medical neglect, with 41 States noting that it was defined in both law and policy. Medical neglect was broadly defined as failure to provide the child with adequate health care or with indicated or needed medical treatment.

Examination of written definitions showed even wider variation from State to State than might be surmised from the State specialists' replies. A few States incorporated psychological or psychiatric care into the broader category of health care, effectively making emotional neglect a form of medical neglect. New Jersey detailed failure to immunize, failure to provide dental care, and removal of a child from the hospital against medical advice as acts of medical neglect, whereas other States explicitly excluded failure to immunize from their definitions.

As indicated in Table 2-4, column 7, over 20 States either reported or provided materials showing that they made religious exceptions to definitions of medical neglect. However, these responses seriously underrepresent the commonality of this practice. In fact, most States have a proviso in their law that reliance on spiritual means of healing and curing provided by an accredited practitioner of a recognized church or denomination is not in itself considered medical neglect. However, these States generally also stipulated that the child must not be suffering

serious or life-threatening injury or disease. In most such cases, the court was empowered to order needed medical services or to otherwise act to protect the child.

Many States defined the withholding of medically indicated treatment from disabled infants with life-threatening conditions as a form of medical neglect. However, they usually allowed a physician to exercise "reasonable judgment" under extreme circumstances, such as irreversible coma, or when it is judged that treatment would only prolong the process of dying.[1]

Emotional Neglect

Forty-six CPS specialists reported that their States defined emotional neglect, five that they did not. Where it was defined, 32 State specialists indicated that emotional neglect was defined in both law and policy, 10 in policy only, and 4 only in law. In some States, emotional maltreatment was a unified category, in which emotional neglect was not distinguished from emotional abuse.

Emotional neglect was broadly defined as failure to provide for a child's normal psychological development. In one State, for example, emotional abuse was demonstrated by showing lack of concern for the child's welfare; emotional neglect was demonstrated by ignoring the child, showing preference for a sibling, or failing to provide order and routine.

Emotional neglect tended to be even less clearly defined than emotional abuse. Several State specialists commented that their definitions "are vague," "need tightening," or "are still in process." Substantiating emotional neglect can involve making delicate judgments about parental lifestyle and morals. In one State, a chaotic lifestyle was one possible ground for emotional neglect, and several other States included failure to guide the child's morals in this category.

Not surprisingly, a number of exclusions could be applied to definitions of emotional neglect. Religious exceptions could be applied here, as they were with physical and medical

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[1] Such exercise of reasonable judgment is permitted by the Federal regulations that implement the State child abuse and neglect grant program.

neglect. Cultural exclusions could also apply, with three States cautioning that decisions regarding emotional neglect must be made with due regard for cultural differences in childrearing practices. As with emotional abuse, some States insisted that, for emotional neglect to be claimed, the harm must be clearly demonstrable and/or corroborated by a mental health professional. Qualifications to States' definitions of emotional neglect, as reported or as indicated in written materials, are given in Table 2-4.

Educational Neglect

Thirty-six States reported that they defined educational neglect as within the purview of CPS, 22 in both law and policy, 10 in policy, and 4 in law. Fifteen State CPS specialists indicated that their States did not define educational neglect as within the purview of CPS at all.[2]

However, even among the 36 States where educational neglect was within the jurisdiction of CPS, most (n=21) revealed strong limitations on their involvement in these circumstances. Nine specifically excluded truancy from CPS purview, and another nine considered educational neglect to be under their jurisdiction only when coupled with other child abuse or neglect, only when it could be clearly connected to parental actions, only for younger children, or only as a last resort. Others said that CPS involvement depended on the school board (hence varied from district to district -- 1 State), that educational neglect was (in practice) referred to school officials (1 State), or that they had recommended eliminating this category of maltreatment from CPS responsibility (1 State). The sixth column of Table 2-4 shows the qualifications applied by specific States to definitions of in-scope educational neglect. Whether CPS or the schools have jurisdiction in this realm remains at least partly unresolved in some States, with one CPS specialist commenting that such jurisdiction was "currently in dispute" in her State. Three State specialists remarked that they would prefer that CPS not have to handle educational neglect, which they felt to be more appropriately managed by the schools.

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[2] States arc not required to address educational neglect as a condition of eligibility for the State child abuse and neglect grant authorized by the Child Abuse Prevention and Treatment Act.

Abandonment

All States reported that they defined abandonment to be within CPS purview, 43 States did so in both law and policy. In written definitions, abandonment could be incorporated into physical abuse or physical neglect, or treated as a separate category. Seven States' definitions specified that abandonment had to be willful; four imposed the condition that the child had to have been abandoned or willfully surrendered for a certain period of time, usually 6 months or a year. Cultural exclusions could also apply. For example, Hawaii explicitly exempted 'hanai' childkeeping arrangements, found in indigenous Hawaiian culture, from the definition of abandonment.

Lack of Supervision

All of the States indicated that they defined lack of supervision as under CPS jurisdiction, 37 in both law and policy, 5 in law, and 9 in policy only. Lack of supervision was most often subsumed under physical neglect and defined as failure to provide adequate supervision or proper support to the child. States reported qualifications related to the age of the child, the degree of lack of supervision, and the extent to which there was a threat of harm.

Hazardous Home Environment

Forty-six States specifically reported that the existence of a hazardous home environment was a basis for defming neglect; 33 in both law and policy, 3 in law only, and 10 in policy only, As with lack of supervision, hazardous home environment rarely figured as a separate category, but was typically subsumed under the more general rubric of failure to provide adequate housing or to protect the child from harm.

2 3 5 Changes in Definitions of Neglect Since 1985

CPS specialists were asked to indicate any changes made to their States' definitions of neglect since 1985. Twenty-three States reported that they had amended their definitions of neglect between 1985 and 1990. A few States reported several changes in this period. Their

responses are presented in Table 2-6. All but four of these States also reported changes to their definitions of abuse.

Table 2-6. Changes in definitions of child neglect since 1985, as reported by States (total n =23)

Changes	Number of States reporting changes
Included chemically dependent newborns	7
Clarified religious exemptions (medical neglect)	5
Added "high priority infants" or "infant medical neglect"	4
Added/further defined "at risk" as "imminent risk"	3
Changed definition re: perpetrator	
Institutional perpetrator added	2
Perpetrator must be parent or guardian	1
Added/changed categories and/or duties of mandated reporters	2
Defined/clarified difference between truancy and educational neglect	2
Added caretaker unavailability due to substance abuse or mental illness	1
Added "serious" as qualifier to all forms of neglect	1
Unspecified	2

Seven States reported having expanded their categories of neglected children to encompass chemically dependent newborns and four added high-priority infants or infant medical neglect. Three States introduced the notion of "at risk" or "imminent risk," and one State added caretaker unavailability due to substance abuse or mental illness.

Among other types of changes made, five States indicated adding a caveat to their definitions of medical neglect that exempted spiritual forms of healing by an accredited practitioner in cases in which the child's health is not endangered. Of these, two States did not specify the nature of the changes. One State reported the addition of a statement that spiritual means of healing are not in themselves neglect, although court intervention is permitted when the child's health is seriously endangered. One State reported a change allowing court intervention,

and one reported repeal of the religious exemption to medical neglect. In another realm, two States clarified the difference between truancy and educational neglect. Three reported changes in who is defined as an allowable perpetrator of in-scope neglect, with one specifying that the perpetrator must be a parent or custodian of the child, and two including institutional perpetrators in their definitions.

On the whole, as can be seen by comparing Tables 2-5 and 2-6, reported changes to definitions of neglect mirrored changes to definitions of abuse insofar as they involved inclusion of new categories of children and introduction of new subtypes of behavior as well as a concern for defining the parties who could be responsible for neglect coming under CPS purview. However, such comparison also reveals that changes to definitions in abuse centered on sexual abuse and emotional abuse, whereas newborn chemical dependency, infant medical neglect, and religious exclusions were the foci of changes made to definitions of neglect during the 19851990 period.

23.6 Summary of Findings on Definitions of Neglect

- All CPS specialists reported that their States defined physical neglect, medical neglect, lack of supervision, and abandonment as forms of maltreatment coming under CPS purview. A lower but still high percentage indicated that they defined emotional neglect, and hazardous home environment.

- In 36 States (71 percent), CPS jurisdiction in cases of educational neglect was either nonexistent (15 States), or in some way restricted (another 21 States). Most States that defined educational neglect as coming under CPS purview went on to qualify this by noting that they exclude cases of truancy or cases in which parental negligence is not clearly involved.

- However, with the exception of physical neglect and abandonment, the other types of neglect were more likely to be defined only in policy as opposed to in law or in both law and policy, suggesting that these other types of neglect are less formally recognized than are categories of abuse.

- A variety of exclusions were applied to definitions of neglect, including financial (physical neglect), cultural (abandonment and emotional neglect), and religious (medical neglect and emotional neglect).

- Like emotional abuse, CPS specialists reported emotional neglect to be difficult to define and to substantiate, involving a number of qualifications and/or exclusions as well as “gray areas” subject to interpretation. Examination of State’s definitions indicated notable variety in whether, how, and where emotional neglect was defined.

23.7 Additional Types of Cases

To determine if certain additional categories of children are unserved or underserved under current CPS practices, we asked State specialists whether five additional types of cases (e.g., those involving caretaker unavailability due to substance abuse, psychiatric hospitalization, imprisonment, and cases of chemically-dependent newborns and of homeless children) were included under their State CPS agency's mission and scope. With similar aims in mind, we also asked State specialists to indicate whether and under what circumstances their State CPS agencies accept voluntary referrals, and whether they define third party and institutional perpetrators as responsible parties in maltreatment. Their answers to these explicit questions are presented in Table 2-7.

Table 2-7. Additional categories of maltreatment: whether included in CPS's scope, as reported by States (n = 51)

Category	Included in agency's scope or mission		
	Unqualified Yes	Qualified Answers	Unqualified No
Caretaker unavailability due to:			
Substance abuse	19	28	4
Psychiatric hospitalization	18	28	5
Imprisonment	18	27	6
Chemically-dependent newborns	25	19	7
Homeless children	10	26	15
Voluntary referrals:			
Abuse/neglect related	43	6	2
Non-abuse/neglect related	22	11	18
Third party perpetrator	13	21	17
Institutional perpetrator	34	12	5

Caretaker Unavailability. Respondents were asked whether their agency included in its scope or mission cases where caretakers were unavailable to care for children in their charge, due to the caretaker's substance abuse, his or her psychiatric hospitalization, or the fact that he or she was in jail. As can be seen in Table 2-7, the patterns of responses were similar for all three of these circumstances -- and qualified responses were very numerous. At the outset, however, it should be noted that respondents who appear in Table 2-7 as having given unqualified responses may simply not have thought about the details of their boundary conditions when answering these questions, and that, in fact, those "unqualified" States might also be more properly characterized with the same types of qualifications.

The qualifications themselves were of interest. Most respondents appeared to respond from the perspective of CPS, where the agency's mission is to deal with problems which must impact the child in some way before the agency has the authority to intervene. Since 1985, one State added caretaker unavailability due to substance abuse or mental illness under its neglect classification (see Section 2.3.5). But insofar as CPS agencies are generally concerned, problems of the caretaker are not in themselves (*ipso* facto) within the jurisdiction of those agencies--those problems must impact the child in some notable way before CPS has the authority to intervene. Thus, nearly all of the qualifications indicated that their (CPS) agency could intervene in the case only if the situation could be construed as one which placed the child at risk (or somehow involved abuse or neglect within the agency's purview). For example, 23 of the 28 qualifying comments regarding substance-abusing caretakers claimed that those cases would be within the agency's scope "only if it affects the child," "if the condition creates risk for the child," "...it would be more likely to involve CPS if there is a connection to child abuse or neglect -- otherwise, CPS may just do I&R."[3] Similarly, 23 of the 28 qualified responses in connection with psychiatrically hospitalized caretakers elicited comments such as: "if [it] comes under neglect," "only if it has abuse/neglect consequences," "would have to be some relationship to maltreatment of child for agency to intervene." And again, regarding caretakers who are imprisoned: "only if it results in abandonment," "when child is at risk of child abuse or neglect," and "if [there is] risk to child."

The remaining qualifications were also of interest, because they were indicative of the relationship between the CPS agency's mission and scope and that of the larger child welfare agency. That is, the remaining qualifications dealt with ways the larger child welfare agency could

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[3] Information and referral.

conceivably serve these children (i.e., in other ways) if they could not be considered within CPS's abuse/neglect definitional guidelines. For instance, respondents considered that they "may do voluntary placement," that there "would have to be an allegation of dependency of child." What appears to have been expressed here is the mission of the larger child welfare agency -- not the narrower mission of CPS.

Chemically-Dependent Newborns. Many more States offered unqualified "yes" responses concerning CPS inclusion of this group. It is noteworthy, in contrast to the foregoing section, that this is specifically a problem that concerns direct effects on the children and that CPS agencies appeared to have fewer qualms or difficulties about defining it to be ipso ***facto*** within their purview. In fact, fully nine States had actually added chemically dependent newborns to their defmitions of in-scope maltreatment since 1985 (see previous sections in this chapter). Also, it is noteworthy that 8 of the 19 qualifications given in this category referred to variations in the circumstances of chemical dependency that were, in themselves, within the agency's scope: for example, whether simply a positive toxicology would be adequate or whether there would have to be "evidence that [the] child is suffering from withdrawal." The remaining qualifications were offered by those States who did not ***ipso facto*** define chemically-dependent newborns to be maltreated. Those respondents (11 of 19 States) referred to how and whether the child might somehow otherwise "fit" under the agency's abuse/neglect definition.

Homeless Children. The circumstances of homeless children elicited yet another type of answer distribution, as can be seen in Table 2-7. Only 10 State respondents gave an unqualified affirmative answer about whether such children come within their agency's scope ***or*** mission; 15 gave an unqualified negative response in this regard. This incidence of clear-cut exclusions of these children from CPS mission is noteworthy -- CPS is not an agency designed to contend with homeless children per se -- but with abused/neglected children. Thus, it is not surprising to see that the qualifications given here overwhelmingly made reference to features of the case that might allow it to qualify for CPS services to abused/neglected children (22 of the 26 qualifications were of this type). The degree to which agencies might sometimes extrapolate the concept of "neglect" in order to allow a homeless child to qualify was evident in the response from one State which said that such children could be served "if homelessness was due to negligence." At the same time, however, even within its mission to serve the abused/neglected population, there may be barriers to providing these services for ***homeless*** abused/neglected children (or those at risk thereof). One State respondent remarked that her State was being sued for failing to provide

family preservation services to the homeless and that, as a result, their CPS agency would now take those cases (which were not really in-scope for CPS) when the caretaker is ill or unavailable.

Voluntary Referrals. States were asked whether their agency scope or mission included voluntary referrals. A large majority of the States (43 States, or 84 percent) offered unqualified affiative answers in connection with voluntary referrals that were abuse or neglect-related. Half of the six qualified responses that were given in this category dealt with the fit/nonfit of the situation with the agency's criteria for in-scope maltreatment (e.g., "not if it doesn't meet the definitions of abuse/neglect," or "if perpetrated by a caretaker"). These reveal the need to weed out voluntary referrals which claimed to be for reasons of abuse/neglect but which may not have been bona fide cases of abuse/neglect under the agency's criteria. The other half of the qualifications more directly suggested that resources may be more restricted or less consistently available even for these voluntary cases: ("[it's] up to the county," "limited").

A very different picture emerged for non-abuse/neglect-related voluntary referrals, where (taking the larger child welfare agency perspective) only 22 States gave unqualified "yes" responses, whereas fully **18** gave the unqualified "no" responses that reflect the narrower CPS agency viewpoint concerning mission/scope. Of all additional survey categories, this category was indicative of how much the CPS agency's mission/scope could be at odds with that of the larger child welfare agency. The qualifications given here also reflect the two different perspectives -- those States where the missions of CPS and of child welfare were closely intertwined: "if income guidelines are met," "if can do foster care," "limited to dependency cases," -- but still -- "more limited [resources for this]"; compared to those States where the mission of CPS was more clearly distinguished from that of the larger child welfare agency: such voluntary cases were "not considered abuse or neglect," the agency would "have no authority if not abuse/neglect," and so forth.

It should be noted that this Janus-faced perspective concerning the CPS agency's mission/scope is not altogether surprising. To begin with, the mission/scope of CPS (to investigate and serve abuse/neglect cases) does contrast with the mission of the larger child welfare agency (to preserve families and serve children and families in need). At the same time, in most places, CPS has essentially become the principal gatekeeper of what cases get into the larger child welfare agency. Thus, CPS staff are structurally in the position of having to simultaneously take into account the conflicting perspectives of both CPS and of the larger child welfare agency.

Third Party and Institutional Perpetrators. Federal regulations implementing the Child Abuse Prevention and Treatment Act define "child abuse and neglect" as acts committed by the child's parent, guardian, or person responsible for the child's welfare. States' responses concerning whether or not "third party" and/or institutional perpetrators were included under their agencies' missions are shown in the last two rows of Table 2-7. As seen there, 13 States responded with an unqualified "yes" and 17 States submitted an unqualified "no" concerning third-party perpetrators. As with the foregoing categories in this section, unqualified responses did not reveal as much as did the qualifications concerning the underlying bases of respondents' answers. For the majority of qualified responses concerning third party perpetrators (12 of the 21 States), the issue of whether or not the perpetrator involved was acting *in* loco *parentis* appeared to have been central (including one State classified as having answered "no"). Among these, the State with the broadest definition also included "household member" among the presumed-caretakers; the narrowest definition confined these caretakers to persons who were "legally in the home" or who were "responsible for the child on a regular basis." Qualifying comments among the remaining States were wide-ranging: from indicating that the definition was vague, to saying that CPS involvement depended on (1) the relative ages between perpetrator/victim, (2) whether the maltreatment was due to parental neglect or negligence; (3) was for cases of sexual abuse only; (4) was jointly with law enforcement;[4] and (5) that although CPS must investigate all reports, law enforcement was then responsible for pursuing all third-party maltreatment except for services to under-age victims.[5]

Institutional perpetrators received a far more favorable response pattern, with 34 unqualified affirmative answers, 12 qualified responses, and only 5 unqualified "no's." Qualified responses here both overlapped with and extended beyond the concept included in the "third party" perpetrators covered by the agency. To begin with, three of the five States with unqualified "no" responses indicated that although their own agency did not deal with these cases, some other department or unit within the human services sector of their State (e.g., licensing) was responsible for them. Along these same lines, one of the qualified responses claimed that the responsibility for institutionally maltreated children was in the process of transition, being moved to another

[4] Law enforcement was explicitly mentioned as the responsible agency by three of the 17 respondents who said that their agency did not deal at all with "third party" perpetrators.

[5] It should be noted that the Federal regulations implementing the Child Abuse Prevention and Treatment Act define "child abuse and neglect" as acts committed by the child's parent, guardian, or person responsible for the child's welfare.

division, and another qualified response indicated that the CPS agency was only responsible for institutional neglect if the facility in question was not licensed. Other qualifiers placed under institutional caretakers circumstances where the institution was acting as caretaker, situations which involved schools only (in one State CPS was allowed to investigate only schools under this category), and cases that involved residential child caring facilities only. Finally, two apparently contradictory circumstances were also included among agency responses: in one State, the CPS agency only dealt with those cases where the institution in question was acting as the agent of the county, whereas in another State, those instances where the institution was operated by the CPS or social services agency could only be investigated by the attorney general (and so were referred). The Federal regulations implementing the Child Abuse Prevention and Treatment Act, while defining "child abuse and neglect" as acts committed by the child's parent, guardian, or person responsible for the child's welfare, permit a State to designate an agency other than CPS to investigate reports of child abuse and neglect that allegedly occurred in out-of-home care settings.

23.8 Summary of Findings on Other Maltreatment Types

- The patterns of responses to questions concerning homeless children, parental unavailability, and non-abuse/neglect-related referrals expressed the conflict between the mission/scope of CPS and the mission/scope of child welfare, in general. These responses were bifurcated in ways that indicated that respondents, as a group, were attempting to simultaneously consider (conflicting) CPS-mandates and larger child welfare agency goals. As a result, some rendered answers that reflected one position, and others offered responses congruous with the other position.

- Chemically-dependent newborns constituted an apparently separate category, wherein there was clear-cut direct harm to the child and far less equivocation about whether or not the cases fell within CPS purview. This category of children represented an area in which definitions of what constitutes in-scope maltreatment have really seen noteworthy changes in the last few years. Nine States added these children as an in-scope category since 1987.

- Homeless children per se were not in-scope for CPS agencies, unless they otherwise fit within the criteria defining abuse/neglect within the agency's purview. Nevertheless, there may be special challenges in serving abused/neglected children in homeless families.

- Voluntary referrals that are abuse/neglect-related were <u>not</u> universally within CPS scope, and other types of voluntary referrals were categorically ruled out by 18 States. Thus, voluntary referrals appeared less likely to have their service needs addressed.

- Abuse/neglect committed by third-party perpetrators was dealt with in some way by all States, but the exact boundary conditions for dealing with them within CPS per se varied. In some locales, third-party perpetrators appeared to be left entirely to law enforcement; in others, CPS and law enforcement jointly investigated these cases. The notion of ***in*** loco ***parentis*** was perhaps the most common boundary condition for dividing cases between CPS and law enforcement. Other approaches divided the cases on the basis of the age(s) of the victim (perpetrator), or on the basis of the exact nature of the offense (e.g., whether sex abuse or not).

- Similarly, institutional perpetrators were all systematically addressed somewhere, but they might be dealt with by some section of the human services department other than CPS per se (e.g., by the licensing division), with CPS being responsible only for those cases where the institution in question was not licensed. Here, again, there was considerable variation in terms of the specific features that demarcated those CPS-appropriate institutional perpetrator cases from institutional perpetrator cases that were more properly under the authority of another division or agency. For example, in one State, CPS was limited to investigating only those cases where abuse/neglect was alleged to have been perpetrated by school personnel; in another State, CPS contended only with those cases where the alleged perpetrator was an employee of a ***residential*** child care facility.

3. AVAILABILITY OF SERVICES, BARRIERS TO SERVICE DELIVERY, AND EFFORTS TO OVERCOME THESE BARRIERS

The organizational structures within which State CPS agencies operate, the procedures they follow, and their budgetary and staffing patterns affect the nature and level of services delivered. Consequently, these factors all serve to define barriers to the provision of services to abused and neglected children and their families. In this chapter, we look at the impact on service delivery of specific factors related to CPS organization, funding, and staffing, paying particular attention to pressures experienced by State CPS agencies in the past 5 years. We also examine the availability of different types of services to CPS clients; consider the level of special efforts being made for certain categories of children; and report on other specially-funded programs being implemented across the States for abused and neglected children and their families.

The goals of this chapter are to highlight the constraints that affect delivery of services by CPS agencies, to discern existing patterns of service delivery, and to describe recent efforts to overcome gaps in and barriers to service delivery. These issues are examined as they answer two objectives of the State Survey:

- To ascertain which groups are being systematically unserved/underserved under the current practices; and
- To determine why these groups may not be served, and when and where they are relegated to lower priority status.

To briefly summarize what follows, CPS agencies are operating under considerable constraints. In recent years most State CPS agencies have experienced heavy pressures related to funding limitations, turnover and training of workers, increased numbers of cases, and an influx of new types of cases. CPS agencies are also often caught in an organizational squeeze with other service agencies. They must interface with the educational system, the health care system and with the wider child welfare system, all which are themselves often inadequately equipped to serve the children not served by CPS. CPS may also have difficulty in coordinating services with the police and the juvenile court system. Overall availability of services for clients entering the child welfare system through CPS is limited, with most categories of services being available without restrictions in only a handful of States. The most commonly available services are those that are crisis-

oriented (e.g., crisis intervention, medical services) rather than those that address chronic or more long-term problems and have a more preventive focus (e.g., home-based/family preservation services, homemakers, parent education). In addition, there is a notable dearth of specialized treatment services (e.g., for substance-abusing caretakers or sexual abuse perpetrators). Special projects and programs initiated by the States, although directed at bridging some of the more glaring gaps in the service delivery system, are for the most part ad hoc, time-limited, relatively few in number in relation to the need, and small in scope.

3.1 Factors Affecting Service Delivery

3.1.1 Special Impediments to Service Delivery in the Past 2 Years

Forty-six States (90 percent) reported that during the past 2 years specific conditions have impeded their CPS agencies from carrying out their missions. For 29 States (63 percent), funding restrictions had been a problem; 27 States (59 percent) cited staffing factors; and 18 States (39 percent) indicated heavy caseloads as an impediment to service delivery. Five States (11 percent) reported impediments deriving from CPS procedures (e.g., the absence of a defined procedure for prioritization), while three States (7 percent) noted legal constraints. Three CPS specialists (7 percent) also named broadened community expectations of CPS, three (7 percent) cited increased severity of reported incidents of child abuse and neglect, and two (4 percent) noted worsening economic conditions in their States as additional impediments to their ability to carry out their mission.

3.12 Organizational Factors Affecting Service Delivery by CPS Agencies

The larger organizational structures of which State CPS agencies are a part determine how service functions are defined and differentiated. CPS agencies across the 50 States and the District of Columbia are organized differently. Such differences obviously affect not only which services are supplied, but also how services are delivered and who provides them.

State Administrative Structures

Thirty-one of the States are State-administered and 18 are locally administered/State-supervised. The District of Columbia acts as a State. In Nevada, the two counties that have more than 100,000 residents are county-administered, State-supervised; the remainder are State-administered. Further regional variations also exist within these categories. For example, not all locally-administered States are county-administered. This is particularly true in New England, but it does occur elsewhere as well. In Connecticut, for example, services of the Department of Children and Youth Services are offered through five regional and seven subregional offices to 167 municipalities. The State's eight counties are not used by the Department for administrative purposes. Similarly, in Massachusetts, the Department of Social Services operates through six regional offices that supervise programs and services provided through 40 area offices. In Vermont, as well, child welfare services are not county-based, but are provided through 12 district offices. In Rhode Island, too, counties are not used for the administration of services to children and youth. There is certainly more variation across the States in how child welfare services are actually administered than the simple division into State-administered/locally administered might suggest. Even within totally State-administered systems, regions and counties may have more or less *de facto* independence from the central office.

CPS's Relation to Wider State Child Welfare Agency

CPS agencies may exist as separate units or departments (or sub-agencies) or they may be functionally and organizationally merged into the wider State child welfare agency. In the latter case, CPS workers may or may not be distinguished from other child welfare workers in title or in the nature of the tasks they perform. Ten States mentioned regional variations wherein workers in urban areas were specialized in CPS functions but workers in rural areas were "multipurpose." One State reported that regional differences existed in the types of supervisory structures that govern CPS workers. Overall, it was clear that there is considerable variation both within and among States in how these functions are organized.

Agencies Legally Mandated to Receive and Investigate Reports

Seventeen States reported that only CPS or the State child welfare agency was mandated by law to receive and investigate reports of child abuse and neglect. In contrast, the remaining 34 States noted that, by law, these prerogatives are shared among CPS/the child welfare agency and law enforcement agencies (including police departments, the district attorney, and the county prosecutor's office).

There were some variations across the States in how reporting and investigative functions were shared between CPS and law enforcement authorities. In the District of Columbia, the police investigated all abuse reports; CPS only assessed initial reports involving abandoned children and children judged to be in immediate danger of harm. Seven States reported that institutional maltreatment was handled by the State agency but third party maltreatment, except that involving persons defined as substitute caretakers, was investigated by the police. Five States reported that police were mandated to investigate only those cases involving sexual abuse, "hard core" cases of sexual and physical abuse, or criminal charges. Two States reported that law enforcement authorities might, or might not, investigate certain cases; as a respondent commented: "The difference between civil and criminal cases can sometimes be fuzzy." In one State, police or juvenile corrections officials investigated incidents of alleged abuse or neglect in contracted agencies; CPS investigated those that occur in non-contracted agencies.

Performance of Selected CPS and Child Welfare Functions

Depending on who provided which services and the degree of coordination that existed among them, children and their families could run a greater or lesser risk of falling through the organizational cracks in the CPS and child welfare service delivery system. Some States drew a clear line between CPS functions and other child welfare functions. Two States reported that the sole function of CPS was to receive and investigate reports of abuse and neglect; beyond that, the case was transferred to another division, agency, or unit. A more common pattern was that CPS investigated all reports but delivered services just to some cases (i.e., those that were substantiated or judged at higher risk); the other cases would then be referred elsewhere.

Table 3-1 summarizes the States' responses with respect to which agencies and/or departments performed nine specified CPS and child welfare functions. We have created a single category for cases in which the functions were performed by CPS and/or by the State child welfare agency, because most State specialists did not distinguish between the two. Table 3-1 shows that removal decisions were the least likely to be handled by CPS and/or the child welfare agency alone, with 19 States reporting that this function was performed just by CPS/the child welfare agency and 30 indicating that removal was jointly handled by the agency and the courts. This breakdown may reflect the way in which the respondents interpreted this particular question, with the former group perhaps considering only emergency placements and the latter group thinking more in terms of longer-term foster placements. Thirty of the States noted that the State agency alone received and investigated reports; the remaining 21 reported this as a function shared with law enforcement. For 42 States, screening of reports, and for 37 States, substantiation, was done exclusively by CPS/the child welfare agency. Finally, all States reported that arranging and overseeing foster care and adoption, case management, and case tracking were performed exclusively by CPS/the child welfare agency, generally with the qualification that adoptions and foster care were handled by a separate unit within the department. Most of these States indicated that CPS workers were responsible for cases only up to a certain point, after which responsibility was either shared with or transferred to foster care or adoption workers.

Table 3-l. Agencies performing specified CPS and child welfare functions, as reported by States (n = 51)[a]

Function	CPS and/or child welfare agency[b]	CPS/child welfare agency and one or more other agencies	Another agency only	Not applicable
Receive reports	30	21		
Screen reports	42 (3)	7	1	1
Investigate	30 (3)	21(3)		
Substantiate	37(l)	13(1)		1
Make removal decisions	19	30		
Arrange/oversee foster care	51 (5)			
Arrange/oversee adoptions	51(11)			
Monitor service delivery/ case management	51 (1)			
Track cases through closure	51			

[a]Parentheses indicate numbers of States that report use of contracted providers for the function in question.

[b]Incorporates States in which CPS is organizationally separate and those in which CPS is/ii merged with/wider child welfare or social service agency or department.

Numbers in parentheses in Table 3-l refer to the numbers of States noting that the function in question was contracted out. Not surprisingly, indicated use of contracted providers was highest for adoptions and foster care. Massachusetts and Illinois also reported use of contracted hotline services for screening cases and for handling investigations. Three other States (Idaho, Virginia, and Wisconsin) also noted that they sometimes made agreements with private agencies to provide investigative services. In Washington State, the specialist reported that the State agency contracted with several American Indian tribes to screen and investigate their own CPS cases. Massachusetts and Illinois also contracted for substantiation services.

States were also asked to specify services they provided directly and those they referred. The specific types of services reported will be discussed in Section 3.2.5 below. Here we would only note that, out of a total of 65 different categories of services, an almost equal number tended to be generally provided directly (31) as were more typically referred (34). A few

specialists noted that services were more likely to be referred rather than provided directly in some counties and/or in urban areas rather than rural areas within their States.

3.13 Procedural Factors

Procedures used by CPS agencies also affect service delivery, and so may present barriers to CPS service provision that influence which groups of children might be unserved and underserved. In this section, we consider whether State agencies follow special procedures for handling cases at several crucial junctures in the CPS process. This section does not include any of the procedures applied in assessing risk to children, since those are discussed in detail in Chapter 4.

Handling Reports

Only 12 States reported special procedures for handling reports on prior substantiated or indicated cases of child abuse and neglect; 11 indicated that they had such procedures for reports on prior unsubstantiated cases. In both situations, most of these States would call up and review the previous record; a few incorporated this information into their assessment of risk level. States reported other special procedures that included submitting the case for team review or referring it to the county prosecutor (for prior substantiated cases), and screening out cases believed to be malicious or fictitious (for prior unsubstantiated cases).

Prioritizing Reports for Investigation

Thirty-eight States reported that they followed special procedures in prioritizing reports for investigation. Sixteen States indicated that their procedures were based upon assessed levels of severity or risk. Eight described prioritization procedures that determined the speed with which the CPS agency would respond to a report, and nine indicated that their procedures dictated top priority handling when the situation was deemed life-threatening or an emergency. Two States reported that they gave priority to cases in which the parents were thought likely to flee with the child and another two reported that their procedures varied by district.

Retaining Information on Unsubstantiated Cases

Forty-nine States reported that they retained information on unsubstantiated cases of child abuse and neglect for some specific length of time; one State reported that the record was expunged immediately after investigation, and another that the State followed no standard rule in this regard. For those States that did retain the information, there was wide variation in how long this information was kept; 19 indicated that they kept it for 1 year or less, 19 for between 1 and 5 years, and 12 for more than 5 years. These three groups of States are listed by name in Table 3-2. At the two extremes, six of the States kept information on unsubstantiated cases for less than 3 months; one State kept it for 10 years or until the youngest child reached the age of 21 years old; and another three States maintained the record permanently.

Three States indicated that they retained information on unsubstantiated cases for lengths of time that varied according to the nature of the case, whether another report was received within a given time period, or whether the alleged perpetrator requested that the record be kept for use in possible future legal action against the reporter.

3.1.4 Budgetary Factors

CPS specialists were asked to assess the adequacy of budgetary resources for performing three basic CPS functions: screening, investigation, and referral.

Screening

Thirty State CPS specialists reported resources adequate to screen all reports, 18 indicated that their agency's resources were inadequate for screening, and two were uncertain. One State was being sued over this issue at the time of the interview and, as a result, had been mandated to provide funds sufficient to screen, investigate, and refer all cases.

Table 3-2. Lengths of time States retain information on unsubstantiated cases (n =50)[a])

Category I: States that retain information on unsubstantiated cases for 1 year or less: (n = 19)
Alaska
Connecticut (record expunged immediately after investigation)
Delaware
Florida
Iowa
Illinois (can be retained longer if alleged perpetrator so requests)
Indiana
Massachusetts
Missouri
Nebraska
New Hampshire
New York
North Dakota
Ohio (3 months in central registry; if there is a prior unsubstantiated case, remains for another 3 months)
Pennsylvania
Texas
Virginia (unless requested to retain; then 2 years)
Vermont
Wyoming

Category II: States that retain information on unsubstantiated cases for 1-5 years (n = 19)
Arkansas
Arizona (2 if invalid, 5 if undetermined, then purged unless new report received)
Kansas (out of computer after 90 days, then retained in hard copy)
Louisiana
Maine
Maryland
Michigan
Minnesota (unless alleged perpetrator requests that it be destroyed, then in 30 days)
New Mexico
New Hampshire
Nevada (2 counties set their own limits)
North Carolina
Oregon
Rhode Island
South Carolina
South Dakota
Tennessee
Utah
Washington

Table 3-2. Lengths of time States retain information on unsubstantiated cases (n = 50)[a]) (continued)

Category III: States that retain information on unsubstantiated cases for 5 or more years (n = 12)
Alabama (permanently)
California
Colorado
District of Columbia
Georgia (unfounded destroyed immediately, unconfirmed kept 5 + years)
Idaho
Mississippi
Montana (expunged from computer at point unconfirmed, thereafter kept on hard copy)
New Jersey
Oklahoma (permanently)
West Virginia
Wisconsin (permanently)

[a] = Hawaii reports that then is no rule determining the length of time this information is kept.

However, even those specialists reporting adequate resources frequently added the caveat that screening was not always as thorough as they wished. As one specialist put it, "We can't always adhere to good practice standards. Other State specialists indicated that there were adequate resources in some field offices, but not in others.

Investigation

Only 18 State specialists reported resources sufficient to investigate all cases needing investigation, whereas 33 considered the resources of their State agencies inadequate for performing this critical CPS function. One State specialist said, quite plainly, "We just can't do them all." Another commented, "The counties say 'no' [that resources are inadequate]." A third State specialist indicated that many offices in her State could not investigate lower priority cases due to staff shortages. However, even the 18 respondents who answered that resources were (generally) sufficient for investigation nevertheless mentioned some problems in this connection. Thus, given the totality of their responses, virtually all States reported that funding and staffing shortages in some way impeded their ability to conduct investigations.

For example, three States that reported adequate resources also noted that investigations were not as timely as they would want. One specialist said, "Response time is affected." Another noted, 'The service is provided, but not in timely fashion." A third commented, "Investigations are delayed, but they do eventually get done." Another common concern, voiced even in the remarks of seven specialists who had reported adequate resources, was that the depth and thoroughness of the investigation necessarily suffered when agencies experienced sharp limitations on resources. The following remarks were indicative: "The level of intervention could certainly improve with lower caseloads;" "We can't always adhere to good practice standards and [as a result] lose prevention capability;" and "Staff levels affect the depth of investigation and level of service provided." One specialist said that, as a gesture of resistance against what they considered a dangerously high investigative caseload, workers in one part of her State would only investigate a certain number of cases per month, and put the remaining cases on a waiting list. Finally, one State specialist commented that thorough investigations were carried out in some field offices, but not in others, where a sharp rise in the number of reports had put pressures on workers to work overtime.

Referral

Twenty-five States reported they had adequate resources to refer all cases that needed to be referred, 22 indicated that they did not. Four States either did not reply or were unsure of their response. However, States reporting that their resources were adequate to refer all needed cases did not necessarily mean that the client received the referred service, but only that the referral had been made. Indeed, once again, the specialists' comments indicated that the level of service provided was often less than optimal. For example, in one State, "borderline" cases might not get referred; in another, no followup was done on referrals. In a third State, referrals might not happen quickly enough to have a real impact, and in a fourth, paperwork burdens might discourage workers from making referrals at all. In addition, three State specialists reported that they often had nowhere to refer these clients.

To summarize, 30 States reported resources adequate to screen all cases, 25 reported resources adequate to refer all cases needing referral, and only 18 indicated that their resources were generally sufficient to investigate all cases needing investigation. Moreover, even for States in which resources were considered adequate to perform a given function, the scope, thoroughness, or timeliness of the service was reported to leave something to be desired. Underfunding and understaffing were most often cited as the main impediments to adequate delivery of these services by State CPS agencies.

3.15 Staffing Factors

Although related to funding constraints, staffing factors can sometimes also present independent barriers to CPS operations. Table 3-3 summarizes the States' responses on staffing factors that limited their CPS agencies' ability to provide needed services to abused and neglected children and their families. These factors are discussed below, in order from most to least constraining.

Table 3-3. Degree to which selected staffing factors limit CPS's ability to deliver services, as reported by States

Staffing Factor	Not at Au	Very Little	Moderately	A Great Deal	Completely
Turnover	0	4	14	30	2
Vacancies/Inability to fill positions	2	3	22	23	1
Worker preparation/ training	1	10	23	15	1
Staff assignment	7	17	15	10	0

Turnover. Thirty States indicated that worker turnover limited them a great deal, and two went so far as to say that it limited them completely. Fourteen States considered turnover a moderate limitation to their ability to provide needed services to abused and neglected children.

Spontaneous comments volunteered by the CPS specialists sometimes clarified the nature and scope of the turnover problem. One State estimated a turnover rate of 25 percent and another a rate of 38 percent. Seven States indicated that heavy turnover was more common in some regions and/or offices than others, although they differed in their assessments of whether the problem was concentrated in cities or in isolated rural areas. One State specialist noted that the problem had become especially intense in the previous 2 years; another said that replacing experienced staff was difficult. One specialist claimed that in his State, workers leave to take better-paying positions in other States. High turnover rates were generally attributed to the dangers of CPS work and to the lack of any strong incentives to remain on the job, especially where better-paying alternatives existed.

Vacancies/Inability to Fill Positions. Twenty-five States reported that staff vacancies and inabilities to fill positions limit their CPS agencies a great deal and 22 said that these factors imposed moderate limitations on their ability to deliver services. Only two indicated that this factor posed no problem.

Comments volunteered by CPS specialists indicated some reasons why this was perceived as a problem for so many agencies. Six States pointed to the rigidity and slow-moving

nature of civil service systems as a major impediment to their hiring operations, Three referred to the difficulties of attracting qualified personnel, particularly at low salaries, while two States indicated that retention was also an issue. Three States reported partial or complete hiring freezes; one State froze CPS hiring for 6 months; another reported a freeze on hiring of supervisors and support services staff, but not direct service workers. Finally, six States indicated that their inability to fill vacancies was true only in some parts of the State, especially in rural areas.

Worker preparation and training. Fifteen States cited inadequacies in worker preparation and training as a great limitation on their ability to deliver services. Twenty-three States reported this as a moderate and 10 States as a minor limitation. Although more States may actually have been doing so, four States specifically volunteered that they had instituted or were developing pre-service training programs or certification programs in an effort to remedy the situation. However, three specialists questioned the efficacy and value of worker training. One commented that training took time away from service delivery, another said that training was wasted because the best-trained workers were the most apt to leave, and a third CPS specialist wondered whether training "really has a positive impact on the investigation and treatment of clients."

Assignment of Staff. This factor, which refers to the way in which CPS staff were distributed across tasks and assigned over the various regions of the State, was considered least limiting by the CPS specialists. Even so, 10 States said that staff assignment limited them a great deal and 15 that it limited them to a moderate extent; 17 States viewed worker assignment as a minor impediment and 7 said that staff assignment presented no problem at all to their ability to deliver services. Specialists from five western and midwestem States indicated that they had difficulties providing services in large, sparsely populated rural areas.

To summarize, CPS specialists regarded all the above-named staffing factors as presenting some level of barrier to service delivery. Staff turnover was seen as the single most constraining factor, followed by the inability to fill positions, worker training and preparation, and staff assignment. CPS specialists named low pay, few job incentives, and the dangers of CPS work as the central factors making for high turnover. Along with low pay, shortages of trained personnel and the slowness and inflexibility of civil service hiring systems were seen as the major contributors to staff vacancies and the difficulties experienced by CPS agencies in filling new positions.

3.2 Availability of Services

As a way of ascertaining groups of children and families who might be unserved or underserved by State CPS agencies, as well as the points at which and the ways in which this might occur, CPS specialists were asked to indicate which services were currently available in their States for children, for parents and families, and for perpetrators. They were asked to note to what extent the services in question are available for cases involving both abuse and neglect, how widely available the services were throughout the State, and any other existing barriers and/or limitations to the availability of each of these services. Responses are summarized in Tables 3-4 and 3-5 and are discussed below.

Table 3-4 reports the percent of State specialists that responded to the question who indicated availability of the service for both abuse and neglect, just abuse, or neither abuse nor neglect. The first part of Table 3-5 gives the percent of the State specialists answering the question who reported different levels of geographic availability of a given service throughout the State. The second part of the table gives the percent of State specialists answering the question who reported various other limitations and barriers for the service. Column 2 (a) **indicates'** the percent of specialists who reported that there were eligibility requirements limiting availability of the service: these included income restrictions, restrictions of the service only to certain types of cases, and any legal barriers that might apply. Column 2(b) gives the percent of State specialists who indicated the existence of resource limitations on availability of the service apart from those reflected in the uneven distribution of the service across different locales. These include States who named funding constraints, waiting lists, or limitations on numbers of slots or numbers of service providers, but did not tie these to the differential availability of the service across locales. Column 2(c) reports the percent of State specialists who indicated that the nature of the service was itself problematic; for example, that available services were not well suited to the specific needs of the clients or were not sufficiently specialized. Column 2(d) gives the percent of specialists who specifically mentioned language barriers in relation to the service in question. Column 2(e) reports the percent of specialists who named barriers related to lack of transportation or other limitations on the physical accessibility of the service to the client population. Column 2(f) gives the percent of State CPS specialists who reported any other barriers to delivery of the service in question; these are further described in the text. Finally, the third part of Table 3-5 reports the number of State specialists who indicated that the service was available statewide and that there were no additional barriers or limitations to provision of the service.

Table 3-4. Percent of State specialists reporting availability of selected services for cases involving both abuse and neglect, just abuse, or neither, for clients entering the child welfare system through CPS

Service	Percent reporting service available for: Both abuse and neglect	Just abuse	Neither	(n)[a]
FOR CHILDREN:				
Medical Services	100	--	--	(n=49)
Day Care (all types)	96	--	4	(n=50)
Mental Health Evaluation	100	--	--	(n=50)
Counseling	98	--	2	(n=50)
School Coordination	82	--	18	(n=49)
FOR PARENTS/FAMILY:				
Crisis Intervention	96	--	4	(n=50)
Case Management	94	2	4	(n=50)
Homemakers	92	--	8	(n=48)
Home-based/Family Preservation Services	96	--	4	(n=49)
Mental Health Evaluation	98	--	2	(n=50)
Substance Abuse Evaluation	96	--	4	(n=50)
Counseling				
- Individual	98	--	2	(n=50)
- Family	98	--	2	(n=50)
- Group	98	--	2	(n=50)
Substance Abuse Treatment	96	2	2	(n=49)
Parent Education	98	2		(n=50)
Basic Needs (e.g., food, clothing, shelter)	88	-	12	(n=50)
Employment Services	76	2	22	(n=50)
Medical Services	82	2	16	(n=50)
FOR PERPETRATORS:				
Mental Health Evaluation	90	2	8	(n=50)
Sex Offender Evaluation		88	12	(n=48)
Sex Offender Treatment		78	22	(n=50)

a = Number of States answering this question for the particular service.

Table 3-5. Percent of CPS specialists reporting availability of selected services in all or part of State, percent reporting other barriers, and number reporting no barriers, for clients entering the child welfare system through CPS

	(1) Percent reporting service available . . .					(2) Percent reporting barriers/limitations . . .							(3)
Service	(a) Statewide	(b) In most of State	(c) In ½ of State	(d) Mainly in urban areas	(e) In very few counties	(a) Eligibility requirements	(b) Resource limitations	(c) Nature of service	(d) Language	(e) Transportation/ accessibility	(f) Any other barrier	(n)[a]	Number of States reporting no barriers
FOR CHILDREN:													
Medical Services	70	28		2		38	13	11	11	7	--	(47)	15
Day Care (all types)	58	28		7	7	26	35	9	7	7	2	(43)	6
Mental Health Evaluation	67	22	2	6	4	17	27	--	11		--	(48)	8
Counseling	67	20		9	4	15	22	2	11	13	--	(46)	8
School Coordination	68	22		3	8	14	3	--	--	--	51	(37)	8
FOR PARENTS/FAMILY:													
Crisis Intervention	83	13		4		7	20	11	9	2	2	(46)	21
Case Management	91	7		2		7	20	4	9	--	--	(45)	25
Homemakers	53	18	5	3	21	26	21	11	11	5	2	(38)	6
Home-based/Family Preservation Services	43	13	2	11	32	19	26	4	17	2	6	(47)	7
Mental Health Evaluation	74	17		4	4	13	17	6	15	6	9	(47)	9
Substance Abuse Evaluation	53	11		11	24	9	36	2	13	9	9	(45)	3
Counseling													
- Individual	65	22		7	7	22	17	4	7	7	7	(46)	14
- Family	63	22		7	9	15	1	5	7	7	4	(46)	13
- Group	55	15	15		15	9		7	7	9		(46)	11
Substance Abuse Treatment	35	20		22	24	15	22	9	7	4	11	(46)	2
Parent Education	38	25		15	23	4	19	6	6	4	6	(48)	6
Basic Needs (e.g., food, clothing, shelter)	66	27		2	5	16	32	--	5	--		44	10
Employment Services	57	38		3	11	14	14	3	5	3	--	(37)	9
Medical Services	56	31		5	8	38	13	3	5	5	--	(39)	7
FOR PERPETRATORS:													
Mental Health Evaluation	58	21			19	19	21	2	7	9	6	(43)	13
Sex Offender Evaluation	29	15		10	46	18	27	12	2	5	5	(41)	6
Sex Offender Treatment	23	6		17	54	20	29	17	3	3	9	(35)	3

a = Number of State specialists answering this question for the particular service. The (n) for columns 1 (a-e) and 2 (a-f) is the same.

32.1 Services for Children

State specialists were questioned about the availability of five types of services for children entering the child welfare system through CPS: medical services, day care, mental health evaluation, counseling, and school coordination.

Availability of Services for Children for Both Abuse and Neglect Cases

AU of the States that responded to this question reported that medical services for children (n=49) and mental health evaluation services for children (n= 50) were available to both abuse and neglect cases. Ninety-eight percent reported that this was so for counseling; the other 2 percent indicated that the service was available to neither abuse nor neglect cases. Similarly, 96 percent reported availability of day care to both abuse and neglect cases, while 4 percent noted that neither abuse nor neglect cases had this service available to them. These State specialists reported various types of day care, including regular day care (41 percent), emergency or crisis day care (24 percent), day nurseries (12 percent), day care homes (10 percent), respite day care (6 percent), therapeutic day care (4 percent), and group day care (3 percent). Only 82 percent of these State specialists indicated that school coordination services were available both to abuse and neglect cases, with the remaining 18 percent again reporting that day care was not available either to abuse or to neglect cases. School coordination is less a service per se than a variety of ways that CPS agencies link up with schools, including: coordination of investigations, case-by-case working agreements, case management/assistance in obtaining services, increasing awareness of child abuse and neglect in the schools, and providing in-school companions to maltreated children.

Geographic Availability of Services for Children

The first five columns in Table 3-5 indicate the percent of CPS specialists responding to this series of questions who reported statewide or more limited geographical availability of these services. In States indicating statewide availability there were no reported limitations on availability of the service by locale, but there often were other limitations, which are given in the next six columns in the table. Seventy percent of the specialists reported that medical services for children were available throughout the State, another 28 percent indicated availability in most of

the State, and just 2 percent reported that they were available only or mainly in urban areas. Sixty-eight percent of responding States reported statewide availability for school coordination, with another 22 percent reporting availability of this service in most of the State, 3 percent indicating that services coordinating the schools and CPS were available mainly in urban areas, and 8 percent suggesting availability in only a very few counties or areas of the State. Sixty-seven percent of these specialists indicated statewide availability of mental health evaluation for children, 22 percent reported availability in most of the State, with a total of only 12 percent reporting more limited availability of one kind or another. The distribution of availability of counseling services for children is very similar to that for mental health evaluation: 67 percent indicated statewide availability, another 20 percent reported that the service was available in most of the State, and the remaining 13 percent reported more limited availability, with 9 percent of these indicating that counseling services for children were available mainly in urban areas.

Fifty-eight percent of the specialists answering this question reported statewide availability of day care, 28 percent reported availability of day care in most of the State, and the remaining fourteen percent were evenly divided between those indicating availability mainly in urban areas and those reporting availability of day care only in a few very counties. Thus, of the five services for children, day care was the most restricted in geographical availability.

Other Barriers/Limitations on Services for Children

Thirty percent of these State specialists indicated that income restrictions or other eligibility requirements limited availability of medical services to children. Twenty-two percent cited income eligibility criteria related to Medicaid-established limits; 8 percent reported limitations stipulating that, to be eligible for State-sponsored medical services, the child had to be a ward of the State or had to be documented as abused or neglected. Twenty-six percent of these States reported eligibility requirements associated with day care. About half cited income requirements, while the other half noted restrictions such as: the case had to be substantiated as abuse or neglect, the child had to be defined as at-risk, the case had to be defined as an emergency case, or the case had to be active with the department. A lower percentage of States responding to this question indicated eligibility requirements related to mental health evaluation (17 percent), counseling (15 percent), or school coordination services (14 percent) for children.

Among other noteworthy limitations on service availability applying to services for children was the high percentage of specialists (35 percent) indicating the existence of limitations on resources for day care, and the somewhat lower percentages reporting this for mental health evaluation (27 percent) and counseling (22 percent). Under the limited nature of services category, 11 percent of the State specialists reported that specialized medical services were often not available, and 9 percent noted that all types of day care were often not available. Finally, 13 percent of these State specialists cited transportation and accessibility problems as affecting counseling services for children. Among other limitations reported (see column 2(f)), the most striking figure was for school coordination: over half of the responding State specialists indicated the existence of barriers related, in one way or another, to CPS's ability to negotiate cooperative working relations with the schools in handling cases involving child maltreatment. Thirty-eight percent of these specialists reported that availability depended on the school district, 11 percent named legal impediments to CPS coordination with the schools, and in one State, according to the specialist, some CPS workers resisted cooperation with the schools because they regarded such contact as a breach of client confidentiality.

Summary: Services for Children With No Reported Barriers or Limitations

The final column in Table 3-5 gives, for each category of service, the number of responding State specialists who reported both that the service was available statewide'& that there were no additional barriers or limitations that applied. This is the best single overall indicator of which services are most and least available. Of services for children, the one reported as available without restrictions by the greatest number (15) of CPS specialists was medical services; the least available was day care, reported as such by only six States. Nevertheless, it should be emphasized that even for the most "available" service in this category, fewer than one-third of the responding States reported no existing barriers or limitations on availability of the service.

3.2.2 Services for Parents/Families

The CPS specialists' responses to questions concerning availability of fourteen types of services for parents and for families are also given in Tables 3-4 and 3-5. Discussion in this section will highlight the most salient points.

Availability of Services for Parents and Families for Both Abuse and Neglect

Reported availability of services to cases involving both abuse and neglect ranged from a low of 76 percent, for employment services, to 98 percent, for mental health evaluation, counseling and parent education. For the most part, the variation in these percentages did not reflect differential availability to abuse cases as opposed to neglect cases, or vice versa, but reflected lack of availability of the service for **both** abuse and neglect cases. As is shown in Table 3-4, five services (case management, substance abuse treatment, parent education, employment services and medical services) were reported as available only to abuse cases by only 2 percent of the reporting States.

Geographic Availability of Services for Parents/Families

Table 3-5 reveals that case management (91 percent) and crisis intervention (83 percent) services stood out as the two services with the highest statewide availability as reported by CPS specialists. In contrast, the services that CPS specialists reported as lowest in statewide availability were substance abuse treatment (35 percent) and parent education (38 percent), followed by home-based/family preservation services (43 percent). The range of reported statewide availability across the different services in this category was in fact considerable. Moreover, at the other end of the continuum, the percent of specialists reporting extremely limited geographic availability was also quite substantial. Fully 32 percent of the specialists indicated that home-based/family preservation services were available only in a few counties, while 24 percent reported that this was the case for substance abuse evaluation and substance abuse treatment services, 23 percent reported it for parent education services, and 21 percent did so for homemaker services.

The overall pattern in Table 3-5 is that the services most geographically available to parents and family were those aimed at staving off an imminent crisis or blunting the impact of an emergency (e.g., crisis intervention) or at directing the family's case plan (e.g., case management). By contrast, the services State specialists reported as least widely available included specialized treatment services (substance abuse treatment) and preventive and educational services (parent education, home-based/family preservation services) designed to effect more lasting changes in the family unit.

Other Limitations/Barriers on **Availability** of Services to Parents and Families

Eligibility requirements figured quite prominently (38 percent) as a reported barrier to medical services for parents and families; as was true for medical services for children, this referred mainly to income requirements that determine Medicaid eligibility and the consequent need for non-eligible families to pay for these services. A relatively high percentage of State specialists also reported eligibility requirements attached to homemaker (26 percent), counseling (22 percent), and home-based/family preservation services (19 percent). These did not refer to income-based requirements; but the restrictions for all three services were roughly evenly divided between limitations that provided the service only to substantiated or high-risk cases and limitations that required the service to be court-ordered.

The highest percentages of CPS specialists reported overall resource limitations (e.g., not enough providers, not enough slots, funding limitations) as barriers to availability of substance abuse evaluation services (36 percent), basic needs services (32 percent), and home-based/family preservation services (26 percent). By contrast, medical services (13 percent) and employment services (14 percent) were reported by these specialists to be the least affected by general resource constraints.

As indicated in column 2 (c), **11** percent of these State specialists reported that the crisis intervention and homemaker services they did provide were limited in scope. Along similar lines, 9 percent of these CPS specialists noted that staff were often not appropriately trained in the delivery of group counseling services. Nine percent also indicated that appropriate substance abuse treatment services were not available in their States, commenting on an absence or dearth of substance abuse treatment facilities oriented toward women, especially facilities that could serve

women with children. Linguistic barriers were most often reported in connection with home-based/family preservation services (17 percent), mental health evaluation (15 percent) and substance abuse evaluation (13 percent) services. Among other barriers or limitations on services to parents and families most often noted by the State specialists, the timing of services was mentioned by a relatively high percent as a problem in relation to mental health evaluation (9 percent), substance abuse evaluation (9 percent), group counseling (9 percent), and substance abuse treatment (11 percent). These States indicated that all four of these services were often not available at the critical point when they are most needed.

Summary: Services to Parents With Families With No Reported Barriers or Limitations

As noted above, the last column (section 3) of Table 3-5 gives the number of responding State specialists who indicated that a given service was available statewide and that no additional barriers or limitations applied to it. This can be taken as providing a rough indicator of overall service availability. Within the category of services to parents and families, the highest number of responding States (25) reported no barriers to availability of case management services; the next highest number (21) indicated that this was so for crisis intervention. By contrast, a mere two States noted no existing barriers or other limitations on availability of substance abuse treatment services, and only three reported this for substance abuse evaluation services. Only six States indicated that no barriers or limitations restricted availability of homemaker services and parent education services, while just seven reported this to be the case for home-based/family preservation services and medical services. Clearly, among all services for parents and families, substance abuse evaluation and treatment as well as homemaker, parent education, and home-based/family preservation services stood out as least available overall.

3.2.3 Services for Perpetrators

Finally, as a third category of services that might be provided, CPS specialists were asked to indicate whether mental health evaluation, sex offender evaluation, and sex offender treatment services were available to perpetrators of child abuse and neglect. This was asked as a separate category, in part to see if these services were available to non-family members as well as

family members who were perpetrators of child abuse and neglect. However, several specialists qualified their responses to indicate that these services were in fact restricted only to family members.

Availability of Services for Perpetrators for Both Abuse and Neglect Cases

Ninety percent of the State specialists indicated availability of mental health evaluation services to perpetrators of both abuse and neglect. Of the remaining 10 percent, 8 percent noted that the service was available to neither category, and only one State specialist reported that mental health evaluation was restricted only to perpetrators of abuse. Sex offender evaluation and sex offender treatment are, by definition, available only to perpetrators of abuse.

Geographic Availability of Services for Perpetrators

Whereas 58 percent of these States reported statewide availability of mental health evaluation services for perpetrators, only 29 percent reported that sex offender evaluation services were available statewide, and an even smaller 23 percent reported statewide availability of sex offender treatment services. An even more striking indication of the extremely limited availability of these two types of services is given by the large percent of specialists reporting sex offender evaluation (46 percent) and sex offender treatment (54 percent) for perpetrators available in only a very few counties or areas of their States.

Other Limitations/Barriers to Services for Perpetrators

Apart from barriers related to general resource limitations, indicated by 21 percent of these State specialists, the most commonly reported barriers to provision of mental health evaluation services to perpetrators referred to eligibility requirements, which were named by 19 percent of these State specialists. These involved income limitations (7 percent), restriction of these services only to high risk or substantiated cases (2 percent), the requirement that the service be court-ordered (5 percent), restriction of availability only to the child's parent or caretaker (2 percent), and the stipulation that non-caretaker offenders and adolescents be the last to receive the services (2 percent).

Resource limitations were also the most commonly reported impediments to availability of sex offender evaluation (27 percent) and sex offender treatment (29 percent) for perpetrators. In addition, eligibility requirements also figured importantly for both sex offender evaluation (18 percent) and sex offender treatment (20 percent). For the former, these involved the requirement that the service be court-ordered (5 percent), the imposition of income eligibility limitations (2.5 percent), the stipulation that the offender had to confess (2.5 percent), and the restriction that the statute of limitations could not have run out (2.5 percent). In addition, in one State (2.5 percent), the CPS specialist reported that attorneys advised their clients not to accept these services, since this could be construed in court as admission of guilt. For sex offender treatment services for perpetrators, the breakdown of applicable restrictions was quite similar. Six percent of these CPS specialists reported that in their States income restrictions were applied to these services, while an additional 6 percent indicated that sex offender treatment had to be court-ordered. Another 6 percent of these CPS specialists reported that non-caretakers and denying offenders could not receive these services. Finally, one State noted that sex offender treatment could only be provided to substantiated cases of sexual abuse.

Other limitations that CPS specialists reported relatively frequently for both sex offender evaluation (12 percent) and sex offender treatment (17 percent) for perpetrators came under the category of limitations on the nature of services. These referred to the judgment of the State specialists that these services were not sufficiently specialized or adapted appropriately to the needs of sexual offenders.

Summary: Services to Perpetrators With No Reported Barriers or Limitations

As indicated in section (3) of Table 3-5, 13 of the responding State specialists reported no limitations on availability of mental health evaluation services for perpetrators, while only 6 reported no barriers to availability of sex offender evaluation, and a mere 3 States indicated that this was the case for sex offender treatment services for perpetrators.

32.4 Overall Conclusions: Availability of Services

Overall, across all three categories of services, the highest percentages of State specialists indicated that services were available for both abuse and neglect cases. This probably means that few or no policy or legal restrictions specifically excluded provision of services to both types of cases. Instead, real barriers to availability existed in the actual distribution of services, as indicated in Table 3-5.

The importance across-the-board of geographic restrictions on the availability of services to children, to parents and families, and to perpetrators, is suggested in the first section of Table 3-5. Only four services were reported to be geographically available statewide by 70 percent or more of the CPS special& case management services to parents and families (91 percent), crisis intervention services for parents and families (83 percent), mental health evaluation for parents (74 percent), and medical services to children (71 percent). When the percent of specialists reporting availability of these services in most of their State is added to the percent indicating statewide availability, the totals range from a high of 98 percent (for medical services for children and case management) to a low of 91 percent (for mental health evaluation for parents/families). Altogether 13 of the total of 22 services were reported to be available statewide by 50 percent to 70 percent of the CPS specialists (e.g., day care for children, mental health evaluation for children, counseling for children, school coordination, substance abuse evaluation for parents, and family counseling for parents and families). For these services, the range of reported geographic availability was wider. For example, when the percent reporting statewide availability is added to the percent reporting availability in most of the State, all types of counseling to parents and families as well as basic needs services, employment services and medical services to parents and families were reported by a total of 74 percent (for group counseling) to 93 percent (basic needs) of the specialists, suggesting a high overall level- of geographic availability. By contrast, although 53 percent of the specialists indicated statewide availability of both homemaker and substance abuse evaluation services, only 18 percent and 11 percent reported that these services were available in most of the State, while high percentages (21 percent -- homemakers, and 24 percent -- substance abuse evaluation) indicated availability in only a few counties or areas.

The remaining five services were reported as available statewide by fewer than 50 percent of the specialists. These were home-based/family preservation services, substance abuse

treatment services for families and parents, parent education, sex offender evaluation, and sex offender treatment. Not surprisingly, these same services were reported as being extremely limited geographically (e.g., available in only a few counties) by 20 percent or more of the specialists. The extreme was represented by sex offender evaluation and treatment services, reported as having extremely limited geographic availability by about one-half of the State specialists responding to the question. The most frequent comments that CPS specialists offered with respect to geographic availability indicated that services were least likely to be available in rural areas or other geographically remote parts of their States.

Reported geographic availability of a service is a kind of beginning or baseline indicator of service availability. As section (2) of Table 3-5 shows, CPS specialists reported a variety of other barriers differentially distributed across the types of services. The two most salient categories here, in terms of the percent of State specialists who reported barriers or limitations in these areas, were: those indicating general resource limitations (lack of funding, waiting lists, too few service providers, etc.), as given in column 2(b), and those indicating the existence of eligibility requirements or other legal or policy barriers, as given in column 2 (a). A surprisingly low percent of State specialists cited the existence of language barriers to service provision. This may be because CPS specialists did not volunteer this information spontaneously, in spite of the fact that language barriers were given as one suggested category of limitations on the State Survey instrument (see Appendix).

The single most telling part of Table 3-5 is section 3, which shows the number of CPS specialists who reported no existing barriers to availability of a given service. As can be seen, the numbers across all categories ranged from a low of two States (for substance abuse treatment for parents/families) to a high of 25 States (for case management services for parents and families). Services that stood out overall as most “barrier-free” were case management (25 States) and crisis intervention (21 States).

Those that stood out as of lowest overall reported availability, indicated as "barrier-free” by only two to three State specialists, were: substance abuse treatment for parents and families (2 States), substance abuse evaluation for parents and families (3 States), and sex offender treatment for perpetrators (3 States). Again, we note the pattern that the most generally available services were crisis management services and the least generally available were specialized treatment services.

The next cluster of services were those reported as available with no associated barriers by 6-9 of the CPS specialists. They were:

- Parent education - 6 States
- Homemakers - 6 States
- Day care - 6 States
- Mental health evaluation for perpetrators - 7 States
- Home-based/Family preservation services - 7 States
- Medical services for parents and families - 7 States
- Mental health evaluation for children - 8 States
- Counseling for children - 8 States
- School coordination - 8 States
- Mental health evaluation for parents and families - 9 States
- Employment services - 9 States

This cluster is comprised of an interesting combination of day care, medical services, basic services (e.g., employment), mental health evaluation services, counseling services for children, and preventive services (parent education) and/or services delivered in-home (homemakers, home-based/family preservation). Although not so low in overall availability as the specialized treatment services reported above, these must also be seen as very restricted in their overall availability. Moreover, the restricted availability of preventive and educational services is especially noteworthy in light of the shift reported by a number of States toward a more family-centered, prevention-oriented mission for CPS. For at least some States, then, actual service delivery had not kept pace with these reported changes in overall agency direction. In addition, it probably bears repeating that educational and prevention-oriented services are designed to have a long-range impact on the functioning of the family unit, whereas several of the more generally available services are immediate or short-term and crisis-oriented in nature. It appears that more energy was being devoted to "bandaid" interventions than to services which might be expected to make a difference to children and their families over time. Only eight specialists considered that there were no barriers associated with availability of school coordination. Most of these barriers

pertained to the difficulties of building bridges to the school districts. Finally, it is also worth noting that counseling services to children were reported as 'barrier-free" by fewer State specialists than were counseling services for parents/families.

Ten to 15 CPS specialists reported "barrier-free" availability of the following services across all three service categories:

- Basic needs - 10 States
- Group counseling - 11 States
- Family counseling - 13 States
- Mental health evaluation for perpetrators - 13 States
- Individual counseling for parents/families - 14 States
- Medical services for children - 15 States

These services include basic services that aim to provide for the family's needs for food, clothing and shelter. Individual counseling for parents and families was reported to be available by one more specialist than reported such availability for family counseling, whereas group counseling was indicated to be slightly less available overall. It was interesting that counseling services for parents and families were reported to be more widely available overall than was true for mental health evaluation for children or parents and families, or for counseling services for children. Perhaps such evaluation services, as well as counseling services for children, were more specialized and thus available "barrier-free" in somewhat fewer States.

Following this, as noted, the two services reported as available with no barriers by the highest number of CPS specialists were crisis intervention and case management.

Several points deserve emphasis here. First, these figures only give a picture of the extent to which these services were reported as available across the States, and indicate reported barriers to their availability. These data do not (except indirectly, in the column indicating limitations on the nature of the services) address the adequacy or effectiveness of these services for clients entering the child welfare system through CPS. Secondly, in comparing levels of availability across these services, one should not ignore the fact that the overall level of availability

of all these services is really quite limited Even the two most "barrier-free" services were reported as available without accompanying limitations by only about one-half of the responding State specialists. From this perspective, the picture is in fact quite striking: all but 2 of these 22 services were reported to be available without any barriers or limitations by 20 or fewer of these State specialists, and more than half were reported as available without barriers or restrictions by just 9 or fewer of these State specialists. The "big picture" was one of considerable limitations on availability of all these services.

3.2.5 Directly-Provided Versus Referred Services

As noted in Section 3.1.2., State specialists were asked to specify which services were provided directly by the State CPS agency and which were referred to another department or agency, whether public or private. Although there was considerable overlap in the types of services that fell into both the directly-provided and referred categories, some types were more frequently named as provided directly, others as referred. These are presented in Table 3-6. It is interesting that two of the services reported in Table 3-5 as being of low availability, homemakers and family preservation services, were most often indicated as directly provided; whereas two others of low availability, parent education and substance abuse evaluation and treatment, were most often reported as referred.

33 Other Pressures on CPS Service Delivery and Responses to Them

33.1 New Types of Cases Witnessed by CPS Agencies

As another way of ascertaining categories of children potentially unserved or underserved by CPS agencies, we asked specialists to indicate whether their State agencies had witnessed an influx of new types of cases during the past 5 years. Forty-four States reported at least one new type of case of this sort since 1985. Their responses are presented in Table 3-7 in order of the number of mentions given for each.

Table 3-6. Services most often named as provided directly by CPS, compared to those most often named as referred

Services Provided Directly	Number of mentions
Casework/counseling	35
Case management	26
Day care	14
Parent aides	12
Homemakers	12
Family Preservation	11

Services Referred	Number of mentions
Mental health services	34
Medical services	21
Parent education	18
Substance abuse evaluation/treatment	13
Day care	13

Table 3-7. New types of cases seen by CPS agencies in the past 5 years, as reported by States (n=44)

Type of case	Number of States*
Drug-exposed infants/children with substance-abusing caretakers	37
AIDS babies	10
Sexually abused children	5
Homeless children	3
Victims of family violence/dysfunction	3
Victims of ritualism/cults	3
Children with severe emotional problems	2
Thrownaway/abandoned children	2
Children with severely mentally ill caretakers	2
Severely/fatally injured, very young children	1
Cases involving institutional abuse	1

*States could name as many categories as applied, and were counted in every applicable row.

As seen in Table 3-7, by far the most notable influx that CPS specialists reported was of chemically dependent newborns and/or substance-abusing caretakers, a problem that was acknowledged by a majority of the States. AIDS-related cases ranked as a distant, but still noteworthy, second in the list of recent new problems, with one-fifth of the States claiming to have experienced a rise in the instances of these cases since 1985. Five States indicated an increase in sexual abuse cases. Cases involving emotional problems of children, mentally ill caretakers, family violence/dysfunction and injuries to very young children were not viewed as entirely new, but as having grown notably more severe during the most recent 5-year period. Three States in different parts of the county -- Iowa, Missouri, and Maine -- reported witnessing an influx of cases involving child victims of satanism and other cult-related and ritualistic violence.

3 3 2 Specific Unserved and Underserved Groups

To determine which specific groups of children CPS specialists regarded as most in need of services, as well as the extent to which CPS agencies had taken any steps to provide services to these groups, we provided CPS specialists with a checklist containing **23** potentially underserved categories of children. For each category, specialists were asked to indicate **(1)** whether any special efforts (policies, programs, practices) were being made or had been made in the previous 5 years to overcome barriers to serving these children; and (2) whether they thought there was a need for such an effort in their State.

Table 3-8 presents their responses for each of these categories of children. The first column gives, in rank order, the number of States reporting both that there was a need for a special effort for the category, and that no such effort **existed** at the time of the interview or had been instituted in the past 5 years. The second column reports the number indicating the existence of one or more such special efforts for the category in question. The third column of Table 3-8 gives the number of States reporting that there was no need for any type of special effort. Finally, the fourth column indicates the number of State specialists who said either that they did not know whether there was a need or were uncertain as to whether a special effort had been or was being made for the particular category of children. Those that gave no answer concerning the specific category were excluded from the total.

The greatest number of State specialists (27) reported a need and no special effort being made for child victims of psychological maltreatment, followed by children with intellectually limited caretakers (26 States), and children with psychiatrically impaired caretakers (25 States). Very few specialists reported the existence of special efforts for these groups of children, while a moderate number of CPS specialists considered that there was no need for any special effort for these groups **(12--child** victims of psychological maltreatment, **14--children** with **intellectually** limited caretakers, **13--children** with psychiatrically impaired caretakers). In addition, for the latter two categories, as many or more State specialists indicated that they did not know whether there was a need for these efforts and/or whether any such efforts existed as reported the existence of such efforts. This **suggests that, in some States, awareness of the problems and needs of these children may have only been emerging at the time of the interview. It is noteworthy that these categories of children, who may be considered the most "underserved" of all, were those**

Table 3-8. Number of States reporting **need for special efforts and existence of special efforts for selected categories of children**

Categories of children	Number of States reporting: Need and no special effort(s)	Special effort(s)	No need for special effort(s)	Do not know (whether is need and/or special effort)	(n)[a]
Child victims of psychological maltreatment	27	6	12	1	(46)
Children with intellectually limited caretakers	26	3	14	3	(46)
Children with psychiatrically impaired caretakers	25	3	13	5	(46)
Children from single parent families	25	8	12	0	(45)
Rural children or those who live at distance from services	23	12	9	0	(44)
Children who live in dangerous neighborhoods	21	4	20	1	(46)
Migrant children or children who move or change households frequently	19	8	16	2	(45)
Homeless children	19	15	10	2	(46)
Children from low income households	18	7	19	1	(45)
Children with substanceabusing caretakers	17	21	8	0	(46)
Children 5-9 years old	13	6	22	3	(44)
Children with caretakers in prison	12	7	24	2	(45)
Children O-4 years old	11	17	17	1	(46)
Children 10-14 years old	10	13	19	3	(45)
Handicapped children	9	28	5	4	(46)
Racial minority children	9	23	11	2	(45)
Ethnic minority children	9	15	18	2	(44)
Chemically dependent newborns	9	32	5	0	(46)
Children 15-18 years old	8	16	20	2	(46)
Children from high income families	6	0	33	2	(41)
AIDS babies	6	28	12	0	(46)
Children from large families	6	1	32	1	(40)
Children from middle income families	5	0	34	2	(41)

[a] = Number of States responding for particular category of child.

whose long-term psychological development could be expected to be most severely impaired in the absence of any service intervention.

Children from single parent families (25 States), rural children or those who lived at considerable distance from services (23 States), and children who lived in dangerous neighborhoods (21) were also reported by a relatively large number of CPS specialists as both in need of special efforts and without any such efforts on their behalf. Looking at the second column of the table, moreover, with the partial exception of rural children, relatively few States indicated the existence of special efforts for any of these categories. These were children whose chronic, if less intense, needs for services were not being addressed by the child welfare system. However, it should be noted that, while relatively few (9) specialists reported that they considered there to be no need for special efforts for rural children, 12 specialists indicated no need for any such efforts for children from single parent families, and fully 20 said this was the case for children living in dangerous neighborhoods.

The next three categories given in column 1 of Table 3-8--migrant children or those who moved or changed households frequently (19 States), homeless children (19 States), and children from low-income households (18 States)--also represented groups of children whose everyday life circumstances made them chronically vulnerable. Although a relatively high number of States (15) reported the existence of special efforts for homeless children, the numbers of specialists so indicating were much smaller for migrant children (8) and children from low-income households (7). At the same time, in parallel to what was reported for the three categories of children described above, a substantial number of State specialists indicated that they perceived no need for any special efforts for these groups of children: 19 specialists reported no perceived need for special efforts for children from low-income households, 16 did so for migrant children or those changing households frequently, and 10 specialists indicated that this was the case for homeless children.

Seventeen State specialists reported a need for special efforts and no efforts being made on behalf of children with substance-abusing caretakers; however, an even greater number (21) reported that they had made some special effort for this group of children. Moreover, just 8 specialists said that they did not think there was a need for such efforts in their States. Although a smaller number of specialists (9) indicated a need and no special efforts being made for chemically dependent newborns, the numbers were counterbalanced by the correspondingly higher number of

specialists (32) indicating the existence of some type of special effort for these children, while an even smaller number (5) perceived no need for any such effort. These findings fit with what was reported in Table 3-7, where 37 State specialists reported having witnessed an influx of CPS cases related to problems of parental substance abuse over the five year period previous to the interview.

Thirteen specialists reported a need and no special efforts for children 5-9 years old, only six indicated the existence of any special efforts for these children, and 22 reported that they did not perceive a need for special efforts for children of this age group. A similar pattern of responses was given for children with caretakers in prison, with 12 specialists reporting a need but no efforts, 7 indicating the existence of these efforts in their State, and 24 specialists considering that there was no need for special efforts for these children. Somewhat fewer specialists reported a need and no existing special efforts for children O-4 years old (11) and children 10-14 years old (10), with a higher number reporting that some efforts were being made for these age groups (17 States -- children O-4, 13 States -- children 10-14). Seventeen specialists indicated that they perceived no need for special efforts for very young children, and 13 indicated that they considered this to be the case for children 10-14 years old.

Nine or fewer State specialists reported a need and no special efforts being made on behalf of: children with disabilities* (9); racial minority children (9); ethnic minority children (9); chemically dependent newborns (see above); children 15-18 years old (8); children from high-income families (6); AIDS babies (6); children from large families (6); and children from middle income families (5). Of these, a high number of specialists reported the existence of special efforts for children with disabilities* (28), AIDS babies (28) and racial minority children (23). A moderate number reported that they had made special efforts for children 15-18 years old (16) and ethnic minority children (15), whereas no specialists reported special efforts for children from middle income families and those from high-income families and only one did so for children from large families. Not surprisingly, the largest number of specialists felt that these latter three categories of children did not need special efforts, whereas many fewer specialists reported this for children 15-18 years old (20), ethnic minority children (18), racial minority children (11) and children with disabilities* (5).

*The survey actually asked CPS specialists about "handicapped children."

Overall, the categories of children who emerged as most clearly underserved were those with the greatest number of States reporting a need and no special efforts on their behalf. However, a more comprehensive picture is obtained when considering all columns of Table 3-8 in conjunction with one another, as was done in the discussion above. When seen in this light, all these categories of children may in some measure be seen as underserved, especially since (as shall be seen in Section 3.3.3 below) the number and scope of most reported special efforts was quite limited, and therefore probably did not begin to exhaust the outstanding need for additional efforts.

This point is reinforced when looking at the above responses in relation to those given in Table 3-4, which, first of all, indicated limited overall availability of a whole range of regular CPS services not necessarily geared to specific groups of children. In addition, Table 3-4 pointed to particular types of services that were woefully lacking (e.g., substance abuse and sex offender evaluation and treatment, home-based/family preservation services, parent education), only a few of which appear to correspond to special efforts reported above by a relatively high number of State specialists (most notably, efforts on behalf of chemically dependent newborns and substance-abusing caretakers). Finally, it is important to reiterate that the data reported above do not speak to the effectiveness of the special efforts tried by the States on behalf of these categories of children.

3.3.3 Programs/Projects Reported for Special Categories of Children

In order to discover more about the kinds of special efforts being made for the 23 categories of children arrayed in Table 3-6, we asked State CPS specialists to supply more detailed descriptions of all policies, programs or practices initiated for any of these categories of children during the past 5 years.

Only 29 States supplied this information for one or more special efforts. In every case, the number of States providing these descriptions was smaller than the total number reporting the existence of a special effort for the category in question, as can be seen by comparing the numbers given below with those in the second column of Table 3-8. Consequently, the numbers below under-report the true numbers of such projects across the States, and reflect only those States who took special pains to inform us about these efforts. The top nine responses are

summarized below, in order of the number of States providing a description of programs or projects for the category in question. Once more, lest their scope be exaggerated, it should be added that many of these efforts were restricted to one site or a small set of sites in a State, or were sharply limited in the number of clients they could (or did) serve. Of the nine categories described below, only one -- Medically Disabled/Medically Fragile Infants -- was volunteered by a responding State.

HIV/AIDS Babies. Fourteen States reported about programs for these children. Seven **States** reported on and described programs to develop or provide specialized foster care for these infants. Other efforts were aimed at creating an infrastructure to provide services. They included staff training, multi-agency coordination, a medical review board, and information and education services.

Infants and Children witb Disabilities/Medically Fragile Infants: Thirteen States supplied information describing programs for these children. These programs encompassed a broad range from prevention and parent education to staff and foster parent medical training and model day care. One State specialist described an agreement between CPS and the public health authorities in one major urban county that was designed to facilitate access to both health and social services for children with intensive medical needs.

Chemically dependent newborns: Nine States indicated the nature of their programs for these children. Most efforts aimed at establishing consistent policies and procedures concerning referral from hospitals, protocol development, multidisciplinary assessment, and worker training. Two States reported providing in-home and/or outreach services to these infants and their families; one State was developing foster care resources for these newborns; and another State described a plan to create a nursing home arrangement for these infants.

Substance Abusing Caretakers: Eight States reported on and described programs for substance-abusing caretakers. Half **of these States reported treatment programs for alcohol and drug-involved** mothers. Three States described efforts to develop policies and practices about how these cases ought to be handled across service sectors (e.g., interagency coordination, referral from hospitals to CPS) and two indicated they were developing and implementing worker training projects.

Programs for Racial and/or Ethnic Minorities: Seven States indicated that they had programs aimed at Black (5 States), Hispanic (4 States), Asian (4 States), and Native American (1 State) children. The majority involved cultural sensitivity training for child welfare or CPS workers or special efforts related to foster care placement or adoption, such as the One Church/One Child program. In a few cases, programs were more directly targeted at child abuse and neglect issues: two States translated parent training materials into Spanish and/or Southeast Asian languages, and one State had a program that trained "gatekeepers" in Asian communities to be parent educators.

Children With Disabilities*/Developmental Disabilities: Six States reported that these children were specifically included in programs involving provision of information and referral services to parents; program development; protocol development; case management services; creation of guidelines for delivery and coordination of services; and training of workers and foster and adoptive parents.

Incarcerated Caretakers: Five States descrii parenting classes as well as placement, visitation, and support programs.

Children O-5 Years **of Age:** Five States had programs and projects such as alternative placement, parent education, and worker training for detection of signs of abuse in infants and young children.

Homeless Children: Four States described programs and projects to provide shelter to homeless children with families; to offer financial assistance to deter out-of-home placement due to homelessness; and to deliver direct services to children in homeless shelters, including the location of special CPS investigation units in shelters.

Other categories of children for whom programs were described:

- Rural children (3 States);
- Children with mentally ill caretakers (3 States);

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*The survey actually asked CPS specialists about "handicapped children."

- Teen parents (3 States);
- Youthful sex offenders (2 States);
- Domestic violence victims (2 States);
- Adolescents (2 States);
- Migrant children (1 State);
- Children ages 4-12 (1 State);
- Children from low-income households (1 State);
- Children with intellectually limited caretakers (1 State); and
- Child victims of ritualism (1 State).

Most of these program efforts were described as involving parent education or worker training. Maine reported the formation of a special unit to investigate child victims of ritualism. Of these 11 additional categories, three (domestic violence victims, youthful sex offenders, and victims of ritualism) were volunteered by the States.

33.4 Specially Funded Programs and Projects

As another means of determining efforts being made by the States to overcome barriers and to remedy gaps in service delivery, when data were requested on sources of CPS funding, CPS specialists were also asked to describe any specially-funded programs and/or projects related to child abuse and neglect initiated during the past 5 years. Twenty-five States responded, although with widely varying levels of specificity. This number obviously did not represent all States receiving monies for such programs, but only those that made the effort to provide specific descriptions. Thus, the number of such efforts was almost certainly under-reported here. The 25 States' responses are summarized below.

Funding Sources

The largest number of special programs and projects described by these States for the period from 19851989 were federally funded. NCCAN grants accounted for nearly all of these,

with 24 States indicating that they had received or were receiving NCCAN monies. (In fact, nearly all States receive monies from one or more NCCAN grant programs.)

Of those States that specified the types of NCCAN grants they had gotten:

- 15 States reported Children's Justice Act monies;
- 12 States reported NCCAN Basic State grants;
- 8 States reported NCCAN medical neglect/infants with disabilities grants; and
- 2 States reported NCCAN demonstration grants.

Several States did not indicate the specific type of NCCAN funding they received, and a few indicated only that projects were federally fmanced.

Only five States reported State funds being put toward special programs or projects related to child abuse and neglect. Three large, county-administered States indicated financing child abuse-and-neglect-related projects at the local level through minigrants awarded from general State fund appropriations. Two States reported projects jointly funded by the State and Federal governments.

Only three States indicated having obtained funding for special projects or programs related to child abuse and neglect from private sources: the Robert Wood Johnson Foundation (1988, 1989), the Edna McConnell Clark Foundation (1988, 1989), and the Children's Defense Fund (1990).

Annual funding levels reported by the States for the 72 programs and projects that were described ranged from $2,000 to $386,000, distributed as follows:

$25,000 and under	7 projects
$25,001-50,000	25 projects
$50,001-100,000	13 projects
$100,001-150,000	11 projects
$150,001-200,000	14 projects

$300,001-350,000	1 project
$350,001-400,000	1 project

Table 3-9 presents an overview of the nature of these special projects and gives the number and names of States describing projects in each area. As can be seen, projects were widely varied. Perhaps one-third were aimed at overcoming systemic barriers to service delivery by facilitating coordination and improvement of services, including worker training; the remaining two-thirds were devoted to direct service delivery. In the table, an "s" superscript beside a project category indicates that one or more projects in that category related to sexual abuse.

The relatively large number of States describing projects involving joint or multidisciplinary investigative teams for sexual abuse most likely reflects the availability of Children's Justice Act Grants to coordinate services in that area. In addition, among prevention-focused projects, those involving parent education, crisis intervention and home-based/intensive family services stood out as the most common types. With respect to treatment-focused projects, specialized day care and counseling or therapy programs were the most commonly reported. Interestingly, these types of project efforts correspond quite neatly to areas in which services were reported as least available in Table 3-5.

335 Child Abuse/Neglect Programs Funded by Other Sources

Information was also requested from CPS specialists concerning other agencies or groups in their States (e.g., Councils on Abuse and Neglect) that received funding for programs for abused and/or neglected children. Eighteen-States responded. Eight reported child abuse and neglect-related services financed by Children's Trust Funds; four described programs provided through Councils on Abuse and Neglect and/or the National Committee for the Prevention of Child Abuse. Annual funding levels for these varied from $36,000 to $1.2 million (the amount of the Children's Trust Fund in one large State). Possibly because they did not adequately understand the question, many specialists whose States in fact did have Children's Trust Funds did not report on their activities; again, the reported numbers clearly under-represented the true extent of these activities across the States. (Most Children's Trust Funds also received NCCAN grant monies; some also receive State appropriations.)

Table 3-9. Overview of specially funded child abuse and neglect projects described by States[a] (n=25)

Nature of project	Number of States describing projects of this nature	States describing projects of this nature
Service Coordination (n = 13)		
■ Joint investigation/multidisciplinary investigation teams[s]	10	AR, CA, CO, IL, MD MN, MS, OR SC, TN
■ Coordination of investigations and prosecution	3	IL, KS, MD
■ Case management[s]	3	CA, IA, SC
■ Development of statewide prevention plan	2	MS, SC
■ Case consultation teams	1	KS
■ Determining disposition of institutional abuse cases	1	ND
■ Service coordination across community agencies	1	CA
Service Improvement/Evaluation (n = 7)		
■ Development of service improvement plan	1	WV
■ CPS program evaluation	1	WV
■ Workload management	1	VT
■ Infant care review committee	1	OK
■ Development of standardized techniques for sexual abuse exams[s]	1	KS
■ Recommendations to improve prosecutions	1	KS
■ Improvement of family assessments	1	NC
■ Development of screening guidelines	1	OR
■ Development of fatality assessment procedures	1	OR
■ Review/evaluation of handling of child sexual abuses	1	IL
■ Research on neglect/risk assessment	1	NC
■ Development of procedures for responding to chemically exposed newborns	1	OR

Table 3-9. Overview of specially funded child abuse and neglect projects described by States[a] (n=25) (continued)

Nature of project	Number of States describing projects of this nature	States describing projects of this nature
Training (n = 13)		
In:		
• Risk assessment	1	OK
• In-home/intensive family services	1	KS
■ Respite care	1	OK
■ Investigative videotapings	2	OK, KS
■ Identifying/handling chronic neglect	1	KS
■ Sexual abuses	3	OR, SD, TN
■ Care of infants and children with disabilities/medically fragile infants	4	co, KS, OK, NY
■ Care of handicapped children	1	IN
■ Drug effects on infants	1	TN
■ Unspecified	4	MD, NC, ND, MS
For:		
■ CPS/Child welfare workers	7	KS, MD, NC, ND, OK, OR, TN
■ Residential service workers	1	KS
■ Prosecutors	1	KS
• Foster and adoptive parents	3	CA, IN, KS
■ Police	1	KS
■ Judges	1	MS
■ Unspecified	3	CO, NY, SD
Prevention-focused services (n=21)		
■ Community-based	10	CA, IL, MD, MS, NY OR, PA, SC, TN
• Parent education	6	CA, IL, KS, MS PA, WV

Table 3-9. Overview of specially funded child abuse and neglect projects described by States[a] (n = 25) (continued)

Nature of project	Number of States describing projects of this nature	States describing projects of thisnature
Prevention-focused services (cont'd)		
■ Respite care/parent aide	5	CA, CO, DE, IL, MS
■ After-school care ("latch-key")	1	KS
■ Crisis intervention	3	CA, KS, TN
■ For children in out-of-home care	2	MS, OR
■ Parent support groups	4	AR, CA, NY, TN
■ Home-based/ intensive family services	7	AR, CA, IA, IL, MS, OK, PA
■ Adolescent pregnancy/teen parenting	3	CA, MS, TN
■ Outreach to substance-abusing parents	1	CA
■ Establishment of councils	2	IA, MS
■ Development of child advocacy network	1	TN
Treatment-focused services (n = 16)		
■ Therapeutic services[s]	9	CA, IL, KS, MD, MS, NC, OR, PA, UT
■ Counseling[s]		CA, IL, TN
■ Services to infants and children with medical disabilities	5	AR KS, MS, OK, VT
■ Clinical assessment	2	CA, KS
■ Specialized day care (model, therapeutic, crisis nurseries)	6	AZ, CA CO, IL, OK, PA
• Family violence shelters	3	AR, CA, TX
■ Family day treatment	1	CA

[a] = Not including those described as special efforts for particular categories of children or as funded to other State organizations.

[s] = Indicates one or more projects related to sexual abuse.

All of these activities were focused on prevention of child abuse and neglect, with an emphasis on primary prevention.

33.6 Summary: Special Projects and Programs

Among special efforts reported for specific categories of unserved and underserved children, the highest percentage of States described projects aimed at "crisis categories," most notably AIDS babies, medically fragile infants, chemically dependent newborns, and substance-abusing caretakers. These efforts were being developed in response to special needs not being met by the normal range of available services. Indeed, many of these projects focused on developing new procedures and protocols that cut across the usual divisions of the service delivery structure. It is also important to emphasize that, for the most part, the scope of these efforts was small in relation to the perceived extent of the problem.

Most specially funded programs and projects reported by the States had been financed by the Federal Government and, more specifically, by NCCAN. The majority were small in scope, with just under half funded at the level of $50,000 or less. These projects covered a wide range, from training videos for CPS workers to specialized services such as therapeutic day care, with a particular emphasis on prevention-related efforts and a strong representation of projects directed at cases involving sexual abuse. Primary prevention was the principal focus of programs financed by other sources, including Children's Trust Funds and Councils on Abuse and Neglect.

4. DEFINITIONS OF HIGH RISK AND USES OF RISK ASSESSMENT

High risk can have several meanings when applied to the work of CPS agencies. High risk children can be those who are at risk of being abused or neglected (whether they are officially known to CPS or not). This aspect of the definition was explored in the other component of the **Study of High Risk Child Abuse and Neglect Groups,** which involved reanalysis of data from the Second National Incidence Study of Child Abuse and Neglect (NIS-2). High risk children can also refer to those who are abused or neglected and who are at risk of not receiving the services they need, either because they are not reported to CPS in the first place, or because they are screened out by CPS. These meanings were also pursued in the secondary analyses of the NIS-2 data.

High risk can also refer to States' definitions of high risk as applied to the children served by their child abuse and neglect programs. This is the sense of "high risk" that is of primary concern here. What did State CPS agencies mean by "high risk" when they used this term in relation to suspected cases of child abuse and neglect? And how did their definitions affect the procedures used to screen and investigate these cases, as well as the nature and timing of services delivered to them? In this chapter these issues are examined as they answer to three objectives of the State Survey:

- To determine States' current definitions of high risk as they relate to children served by child abuse and neglect programs;
- To determine the States' current uses of risk assessment in relation to suspected cases of child abuse and neglect; and
- To determine procedures followed and problems encountered by State CPS agencies in serving high risk children.

4.1 Definitions of High Risk

One of the objectives of the State Survey was to determine the States' current definitions of high risk as they relate to children served by child abuse and neglect programs. To better understand what State agencies meant by risk to these children, we asked CPS specialists to indicate where and how they defined risk.

Risk as Reflected in the Agency's Mission

Taking both abuse and neglect into account, **14** States recognized the concept of risk as in some way figuring into their agency's mission. Seven reported that the agency's mission involved serving children at risk of *imminent* harm; three considered that the primary concern was risk of *cumulative* harm; and one named risk of serious abuse or neglect as central in this regard. In addition, for another two States, the agency's mission included serving those at risk of future harm or at risk of harm of future abuse or neglect, and for one more included reducing the risk of future harm. Five State CPS specialists reported having added protection of children at risk of imminent harm 'to their State agency's mission in the past 5 years. Similarly, 6 of the 22 written mission statements sent by the States incorporated the concept of serving or protecting children at risk of future maltreatment. Altogether when both specialists' responses and written mission statements were considered, a total of **16** States included risk as a primary component of their mission.

Risk in Definitions of Child Abuse and Neglect

Twelve State CPS specialists reported that risk to children was defined by law. (See Table **4-l.) In** response to a question regarding changes made to their State's definitions of child abuse since **1985, 12** specialists replied that the concept of risk had been added to their definition of abuse between 1985 and 1990, either by reference to threat of harm or imminent risk of harm (8 specialists) or by **defining** at-risk children (4 specialists). Six States reported that a similar introduction or reinterpretation of the concept of risk as imminent risk was applied to definitions of neglect during this period.

Examination of State statutory and policy definitions of child abuse and child neglect revealed that most States recognized threat of harm or substantial risk of harm in their definitions of abuse and neglect; however, these were not necessarily presented as explicit definitional criteria of abuse or neglect, and often had to be inferred from the surrounding text. Consequently, it was not surprising that most CPS specialists reported that, in their State, the concept of risk to children was not defined in law.

Other Sources of Definitions of Risk to Children

In spite of the relatively low number responding that risk was defined in agency mission or in law, CPS specialists in all but two States reported that risk to children was defined in some way, whether in policy, in risk assessment, or by other means. Some indicated that their States defined risk in several sources, others that it is defined in only one source. Table 4-l presents, in rank order, the number of States reporting definitions of risk for each locus of definition(s).

Table 4-1. Where risk is defined, as reported by States (n = 46)

Definition of risk	Number of States
In worker training	42
In written policy	40
In risk assessment	36
In practice	35
In worker manual	30
In law	12

The highest numbers of CPS specialists indicated that risk was defined in worker training (42 respondents) or in written policy (40 States). For somewhat lower numbers, risk was seen as defined in risk assessment (36 States), practice (35 States) or worker manuals (30 States). Finally, as noted, only 12 States reported that risk was defined in law.

4.1.1 How Risk is Defined

Like their sources, the specific definitions of risk recognized by State CPS specialists varied. Most employed more than one definition, or, more precisely, they used the concept of risk in several overlapping ways.

Table 4-2 shows the number and percent of State specialists giving specific definitions of risk and the rankings they accorded each definition. CPS specialists named as many definitions of risk as they thought applied to their State and then ranked those in terms of relative priority.

Table 4-2. State rankings of definitions of risk (n = 48)

Risk	States using definition	Percent in row who ranked this as . . .		
	n	First Priority	Second Priority	Third Priority
Risk of immediate harm	37	62%	38%	--
Risk of serious harm	31	42%	58%	--
Risk of re-report	16	19%	6%	75%
Risk of future maltreatment	7	100%	--	--
Risk of harm/threat of harm	4	100%	--	--

The main points of Table 4-2 are as follows:

- Thirty-seven State specialists understood risk to mean "risk of immediate harm"; over 60 percent of these also considered this the primary definition of risk.
- **Thirty-one** States defined risk as "risk of serious harm." For most, this was the secondary sense of risk.
- **Sixteen** States defined risk as risk of re-report of abuse or neglect; most considered this their tertiary definition.
- Seven States gave risk of future maltreatment as their first definition.
- Four State specialists gave risk or threat of harm (unspecified) as their primary definition of risk to children.

4.12 Variations in Levels of Risk

Forty-one States indicated that they differentiated levels of risk, almost all in their risk assessment systems or instruments.

Twenty-two States noted that they defined three levels of risk, using some variant of a three-level (low-moderate-high) risk scale. Ten States employed a four-level scale. Four States used a five-level numeric scale in evaluating risk. Three States defined just two categories, "risk" and "high risk." One State claimed to use only the single category of "substantial risk," which is "not very well defined." One State did not clarify the nature of its gradations of risk.

No matter how many risk categories a given State defined, the meaning of these categories depended on the aim of the particular risk assessment instrument. Consequently, "low," "moderate," and "high" risk meant different things in different States. States that assessed risk in terms of probability of imminent harm or probability of reabuse tended to apply categories that had the following kinds of meanings:

- Low - Low risk to child;
- Moderate - Some degree of probability reabuse may recur; and
- High - Child was at risk of imminent harm.

States that evaluated the nature and severity of the child's situation defined risk levels such as:

- Priority I - Life threatening and/or emergency situation, and
- Moderate - a positive change in the situation was likely to occur without intervention.

Similarly, in States in which risk levels were determined primarily to establish response times, their definitions reflected this:

- Emergency to High Risk - Immediate response, or
- Non-Emergency - Non-immediate response - possible contact.

4.13 Disabling Conditions* and Definitions of High Risk

Thirty-seven States reported that disabling conditions* were included in their States' definitions of levels of risk to children served by child abuse and neglect programs. This most often occurred because disabling conditions* entered into the risk factors applied in the different risk assessment instruments. Twenty-five States reported that disabling conditions* were treated as risk factors or as components of risk factors (e.g., child's physical condition). One State indicated that disabling conditions* were included in its definitions of risk levels only if these conditions required special care; another that this was true only if the child was defined as a special needs child. Two States indicated that disabling conditions* only defined risk levels if they could be shown to cause at least moderate mental or physical developmental delays. Finally, one specialist noted that, in her State, these conditions figured into definitions of risk informally in practice, although they were not specifically defined as such in policy.

4.1.4 Summary of Current Definitions of High Risk

In summary:

- Forty-nine State CPS agencies reported that they defiied risk to children, and 41 indicated that they differentiated levels of risk, most commonly on a three-level scale of low, medium, high.
- Only 15 State CPS specialists indicated that they defined risk to children in their agency's mission, in law, or in both. More commonly, risk was defined in practice (whether worker training, risk assessment tools, practice, or worker manual), in policy, or in some combination of these.
- State CPS agencies reported that they defined risk to children served by their programs in multiple ways. The primary definition, reported by 34 States, was that the child was at **risk of immediate harm. The** secondary sense of risk understood by CPS specialists was that the child was at **risk of serious harm. Risk of re-report** was most often given as the tertiary sense in which risk was defined.
- Thirty-seven States reported that disabling conditions* were in some way factored into their definitions of risk to children served by child abuse and neglect programs. Most did so by including disabling conditions* in risk factors.

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*The survey actually asked CPS specialists about "handicapping conditions."

42 Current Uses of Risk Assessment by State CPS Agencies

Another goal of the State Survey was to determine how the States used risk assessment in relation to suspected cases of child abuse and neglect that were reported to them. In this section, we respond to this objective in several ways. First, we summarize which risk assessment systems and instruments were in place and how widely they were applied. Then we consider: (1) whether the States had written policies on risk assessment; (2) at what points in the casework process risk assessment was applied; (3) for which casework decisions risk assessment was used; and (4) what the purposes of risk assessment were, as viewed by CPS specialists. Finally, we examine the bases on which risk assessment was applied by these State agencies, specifically in relation to research, worker training, and computerization of risk assessment systems. What follows will show that, in spite of the fact that almost all States either used risk assessment or were planning to implement it, not only did they employ a number of different risk assessment systems, but they used it for different ends and applied it at different points in CPS practice. In some cases, moreover, intra-State variations were as great as differences among States. Additionally, as shall be seen, workers had received relatively little training in risk assessment, and very few States had either gathered or computerized data on risk assessment that could enable them to evaluate its effectiveness, reliability, and validity, and serve to guide future development or revision of the risk assessment system they used. In short, what might appear on first impression to be widespread dissemination of a successful innovation emerged under scrutiny as widespread excitement about the idea of risk assessment but considerable diversity in what systems were used, and in when and how they were applied. Perhaps most importantly, the area appeared to lack the long-term perspective that would base selections and revisions in risk assessment systems on systematic data.

42.1 How Extensively Risk Assessment is Used

Thirty-five States reported using a risk assessment system for child abuse and neglect cases; 13 indicated that they were developing such a system. Only three States reported neither using nor developing a risk assessment system for suspected cases of child abuse or neglect.

Thirty-four States reported that they used, or would use, their risk assessment systems statewide. Eleven States indicated that they applied risk assessment only in certain counties or districts, or used different systems in different parts of the State. In one State, where some county-level workers had resisted wholesale imposition of the State model, workers had to use some form of risk assessment, but had been given the option of selecting other models.

4.2.2 Which Systems Are in Place

As indicated in Table 4-3, CPS agencies made use of a variety of risk assessment systems.

Table 4-3. Risk assessment systems used by the States (n =44)

Systems	Number of States
State-developed system	21
Illinois CANTS or modified version	15
Child At Risk Field System	4
National Center on Crime and Delinquency..	2
Family Risk Scales and/or Child Well-Being Scales..	2

As noted in Table 4-3, 15 States reported that they used the Illinois Risk Assessment Model (CANTS) or a modified version of this system. The Illinois Risk assessment model (the CANTS 17B or Risk Assessment Observations/Recommendations) was developed in 1984 by the Illinois Department of Children and Family Services. It was designed as a comprehensive tool and includes 13 risk factors.[1] The Illinois CANTS had been required for all investigations of child abuse and neglect in the State from May of 1987 until shortly before our survey, when Illinois decided to replace the system.

[1] For additional information see Louis Martinez, Illinois Presents Its Child Protective Risk Assessment Instrument, in: National Roundtable on CPS Risk Assessment and Family Systems Assessment: Summary of Highlights, American Public Welfare Association, Washington, D.C., 1987.

Four States indicated that they employed the Child At Risk Field System, which is a decision making system for CPS created by ACTION for Child Protection that takes a social work approach. It was designed to guide casework and to be applicable to the entire CPS process. It is structured into five overall categories known as Forces (Child, Parent, Family, Maltreatment and Intervention).[2]

Two States noted that they used, or were about to implement, a risk assessment system that was specifically adapted to their States' characteristics by the National Center on Crime and Delinquency (NCCD). The Child Well-Being: Scales were developed by Stephen Magura and Beth Silverman Moses for the Child Welfare League of America.3 The Child Well-Being Scales are a set of standardized client outcome measures of a family and child's position on 43 separate dimensions. The Familv Risk Scales consist of 32 scales, by the same authors? Of the two States that used these approaches, one reported using the Familv Risk Scales and the other employed the full combination of the Family Risk Scales and the Child Well-Being Scales.

Finally, 21 States indicated that they had developed their own system or had adapted one or more other States' systems to their States' needs. Among these were 4 States, including the State of Washington, which reported using the Washington State model. For one of these States, this was one of two models in use. In fact, several States reportedly used more than one risk assessment system. This almost always meant that different systems were applied in different counties. In Pennsylvania, for example, the Child At Risk Field Svstem was applied across most of the State, but Philadelphia and Washington County (in the southwestern portion of the State) used their own "adapted" systems. In only one State, different systems were simultaneously in use at different stages in the CPS process (see below).

The risk assessment systems that were in place were adopted over a 6-year period between 1984 and 1989; the greatest number were adopted between 1987 and 1989. However, there had been considerable flux in which risk assessment systems were being used where and

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[2]For additional description, see Child Protective Services Risk Management: A Decision Makine Handbook, Action for Child Protection, Charlotte, North Carolina, 1987.

[3]See Stephen Magura and Beth Silverman Moses, Outcome Measures for Child Welfare Services: Theory and Applications, Child Welfare League of America, Washington, D.C., 1%.

[4]Stephen Magura, Beth Silverman Moses, and Mary Ann Jones. Assessing Risk and Measurine Change in Families: The Familv Risk Scales, Child Welfare League of America, 1987.

when. These systems were repeatedly revised or replaced, and several States, some of which were already applying one system, were either testing new systems or had scheduled new ones for implementation in the future. To offer one illustration of the extent of flux in this area, one State used three different risk assessment systems between 1987 and the time of our interview in 1990. Also, in the past year, in a move emblematic of the rapidly changing situation in the field, as previously noted, Illinois had replaced the "classic" risk assessment model that bears its name.

4.2.3 Types of Risk Assessment Instruments Used

Forty-two States reported that they used some instrument in assessing risk, two indicated that they did not, and one State specialist did not know whether the risk assessment system in use employed an instrument or not.

Thirty-two States reported that they used a risk assessment instrument that included only one of the features listed in Table 4-4 (see last column). Ten States noted that their instrument combined one or more of these features. As is shown in the table, a matrix of risk factors with no scoring was the most commonly reported feature (15 States), followed by a scale for entering numeric (13 States) or ordinal (13 States) values. A scale for entering numeric values involved assigning number values to risk levels, whereas one that used ordinal values ordered attributes along a dimension (e.g., low, medium, high) without assigning a numeric score. A checklist of risk items was the next most reported feature (10 States), and the least often reported risk assessment instrument feature was a form for entering descriptive information (5 States). In addition, a few States indicated that they used more than one risk assessment instrument, depending on the stage of the risk assessment process. For example, one State applied one risk assessment instrument at intake and investigation, and another at substantiation and case closure.

Table 4-4. Features of risk assessment instruments (n = 42)

Instrument feature	Number of States where instruments included this feature[a]	Number of States where instruments used this feature exclusively
Matrix of risk factors without any scoring	15	12
Scale for entering numeric values	13	7
Scale for entering ordinal values	13	6
Checklist of risk items..	10	5
Form for entering descriptive information	5	2

[a]Number totals to more than 42 because one instrument could involve several features.

42.4 Types of Abuse and Neglect Assessed by the Instruments

Only 11 States reported limitations on the types of abuse and neglect that their risk assessment instruments were meant to assess. Six of these States named one or more categories of abuse or neglect that essentially fell outside the purview of their CPS agencies: including educational neglect (2 States); HIV-infection (2 States); victims of parental drug addiction (1 State); victims of parental alcoholism (1 State); and extra-familial abuse/institutional abuse (3 States). An additional State noted that its risk assessment instrument was being changed to incorporate more in-depth elements on parental substance abuse. Three States indicated that their risk assessment instruments were better suited to assessing physical abuse than they were to evaluating emotional maltreatment, sexual abuse, or neglect. One State specialist was uncertain as to whether the instrument was meant to handle CPS cases involving child exploitation.

4.2.5 Cultural Bias in Risk Assessment Instruments

The issue of possible cultural bias in risk assessment practices and instruments is extremely important, and is tied to the larger question of what constitutes culturally relevant practice in CPS and in child welfare in general. Culturally relevant practice involves the effort and

ability to recognize and appreciate cultural differences among client populations. More to the point for present purposes, it entails the capacity to differentiate practices_ which, although different than those in the majority culture, are considered appropriate in minority cultures, from those that can properly be considered abusive or neglectful. To date, no universally applicable rule has been developed for making these determinations, which are particularly likely to arise in situations involving application of religious and curing practices, and those involving differences in childrearing practices and family structures.[5] As was noted in Chapter 2, a number of States reported exclusions related to the use of spiritual means of curing in their definitions of medical neglect, while a smaller number indicated the existence of cultural exclusions to their definitions of physical and/or emotional neglect.

It is in this overall light that we should interpret the State Survey finding that 29 State CPS specialists did not think that any of the risk factors used in their risk assessment instruments were culturally biased. Twelve specialists reported that they did think one or more factors could be biased when applied to specific racial or ethnic minorities; in particular, they expressed misgivings about biases in factors related to housing standards, parenting practices, family structure and in assessing neglect. Specialists in three additional States were uncertain about how to answer this question. One admitted the difficulties of developing an unbiased assessment tool, noting that her State instrument had been created with input from members of minority communities. Another State specialist suggested that bias might exist in the application of the instrument if not in the instrument itself. A third specialist commented that, while not overtly biased, her State's instrument tended to overlook the special strengths of minority cultures. One State supplied us with a copy of a paper used to guide application of risk assessment to American Indian populations. The document aimed to sensitize CPS workers to differences in family structure between the dominant and minority cultures.

4.2.6 Categories of Risk Factors Included in the Instruments

Risk assessment instruments typically group individual risk factors into broader categories, e.g., those pertaining to the child, the caretaker, the environment, and so on. States

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[5] For a more complete examination of this issue see Diana J. English, Cultural Issues Related to the Assessment of Child Abuse and Neglect, Children's Services Research Project, Olympia, Washington, n.d. Much of the above diiion is based on thii paper.

varied as to whether a given category was included in the risk assessment instrument they used and how many factors fell under each category. This information is presented in Table 4-5.

Table 4-5. Categories and numbers of risk factors in risk assessment instruments, as reported by States (n = 46)

Categories of risk factors	Number of States that have category	Range of of factors	Modal number of factors*
Parent/caretaker	42	1-32	4
Child	41	l-33	3 or 5
Family	37	1-14	3
Environment	33	1-9	1
Severity of abuse	29	l-8	2
Type of abuse	24	l-8	2
Parent/child interaction	11	1-7	1

*Most frequently occurring number.

42.7 Specific Risk Factors Addressed

Table 4-6 reports the specific risk factors included in the States' risk assessment instruments in order of the number of States reporting use of a given factor. In the most general sense, States were most likely to include clearly specified factors with direct bearing on the severity and immediacy of the situation, and least likely to include factors pertaining to the child's or family's demographic and socioeconomic characteristics.

More specifically, 43 of the 44 States that responded indicated that they included parental drug addiction as a risk factor in their instrument. Forty-two States included parental alcoholism, parental emotional status, parental behavior problems, child's physical condition, and abuser's access to the child. Forty States took into account child age, severity of abuse, past history of abuse to the child in question and family's access to support systems.

Table 4-6. Risk factors included in risk assessment instruments as reported by States (n = 44)

Factor(s)	Numb& of States
Parental drug addiction	43
Parental alcoholism	42
Parental behavior problems	42
Parental emotional status	42
Child's physical condition	42
Abuser's access to child	42
Child's age	40
Severity of abuse	40
Past history of abuse to child in question	40
Family's access to support systems	40
Housing conditions	39
Past history of abuse in the family	39
Type of abuse	39
Parenting skills	39
Child's health status	38
Parental access to child	38
Parental coping skills	38
Child's behavior	37
Child's emotional status	37
Location of injury	36
Parental physical condition	34
Parental intellectual level	34
Family financial status	32
Parental health status	32
Parental employment status	32
Neighborhood/community characteristics	26
Parental marital status	25
Geographic location of family	23
Child's educational status	21
Family size/composition	21
Child's sex	14
Parental demographic characteristics (e.g., race, ethnicity)	9

Thirty-nine States reported including housing conditions, past history of abuse in the family, type of abuse and parenting skills; 38 States indicated that they included child's health status, parental access to child, and parental coping skills. Child's behavior and child's emotional status were reported by 37 States. Thirty-six States considered the bodily location of the child's injury, and 34 indicated that they assessed parental physical condition and emotional level.

Overall, a lower number of States incorporated risk factors that reflected the family's neighborhood and community environment and socioeconomic status. Although 32 States took into account family financial and employment status, 26 included neighborhood or community characteristics, 25, parental marital status, only 23 included geographic location of the family, and 21, family size and composition, At the bottom of the list were child's sex (14 States) and parents' demographic characteristics (9 States).

The general patterning in this listing is noteworthy. Parent problem factors ranked high in frequency of use, whereas demographic features such as marital status, employment, family size and so forth were among the least-frequently included factors. Although the former could reasonably be presumed to signal real intrafamilial problems, this finding also suggests that, in failing to gather basic demographic information, many instruments did not collect data important to assessing the overall context in which the child and his/her family was functioning. That is, the focus was on the crisis of the moment rather than on the more stable and enduring features of the child's and family's situation. This parallels the finding in Chapter 3 that a lower level of service attention was given to cases involving chronic, longterm problems as opposed to cases that had already reached serious or crisis proportions. Also note that this lack of attention to context may signal the potential for cultural and/or racial biases in the use of risk assessment tools, at least insofar as their application may not be sensitive to cultural differences in parent-child relationships, supervision patterns, and approaches to medical care.

4.2.8 How and When Risk Assessment is Used

Identifying which risk assessment systems and instruments are in place, and where, reveals only the outlines of the picture. To more fully assess use of risk assessment by State CPS agencies, it is important to know the policies that govern use of risk assessment by CPS agencies

and to understand how risk assessment was perceived and applied by the 50 States and the District of Columbia.

46.9 Risk Assessment Policy

Thirty-four States indicated that they had a statewide written policy specifying the ways risk assessment had to be used. Eleven States reported that they were in the process of writing such policy. Only six States had no such policy and were not developing one at the time of this survey.

About two-thirds of the existing State policies specified at what point in the CPS process risk assessment was to be used. The rest either indicated the kinds of cases to which risk assessment should be applied, or they delineated the steps that should be followed when undertaking risk assessment.

42.10 Points in the Casework Process Where Risk Assessment is Used

CPS agencies may use risk assessment at one, several, or **all** points in the casework process. CPS specialists were shown the diagram of the casework process presented in Figure 4-1, and asked to indicate all points at which risk assessment was generally applied in their States. Ten States responded that they used risk assessment at one to two points in the casework process, 7 States at three to four points, 17 at five to six points, and 7 States at seven to eight points in the casework process. In four States, use of risk assessment was required at one or more points, but optional at others. In Pennsylvania, the State agency established minimum requirements for use of risk assessment, and individual counties could opt to apply additional case trigger points if they so chose. In two States, use of risk assessment at certain junctures was conditional. In one State, it was used only when the case was going to court, in the other when a family was designated for intensive in-home services.

Below, we discuss use of risk assessment by State **CPS** agencies at each point delineated in Figure 4-l. The number of States reporting use of risk assessment at each point is

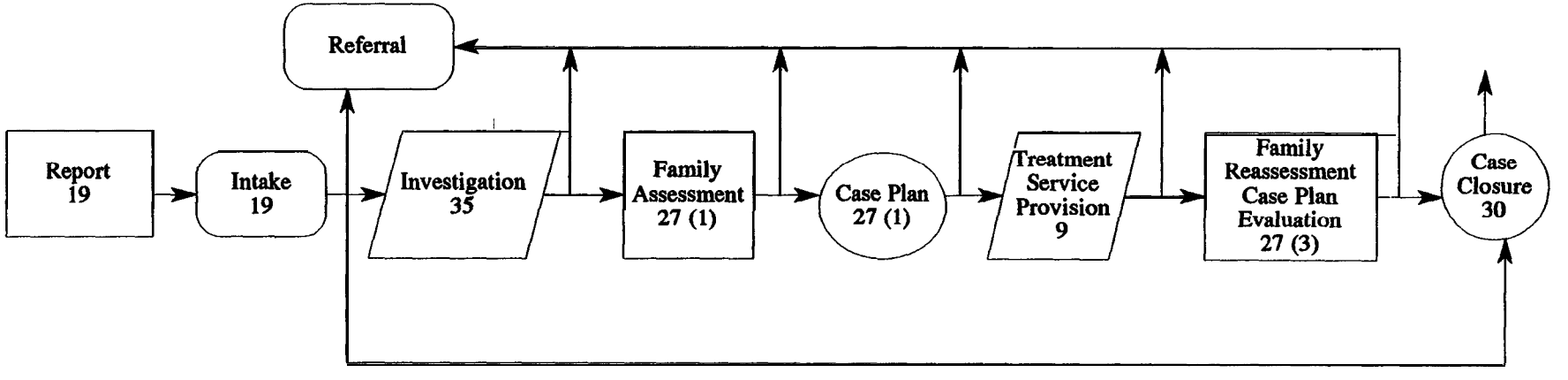

Figure 4-l. Number of states reporting use of risk assessment at a given point of the CPS casework process (n=43)

indicated in the figure beneath the appropriate part of the diagram. Numbers of additional States reporting optional use at a given point are indicated in parentheses.

At Report/Intake: Eighteen States indicated use of risk assessment at the report/intake stage of the CPS casework process. Of these, four States used risk assessment at all eight specified points on the diagram. Another eight States used risk assessment at six or seven points; four States used risk assessment at five or fewer points in the CPS casework process; and two States applied risk assessment exclusively at this juncture. In addition, in at least two States, the instrument applied at intake was an abbreviated checklist or intake summary, which was expanded upon later on in the casework process.

In a later section, we describe the answers to a systematic survey question about what decisions were affected by the risk assessment approach. Here, we note that respondents occasionally offered such information when discussing the Figure 4-l diagram. In several States that used risk assessment at the report/intake stage of the CPS process, respondents noted that the risk assessment served to drive response time. Another State CPS specialist noted that the plan in her State was to use risk assessment at intake in order to facilitate rapid provision of home-based services, thus hopefully minimizing a later need to remove the child from her or his home.

At Investigation: As seen in Figure 4-1, investigation was the single most common and the most pivotal point in the CPS casework process at which States reported that risk assessment was applied. Thirty-five States used risk assessment at or immediately after investigation; seven used it exclusively at this point. Five States reported that their workers were required by law or policy to use risk assessment at investigation.

Respondents who commented on their State's use of risk assessment at investigation said that it was principally employed as a means of determining the need for the immediate removal of the child from her/his home.

At Family Assessment: Twenty-seven States reported use of risk assessment in making family assessments. One State "encouraged," but did not require, that risk assessment be applied at this point. Another used a risk continuum form at family assessment only if the case was going to court.

At Case Plan: Twenty-seven States reported that they used risk assessment in case planning, mainly in deciding whether to remove the child from the home. In one State, use of risk assessment to guide case planning was optional.

At Treatment Service Provision: **Only** nine CPS specialists reported use of risk assessment in providing treatment services. This included **4** States that reported use of risk assessment at all designated points of the casework process. 3 States offered further clarification of exactly how risk assessment figured into service treatment provision. One State CPS specialist noted that risk assessment results determined the level of the services that were provided, while another indicated that risk assessment was used as a "reference point" in guiding service provision. Finally, in one State, the risk assessment form was used at case staffings held throughout the treatment plan.

At Family Reassessment/Case Plan Evaluation: Twenty-seven States reported use of risk assessment at family reassessment/case plan evaluation. For an additional 3 States, use of risk assessment at family reassessment/case plan evaluation was optional or "encouraged," but not absolutely required. Six States indicated that reassessment/case plan evaluation occurred periodically at regular (usually **6-month)** intervals, and 5 respondents specifically indicated that risk assessment was used in determining whether to return a child to her/his home.

At Case Closure: Thirty States indicated that they used risk assessment at case closure, generally as one of the bases, if not the sole basis, of deciding whether to close the case.

At Other Points: State CPS specialists were asked to indicate any other points in the CPS casework process at which risk assessment was applied that were not adequately or accurately represented on our diagram. Most considered the diagram comprehensive. However, 6 States provided additional responses. For these States, risk assessment was used:

- At the point of making visitation decisions **(1** State);
- When deciding whether to transfer a case to another department or division (2 States);
- At judicial review, repeated referral, and birth of a new child **(1** State);
- When monitoring relative foster home placements (2 States); and

- When licensing and supervising foster homes, matching children to foster and adoptive homes, and terminating parental rights (three States).

To summarize, States varied widely in the number of points in the casework process at which they reported that risk assessment was brought to bear; the greatest number (17) States used it at five to six points, followed by one to two points (10 States), three to four points (9 States), and seven to eight points (7 States). Most commonly, States indicated that risk assessment was applied at investigation (35 States). In decreasing order of frequency, it was also applied at case closure (30 States), family assessment (27 States), case plan and family reassessment/case plan evaluation (27 States), report/intake (19 States) and treatment service provision (9 States).

42.11 Casework Decisions for Which Risk Assessment is Used

In a separate question, CPS State specialists were asked to indicate the casework decisions to which the results of risk assessment were generally applied in their States. These responses are presented in Table 4-7, in order of most to least frequently named.

Table 4-7. Decisions for which risk assessment is used, as reported by States (n=47)

Risk assessment decision	Number of States
Service plan decisions	37
Child removal and placement decisions	36
Case closure decisions..	35
Any decision during investigation	33
Family reunification decisions	30
Decisions about the duration/intensity of services	29
Service priority decisions	29
Any decision related to court action	23
Substantiation decisions	22
Decisions related to case referral	20
Case screening before investigation	16
Workload/staffing decisions	10

As noted in the table:

- The greatest number of States reported that they used the results of risk assessment for: service plan decisions (37 States), child removal and placement decisions (36 States), case closure decisions (35 States), and any decision made during investigation (35 States).
- The next greatest number of States used the results of risk assessment for family reunification decisions (30), decisions about the duration/intensity of services (29) and service priority decisions (29).
- In descending order, the next greatest number of States reported using the results of risk assessment to make any decision related to court action (23) and decisions related to case referral (22).
- The fewest States noted that they used risk assessment for case screening before investigation (16) and workload or staffing decisions (10).

42.12 Purposes of Risk Assessment

Most State CPS specialists saw risk assessment as serving multiple purposes. Table 4-8 presents their views and relative rankings of the purposes of risk assessment. Main points are highlighted below.

- Thirty-seven States considered risk assessment a tool for guiding casework practice; a little more than half of them ranked this as its primary purpose.
- Twenty-eight States viewed risk assessment as a tool for collection of pertinent information about the child and his/her family. More than half of these States (54 percent) regarded this as its primary purpose.
- Twenty-two States looked at risk assessment as a tool for classifying existing risk factors; for slightly over half of them (55 percent), this was the primary purpose it serves.
- Twenty States saw risk assessment as a tool for service planning. Thirty percent of them regarded this as its primary purpose. Most States saw service planning as taking lower priority relative to other purposes.
- Nineteen States regarded risk assessment as a predictive tool, with 42 percent of them viewing this as its primary purpose.

Table 4-8. Purposes of risk assessment as reported by States*

Purpose	States reporting this use n	Percent ranking this purpose as: First priority	Second priority	Third priority	Fourth priority	Fifth or lower priority
Tool for guiding casework practice	37	51%	24%	19%	5%	
Tool for gathering information about child and family	28	54%	29%	14%	4%	--
Tool for classifying existing risk factors	22	55%	18%	9%	9%	9%
Tool for service planning	20	30%	15%	15%	20%	20%
Predictive tool	19	42%	21%	16%	16%	5%
Diagnostic tool	10	20%	40%	20%	--	20%
Screening tool	8	25%	25%	13%	25%	13%

*n varies by category.

- Ten States viewed risk assessment as a diagnostic tool. Of these, only 20 percent regarded this as its primary purpose, with an equal percentage ranking this as fifth priority.

- Eight States considered risk assessment a screening tool, and only 25 percent of these viewed this as the primary purpose.

Given the option of specifying other purposes, five States volunteered their own characterizations of the purposes of risk assessment, going beyond those that are reported in Table 4-8. These were: (1) facilitating worker judgment and/or forcing investigators to consider "the total picture" (both primary purposes); (2) enforcing consistency across localities (considered primary); (3) supporting workload analysis (third priority); and (4) collecting data on service needs (fourth priority).

The majority of State CPS specialists regarded risk assessment primarily as a means of guiding casework practice or of facilitating the collection of information about children and their families. In parallel fashion, those who volunteered responses considered that risk assessment's main purposes are to guide worker judgment and to enforce consistent information collection procedures across localities.

In light of the high number of States (37) who reported use of risk assessment in making service plan decisions (see the foregoing section), it is interesting that only 20 States recognized service planning as one of risk assessment's purposes and that, even among those who did, only a minority gave it priority over other purposes. Perhaps they considered that service planning could be encompassed under the broader rubric of guiding casework practice, the topmost purpose also named by 37 States.

Overall, fewer State CPS specialists viewed risk assessment as a means of prediction or as a clinical or a screening tool than saw it as a guide to practice or a means of collecting and classifying information. As shown in Table 4-8, progressively lower numbers of State CPS specialists saw risk assessment as serving predictive, diagnostic and screening purposes; moreover, these purposes tend to be ranked as of secondary, tertiary or even lower priority.

42.13 Bases of the Application of Risk Assessment

Training

Forty States reported that they provided some training in risk assessment to their CPS workers. The amount of such training was, for the most part, minimal, ranging from less than 1 day to 1 week. Thirty States indicated that they provided, on average, fewer than 16 hours of training in risk assessment per worker per year; two said they provided fewer than 8 hours of such training per worker per year. Moreover, most of this was initial training or training in system implementation. Continued training on such topics as updated risk factors and strategies for decision making was sharply limited. Only 11 States provided 1 to 2 days' training that went beyond initial training or training in system implementation. Seventeen States said that they provided 1 day or less of continued training in risk assessment, while 12 reported conducting no ongoing training of this type whatsoever.

Research

Just seven States reported having conducted research of any sort on risk assessment. A few others commented that they had examined the results of research carried out in other States. Three States indicated that they were developing plans to conduct research on risk assessment at the time of the interview.

The small amount of research that had been carried out by the States focused on various aspects of risk assessment, including: testing the predictive ability of risk assessment (five States); assessing the inter-rater reliability of the instrument (five States); and evaluating the process of implementation of risk assessment (five States).

Computerization

Of the 33 States indicating that no part of their risk assessment system was computerized or automated at the time of the interview, 19 reported that there was a plan to do so, two said that such a plan was being considered, and 12 that they had no plans to computerize or

automate their risk assessment system. Only 10 States indicated that they had computerized or automated any part of their system. No one part or aspect of the risk assessment process was more likely to have been computerized than any other. Depending on the State, this process was reported to be applied to data on intake, risk factors, case outcomes, and training.

Based on the above, it can be concluded that:

- CPS workers were receiving little, and only limited, types of training in risk assessment.
- **Very** few States had conducted or examined research on risk assessment or otherwise assessed the reliability, validity, or predictive value of risk assessment.
- Fewer than one-fifth of State CPS agencies had computerized or automated any part of their risk assessment system, and this had occurred in piecemeal fashion (i.e., one State has computerized one part, another State another part of the instrument or system).

43 **What Happens When Risk Assessment Identifies a Case as High Risk**

Another goal of the State Survey was to determine procedures followed and problems encountered in serving high risk children. To determine this, when questioning State CPS specialists about the uses of risk assessment in their States, we asked them to indicate how an assessment of high risk at any point in the casework process would affect CPS decision making, especially with respect to: (1) which services would be provided, and (2) how quickly they would be provided. This section discusses their responses. Here it is worthwhile to note that, although many States defined intermediate levels of risk, most States appeared to use the "high risk" category as the main cutoff point differentiating types and levels of service delivery. Consequently, cases judged to be at "moderate" risk, along with those assessed as low risk or no risk, were less likely to receive a different service response.

43.1 Differences in Service Delivery to High Risk and Other Cases

Table 4-9 provides an overview of the States' responses. Fourteen States responded that both the nature and timing of services were affected when a case was assessed as high risk. For five States, only the timing of these services was affected, and for another seven, only the nature of the services changed with a high risk assessment. In three States, both the nature and intensity of services were affected; in two States, both the timing and intensity of services were affected.

Table 4-9. How an assessment of high risk affects overall service delivery, as reported by States (n=35)

Effect on service delivery	Number of States
Both the timing and the nature of services are affected	14
Only the timing of services is affected	8
Only the nature of services is affected	7
Both the nature and intensity of services are affected	3
Both the timing and intensity of services are affected	2
Only the intensity of services is affected	1

Descriptions and distributions of the States' responses in each of the three main categories, timing, nature, and intensity of services, follow. We also describe the responses of a separate category of States in which high risk status affected specific CPS procedures.

432 The Effect of a High Risk Assessment on the Timing of Services

Table 4-10 presents the responses of the 25 States which reported that a high risk assessment affected the timing of service delivery. Twenty of these States reported that an assessment of high risk at intake necessitated an "immediate" response from CPS. Of the five that defined what was meant by "immediate," all but one State indicated that action designed to ensure the child's immediate safety had to be taken within 24 hours of the initial report. For the additional State, action had to be taken within 48 hours.

An additional three States reported that an assessment of high risk meant that the case was opened more quickly and the case plan brought forward; in effect, the entire casework process was sped up. Similarly, in another two States, high risk cases were moved to treatment more quickly and/or were provided with specific services within clearly specified time limits (i.e., day care had to be provided within 1 day, psychological consultation had to be supplied within 1 week).

Table 4-10. How timing of services is affected by an assessment of high risk (n = 25)

Effect on service timing	Number of States
Immediate response necessitated	20
Case plan brought forward	3
Case moved to treatment more quickly	1
Targeted services provided within specified time limits	1

433 The Effect of a High Risk Assessment on the Nature of Services

Table 4-11 presents the responses of all **21** States reporting that a high risk assessment affected the kinds of services that CPS delivered to children and their families. A single State could, and in many cases did, give more than one response to this question. In addition, a total of 14 States reported that both the timing and the nature of services were affected by a high risk assessment, and were included in Table 4-10. Thus, there was considerable overlap between the States represented in Tables 4-10 and 4-11.

Table 4-11. How the nature of services is affected by high risk assessment, as reported by States (n = 21)

Effects on nature of service	Number of States[a]
Child is more likely to be removed from the home	13
Family is more likely to receive in-home/family preservation services	8
A safety service plan is developed	5
The case plan is affected (unspecified)	5
High risk areas are targeted for specific case plan interventions	3
Case management is provided	1
CPS provides services	1

[a]Responses total to more than 21 because indiidual States could respond in more than one category.

For a total of 21 States, a determination of high risk meant that the kinds of services delivered to the child and his family were different from those delivered to those determined not to be at high risk. For 13 States, an assessment of high risk at or directly after investigation meant that the child was more likely to be removed from her or his home and to receive emergency placement. For eight States, including many of these same States, an assessment of high risk meant a greater likelihood that the family would receive in-home/family preservation services. In the seven States that overlap the two categories, family preservation services were considered an alternative to removing the child from home for certain high risk cases.

In five States, a high risk assessment necessitated development of an immediate safety plan for the child. In three States, areas for which the child had been found at highest risk were targeted for specific service interventions. In one State, a finding of high risk meant that the case would receive case management services and, in another, a high risk finding meant that CPS would provide services directly. Finally, five of these States did not specify how, but only indicated that the case plan would be affected by a determination of high risk.

43.4 The Effect of a High Risk Assessment on the Intensity of Services

Only seven States reported that an assessment of high risk affected the intensity of services delivered, although in some cases, greater intensity could be implicit in the different nature of the service provided to high risk as opposed to other types of cases (e.g., in-home/family preservation services). Three States responded that a high risk case required a greater number of client contacts and four States claimed that these cases required a greater number of services, although, for one State, this was only true of high risk cases that went to court.

4.3.5 The Effect of a High Risk Assessment on CPS Procedures

Four States indicated that their State CPS agencies handled or processed high risk cases differently than they handled moderate or low risk cases. Since these are arguably differences in procedure more than in the nature of services, we have separated the two categories. In two States, cases identified as high risk were investigated differently than other cases; in one of these, a high risk case was more likely to be- investigated by a team. In one State, high risk cases were assessed with a different form; in another, supervisors reviewed all high risk cases.

43.6 Summary: Effects of a High Risk Assessment

To summarize, 14 State specialists reported that an assessment of high risk affected both the timing and the nature of services provided to children and their families by State CPS agencies. For another eight States, only the timing of services was affected and, for seven States, the nature of services. The most common effect of a high risk assessment on timing of services was to impel a more rapid response at intake (20 States). Its primary effect on services was that, after investigation, the child was more likely either to be removed from the home or to receive in-home family preservation services (21 States). For about 40 percent of all States, then, when a child was assessed as high risk at intake, this assessment served as a “flag” to trigger faster investigation. If the initial high risk assessment was borne out after investigation, this, in turn, elicited more comprehensive protective services from the State agency.

5. STATISTICS ON ALL CHILDREN, CHILDREN WITH DISABILITIES*, AND BUDGETARY DATA IN CPS

The State Survey sought to partially address several study goals by collecting statistical and budgetary data from State CPS agencies. To help answer questions regarding which children might be unserved and underserved, and where and at what points in the process they might be relegated to lower priority status, data were requested on total numbers of children served and numbers of particular categories of children served at different points in the CPS process. States were also asked to provide breakdowns of budgetary resources made available to CPS agencies, and to report their distribution across different uses and types of services. To develop preliminary estimates of the incidence of children who had developed disabling conditions** as a result of maltreatment, which was the sixth goal of this State Survey, data were requested on numbers of all children with disabilities* receiving CPS and other child welfare services at different points in the process. State specialists were also asked to provide statistics on children whose disabilities* were thought to have resulted from maltreatment.

The body of this chapter is devoted to a discussion of which of these data the States were able to provide and their limitations for addressing the associated study goals. The first to be considered are data pertaining to numbers of children served. Second, data related to children with disabilities* are examined. Finally, the availability of CPS budgetary data is considered.

5.1 CPS Data on Numbers of Children Served

Acquiring usable data on numbers of children in various categories served by CPS proved extremely difficult. States were asked to supply total numbers of CPS cases and numbers of high risk cases reported, screened, investigated, and substantiated, as well as numbers of cases served in-home and in placement, from 1985 to 1989. All but one State could provide at least one such piece of information for the total number of CPS cases for at least one of these years, but there was little comparability or consistency across States in this regard, and the reported data

*The survey actually asked CPS specialists about "handicapped children."

**The survey actually asked CPS specialists about "handicapping conditions."

were hedged with numerous qualifications.[1] Only the District of Columbia could differentiate numbers of high risk cases from numbers of all cases in any category, probably because their CPS agency only received and investigated reports of high risk cases (and cases of abandonment), leaving all other reports to the police.

States were also asked to provide data for 1989 on numbers of cases reported, investigated, and substantiated, and numbers served in-home and in placement, by sex, age, race/ethnicity, type of disability*, and type of maltreatment. While 39 States could provide data for at least one such category (e.g., age or sex), 19 could only supply such numbers for substantiated cases, and 1 State could do so just for numbers of investigated cases. This made it impossible to compare the ratios of these cases to all cases at different points in the CPS process, which had been the main intent of the survey question.2

Our findings are instructive primarily in pointing out the extent of variation across States in terms of the statistics that are kept on CPS cases. Limitations on the quality and comparability of available data thus precluded drawing valid conclusions concerning numbers of children unserved and underserved by CPS agencies across the States.

5.2 CPS Data on Children with Disabilities*

As indicated earlier, the sixth and final goal of the State Survey was to assess the incidence of children who had developed disabling conditions** due to abuse or neglect. To do this, State CPS specialists were asked to: (1) indicate how they defined children with disabilities* for CPS purposes; (2) report numbers of children with disabilities* in their CPS and child welfare systems; (3) provide numbers of children with disabilities* whose disabilities were believed to be the result of abuse or neglect; and (4) supply information on numbers of reported, investigated,

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[1]Appendix A to this report provides further discussion of these numbers, and presents the tabulated data along with their accompanying qualifications.

[2]These issues will be did at greater length in our methodological appendix.

*The survey actually asked CPS specialists about "handicapped children."

**The survey actually asked CPS specialists about "handicapping conditions.

and substantiated CPS cases with different types of disabling conditions.* Each of these subjects is addressed, in turn, below.

52.1 CPS Definitions of Children with Disabilities"

Twenty-four State CPS specialists reported using the definition of children with disabilities** set forth in the Federal Education of the Handicapped Act and subsequent amendments to it.[3] Twelve States reported that they did not define children with disabilities** for CPS purposes, while six States failed to answer this question.

Nine States indicated that their definition of children with disabilities** differed from the Federal definition. One State applied the Supplemental Social Security (SSI) definition, another, the same definition as used by their State Department of Mental Health. Three States reported definitions of children with disabilities** more limited than the Federal definition in that they excluded certain categories of disabilities**, whereas three States indicated that they employed more open definitions.

5.2.2 CPS Data on Children with Disabilities**

Thirty States reported that they kept no statistics on the number of children with disabilities** anywhere in the child welfare system,[4] while 10 reported that they did maintain these numbers. Five CPS specialists were uncertain as to whether these statistics were kept, and had

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*The survey actually asked CPS specialists about "handicapping conditions.

**The survey actually asked CPS specialists about "handicapped children."

[3]The following definition was supplied to State specialists by Westat and was derived from the Education for All Handicapped Children Act (P.L. 94-142) of 1975 and subsequent relevant amendments to it. " 'Handicapped children' as defined by the federal Education of the Handicapped Act and subsequent amendments to it means: mentally retarded, hard of hearing, deaf, language impaired, visually impaired, seriously emotionally disturbed, orthopedically impaired, other health impaired children, children with specific learning disabilities (who by reason thereof require special education and related services) and infants and toddlers from birth to age 2 with developmental delays in specified areas or diagnosed conditions with a high probability of resulting in developmental delay.

[4]This number includes hvo States that reported keeping various statistics on special needs children. Although children with disabilities* are considered special needs children, the category is much more encompassing than thii (e.g.. may also include all minority children, etc.), so the inability to further disaggregate these data made them inapplicable for our purposes.

only vague ideas about who might know (e.g., "possibly an interdepartmental group," "another department," "the Division of Developmental Disabilities"). Six States did not answer the question.

Of the 12 States indicating that they kept statistics on numbers of children with disabilities' in the child welfare system, only five could provide specific numbers either for FY 1988 or FY 1989. Moreover, these numbers were incomparable across these States because the categories were defined so differently. For example, one State collected data exclusively on children with disabilities* in State custody; another tabulated numbers only for substantiated CPS cases associated with certain types of disabilities*, but could not disaggregate data on children from data on parents with these conditions.

Only one State, Georgia, reported that it systematically kept data about children with disabilities* and specifically concerning whose disabilities* are believed to be the result of abuse or neglect. However, at the time of this survey, that information was recorded on case-level CPS forms, and was not aggregated, although there were plans to computerize the process in the future. Only Hawaii could provide a breakdown of substantiated cases by types of children's disabilities*, but could not say whether the disabilities* resulted from maltreatment.

523 Summary of Findings on Children with Disabilities* and CPS

Responses to our State Survey questions concerning children with disabilities* were more instructive about interstate differences in definitions, variations in recordkeeping practices and procedures, and the restriction of knowledge about children with disabilities* to particular divisions or departments than they were about numbers of children with disabilities* in the CPS system or whether children's disabilities* were the result of maltreatment. Indeed, all but three or four State CPS agencies appeared not to systematically differentiate cases involving children with disabilities* from other cases at all--at least in their aggregate case statistics. This fit with what was found in Chapter 4 concerning case-level practice, where we discovered that disabling conditions** normally entered into States' definitions of high risk only insofar as they might be included in the definitions of risk factors.

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*The survey actually asked CPS specialists about "handicapped children."

**The survey actually asked CPS specialists about "handicapping conditions.

A companion study, **A Report on the Maltreatment of Children with Disabilities*,** yielded more useful information regarding the relationship between disabling conditions** and child abuse and neglect. That study examined data from caseworkers on all substantiated cases of child abuse and neglect in a nationally representative random sample of 36 local CPS agencies in 25 States. Data were collected on any child in the household who had a known or suspected disability* prior to maltreatment, and on the nature of the disability'. Subsequent rounds of data collection sought to ascertain whether any disabilities* had developed 90 days after and one year after substantiation. Information was also sought on whether and how the investigation process differed for these cases and whether different services were provided to cases involving children with disabilities*. Individual caseworkers appeared to have access to this information, although it was often reported in various ways, whether on case forms, in case notes or simply in their heads. The problems encountered suggested that the central problems reside in the lack of uniform procedures systematically applied to these cases, and in a failure to aggregate these data.

53 Limitations on Availability of CPS Budgetary Data

When we tried to obtain budgetary data on CPS agencies, difficulties paralleled those described above. States were asked to give amounts of Federal, State, local, and private funding received by their CPS agencies for fiscal years 19851990. They were also requested to provide breakdowns regarding amounts of funding devoted to different CPS and child welfare functions (e.g., worker training, screening, investigation). Thirty-seven States were able to supply some, if very limited, budgetary information. However, they varied enormously in which pieces of information they could provide and in the categories they applied, making comparison and aggregation difficult. More importantly, very few States could systematically differentiate that part of their State's budget for CPS per se from the budget for the child welfare system as a whole, nor could they disaggregate data on specific CPS functions. Consequently, the best we could do was to

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*The survey actually asked CPS specialists about "handicapped children.

**The survey actually asked CPS specialists about "handicapping conditions."

extract the budgetary information States reported for child abuse and neglect-related projects funded by Federal, State and private sources, as presented in Chapter 3.[5]

[5]More detailed budgetary data are presented and discussed in the Appendix

6. CONCLUSIONS

This State Survey provided an overview of:

- How CPS agencies conceive of their mission and define their jurisdiction in cases of maltreatment;
- Patterns of service delivery and service availability across the States, perceived barriers to and gaps in service delivery, and specific programs designed to overcome the barriers and bridge the gaps in availability of services to specific categories of children;
- Definitions of risk that are used by State CPS agencies and their risk assessment policies and practices currently and over the past 5 years; and
- Data maintained and aggregated concerning children and families served by CPS agencies, particularly information about disabling conditions* that may have resulted from child abuse and neglect.

The overall picture has been one of considerable variation across the States (and D.C.) in CPS policies, procedures and practices. This final chapter summarizes the key State Survey findings in relation to the study goals set forth at the outset of this report (see Chapter 1). The first section identifies the groups that appear to be unserved/underserved under current practices, discussing why, when, and where these groups are relegated to lower priority status. In the second section, States' definitions of risk and uses of risk assessment are reviewed, and emphasis is placed on the procedures followed and problems encountered in serving high risk children. The third section addresses the secondary goal of this survey and indicates the amount of information that was available from States regarding the incidence of disabling conditions* resulting from child abuse and neglect. Finally, the last section synthesizes the input from the project's Advisory Panel concerning the implications of these findings and recommendations for future Federal policy in the area of child abuse and neglect.

*The survey actually asked CPS specialists about "handicapping conditions."

6.1 Groups Identified as Relatively Unserved/Underserved

On the basis of how CPS agencies define their mission and their jurisdiction in cases of maltreatment, what can be said about which groups are unserved and underserved? Admittedly, agency mission statements and definitions of in-scope maltreatment may not present the entire picture of how services are allocated. It is reasonable to expect, however, that they bear some systematic relationship to the broad patterns of how children and families are screened-in (vs. out) and how those who are screened-in are prioritized for services.

One of the most striking aspects of the study was the clear indication that, of all the types of maltreatment, educational neglect is most often categorically excluded from CPS purview. Thirty-six of the 51 survey respondents excluded educational neglect either entirely or in many cases. Fifteen did not define it as within CPS purview at all, and 21 others placed limitations on their involvement, such as by excluding simple truancy altogether, by including educational neglect only if it occurs in conjunction with other maltreatment, or by imposing other special requirements (e.g., only for younger children, only as a last resort, only after school officials have acted, etc.). Two States narrowed CPS involvement with educational neglect since 1985--one distinguished between simple truancy and in-scope educational neglect; the other dropped the category of educational neglect altogether. Thus, it appears that the majority of States provide limited or no CPS attention to educational neglect per se (nor are they required to do so in order to be eligible for State child abuse and neglect grants from NCCAN).

In and of itself, the fact that CPS generally excludes educationally neglected children does not necessarily imply that these children go without services. The responsibility for dealing with the educationally neglected children shifts to the school system in communities where CPS excludes them by definition. Moreover, an excellent case can be made that these children should not be served by CPS, but that the school systems should provide the resources to meet their needs. The point here, however, is that this is an arena in which responsibility has been shifting in recent years and that in many communities the school systems may not have had the resources to adequately deal with the service vacuum created by the curtailment of CPS services to this sector. As a result of the fact that they fall in the niche between service systems, children who are educationally neglected may be more likely to be unserved/underserved than children who are maltreated in other ways.

Children who are deemed to be at risk of harm are not generally accorded the same priority status as those who have already evidenced harm from abuse or neglect. At most, 16 States included the concept of risk in defining the primary mission of their CPS agency (according to the responses of 14 State CPS specialists and the contents of 2 States' written mission statements). It would thus appear that, in most States, CPS emphasizes already-injured or **already-**abused/neglected children over those at risk of harm or at risk of being maltreated. Children who are at risk, then, may be relatively unlikely to receive **official** CPS attention and services--at least until their circumstances worsen to the point that they are actually harmed or maltreated. Even among children who are deemed to be at risk, one sees that the system emphasizes the current crisis at the expense of long-term detrimental conditions: risk of imminent harm is more often cited in the agency's primary purpose than is risk of ***cumulative*** harm. At the same time, it is likely to be these latter cases that make up a large sector of the agency's re-referrals, and their needs are typically not as extensive as those of families and children whose circumstances have been left to develop to the point of crisis. More timely interventions with the non-crisis cases might, in the long run, be less costly, both in terms of agency resources, and in human terms as well.

Voluntary referrals were less likely to be accepted for CPS attention than were involuntary referrals. Often these are the non-crisis cases as well, so the foregoing discussion would appear to apply equally here. However, voluntary referrals are also the cases that are more manageable--in terms of client cooperation and in terms of the achievability of goals. It is ironic that these voluntary referrals would be among the first to be excluded in an effort to deal with unmanageable caseloads. By excluding the voluntary cases, the remaining cases are necessarily those that are the most unmanageable ones--ones where it is more difficult to accomplish real change.

Children who are emotionally abused or neglected may be unserved or underserved, since these children are **not** always specifically defined to be within the scope of CPS purview. Moreover, even when emotional maltreatment is technically included within the agency's defined purview, it is typically not treated as a separate specified category. As a result, it may only be accorded attention when it occurs in conjunction with other maltreatment. Finally, survey respondents also reported that emotional maltreatment is generally more difficult to substantiate. Taken together, these facts all converge on the implication that emotionally maltreated children will be unserved or underserved by **CPS** relative to children who are maltreated in other ways.

States' definitions of neglect were more variable than their definitions of abuse, and subject to more qualifications and limitations. Consider physical neglect and medical neglect--both defined as within CPS purview by all 51 survey respondents. Physical neglect that stems solely from the parent's lack of financial resources was often excluded by CPS definitions. Also, all but one State excluded failure to immunize from what they defmed to be in-scope medical neglect; and nearly all States made religious exemptions in the medical neglect category. However common these exclusions and exceptions may be, they nevertheless do indicate subgroups of children who are less likely to receive CPS services.

The patterns of responses to questions concerning homeless children, parental unavailability, and non-abuse/neglect-related referrals revealed possibly more about the relationships between CPS agencies and their encompassing child welfare agencies than they did about these specific groups of clients per se. Responses expressed the conflict between the mission/scope of CPS and the mission/scope of child welfare, in general. Whereas CPS agencies focus on the protection of children who have been or who are in (danger of being abused or neglected, the larger child welfare agencies focus on the broader group of children and their families who are in need of family preservation or support services. Responses concerning homelessness, parental unavailability, and non-abuse/neglect-related referrals were bifurcated in ways that indicated that respondents, as a group, were attempting to consider conflicting CPS-mandates and larger child welfare agency goals, simultaneously. Kamerman and Kahn[1] recently conducted a in-depth study of 25 sites (including State systems, counties, and voluntary agencies), during which they also observed the structural underpinnings of this internal tension. In summarizing their findings, they underscored what this structural organization of CPS as the primary gatekeeper implies concerning who is likely to be unserved/underserved in the context of the larger child welfare agency:

> Child Protective Services (CPS) (covering physical abuse, sexual abuse, and neglect reports, investigations, assessments, and resultant actions) have emerged as the dominant public child and family service, in effect "driving" the public agency and **often taking over child welfare entirely.** A **repeated theme in state after state, county after county, is that the social service system has become so constricted that children can gain access to help only if they have been abused or severely neglected, are found delinquent, or run away. Doorways for "less serious" or differently defined problems**

[1]Kamerman, Sheila B., & Kahn, Alfred J. (June, 1989). Social Services for *Children*, Youth and *Families* in the U.S. The Annie E. Casey Foundation.

are closed. Many communities cannot serve "voluntary" cases. Even for accepted cases, the needed help may not be forthcoming, or if it is, may not be adequate.

It should also be emphasized that the lack of coordination between CPS and some alternative child welfare intake mechanism, as well as the severe curtailment of the latter, leaves children and families in another unfilled service niche--this one within the child welfare system itself. Only eight States reported having developed special training projects for their workers in an attempt to address these problems.

Most States reported that their CPS agencies were operating with seriously constrained resources. Fewer than half (n = 18) of the survey respondents said that their resources were generally sufficient to investigate all cases needing investigation. In this context, it came as no surprise to discover that 38 States follow special procedures to prioritize reports for investigation. Moreover, even for States which said resources were generally adequate in this area, respondents voiced concerns about the scope, thoroughness, and timeliness of investigations. Staffing issues appeared to be one of the most important limits, with majorities of States claiming that staff turnover (n=46 States), unfilled staff vacancies (n =45 States), and inadequacies in worker preparation and training (n=39 States) imposed a moderate to severe limitation on CPS's ability to deliver services. In this connection, it is interesting that the agency emphasis on crisis cases and on those cases where goals are clearly more difficult to achieve would also be expected to contribute substantially to worker dissatisfaction.

Not only do CPS agencies function with inadequate resources and interface with educational and larger child welfare systems that may themselves have inadequate resources for bridging the service gaps, but CPS may also have difficulty in coordinating services with the police and with the juvenile court system. Specialists' comments indicated that the division of labor and responsibility between CPS or the child welfare agency and law enforcement agencies is in fact quite variable, and not always clearcut. In many States, CPS operations are severely constrained by the court system, especially by the time it takes for cases to be put on the court docket. Indeed, experts have expressed concerns that pressure exists for CPS to become "an arm of the legal system." In philosophical terms, this may affect the relative weight given to a punishment-oriented versus a treatment-oriented perspective. More directly, however, it may mean that cases will essentially be prioritized for services more on the basis of what the legal system regards as winnable in court than on the basis of their actual service needs. One indication that these are matters of concern to CPS agencies is provided by the relatively large number of States (12)

reporting special projects related to inter-agency service coordination, as well as those reporting that they have conducted training in joint investigations (2 States) or developed training for police or prosecutors (3 States).

In the context of the considerable restrictions (noted above) on CPS services, the question of who is unserved/underserved can be put in terms of the incongruence between service needs and service availability. Respondents were asked to respond to a listing of 23 categories of services, indicating the extent to which the services were available statewide and noting any other existing barriers or limitations on the availability of services in each category. In understanding the significance of their answers, it is important to bear in mind that even among those who claimed that a service was available statewide, what was referred to as "statewide" availability may still have included large numbers of communities without ready geographical access to the service. Also, the various barriers or limitations that they indicated were those: that spontaneously came to their minds, and many respondents who did not spontaneously think of mentioning a certain barrier might nevertheless have acknowledged it had we explicitly asked about it. Taken together, both of these considerations imply that the survey fmdings regarding service availability probably overestimate the extent to which services are available, statewide and without other types of limitations or barriers.

Given this caveat, the findings regarding the very limited availability of nearly all categories of service are all the more alarming. The most readily available service categories were case management and crisis intervention, which 25 and 21 States, respectively, reported to be available statewide and without barriers or limitations to their accessibility. Far fewer States reported unproblematic availability for other types of services: mental health evaluations for perpetrators and medical services for children were only reported to be trouble-free in their availability by 13 and 15 States, respectively. Fourteen States reported unhampered statewide availability of individual counseling to parents and families, 13 indicated that this was the case for family counseling and 11 States indicated unhampered statewide availability of group counseling. All other categories of services were said to be available statewide and unhampered by other barriers or limitations by only ten or fewer States!

It is also noteworthy that the services named as "barrier-free" by most States tended to be those that are more crisis-oriented (e.g., crisis intervention medical services), whereas services that address chronic or more long-term problems and aim to have a more longstanding impact on

the family unit (e.g., home-based/family preservation services, parent education) were much less widely available. As we noted earlier, under the strain of scarce resources and increasing pressures on the system, CPS agencies appear to have taken a reactive rather than a proactive stance; they respond to immediate crises while failing to address underlying structural problems.

Unfortunately, these conclusions were largely reinforced by the findings concerning the particular categories of children with the greatest perceived needs and the special efforts reportedly made on their behalf. From this perspective the categories of children who were most often perceived as having a need for special efforts without reports of any such efforts were those who were victims of psychological maltreatment, those with intellectually limited caretakers, and those with psychiatrically impaired caretakers. These are the same children most likely to "fall between the cracks" under many States' definitions of emotional maltreatment and/or to fall outside (or only ambiguously within) the CPS agency's purview. Regrettably, they are also the children whose long-term developmental prospects bode least well in the absence of early intervention and treatment. Also relatively high on the list of underserved categories of children were children from single-parent families, rural children, children who live in dangerous neighborhoods, and children from low-income households. In short, these were children whose problems, while chronic, might well be amenable to successful intervention if a greater number and more suitable services were made available to them before their situation deteriorates into crisis. Again, the same theme emerges here as discussed above. Services tend not to be provided to those children at risk of cumulative harm, until actual maltreatment occurs.

At the same time that CPS agencies have tended not to serve children with lower level but more chronic problems, they have not kept pace with the needs of several of the "crisis categories" of children and families who have been ever more insistently overburdening the service delivery system in the past few years. Specifically, substance abuse evaluation and substance abuse treatment for parents and sex offender treatment for perpetrators were reported to have non-problematic availability by fewer than five States. At the same time, this severe lack of readily-available services for substance abusing parents is seriously at odds with what States reported about the influx of new types of cases in the past five years. Drug-exposed infants and substance-abusing parents topped the list of noteworthy new types of problems coming into CPS in the past 5 years--named by 37 States. Although a number of States reported having developed special efforts for substance abusing caretakers, such efforts were minimal in scope, and a closer examination of a subset of them indicated that fewer than half had any treatment focus. Clearly, this is an arena

where substantial changes in service needs have been observed, while the growth in services has lagged far behind the rise in the problem itself.

To answer the question concerning who is unserved/underserved from the vantage of what services are needed, the findings of this survey indicate that children and families *with all types of service needs will be* unserved/underserved in many communities throughout the nation because the needed services are geographically inaccessible or there are other barriers or limitations on their availability. Moreover, the most severely unserved/underserved by far are abused/neglected children in substance-abusing families, whose service needs have presented new challenges to CPS because of the recent notable rise in their numbers, yet for whom services are reported to be least available. These findings would appear to give cause for grave concern about the extent of the population of unserved/underserved abused or neglected children.

6.2 Uses of Risk and Risk Assessment in CPS

This section reports conclusions with respect to three of the State Survey objectives:

- To determine States' current definitions of high risk as they relate to children served by child abuse and neglect programs;
- To determine the States' current uses of risk assessment in relation to suspected cases of child abuse and neglect; and
- To determine procedures followed and problems encountered by State CPS agencies in serving high risk children.

Risk can take on one or more meanings in the context of CPS, and it can be defined in one or more sources, including in the agency's mission statements, definitions of maltreatment, CPS policy manuals, worker training, and/or in risk assessment materials. The State Survey revealed that although 49 states defined risk to children in some way, many more did so in worker training (42), in written policy (40), or in risk assessment (36) than did so in the CPS primary mission (16). Only 12 States specifically reported that risk is defined in law. These fmdings are particularly interesting in light of the limited amount of training that workers are reported to receive in risk assessment. Thirty of the 40 States that provide such training on average offer fewer than 16 hours in all. Thus, although the greatest number of States reported that they define

risk in worker training, most workers had received only minimal training. One wonders how much time was actually spent in defining risk for the line workers who are expected to apply the concept in practice.

The fact that only a relatively small number of States indicated that risk is a component of agency mission, whereas considerably more reported that risk is defined in policy, training and/or in risk assessment, is perhaps not surprising when one considers the implications of incorporating the notion of risk at different points in the CPS process. When risk is included in agency mission, this may mean that the agency defines its mission as serving not just children who have been abused or neglected, but also children at risk of harm or maltreatment. At this point, introduction of risk broadens the base of the CPS agency's potential service population.[2] By contrast, when the concept of risk is applied later in the CPS process, it more often serves as a screening mechanism, essentially narrowing down the categories and/or numbers of children that the agency defines as eligible for services at later stages in the CPS process. Thus, the fact that few States incorporated the notion of risk in their mission, whereas many did so at later stages, might be seen as different facets of the same underlying dynamic--the effort to curtail the overall size of the population that the agency is mandated to serve.

Most States simultaneously employed more than one defiiition of risk to children. Of the 48 States which reported their definitions of risk, all but 11 indicated that they used more than one definition. The most commonly given definition was risk of immediate harm, reported by 37 States as being one component of their definition of risk and deemed first priority by 62 percent of these States. The next most commonly cited definition was risk of serious harm, reported by 31 States as a component of their definition, but considered as first priority by only 42 percent. So although both immediacy and severity of risk were seen as central by a large number of States, immediacy was regarded by more States as the more important component. Interestingly, only 23 States included a component of future risk to the child in their definitions, either as risk of re-report (16 States) or as risk of future maltreatment (7 States). However, in interpreting this finding it should also be considered that some States may define "immediate" in relatively long-range terms (e.g., within a few weeks or months). Of the 16 States which did indicate risk of re-report as part of their definitions, 75 percent judged it to be of only third priority. All seven States

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[2] It broadens the base in that it includes those at risk as well as those already harmed. A limit on how risk is defined for thii purpose, there might be considerable room left to broaden further. Note, in thii connection, that including those at risk of imminent harm gives a narrower base than does risk of cumulative harm -- an issue discussed earlier.

which indicated that risk of future maltreatment is in their agency's definition considered this to be the only definition of risk they employed. Finally, four States reported risk or threat of harm as their sole definition of risk without further qualifying the specific nature of the risk to children that would be involved. These findings are noteworthy in that the central use of risk definitions for these agencies is in risk assessment, which is meant to be a process of assessing future risk to the child. The variety of risk definitions that were reported, as well as the use of multiple and not always mutually exclusive definitions of risk by CPS agencies, may also reflect not only that risk is defined in multiple loci, but also that same definition is not applied consistently at all levels. In a few States, for example, risk is defined differently in CPS mission and in risk assessment. Thirty-seven States reported that disabling conditions* are included in their definitions of risk, generally insofar as they are treated as risk factors or components of risk factors in risk assessment instruments.

Thirty-four States reported that they use, or will use, their risk assessment systems statewide, and 11 States indicated that they apply risk assessment only in certain counties or districts, or use different systems in different parts of the State. State CPS agencies indicated use of a variety of risk assessment systems. Fifteen States reported that they use the Illinois Risk Assessment Model (CANTS) or a modified version of this system. Four States indicated that they employed the Child At Risk Field System. Two States noted that they use, or were about to implement, a risk assessment system adapted to their States' characteristics by the National Center on Crime and Delinquency. One State indicated use of the Family Risk Scales and one employed both the Family Risk Scales and the Child Well-Being Scales. Finally, 21 States indicated that they had developed their own risk assessment systems or adapted other States' systems to their needs. Although most of these were composite models based upon systems used in other States, four of these States used the Washington State model. In the end, then, most of these risk assessment systems are variants of a few basic models.

Forty-two States reported the use of some form of instrument in assessing risk. The risk assessment instruments they use incorporate a number of features, the most common of these being a matrix of risk factors (15 States), a scale for entering numeric values (13 States) and a scale for entering ordinal values (13 States). However, only 4 States responded that their instrument included a form for entering descriptive information. The majority of States mentioned no

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*The survey actually asked CPS specialists about "handicapping conditions."

limitations on the types of abuse and neglect which their instruments are designed to assess. Even though possible cultural bias in risk assessment instruments is regarded as a major issue by researchers, this was not seen as a serious problem by most of the CPS specialists we interviewed. This may stem, in part, from a hesitation to overtly address issues related to class, race and ethnicity. For our survey also found, in somewhat parallel fashion, that States' risk assessment instruments are most likely to include parental problem factors and least likely to include factors related to neighborhood/community characteristics, geographic location of the family, family size/composition, and parental demographic characteristics. Although this may be part of an effort to avoid inclusion in the instrument of factors that might be considered discriminatory or too broad to be useful, these are also the factors most likely to inform the workers about the larger economic and cultural context in which the client family is embedded.

States varied widely in the number of points in the casework process at which they reported that risk assessment is brought to bear. Most commonly, the instrument is applied at investigation (35 States) and at case closure (30 States). It is noteworthy that only 19 States reported using their risk assessment instruments at the report/intake stage. In effect, then, for many States intake may not include a comprehensive assessment. However, a number of these States may be constrained by law from applying risk assessment at this point, turning to prioritization procedures for investigation as an unofficial risk screen. The greatest number of States reported using the results of risk assessment to make service plan decisions (37), child removal and placement decisions (36), and case closure decisions (35). Interestingly, the majority of State CPS specialists regarded risk assessment primarily as a means of guiding casework practice or of facilitating the collection of information about children and their families. Far fewer State CPS specialists viewed risk assessment as a means of prediction or as a clinical or screening tool, which would appear to be closer to what risk assessment was originally intended to be.

Forty-one States reported that they differentiate levels of risk, most commonly on a three-level scale of low, medium, and high. But what are the effects of different risk level assessments on actual service delivery? Out of a total of 35 States that answered the question of how a high risk assessment affects service delivery, 14 reported that an assessment of high risk affects both the timing and nature of services, 8 indicated that only the timing of services is affected, and 7 noted that only the nature of services is affected. Interestingly, in light of what was reported above with respect to the points of the CPS process at which risk assessment is applied, 20 of these 35 States indicated that a high risk assessment impels a faster response time at intake.

It may be that, in replying to this question, State specialists were using a broader definition of risk assessment that incorporated prioritization procedures applied at intake, even though these are not technically considered part of the formal assessment of risk With respect to its impact on services, 21 States noted that the primary effect of a high risk assessment at investigation is that the child is more likely to be removed from the home or to receive in-home family preservation services. For about 40 percent of the States, the "combined effect" of a high risk assessment at intake and after investigation is to trigger faster investigation and elicit more comprehensive protective or preventive services from the State agency. It should be added here that, in a number of States, children assessed as being at moderate risk are reported to be served (or unserved) no differently than those assessed at low risk. Thus, they may perhaps be considered as another (or a parallel) category of children unserved or underserved under existing CPS practices.

Although considerable research has been conducted on risk assessment over the past several years, State specialists did not indicate that they were familiar with this body of work. Just seven States reported having conducted research of their own on risk assessment, while a few others had examined the results of research carried out in other States. Three States indicated that they were developing plans to conduct research on risk assessment at the time of the interview. The small amount of research that has been carried out by the States has focused on varied aspects of risk assessment, including: testing its predictive ability, assessing the inter-rater reliability of the instrument, and evaluating the process of implementation.

A limited awareness of other research conducted on risk assessment and the minimal amount of such research that has actually been done by the States is paralleled by the small number of States that have computerized or automated their risk assessment system. Of 33 States indicating that no part of their risk assessment system was computerized or automated at the time of the interview, 19 reported that there was a plan to do so, two said that such a plan was being considered, and 12 that they had no plans to computerize or automate their risk assessment system. Only 10 States indicated that they had computerized or automated any part of their system at the time of the interview.

Both the limited research and the restricted extent of computerization across the States suggests that few, if any, systematic efforts were made to collect data that will inform about the usefulness and impact of risk assessment over time. This, too, gives cause for concern. Admittedly, risk assessment is still only in its infant stages, and developmental "growing pains" are

perhaps to be expected. Moreover, it may well represent an improvement over what existed prior to its inception. Nevertheless, one fails to see how risk assessment methodology can gain any informed direction or advancement in the absence of data concerning its utility and impact, and when workers are not adequately trained in its implementation.

The risk assessment systems now in place were adopted over a 6-year period between 1984 and 1989, and already there has been considerable flux in which systems are being used where and when. Systems are repeatedly being revised or replaced; at the time of the interview several States were either testing new systems or had scheduled new ones for implementation in the near future. Some flux of this sort is probably a healthy sign, representing the desire to refine what is after all a process still in its formative phases. Yet one must also ask about the nature of this flux and the impetus behind it in the absence of a basis for considered decision-making informed by research and evaluation. In a kind of "bandwagon effect," many States appear to have replaced systems before they had a chance to see if they worked, for it may take several years of concerted effort to put the process fully in place. Other States appear to have borrowed pieces of their systems from different models, a strategy likely to generate an overall risk assessment system that does not fit together as a coherent, integrated whole. Again, this belies the original intent behind risk assessment, which was to create an integrated, systematic, uniformly applied procedure for assessing risk to children. If risk assessment is not serving these originally intended functions, this may also help to explain why so few States characterized risk assessment as a diagnostic or therapeutic tool and chose instead to regard it more broadly and generally as a tool for guiding practice and/or for collecting information. These concerns about the current state of risk assessment also need to be considered against its potential promise. Michael Wald and Maria Wolverton recently offered a concise analysis of the prerequisites that need attention for risk assessment to yield its promise:

> Implementation of a risk-assessment system can be a stimulus for major changes in a child protection system. If implementation is accompanied by clarification of goals, analysis of resource needs, increasing training of workers, good supervision, and high-quality services, it will certainly result in a vastly improved system. But without the additional changes, risk assessment will be the emperor's new clothes?

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[3] Michael Wald and Maria Woolverton, Risk Assessment: The Emperor's New Clothes?, in Child *We&are*, November, 1990, Vol. LXIX, No. 6, p. 505.

6.3 Disabling Conditions* Resulting From Abuse or Neglect

The sixth and final goal of the State Survey was to provide preliminary estimates of the incidence of children who developed disabling conditions* as a result of abuse or neglect. In an effort to address this goal, respondents were asked to indicate the numbers of children with disabilities** in their CPS and child welfare systems, to provide the numbers of children with disabilities** whose disabilities were believed to have resulted from abuse or neglect, and to supply information about the numbers of children reported, investigated, and substantiated by CPS who had different types of disabling conditions*.

The attempt to use this State Survey effort to address the question concerning the incidence of disabling conditions* due to abuse or neglect was decidedly unsuccessful. Data about disabilities* are typically not recorded at all; in the few instances that are recorded, the data are either not aggregated at the State level or do not reveal whether the disabilities** in question stem from abuse or neglect.

Specifically, only 12 States indicated that they do keep some statistics on the number of children with disabilities** in their child welfare system, but only five of these were able to provide figures for either FY 1988 or FY 1989. Moreover, the meaning of the figures kept varies so substantially that it was not possible to compare these statistics across even these five States. Only one State (Georgia) reported that it does systematically keep data about children with disabilities** and specifically concerning those whose disabilities** are believed to have resulted from abuse or neglect. However, that information is presently only recorded on case-level data forms, and is not aggregated at the State level. One other State (Hawaii) was able to provide a breakdown of substantiated cases by types of children's disabilities**, but that State could not say whether or not these disabilities** resulted from maltreatment.

***The survey actually asked CPS specialists about "handicapping conditions.**

****The survey actually asked CPS specialists about "handicapped children.**

6.4 Implications for Future Federal Policy Initiatives

The Advisory Panel for this study discussed the State Survey findings. The recommendations described in this concluding section were generated from the points raised during the discussion.

First, the considerable range across States in definitions of CPS mission and of the types of cases that fall within the CPS agency's jurisdiction indicates that definitional issues are still far from resolved in this arena. Federal leadership would be extremely helpful in developing greater consensus on these issues and developing more consistent use of terms and concepts.

Second, a number of issues pertaining to service organization and prioritization of services need attention. To begin with, several systemic issues that relate to CPS and its role in service delivery are in serious need of careful thought and discussion by experts in the field. Both Federal and State governments should take a leadership role in generating in-depth discussions about and creative approaches for resolving the following gaps and/or points of failed coordination in community service systems:

- The division of responsibilities between CPS and the educational system concerning educational neglect cases;
- The coordination of services between CPS and the larger child welfare and social service systems concerning children and families which do not fall within the scope of CPS jurisdiction (e.g., cumulative harm cases, voluntary referrals, and/or families needing resources such as food, medical care, transportation, or housing, to prevent serious deterioration of a child's situation); and
- The interaction of CPS with law enforcement (police and the courts) concerning reported children and their families.

In addition to stimulating discussion and suggestions concerning these critical junctions and transfer points between service systems, the Federal Government could sponsor the development of model inter-system coordination agreements. In addition, both Federal and State governments could fund research on the impact of selected model agreement arrangements on the magnitude and manageability of the CPS caseloads.

The issue of worker training and retention needs more concerted attention. The field generally needs a better understanding of the confluence of factors that impact worker retention at all levels in the CPS system. But, in particular, the issue of worker training and retention also needs to be considered in connection with both the total number of cases in worker caseloads and the manageability of those cases.

Finally, initiatives are critically needed that would redirect service orientation from the current reactive stance to one that is considerably more proactive, and which gives greater emphasis to those cases where temporary low-to-moderate investment of resources may be sufficient to prevent deterioration to a crisis status. State funding priorities need to be adjusted so that this shift in emphasis can be effected. At the same time, Federal funding should be channelled toward demonstration projects that shift emphasis in this direction, and these could be designed to provide the information and resource base necessary to attract more stable funding sources at the conclusion of the demonstration.

Some efforts are needed to help services catch up with client needs in areas where the latter have shown considerable change in recent years, but it would be a mistake to place the primary emphasis on efforts such as these. Instead, the primary emphasis should be on ensuring the unrestricted availability of those services that help families solve their problems and stay out of the CPS caseloads in the future, such as day care, in-home prevention services, and family preservation services.

NCCAN could take a leadership role in helping to systematize risk assessment methodology, by:

- Establishing a minimum or "core" set of factors which should be included in all risk assessment instruments, and
- Synthesizing the extant research knowledge concerning risk assessment and disseminating this information to States and interested local agencies.

NCCAN also could support additional research designed to shape the development of risk assessment and should direct efforts toward stimulating more long-range information resources in this arena, by:

- Offering grants and/or technical assistance to the States for monitoring and evaluating ongoing risk assessment systems,
- Providing grants and/or technical assistance for computerizing the data from risk assessment systems,
- Permitting longer grant periods for the support given to these purposes, and
- Funding long-term evaluations of selected risk assessment systems.

Finally, States and local agencies need to supply more intensive training in risk assessment. The Federal Government should consider mechanisms that would provide stronger incentives for doing this.

Appendix A

TABLE OF CONTENTS

Section	
1	State Survey Methodology
2	Telephone Update Guide
3	Reference To Guide
4	CPS Data on Numbers of Cases Served (Tables A-l and A-2)
5	CPS Budgetary Data (Table A-3)

List of Tables

Table	
A l	Disposition of CPS cases and cases served in-home and in placement for 1985-1989, as reported by States (n=50)
A-2	Characteristics of investigated and substantiated cases, 1988/89, as reported by States
A-3	Amounts and sources of funding for child-related services, for fiscal years 1985-1989, as reported by States (in thousands of dollars)

Section 1

Section 1. STATE SURVEY METHODOLOGY

Overview of State Survey

The purpose of the **State Survey** or **Telephone Update Guide,** was to obtain information on CPS organization, mission, scope, services, policies and procedures, barriers to services, funding, special projects and efforts, and populations served and underserved. In order to implement the State Survey, the following steps were undertaken:

1. The **Telephone Update Guide** and **Reference to the Guide** were prepared.
2. States were recruited and sent the Guide materials.
3. Telephone confirmation calls were completed.
4. Responses were collected, processed, and analyzed.

Preparation of the Telephone Update Guide and Reference to the Guide

Prior to conducting the telephone discussions, the **Telephone Update Guide (See** Section 2 in this Appendix) was developed to address the study questions. The section of the Guide pertaining to risk assessment practices and procedures was modeled on the APWA survey of State CPS agencies conducted during the Summer of 1989. At the same time, the **Reference to the Guide,** designed to aid respondents in understanding the **Guide** and preparing materials prior to the interview, was also developed.

Recruitment Process for State Participation

We began the process of recruiting the 50 states and the District of Columbia by sending a recruitment letter to the head of child welfare services in each state. The letter explained the nature of the study and asked that the enclosed packet of materials containing the **Guide** and **Reference to the Guide** be forwarded to the person deemed most knowledgeable in CPS policies and procedures in the State. We had already completed the relevant sections of the **Guide**

with information on risk assessment obtained from the 47 states that had responded to the APWA Survey. We also included in these letters the name of the person who had responded to the APWA Survey for the State. Copies of the **Telephone Update Guide** and **Reference to the Guide,** along with accompanying explanatory letters and requests for support of the study effort, were also mailed to the NCCAN State Liaison Officers and to Health and Human Services regional offices.

After approximately two weeks, if we had not yet heard from the State regarding who had been designated to be the chosen respondent, we conducted telephone calls to gather this information. At the same time, we began our first round of calls to contact respondents, answer any questions concerning the State Survey, and schedule the telephone interviews. We also used these calls as an opportunity to remind respondents of the need to prepare materials in advance of the scheduled interview, and reiterated the possible need to distribute pieces of the survey to different persons in their State agency (e.g., budget directors or those in charge of information systems). In some cases, arrangements were made in advance to interview several persons in a given State; on a few occasions this occurred through conference calls.

Telephone interviews were conducted by two Westat senior staff and two consultants well versed in CPS procedures. Interviews lasted from about one hour to nearly five hours in length, at times staggered over several sessions. The average length was approximately one hour forty-five minutes to two hours.

During September, followup calls were made to a number of states to obtain further clarification of reported responses and/or to request that pieces of information as yet unobtained (e.g., definitions, budgetary figures) be sent.

Data Processing

Data from the **Telephone Update Guide** were processed in two different ways. For the more close-ended questions a codebook was developed and the data were then coded and SAS files were created to produce frequency distributions of the responses. A D-BASE system was also designed for use on PCs to allow entry of data from open-ended questions. This yielded memo fields that consolidated responses for these questions, and enabled further analysis. These data

were then synthesized, along with the written materials sent by the States, to answer the study questions.

Section 2

STUDY OF HIGH RISK
CHILD ABUSE AND NEGLECT GROUPS

Telephone Update Guide

State _____

Respondent's Name _____

Position _____

Address _____

_____

Phone Number _____

I. CPS **Organization and Functions**

1. What is your state's administrative structure as it relates to the child **welfare/CPS** administration? (CIRCLE ONE.)

Totally state-administered	1
Locally-administered/state-supervised	2
Other **(SPECIFY)** _____	3

2. What are the agencies in your state that are-mandated by law to receive reports and investigate cases of child abuse and neglect?

_____

_____

_____

_____

_____

_____

3. The chart below gives various functions that may be performed by CPS units or CPS agencies, or by other child welfare units or agencies. Please indicate by checking in the appropriate space whether in your state the function in question is performed by CPS, a CPS unit in or in conjunction with another agency, another agency, or is not performed by any agency or unit. Under Refer for Services and Provide Direct Service, please specify the categ(ies of services referred/provided.

	CPS	Joint Unit Coordinating Wii Another Agency (SPECIFY)	Another Agency (SPECIFY)	Not Applicable
Receive reports				
Screen reports				
Investigate				
Substantiate				
Provide family preservation/home-based services (SPECIFY) _____				
Refer for services (SPECIFY TYPES) 1) _____				
2) _____				
3) _____				
4) _____				
5) _____				
Provide direct services (SPECIFY TYPES) 1) _____				
2) _____				
3) _____				
_____				
5) _____				

3. (continued) See instructions at top of p.2.

	CPS	Joint Unit Coordinating Wiih Another Agency (SPECIFY)	Another Agency (SPECIFY)	Not Applicable
Make removal decisions				
Arrange/oversee foster care (related to abuse or neglect)				
Arrange/oversee adoptions (related to abuse or neglect)				
Monitor service delivery/ case manage				
Track cases through closure				

II. CPS's Mission/Eligibility for Services

4. What do the CPS agencies in your state regard as their primarv mission in serving abused children? s may not be the only mission in serving abused children; we are interested in what is primary. (CIRCLE ONE.)

To serve children for whom prior abuse of any kind has been documented 1

To serve all reputed abuse cases 2

To serve children who have been physically or sexually abused 3

To serve children at risk of imminent harm of future abuse 4

To serve children at risk of cumulative harm from abuse 5

Other (SPECIFY) _____ _____ 6

DK (Who would? _____ _____ 9

5. What do the CPS agencies in your state regard as their primary mission in serving neglected children? This may not be the only mission in serving neglected children; we are interested in what is primary. (CIRCLE ONE.)

To serve children for whom prior neglect of any kind has been documented 1

To serve all reputed neglect cases 2

To serve children who have been physically neglected 3

To serve children who have been emotionally neglected 4

To serve children at risk of imminent harm of future neglect 5

To serve children at risk of cumulative harm from neglect 6

Other (SPECIFY) _____ _____ 7

DK (Who would? _____ _____) 9

6. Please fill in the following chart, specifying the types of abuse, neglect, and associated problems that are within the scope of your state CPS agencies' jurisdiction; whether these are defined in law, policy or both; any limitations or qualifications on these categories; whether reports that are not accepted as bona fide by your agency's criteria are referred elsewhere for service; and whether any followup is conducted on these referrals.

	Included in agency's scope/ mission? Y = Yes	Defined in law, policy or both? L, P, B	Specific Limitations/ Defining Characteristics (e.g., limitations on definition of educational neglect, provision of Information and Referral services only)	If not accepted is it referred? Y = Yes	Followup on referrals? Y = Yes
TYPES OF ABUSE					
Physical Abuse					
Emotional Abuse					
Sexual Abuse					
Multiple Abuse					
Other (SPECIFY)					
TYPES OF NEGLECT					
Physical Neglect					
Medical Neglect					
Emotional Neglect					
Educational Neglect					
Abandonment					
Lack of Supervision					
Hazardous home environment					
Caretaker illness/unavailability					
- substance abusing					
- psychiatrically hospitaliied					
- jailed					
Chemically dependent newborns					
Homeless children					
Voluntary referrals					
- abuse/neglect related					
- non-abuse neglect related					
Third party perpetrator					
Institutional perpetrator					

7. If the definition of abuse used by your state's CPS agencies has been changed in the last five years, please indicate **when** and **how**.

_____

_____

_____

8. If the definition of neglect used by your state's CPS agencies has been changed in the last five years, please indicate **when** and **how**.

_____

_____

_____

9. If the mission of your state's CPS agencies has been redefined in the past live years, please indicate **when** and how.

_____

_____

_____

_____

_____

10. In the past two years, have any specific conditions impeded your state's CPS agencies from carrying out this mission? (CIRCLE ONE)

Yes (SPECIFY AS MANY AS APPLY) 1

_____

_____

No 2

DK 9

(Who would?)_____

11. In the past five years, has CPS witnessed an influx of new **types** of reports (e.g., on AIDS babies, crack babies)? (CIRCLE ONE.)

Yes (SPECIFY AS MANY AS APPLY) 1

_____

_____

No 2

DK 9

(Who would?)_____

12. Are there special procedures for handling reports on prior substantiated/indicated cases of abuse and neglect? (CIRCLE ONE.)

Yes (SPECIFY) _____ 1

Other (SPECIFY) _____ 2

No 3
DK 9
(Who would?) _____

13. Are there special procedures for handling m-reports on previous unsubstantiated cases? (CIRCLE ONE.)

Yes (SPECIFY) _____ 1

Other (SPECIFY) _____ 2

No 3
DK 9
(Who would?) _____

14. Are there special procedures for prioritizing reports for investigation? (CIRCLE ONE.)

Yes (SPECIFY) _____ 1

Other (SPECIFY) _____ 2

No 3
DK 9
(Who would?) _____

15. How long is information kept on unsubstantiated cases? (CIRCLE ONE.)

3 months or less 1
3-6 months 2
6 months to 1 year 3
I-2 years 4
2-5 years 5
5 years + ... 6
Other (SPECIFY) _____ 7

DK 9
(Who would?) _____

III. Budgetary Information

16a. To the extent that information is available, please give the amounts of funding received by CPS agencies in your state from all federal, state, local and private sources for fiscal years 1985-1989. If the funds are earmarked for a special project of some kind, please indicate this by checking in the appropriate space. Special projects might include demonstration projects, targeted services, or training projects of some kind (see 16b). If the numbers are for calendar years or state fiscal years, please show this above the appropriate columns (e.g., SFY [specify when to when] or CY). Use the comments section for any other qualifiers on numbers given.

	FY 85	FY 86	FY 87	FY 88	FY 89	Check (✓) here if all or pan for special project(s)	Comments
FEDERAL NCAAN							
NIMH							
National Law Enforcement Foundation							
Other (SPECIFY)							
TOTAL FEDERAL							
STATE Legislature							
Other (SPECIFY)							
TOTAL STATE							

16a. (continued)

	FY 85	FY66	FY 87	FY 88	FY 69	Check (✓) here if all or part for special project(s)	Comments
LOCAL Counties							
Other (SPECIFY) _____							
TOTAL LOCAL							
PRIVATE ABA							
Children's Defense Fund							
Foundations (SPECIFY) _____							
_____							
Other (SPECIFY) _____							
TOTAL PRIVATE							
OVERALL TOTAL							

16b. For each of the spaces checked off above, please note: the name or a capsule title of the project; starting and ending dates; the specific funding source; the amount funded for the oroiect; and a brief synopsis of the project.

Project	Starting/ Ending	Funding Source	Amount	Nature of Project (e.g., demonstration, training, service)

17. Please indicate: a) all other agencies in your state that now receive or in the past five years have received funding to provide services to abused or neglected children (e.g., Councils on Abuse and Neglect), excluding services contracted out by your state CPS agencies; b) the sources of the funding; c) when; d) amounts received: and e) the purposes of the funding..

Agency	Funding Source	Date(s)	Amount	Purpose

18. To the extent possible, please indicate the total amounts from all sources in your state's CPS agencies' budgets for fiscal years 1985-1989 that were allocated to the following activities/categories. If expenditures differed from allocations, please indicate by placing an asterisk next to the figure: supply any qualifiers/explanations in the comments column. Change fiscal years to state fiscal year (SFY - specify), calender year (CY) or other (specify) if appropriate.

	FY 85	FY 86	FY 87	FY 88	FY 89	Comments
Worker training						
Screening						
Investigation						
Prevention						
Treatment						
Foster Care						
Adoption						
Other Specify _____						
_____						
Salaries						
Administration						

IV. Services and Barriers to Service

19. Are budgetary resources sufficient for your state's CPS agencies to perform the following functions?

	Yes	No	Comments
Screen all reports	1	2	_____
Investigate all reports that require investigation	1	2	_____
Refer all reports that need referral	1	2	_____

20. The chart below lists services that can be provided in CPS cases at various points in the process. For all children who enter the child welfare system through CPS, please indicate: whether the service can be provided if needed in your state (regardless of whether CPS itself actually provides the service) for cases of abuse, neglect, or both; how widespread availability is; other limitations on availability; if the service is unavailable, the reason(s) why.

	Available if needed? A = for abuse N = for neglect B = for both	How widespread? (e.g., most counties; only a few counties; only urban areas; etc.)	Limitations on Availability (e.g., only to certain parents; only in English; etc.)	If unavailable, reason(s) why		
				Legal and/or Policy Barriers (SPECIFY)	Inadequate Resources (SPECIFY)	Service does not Presently Exist
SERVICES FOR CHILD Medical Services						
Day Care (SPECIFY) _____ _____						
Mental health evaluation						
Counseling						
School Coordination (SPECIFY) _____ _____						
Other (SPECIFY) _____						
SERVICES FOR PARENTS/FAMILY Crisis Intervention						
Case Management						
Homemakers						

20. (continued)

	Available if needed? A = for abuse N = for neglect B = for both	How widespread? (e.g., most counties; only a few counties; only urban areas; etc.)	Limitations on Availability (e.g., only to certain parents; only in English; etc.)	If unavailable, reason(s) why		
				Legal and/or Policy Barriers (SPECIFY)	Inadequate Resources (SPECIFY)	Service does not Presently Exist
SERVICES FOR PARENTS/FAMILY (cont.)						
Home-Based/ Family Preservation						
Mental Health Evaluation						
Substance Abuse Evaluation						
Counseling						
Individual						
Family						
Group						
Substance Abuse Treatment						
Parent Education						
Basic Needs (e.g., for food, shelter, clothing)						
Employment Services						
Medical Services						
Other (SPECIFY) _____						

20. (continued)

	Available if needed? A = for abuse N = for neglect B = for both	How widespread? (e.g., most counties; only a few counties; only urban areas; etc.)	Limitations on Availability (e.g., only to certain parents; only in English; etc.)	If unavailable, reason(s) why		
				Legal and/or Policy Barriers (SPECIFY)	Inadequate Resources (SPECIFY)	Service does not Presently Exist
SERVICES FOR PERPETRATORS						
Mental **health** evaluation						
Sex offender evaluation						
Offender treatment (SPECIFY) _____						
Other (SPECIFY) _____						

21. Apart from budgetary constraints, to what degree do any of the following staffing factors limit your state CPS agencies' capacity to provide needed services to all who need them?

	Not At All	Very Little	Moderately	A Great Deal	Completely	Comments
Vacancies/Inability to fill funded positions	1	2	3	4	5	
Deployment of staff	1	2	3	4	5	
Worker preparation/training	1	2	3	4	5	
Staff turnover	1	2	3	4	5	
Other (SPECIFY) ..... _____	1	2	3	4	5	

22a. Certain categories of children can present special challenges to CPS agencies. Below is a list of kinds of children who may be especially difficult to reach and/or serve. Please indicate, by checking: 1) whether any special efforts (policies, programs, practices) are now being made or have been made in the past five years to overcome barriers to serving these children: 2) regardless of whether any effort- has been made, whether you see a need for such an effort in your state.

CHILD CHARACTERISTICS	Special Effort?	Does the Need Exist?
Migrant children or children who move or change households frequently		
Homeless children		
Rural children or those who live at considerable distance from service agencies		
Handicapped children		
Racial minority children (SPECIFY) _____		
Ethnic minority children (SPECIFY) _____		
Children: O-4 years old		
5-9 years old		
1 O-l 4 years old		
15-l 8 years old		
Children who live in dangerous neighborhoods		
Children from large families		
Children from single parent families		
Children with caretaker(s) in prison		
Children with substance abusing caretaker		
Children from: low SES households		
middle SES households		
high SES households		

22a (continued) See instructions on p. 16.

CHILD CHARACTERISTICS	Special Effort?	Does the Need Exist?
Chemically dependent newborns		
AIDS babies		
Female children		
Children who are victims of psychological maltreatment		
Children with intellectually limited caretakers		
Children with psychiatrically impaired caretakers		
Other (SPECIFY) _____		

22b. For all such policies, programs and/or practices, please indicate:

a) Its name or a capsule title
b) When it was instituted, when it was ended (if applicable)
c) Where it was instituted (e.g., if only certain counties)
d) Who it was/is designed to serve (**all** of the relevant categories of children that were checked)
e) A brief description
f) Any current sense of its impact

Policy/Program/Procedure

a) _____

b) _____

c) _____

d) _____

_____

e) _____

_____

_____

f) _____

_____

_____

Policy/Program/Procedure _____

a) _____

b) _____

c) _____

d) _____

_____

e) _____

_____

f) _____

_____

V. Risk and Risk Assessment

23. CPS agencies may attempt to define risk to children through use of risk assessment instruments, law, policy definition, or other means. Does your state CPS agency in any way attempt to define or describe risk to children? (CIRCLE ONE.)

Yes	1	
No	2	(Q.43)
DK	Q	
(Who would know?) _____		

24. How is risk defined? (CIRCLE ALL THAT APPLY.)

	Yes	No
In law	1	2
In written policy	1	2
In practice	1	2
In worker manual	1	2
In worker training	1	2
In risk assessment	1	2
Other (SPECIFY) _____	1	2

25. The concept of risk can have several meanings in CPS work. Please indicate by a '1' which of the following definitions most closely approximates the sense in which risk is used by the CPS agencies in your state. If more than one definition is used, please rank order the definitions according to which is primary (1), secondary (2), and so on. Use the comments section to indicate any clarifications of meanings of the categories or how they are used in your state's CPS system.

		COMMENTS
_____	Risk of re-report of abuse/neglect	_____
_____	Risk of serious han	_____
_____	Risk of immediate harm	_____
_____	Other (SPECIFY)	_____

26. Definitions or descriptions of risk may have separate categories of risk, such as 'low, medium, high' or they may discuss risk as a single category, such as 'children at risk.' Does your state define or describe different levels of risk to children? (CIRCLE ONE.)

Yes	1	
No	2	(0.43)
DK	9	
(Who would know?) _____		

27. **Please** give brief definitions and definina characteristics of each of the levels of risk used by your CPS state agencies.

_____

_____

_____

_____

28. Do handicapping conditions figure into your state's definition(s) of risk levels? (CIRCLE ONE.)

Yes (SPECIFY) _____ 1

_____

_____

_____

No 2

DK 9

(Who would know?) _____

29. Does your state currently use a risk assessment system for child abuse and/or neglect cases? (CIRCLE ONE.)

Yes 1

Now being developed 2

Other (SPECIFY) _____ 3

No ..... 4 (SKIP TO 0.43)

30. Which risk assessment system does this state use? (CIRCLE ONE.)

Child at Risk Field (Action for Child Protection) 1

Child Well-Being Scales (CWLA) 2

Family Risk Scales (Magura) 3

Illinois CANTS 4

Other (SPECIFY) _____ 5

DK 9

(Who would know?) _____

31. How widely is this risk assessment system used? (CIRCLE ONE.) If some counties use different systems, please specify which they are.

On a state-wide basis 1

Only in certain counties 2

(SPECIFY) _____

_____

Other (SPECIFY) _____ 3

_____

_____

32. Did your agency develop your own CPS risk assessment system or transfer another existing system or purchase a system that is commercially available? (CIRCLE ONE.)

Developed own system 1
Transferred another system 2
What system/From where? _____
Purchased a system 3
What system/From where? _____
Other (SPECIFY) _____ 4
DK 9
(Who would know?) _____

* 33. If you answered 'transferred' above, did you transfer the system as it was or adapt it to **your state's** needs?

Transferred it as it was 1
Adapted it (Specify) _____ 2
_____
Other (Specify) _____ 3
_____

* (New question)

34. When did your state begin using the system/tool?

_____ (month/year)

35. Does your state's CPS risk assessment system use any instrument (e.g., form, checklist, matrii. or scale) in assessing risks? (CIRCLE ONE.)

Yes 1
No 2
Other (SPECIFY) _____ 3
_____
DK 9
(Who would know?) _____

36. What is the best characterization of the instrument? (CIRCLE ONE.)

Form for entering descriptive information 1
Checklist of various risk items 2
Matrix of risk factors (without any scoring) 3
Scale for entering numerical values 4
Scale for entering ordinal (i.e., 'low, 'medium,' 'high', etc.) values 5
Other (SPECIFY) _____ 6
DK 9
(Who would know?) _____

37. Please give a breakdown of risk factors listed in your instrument according to the categories provided below, entering the number of risk factors associated with each of the categories.

_____ Child Risk Factors
_____ Parents/caretaker risk factors
_____ Family risk factors (other than "parent/caretaker" factors)
_____ Environmental risk factors
_____ Risk factors related to type of abuse (e.g., 'sexual abuse")
_____ Risk factors related to severity of abuse
_____ Parent/child interaction
_____ Perpetrator's access to child
_____ Other (SPECIFY) _____
_____ Other (SPECIFY) _____
_____ DK (Who would know?) _____

38. Which specific factors are included in your agency's risk assessment instrument? (CHECK ALL THAT APPLY.)

Child age
Child sex
Child behavior
_____ child health status
_____ Child 'special needs' status
_____ Child emotional status
_____ Child physical condition (e.g., handicap)
_____ Child educational status
_____ Sibling status
_____ Parental alcoholism
Parental drug-addiction
_____ Other parental behavioral problems
_____ Parent(s) marital status
_____ Parent(s) demographic characteristics (e.g.. race/ethnicity)
_____ Parent(s) employment status
_____ Parent(s) intellectual level
_____ Parental access to child
_____ Parent(s) coping skills
_____ Parent(s) emotional status
_____ Parent(s) health status
Parent(s) physical conditions (e.g., handicap)
_____ Housing conditions
_____ Parenting skills
_____ Abuser's access to child
_____ Family size/composition
_____ Family financial status
_____ Type of abuse occurred.
_____ Location of the injury occurred
_____ Severity of abuse that has occurred
_____ Past history of abuse to the child in question
_____ Past history of abuse in the family
_____ Family's access to support systems
_____ Geographic location of the family
_____ Neighborhood/community characteristics
_____ Other (SPECIFY) _____
_____ Other (SPECIFY) _____
_____ Other (SPECIFY) _____

39. Do you think any of the risk factors in your state CPS agencies risk assessment are inherently culturally biased against certain racial/ethnic minorii groups? (CIRCLE ONE.)

Yes (SPECIFY)_____ 1
No 2
Other (SPECIFY) _____ 3

40. If your state's risk assessment instrument is not meant to assess all types of abuse and neglect as defined earlier, please indicate which types are excluded.

_____

_____

_____

41. Indicate with a '1' the best characterization of the purpose of your state CPS agencies' risk assessment system. If **more than one applies, please rank order your responses in order of importance from most (1)** to least **(2, 3, 4)** important.

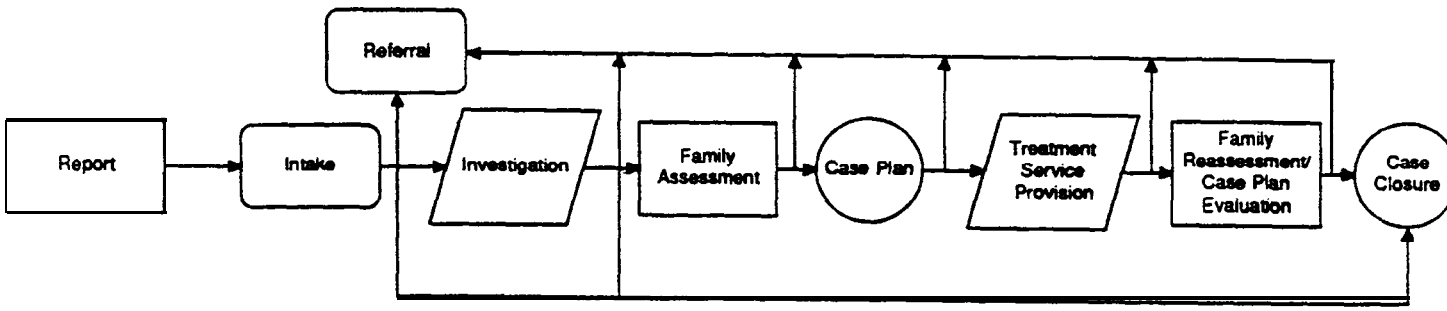
_____ **Predictive tool**
_____ **Tool for** classifying existing risk factors
_____ **Tool for** guiding casework practice
_____ **Tool for gathering information about the child and his/her family**
_____ **Diagnostic tool**
_____ **Case screening tool**
_____ **Service planning***
_____ **Other (SPECIFY)** _____

* (New category)

42. Is **there any statewide written policy specifying the ways risk assessment must be used2 (CIRCLE ONE.)**

Yes (SPECIFY)_____ 1
_____
_____
Other **(SPECIFY)** _____ **2**
_____
_____
No **3**
DK **9**
(Who would know?) _____

43. Below is a diagram of the CPS casework process showing various points at which the risk assessment instrument may be used to assess risk.



Using the diagram as a guide, please indicate: a) all the points in the process at which the resutts of CPS risk assessment are generally used, and b) how an assessment of hiqh risk would affect decision-making at every relevant point in the process with respect to: which services would be provided and how auicklv they would be provided.

a) Points in the process: _____

_____

_____

_____

_____

b) If high risk: _____

_____

_____

_____

_____

c) Please explain here if there are any other points in the casework process in your state at which risk assessment is used that are not shown in the diagram above.

_____

_____

_____

_____

44. For what casework decisions are the results of your state CPS agencies' risk assessment generally used? (CIRCLE ALL THAT APPLY.)

Case screening before investigation	1
Any decision during investigation	2
Substantiation decisions	3
Service plan decisions (e.g., types of services)	4
Decisions for the duration/intensity of services	5
Child removal/placement decisions	6
Workload/staffing decisions	7
Service priority decisions	8
Any decision related to court actions	9
Family re-unification decisions	10
Decisions related to case referral to other agencies	11
Case closure decisions	12

45. On average, how many hours of formal or informal training per year does each worker receive in CPS risk assessment? Please use your best estimate and check one that applies.

More than 80 hours	1
40-72 hours	2
24-32 hours	3
8-16 hours	4
0-7 hours	5
None at all	6
DK	9
(Who would know?) _____	

*46. If your answer to Question 45 included in your estimate training in system implementation and/or initial training, could you please provide an estimate of how many hours of formal or informal training per year each worker receives in CPS risk assessment (e.g., updates on risk factors, strategies for decisionmaking) excluding training in system implementation and/or initial training?

More than 80 hours	1
40-72 hours	2
24-32 hours	3
8-16 hours	4
0-7 hours	5
None at all	6
Not applicable	6
DK	9
(Who would know?) _____	

* (New question)

47. If your state has conducted any research on the usefulness of risk assessment, please indicate with a '1' which of the following best describes this research. If more than one answer applies, please rank your responses from most (1) to least (2, 3, 4) important.

____ Test 'predictive' validity of factors
____ Test "content" validity
____ Test "inter-rater" reliability
____ Evaluate implementation process
____ Evaluate worker acceptance and client satisfaction
____ Evaluate an impact on cases
____ Other (SPECIFY) _____
____ Not applicable
____ DK (Who would know?) _____

48. Is <u>any</u> part of your agency's CPS risk assessment <u>computerized/automated</u>? (CIRCLE ONE.)

Yes. What parts(s)? _____ 1
_____
No, but there is a plan 2
Other (SPECIFY) _____ 3
DK 9
(Who would know?) _____

VI. Number of Abused and Neglected Children

49. In the chart on p. 28, to the extent possible. please provide the requested numbers of cases for the CPS system in your state for 19851989. Please also fill in the second part of the chart for high-risk cases. Use the comments section for any qualifiers. First, however, could you please answer the following questions concerning the numbers you are providing. If possible, we would prefer to have numbers of: children, unduplicated counts, new cases in a aiven time period, and numbers for fiscal year.

a. Do the numbers given refer to:

Numbers of children 1
Numbers of reports 2
Numbers of families 3
Other (SPECIFY) _____ 4

b. Please indicate whether the numbers provided represent:

Total counts (m-reports are not identified) 1
Unduplicated counts (a given child or family counts only once) 2
Other (SPECIFY) _____ 3

c. Please indicate whether the numbers given refer to:

Only new cases were added to the system during the given time period 1
All cases in the system during given time period (regardless of when they entered) 2
All cases in the system as of a certain date 3
(SPECIFY DATE) _____
Other (SPECIFY) _____ 4

d. Please indicate if the numbers given are for:

Fiscal year 1
Calendar year 2
State fiscal year (SPECIFY) _____ 3
Other (SPECIFY) _____ 4

49. (continued)

	85	86	87	88	89	Comments
e. All Cases						
Reported						
Screened In						
Investigated						
Substantiated						
All Cases Served						
In home						
In placement						
f. All High Risk Cases*						
Reported						
Screened In						
Investigated						
Substantiated						
All H-R Cases Served						
In home						
In placement						

*If the definition of high risk here is different than the primary definition given earlier (Q.21) please indicate how.

50. 'Handicapped children' as defined by the Federal Education of the Handicapped Act and subsequent amendments to it, means: mentally retarded, hard of hearing, deaf, language impaired, visually impaired, seriously emotionally disturbed, onhopedically impaired, other health impaired children, children with specific learning disabiliiies (who by reason thereof require special education and related services) and infants and toddlers from birth to age 2 with deveiopmental delays in specified areas or diagnosed conditions with a high probability of resulting in developmental delay. Do your state CPS agencies follow this definition of handicapped children?

Yes ..... 1 (SKIP TO 0.46)
No 2
DK 9
(Who would know?) _____

51. What definition of 'handicapped children' do your state CPS agencies use?

_____

_____

_____

52. Did your state collect FY 1988 or 1969 statistics on the total number of handicapped children anywhere in the child welfare system?

Yes (SPECIFY YEAR, #, AND QUALIFIERS) _____ 1
_____
Other (SPECIFY) _____ 2
_____
No 3
DK 9
(Who would know?) _____

53. Did your state collect FY 1988 or FY 1989 statistics on the total number of handicapped children whose handicaps are believed to be the result of abuse and/or neglect?

Yes 1
Other (SPECIFY) _____ 2
_____
No ..... 3 (SKIP TO 0.49)
DK 9
(Who would know?) _____

54. a Provide below the total number of abused and neglected children in your state for FY 88 or '89 whose handicaps are believed to be the outcome of abuse and/or neglect. If possible, provide a breakdown of these figures according to type of handicap. See part b. for clarification.

Total _____

Mentally retarded ..... _____
Hard of hearing ..... _____
Language impaired ..... _____
Deaf ..... _____
Visually impaired ..... _____
Emotionally disturbed ..... _____
Orthopedically impaired ..... _____
Other health impaired ..... _____
Learning disabled ..... _____
Developmentally delayed infants and toddlers ..... _____

b. Please circle the response that applies to the above figures.

1. FY 88 FY 89 Other (SPECIFY) _____

2. Only new cases All cases All as of _/ / _

55. To the extent possible, please fill in the requested numbers for cases in the CPS system in your state for fiscal year 1998 or 1989 (the most recent available). Under each heading (e.g.. **Race/Ethnicity,** Age) please enter the categories used by your state (e.g., white/racial minority; **0-4, 5-9, 10-14, 15-**18) and supply the appropriate numbers. Use the comments section for any qualifiers. First, however, please fill out section 55a. Again, our preference is for numbers on: fiscal year 89, only new cases, children, and unduplicated counts.

a. Please circle the responses that apply to these figures.

1. **FY 88** **FY 89** Other (SPECIFY) _____

2. Only new cases All cases All as of -/ / - Other (SPECIFY) _____

3. Reports Families Children Other (SPECIFY) _____

4. Total counts Unduplicated counts

b.

	Total	Reported	Screened In	Investigated	Substantiated	Sewed In home	Sewed In placement	Comments
All Cases								
1. **Sex** **M**								
F								
2. **Race/Ethnicity** **(Specify Categories)**								

55b. (continued)

	Total	Reported	Screened In	Investigated	Substantiated	Served In home	Served In placement	Comments
3. Age (Specify Categories)								
4. Handicapped All								
-Mentally retarded								
--Hard of hearing								
--Language impaired								
--Deaf								
--Visually impaired								
--Emotionally disturbed								
--Orthopedically impaired								
--Other health impaired								
--Learning disabled								
--Developmentally delayed infants and toddlers								

55b. (continued)

	Total	Repotted	Screened In	Investigated	Substantiated	Served In home	Served In placement	Comments
5. Type of Maltreatment (Specify) All Abuse								
--								
All Neglect								
--								

Thank you so much for completing the Telephone Update Guide.

We appreciate the time and care you have taken with it.

Whenever applicable, we would appreciate your sending copies of the following documents. Please check off those you are sending.

Your state's definition(s) of abuse and neglect ..... _____
Your state's definition of risk and risk levels ..... _____
Your state's definition of handicapped children
as applied to CPS (if different than federal) ..... _____
CPS mission statement ..... _____
Policy(ies) concerning application of risk
assessment ..... _____
Your state's risk assessment instrument ..... _____

Again, thank you for your cooperation.

Section 3

REFERENCE TO TELEPHONE **UPDATE GUIDE**

The Reference to the Telephone Update Guide provides general guidelines to follow when responding to questions contained in the Telephone Update Guide. Much of the Guide is **self-**explanatory. However, a few general points should be kept in mind as you fill it **in:**

1) **Other (Specify)** Responses---If a given response category does not adequately or accurately capture the situation in your state, please use the Other (Specify) category and write in a more appropriate response. Where no space has been left for such a response, please write it in anyway: for example, in Question 3, if the chart as given has overlooked a CPS service that cannot be included in either the Referral or Direct Services spaces, please write it in below the last line of the chart (e.g. under "Track cases through closure"). Do the same for other questions.

2) DK (Who would?) responses--For many questions there is a DK or Don't Know category, followed by (Who would?). We are interested in the name and phone number of a person you think would know or even might know the answer to the question if you do not.

3) Budgetary Information (Section **III)--We** ask that you specify if the numbers are for fiscal years, state fiscal years, calendar years, or some other period of time, and indicate this on the chart as explained in the instructions. Please also feel free to make any qualifying remarks in the Comments section and/or to add or change categories as given on the charts if that seems most appropriate.

4) Risk and **Risk** Assessment (Section V.)-Whenever possible, questions have already been completed with your state's responses to the APWA state survey. We ask that this mformation be **verified and** updated by the person in your state most knowledgeable about policy and services to abused and neglected children. Note that Questions 23-28, 33.42, and 43 have been added (e.g. were not in the APWA survey); a new category has also been added to **Question** 41. Please do not overlook these questions.

5) Numbers of Abused and Neglected Children (Section VI.)-- We ask that you carefully specify various aspects of the information you are providing (e.g. whether it refers to cases, children, or families; to only new cases, all cases, or all cases as of a given date) as explained in the instructions to each question. The instructions to Question 49 (p. 27) indicate how we would like to receive the information if at all possible. It is most important that we have accurate specifications and qualifications so the information can be properly interpreted.

6) Who **should supply the information--The** information requested in the different parts of the Guide should be provided by the most **knowledgeable** oerson in that **particular** area: for example, demographic and/or funding data may best be supplied by the statistics branch. Thus it may be necessary for several people to contribute in order to complete the Guide.

7) Checklist--Please send us copies of documents as requested on page 34.

A **followup** telephone interview will be scheduled at your convenience to discuss the completed form and answer any questions.

We would like to thank you for taking time out of your busy schedules to answer our questions. Copies of the research results will be mailed to you when they become available.

Section 4

Section 4. CPS DATA ON NUMBERS OF CASES SERVED

As noted in Chapter 5 of the State Survey Report, obtaining comparable data on numbers of cases served by State CPS agencies proved extremely difficult. Table A-l presents information concerning total numbers of CPS cases reported, screened-in, investigated and substantiated, and cases served in-home and in placement, for 19851989. Many States did not keep separate statistics on CPS cases and other cases served; consequently, numbers given for cases served in-home and in placement generally refer to all cases in the child welfare system and not just those entering through CPS. With one exception (the District of Columbia), States were unable to supply separate breakdowns for high risk cases. Since these data are highly qualified, careful attention should be paid to the footnotes in interpreting the numbers in Table A-l.

Data obtained regarding numbers of cases reported, investigated, substantiated and served for different categories of children were also too inconsistent and too fragmentary to be systematically analyzed in the manner originally intended. Table A-2 presents information provided by the States regarding numbers of investigated and/or substantiated cases with selected characteristics for 1988/1989. Only those categories for which 15 or more States gave some information are included. Again, it is important to pay attention to the footnotes, which substantially qualify and clarify the meaning of the numbers.

Table A-l. Disposition of CPS cases and cases served in-home and in placement for 1985-1989, as reported by States (n = 50)*

	1985	1986	1987	1988	1989
AK[a, e, g, k]					
Reported					
Investigated	7,702	9,222	10,105	9,774	9,235
Substantiated		1,071	1,317	1,427	1,317
AL[a, d, f, i]					
Reported	31,385	26,893	30,908	35,641	38,275
Investigated	31,385	29,693	30,908	35,641	38,275
AR[b, d, f, j]					
Reported					
Investigated [l]	12,592	14,159	14,351	15,907	15,879
Substantiated	4,625	4,814	5,160	5,907	5,502
Served					
In-home [m]		6,091	4,579	7,733	6,740
In placement		1,236	798	1,294	965
AZ[b, d, h, k, n]					
Reported	23,317	26,463	26,073	29,322	35,920
Screened in		8,618	17,471	18,566	20,099
Investigated		6,755	14,065	14,747	17,214
Substantiated		3,412	6,841	6,887	7,645
CA[a, e, g, j]					
All cases					
Reported [o]	158,990	263,354	282,595	313,840	343,664
Screened in	295,650	341,756	370,633	241,558	335,149
Investigated	295,650	341,756	370,633	241,558	335,149
Substantiated					
Served					
In-home [p]	67,209	52,455	47,590	46,703	49,658
In placement [q]	17,073	19,316	20,898	20,646	20,420

	1985	1986	1987	1988	1989
CO[b,d,h,k]					
Reported		28,000	32,304	40,094	38,543
Screened in			24,3 14	30,909	28,922
Investigated			24,3 14	30,909	28,922
Substantiated				6,769	7,224
Served				9,237	9,500
In-home					
In placement		4,504	4,360	4,307	4,434
CT[a,d,g,k]					
Reported					
Screened in	16,804	17,059	18,552	20,354	20,233
Investigated	16,804	17,059	18,552	20,354	20,233
Substantiated	11,723	12,362	13,030	13,348	13,938
Served					
In-home [r]	5,746	5,110	4,702	5,488	5,988
In placement [s]	5,377	5,988	4,403 [t]	3,986	4,171
DC[a,d,g,i]					
Reported [u]	6,073	7,366	8,056	8,039	8,677
Screened in					
Investigated					
Substantiated [v]	1,682	1,779	1,770	1,728	1,833
High risk cases					
Reported [w]	876	837	983	824	854
Substantiated	339	471	325	516	350
DE[b,d,g,k]					
Reported			4,026	4,000	3,745
Screened in			4,026	4,000	3,745
Investigated			4,026	4,000	3,745
Substantiated			1,819	1,802	1,765
Served					
In-home [x]			1,406	1,344	1,299
In placement [y]			719	681	687

	1985	1986	1987	1988	1989
FL[b,e,g,k]					
Reported	65,506	84,849	89,696	106,974	119,374
Screened in					
Investigated				106,974	119,374
Substantiated				14,702	
GA[b,d,h,i]					
Reported	26,510	31,108	39,122	36,230	45,564
Screened in					
Investigated	26,5 10	31,108	39,122	36,230	45,564
Substantiated	10,869	16,424	14,262	18,958	19,507
Served	3 1,985	36,849	40,239	43,737	55,115
HI[b,c,f,k]					
Reported	4,414	4,597	4,809	4,635	3,396
Screened in	4,414	4,597	4,809	4,635	3,396
Investigated	4,414	4,597	4,809	4,635	3,396
Substantiated	2,289	2,590	2,543	2,619	2,100
Served					
In-home	3,712	3,841	4,039	3,858	2,617
In placement	644	686	727	742	689
IA[b,d,f,k]					
Reported	16,038	16,450	16,836	17,200	17,829
Screened in					
Investigated	16,038	16,450	16,836	17,200	17,829
Substantiated	6,361	6,245	6,293	6,400	6,700
Served					
In-home [z]	775	868	882	1,069	979
In placement [aa]	4,379	5,050	5,606	6,065	6,339

	1985	1986	1987	1988	1989
ID[b,d,g,k]					
Reported	7,679	8,055	8,092	8,134	8,121
Screened in	7,679	8,055	8,092	8,134	8,121
Investigated	6,970	7,903	7,868	6,695	7,229
Substantiated	2,979	4,316	3,937	3,227	3,184
Served	3,475	3,248	2,628	2,046	1,599
In-home [ab]	1,337	1,291	1,146	998	733
In placement [ab]	2,138	1,957	1,482	1,048	966
IL[a,e,g,k]					
Reported	69,671	90,425	91,714	94,086	102,238
Screened in					
Investigated	69,671	70,425	91,714	94,086	102,238
Substantiated	32,453	33,857	38,857	41,382	41,025
Served [ac]	15,79 1	16,200	18,635	24,112	28,448 [ad]
IN[a,d,f,k]					
Reported	33,868	34,775	29,344	30,763	39,596
Screened in					
Investigated	33,868	34,775	29,344	30,763	39,596
Substantiated	17,018	18,057	14,455	14,840	20,263
Served					
In-home	1,102	1,069	1,069	1,173	1,303
In placement	4,255	4,176	4,394	4,975	4,895
KS[a,d,h,i]					
Reported	24,55 1	22,292 [ae]	27,814 [ae]	24,372	23,437
Screened in	24,55 1	22,192 [ae]	27,814 [ae]	24,372	23,437
Investigated [af]	24,55 1	22,292 [ae]	27,814 [ae]	24,372	23,437
Substantiated	7,724	5,192 [ae]	5,156 [ae]	2,896 [ag]	2,508

	1985	1986	1987	1988	1989
KY[a,d,f,k]					
Reported	34,839	39,486	42,160	43,351	44,171
Investigated	34,839	39,486	42,160	43,351	44,171
Substantiated [ah]	15,386	17,976	19,195	19,156	19,458
Served [ai]	20,908	23,914	25,820	27,092	27,713
In-home					
In placement [aj]	1,335	1,543	1,412	1,542	1,418
LA[d,f,j]					
Reported					
Screened in					
Investigated [b]	28,528	27,032	23,153 [ak]	23,223	23,445
Substantiated [a]	16,774	14,626	9,949	18,119	13,858
MA[a,d,g,k]					
Reported	49,465	49,799	51,813	57,484	65,775
Screened in	38,202	37,052	36,409	37,530	42,666
Investigated	36,870	34,988	34,131	35,358	39,442
Substantiated	17,830	18,295	17,403	18,297	20,372
MD[b,d,f,j]					
Reported					
Screened in	16,710	20,646	21,420	23,300	24,457
Investigated	16,710	20,646	21,420	23,300	24,457
Substantiated [al]					
Served [am]					
ME[c,e,g,j]					
Reported		13,063	13,634	15,332	16,170
Screened in		5,627	5,009	4,773	4,341
Investigated		5,627		4,712	4,289
Substantiated		3,095		2,415	2,257
Served an	5,847	5,627	4,843	4,781	4,325

	1985	1986	1987	1988	1989
MN[b,d,f,j]					
Reported and Assessed [ao]	14,506	16,265	17,894	18,066 [ap]	
Screened in					
Assessed	14,506	16,265	17,894	18,066	
Substantiated	5,607	6,032	6,599	7,409	
MO[b,d,g,j]					
Reported	41,133	43,095	43,676	40,252	43,565
Investigated	41,133	43,095	43,676	40,252	43,565
Substantiated	18,156	18,720	15,549	9,895 [aq]	9,779
MS[b,d,f,j]					
Reported					
Screened in	8,042	9,908	11,693	12,779	12,778
Investigated	8,042	9,908	11,693	12,779	12,778
Substantiated	4,091	4,876	6,110	6,232	5,367
Served [ar]	17,417	18,437	17,660	21,703	23,071
In-home [ar]	13,229	13,799	13,226	16,861	17,873
In placement [ar]	3,122	3,632	3,100	4,042	4,366
MT[b,e,g,k]					
Reported	8,708	9,572	10,135	10,854	11,272
Screened in					
Investigated	6,361	7,036	6,083	6,008	6,253
Substantiated	3,610	3,734	4,899	4,639	4,767
NC[b,d,g,k]					
Reported					
Screened in	19,786	23,542	24,418	31,097	36,214
Investigated	19,786	23,542	24,418	31,097	36,214
Substantiated	7,121	8,301	8,307	10,861	12,139

	1985	1986	1987	1988	1989
ND[b,d,g,j]					
Reported		2,244	2,926	3,344	3,410
Screened in		2,244	2,926	3,344	3,410
Investigated		2,244	2,926	3,344	3,410
Substantiated			1,339	1,472	1,749
Served		2,244	2,926	3,344	3,410
NE[b,d,f,k]					
Reported					
Investigated		7,378	7,723	7,537	7,603
Substantiated	4,077	4,833	4,432	4,247	3,937
Substantiated Priority 1 as			1,228	1,530	1,708
NH[b,d,h,j]					
Reported					
Screened in	3,765	3,902	4,239	4,465	5,039
Investigated	3,765	3,902	4,239	5,039	
Substantiated	1,707	1,338	1,017	859	
N J[a,d,h,j]					
Reported at	47,128	30,414	50,250	56,859	58,404
Screened in					
Investigated					
Substantiated	18,033	17,982	19,288	20,948	21,311
Served au	51,816	55,329	51,991	5 1,352	54,139
In-home	39,779	43,188	39,769	39,036	41,207
In placement					
Substitute care	8,983	8,840	8,681	8,542	8,759
Subsidized adoption	3,054	3,300	3,541	3,774	4,113

	1985	1986	1987	1988	1989
NM[b,d,h,j]					
Reported	8,577	8,166	7,934	8,617	12,874
Screened in					
Investigated	8,577	8,166	7,934	8,617	12,874
Substantiated	3,166	3,006	3,032	2,961	4,025
Served	3,166	3,006	3,032	2,961	4,025
NV[b,d,g,j]					
Reported	6,615	7,282	7,533	9,852	11,017
Screened in					
Investigated	6,615	7,282	7,533	9,852	11,017
Substantiated	3,401	3,679	3,803	4,723	4,712
NY[a,d,f,j]					
Reported	103,206	112,818	121,426	137,557	145,550
Screened in	103,206	112,818	121,426	137,557	145,550
Investigated	103,206	112,818	12 1,426	137,557	145,550
Substantiated [av]	38,186	38,809	43,47 1	50,344	54,872
OH[b,e,g,j]					
Reported	65,965 [aw]	74,016 [ax]			
Screened in	65,965	74,016			
Investigated	65,965	74,016			
Substantiated	15,292	16,894			
OK[a,d,h,k]					
Reported					
Screened in	20,275	22,087	22,876	23,179	23,105
Investigated	20,275	22,087	22,876	23,179	23,105
Substantiated	7,194	8,207	8,414	7,522	7,602

	1985	1986	1987	1988	1989
OR					
Reported	18,423	19,834	20,526	2 1,822	25,018
Screened in					
Investigated					
Substantiated	7,571	7,975	8,364	8,819	8,674
PA[b,d,g,j]					
Reported	20,980	20,067	20,260	22,021	23,323
Screened in	20,980	20,067	20,260	22,021	23,323
Investigated	20,980	20,067	20,260	22,021	23,323
Substantiated	7,724	7,127	7,142	7,809	7,935
Served					
In-home [ay]	45,904	48,28 1	48,540		
In placement	13,90 1	13,171	14,023		
Placed because of abuse	5,668	6,696	7,564	8,126	
RI[b,d,g,k]					
Reported		9,671	9,909	10,652	12,048
Screened in		5,773	5,651	6,259	7,294
Investigated		5,773	5,651	6,259	7,294
Substantiated		2,667	2,662	2,939	3,033
SC[b,d,f,l]					
Reported					17,727 [az]
Screened in					
Investigated					17,727 [az]
SD[a,d,h,k]					
Reported					
Screened in	9,036	10,093	10,686	11,007	11,179
Investigated	9,036	10,093	10,686	11,007	11,179
Substantiated	3,957	4,606	4,579	4,483	4,317
Served					
In-home					
In emergency placement after investigation [b a]		1,282	1,370	1,368	1,280

	1985	1986	1987	1988	1989
TN[a,e,g]					
Reported					
Screened in					
Investigated	45,654 [j]	44,478 [j]	13,451 [bb]	30,586 [k]	32,921 [k]
Substantiated				10,234 [k]	12,031 [k]
TX[b,e,f,i]					
Reported		71,025	68,347	65,966	
Screened in		71,025	61,347	65,966	
Investigated		71,025	68,347	65,966	
Substantiated		38,066	35,850	28,347	
Served					
In-home [bc]		12,815	10,438	10,045	
UT[f,j]					
Reported					
Screened in					
Investigated [bd]	10,450	11,390	11,319	11,235	12,548
Substantiated [be]	5,569	5,127	4,976	6,577	7,782
VA[a,d,f,k]					
Reported					
Screened in	49,765	47,888	47,931	50,228	52,759
Investigated	49,765	47,888	47,931	50,228	52,759
Substantiated	12,213	11,583	11,052	11,342	12,072
VT[b,d,f,k]					
Reported	2,465	2,547	2,551	2,395	2,703
Screened in	2,465	2,547	2,551	2,395	2,703
Investigated	2,465	2,547	2,551	2,395	2,703
Substantiated	1,194	1,324	1,450	1,374	1,414
	1,597 [bf]	1,728 [bf]	1,861 [bf]	1,718 [bf]	1,703 [bf]
Served					
In-home					
In placement [bg]	278	297	306	306	322

	1985	1986	1987	1988	1989
WA[a,d,f,j]					
Reported	40,100	42,747	32,828	42,756	55,834 [bh]
WI[a,d,f,j]					
Reported					
Screened in					
Investigated	26,011	28,838	29,456	3 1,370	
Substantiated	8,670	9,794	10,337	11,170	
WV[b,d,g,i]					
Reported	12,067	12,725	13,011	13,446	13,638
Screened in	12,067	12,725	13,011	13,446	13,638
Investigated	12,067	12,718	12,796	13,130	13,098
Substantiated	3,472	3,598	3,713	3,298	3,350
WY[d,g,i]					
Reported [bi]	1,525	2,428	2,727	2,778	2,854
Screened in					
Investigated	1,525	2,428	2,727	2,778	2,854
Substantiated	990	1,174	1,235	1,243	1,273
All cases served	738	944	1,021	835	870

*Numbers served in-home and in placement may refer to numbers of children in the child welfare system as a whole and not just CPS-related cases. Michigan was the only State reporting no information in response to this question.

Table A-l. Footnotes

[a] Numbers of children.
[b] Numbers of reports.
[c] Numbers of families.
[d] Total counts (includes re-reports).
[e] Unduplicated counts.
[f] Refers only to new cases added each year.
[g] Totals are cumulative.
[h] Refers to number of cases at a specific point in time.
[i] Numbers are for fiscal year.
[j] Numbers are for calendar year.
[k] Numbers are for State fiscal year.
[l] Only cases referred for investigation are counted.
[m] Includes cases pending disposition.
[n] Reporting and recording systems changed between 1986 and 1987.
[o] Reported numbers are numbers of families; all others are numbers of children.
[p] Children transferred to family maintenance.
[q] Children transferred to family reunification and foster care.
[r] Average daily number of families served in-home.
[s] Average daily number of children served in placement, including some in own home.
[t] Includes subsidized adoption.
[u] Includes all reports, both to CPS and to police.
[v] May not accurately reflect all cases handled by police. CPS estimates that police substantiate approximately 25% of all cases they receive.
[w] The District of Columbia does not assess the risk level of initial reports except for cases involving abandoned children and those considered in immediate danger of harm. This is the number represented here.
[x] Monthly average of families in caseload.
[y] Average daily population of children in placement.
[z] Receiving family-centered services.
[aa] Includes foster care, residential and institutional care and protective day care. It is assumed that children in placement represent the high-risk population.
[ab] Estimate based on average per month figures.
[ac] Represents combined number of cases that required followup child welfare services. Cannot be broken down into in-home and placement categories.
[ad] Estimate.
[ae] In 1986, State switched from hand tally to computer tally. CPS believes 1986 figures are too low and 1987 figures are too high.
[af] All CPS reports are investigated.
[ag] In 1988 levels of substantiation changed, reflecting increasing criminalization of CPS investigations.
ah Includes both “substantiated” and “some indication.”
[ai] Refers to numbers of cases.
[aj] Refers to out-of-home placement.
[ak] Began new data system in 1987.
[al] State estimates that about 40% of cases are substantiated.
[am] Regulations require that all substantiated cases be served. Some unsubstantiated cases are also served. Approximately 90% of cases served are served in-home.
an Number of cases opened.
[ao] Excludes calls with insufficient information to proceed.

ap 1988 data are preliminary.

aq Between 1987 and 1988, a new investigative category of "Unsubstantiated: Preventive Services Indicated" was added. Some cases that would have been substantiated previously are now put in this category, causing an apparent precipitous drop in the substantiation rate.

ar These figures refer to Federal fiscal year and include all children provided preventive and protective services at home and all children provided placement services during each respective Federal fiscal year, including those children already receiving the services on the first day of the reporting period. Cases Served also includes children receiving interstate placement service.

as Priority 1 cases are those judged at highest risk.

at Number of allegations of child abuse/neglect.

au Number of cases receiving at least one service as of 12/31. State estimates that about 80% are child abuse/neglect related.

av Estimated for undetermined cases, based on percentages.

aw 83/88 counties reported.

ax All counties reported. In 1987, cases were computerized, but the reporting system was still not up as of 8/90.

ay "Snapshot" as of 12/31 of the year in question.

az For 7/1/89 through 3/31/90.

ba On average, there are only 500 children in care per year; these numbers represent duplicated counts.

ba Numbers are for 1-87 through 6-89.

bc Cases opened for ongoing services.

bd Number of investigations, as taken from central registry.

be Number of "victims" given in central registry.

bf Number of victims.

bg Cases entering placement each year as a result of child abuse/neglect.

bh In 1989, changed from calendar year to fiscal year for datakeeping purposes.

bi Cases for which investigation was still pending at end of year are carried over into following year's totals.

Table A-2. Characteristics of investigated and substantiated cases, 1988/89, as reported by States

	AK[b,c,i,k]		AL[l]		AR[c,e,i,j]		AZ[b,e,i,j,p]		CA[l]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated
Sex										
Male	4,238					3,669	18,824	8,739		
Female	4,852					4,566	19,765	9,055		
Unknown										
Age										
0						874				
1						430	6,826	3,093		
2	2,893					557				
3						537				
4						496	6,018	2,631		
5						543				
6						494				
7						499	5,341	2,398		
8	1,961					503				
9						464				
10						413	4,253	1,908		
11						402				
12						434				
13						419	3,576	1,691		
14						430				
15	1,961					332				
16						294	2,368	1,099		
17						163				
18	299									
19										
Unknown										
Race/Ethnicity										
White	3,481					5,846	14,673	6,808		
Black	517					2,358	1,955	953		
Hispanic							5,739	2,782		
Asian/Pacific Islander										
Native American/American Indian	2,931					10	863	490		
Other/Unknown	2,118					128	712	426		
Type of Maltreatment										
All Abuse										
Physical Abuse	2,400	325				2728 [m]	3,510	1,671		
Sexual Abuse	1,431	289				2468"	3,293	1,218		
Emotional Abuse						493	702	247		
Other Abuse						526 [o]				
All Neglect	3,989	703					4,239	1,658		
Physical Neglect						1,353				
Emotional Neglect						324				
Medical Neglect						318				
Educational Neglect						321				
Abandonment						243				
Lack of Supervision						1,575				
Other Neglect							1,598 [q]	703 [q]		
Other Maltreatment										
Emotional Maltreatment										
Threat of Harm/Potential Maltreatment							4,167	1,130		
Abuse and Neglect										
Other							2,942 [r]	1,018 [r]		

Table A-2. (continued)

	CO[a,e,i,j]		CT[l]		DC[l]		DE[e,h,s]		FL[b,g,j,t,u]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated
Sex										
Male		3,107								12,368
Female		4,296								14,156
Unknown										42
Age										
0										
1										7,690
2										
3										
4										5,088
S										
6										
7										6,893
8										
9										
10										
11										4,536
12										
13										
14										
15										3,145
16										
17										
18										
19										
Unknown										
Race/Ethnicity										
White							428			15,506
Black							327			10,879
Hispanic							34			
Asian/Pacific Islander							3			
Native American/American Indian										
Other/Unknown										179
Type of Maltreatment							20			
All Abuse										
Physical Abuse	11,618	2,678						565		7,747
Sexual Abuse	6,130	1,969						164		4,450
Emotional Abuse										881
Other Abuse										2,188
All Neglect	11,177	2,759								
Physical Neglect								625		7,887
Emotional Neglect										
Medical Neglect										1,456
Educational Neglect										
Abandonment										
Lack of Supervision										9,967
Other Neglect								575 [q]		1,563
Other Maltreatment										
Emotional Maltreatment										
Threat of Harm/Potential Maltreatment										
Abuse and Neglect										
Other										

Table A-2. (continued)

	GA[b,f,h,j]		HI[b,f,i,j]		IA[l]		ID'		IL[b,f,i,k]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated
Sex										
Male		8,778	1,530	906					49,158	19,364
Female		10,729	1,857	1,186					52,256	21,506
Unknown										
Age										
0			601	388						
1		3,981							26,650	12,177
2			227	137						
3			236	133						
4			212	119					21,672	8,340
5			219	108						
6										
7		6,437								
8										
9			1,222	762					37,352	14,758
10										
11										
12		4,682								
13										
14										
15									15,792	5,645
16		4,487	679	453						
17										
18										
19										
Unknown									772	105
Race/Ethnic@										
White		10,729	648	342					51,524	18,920
Black		8,193	117	88					41,890	18,733
Hispanic		195	7	5					6,418	2,605
Asian/Pacific Islander			1,288 [v]	856 [w]						
Native American/American Indian										
Other/Unknown		398	1,366 [x]	809 [y]					2,406	767
Type of **Maltreatment**										
All Abuse		9,675							47,425	18,947
Physical Abuse		4,194		1,206 [z]					36,405 [ac]	13,311 [ad]
Sexual Abuse		2,946		242					11,019	5,636
Emotional Abuse		2,535		166						
Other Abuse				99 [aa]						
All Neglect		9,832							54,978 [ae]	22,578 [af]
Physical Neglect				252						
Emotional Neglect				93						
Medical Neglect				134						
Educational Neglect				29						
Abandonment				38						
Lack of Supervision				248						
Other Neglect				69 [ab]						
Other Maltreatment										
Emotional Maltreatment										
Threat of Harm/Potential Maltreatment				831						
Abuse and Neglect										
Other										

Table A-2. (continued)

	IN[b,e,i,j]		KS[b,e,i,j]		KY[b,e,i,j,aj]		LA[c,f,i,j]		MA[b,e,i,j,ao]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated[al]	Substantiated
Sex										
Male		8,809	11,558	1,015	21,377	9,115		6,395	19,873	9,394
Female		11,454	11,879	1,493	22,720	10,343		7,457	21,373	10,321
Unknown									1,420	657
Age										
0			2,928	218						
1		4,464						2,947		
2			3,664	325	19,218	8,083			17,263	7,966
3										
4			3,328	368						
5		3,369								
6										
7									12,817	5,965
8			8,406	946	12,706	5,529		2,524		
9		6,522								
10										
11										
12									8,854	4,493
13					9,928	4,730		5,574		
14			4,970	633						
15		5,133								
16					2,268	1,116			3,689	1,932
17										
18										
19										
Unknown			141	18	51	0			43	16
Race/Ethnicity										
White		16,885	18,163		38,018	16,321		6,464	27,300	12,175
Black		2,616	3,440		4,915	2,612		7,138	7,045	3,954
Hispanic		208	1,191		146	74			4,652	2,443
Asian/Pacific Islander			145		83	43				
Native American/American Indian			132		12	6				
Other/Unknown		554	365 [ag]		997 [ah]	402 [ai]		250 [ak]	3,669 [am]	1,800 [an]
Type of Maltreatment										
All Abuse										
Physical Abuse		5,310	2,618	556	12,693	5,375		3,311	16,257	6,768
Sexual Abuse		4,816	1,573	887	4,253	2,113		1,478	5,913	2,707
Emotional Abuse			697	127				51		
Other Abuse										
All Neglect		10,137			31,214	13,011		8,705	28,625	14,048
Physical Neglect			3,266	474						
Emotional Neglect										
Medical Neglect			257	37						
Educational Neglect										
Abandonment										
Lack of Supervision			1,907	427						
Other Neglect									595 [ap]	392 [aq]
Other Maltreatment										
Emotional Maltreatment									7,438	4,506
Threat of Harm/Potential Maltreatment										
Abuse and Neglect										
Other					1,261	816		198		

Table A-2. (continued)

	MD[c,f,i,j]		ME[c,f,i,at]		MN[aw,f,i,k,at]		MO[l]		MI'	
	Investigated	Substantiated[ar]	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated
Sex										
Male	11,984	4,794			10,139	3,329				
Female	12,473	4,989			11,409	4,203				
Unknown					176	40				
Age										
0										
1										
2	7,337	2,934			7,660	2,347				
3										
4										
5										
6										
7	7,826	3,138			6,614	2,244				
8										
9										
10										
11										
12	5,869	2,347			4,851	1,864				
13										
14										
15										
16	3,179	1,271			1,061	773				
17										
18										
19										
Unknown					152	56				
Race/Ethnicity										
White	12,228	4,891			16,428	5,418				
Black	11,250	4,500			2,438	987				
Hispanic	317	126			370	109				
Asian/Pacific Islander	146	58			220	92				
Native American/American Indian	48	19			1,569	743				
Other/Unknown	489 [as]	195 [as]			707 [ax]	222 [ay]				
Type of Maltreatment										
All Abuse										
Physical Abuse	9,252	3,700		1,001 [au]	8,018	3,039				
Sexual Abuse	3,996	1,598		893	3,688	1,751				
Emotional Abuse										
Other Abuse										
All Neglect	11,289	4,484			11,982	3,710				
Physical Neglect				4% [av]						
Emotional Neglect										
Medical Neglect										
Educational Neglect										
Abandonment				89						
Lack of Supervision				805						
Other Neglect										
Other Maltreatment					1,830 [az]	728"				
Emotional Maltreatment				1,259						
Threat of Harm/Potential Maltreatment				1,135						
Abuse and Neglect										
Other										

Table A-2. (continued)

	MS'		MT[b,f,k,ba]		NC[a,f,i,j]		ND[b,e,g,j]		NE[b,f,i,k]	
	Investi-gated	Substan-tiated	Investi-gated	Substan-tiated	Investi-gated	Substan-tiated	Investi-gated	Substan-tiated	Investi-gated	Substan-tiated
Sex										
Male						7,872		2,492		3,267
Female						8,592		2,708		3,410
Unknown										
Age										
0							271	127		
1							250	118		
2										2,499
3						6,451	1,112	522		
4										
5										
6							1,409	692		
7										2,080
8										
9						5,895				
10							1,033	513		
11										
12										1,470
13										
14							708	386		
15										
16							321	154		628
17										
18										
19										
Unknown										
Race/Ethnicity										
White						9,145				5,587
Black						6,625				541
Hispanic										224
Asian/Pacific Islander										38
Native American/American Indian						299				238
Other/Unknown						395				49
Type of Maltreatment										
All Abuse							2,071	1,106		
Physical Abuse			3,828	1,622		1,330	1,541	825		1,851
Sexual Abuse			1,495	672		1,280	530	281		763
Emotional Abuse						113				
Other Abuse										
All Neglect			5,949	2,468			2,237	1,203		4,337
Physical Neglect						4,587				
Emotional Neglect						149				
Medical Neglect						205				
Educational Neglect						43				
Abandonment										
Lack of Supervision										
Other Neglect										
Other Maltreatment										
Emotional Maltreatment										
Threat of Harm/Potential Maltreatment										
Abuse and Neglect							601	205		
Other										

Table A-2. (continued)

	NH[a,e,g,j,at,bb]		NJ[aw,e,i,j]		NM[c,e,g,j]		NV[c,e,i,j]		NV[c,e,i,j,at]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated[b,f]	Investigated	Substantiated
Sex										
Male		517		9,186		1,653				3,902
Female		748		10,202		1,955				3,934
Unknown										
Age										
0										381 [bg]
1		259				642				1,244
2				7,424				20,028		
3						509				
										1,576
4		228				431				
6										
7						505		15,364		1,969
8		251		7,380						
9						420				
10										
11		228				343				1,466
12								13,499		
13				3,258		361				
14		198								568
15						282				
16										365
17		103		1,226		67		5,981		
18										
19										
Unknown						91				
Race/Ethnicity										
White				7,272		1,206		20,467		5,142
Black				8,837		81		22,059		1,566
Hispanic				2,753		1,164		10,426		609
Asian/Pacific Islander						13		274		96
Native American/American Indian						417		110		55
Other/Unknown				426		770		1,536		371
Type of Maltreatment										
All Abuse										
Physical Abuse		190 [bc]		7,130	3,332	944				1,449 [bh]
Sexual Abuse		434		1,963	1,384	589				402
Emotional Abuse										
Other Abuse		248			7,356	2,492				
All Neglect		280		10,026 [be]						
Physical Neglect		96 [bd]								2,121
Emotional Neglect										
Medical Neglect										319
Educational Neglect										261
Abandonment		46								188
Lack of Supervision										2,730
Other Neglect		385								2,375
Other Maltreatment										
Emotional Maltreatment										1,031
Threat of Harm/Potential Maltreatment										
Abuse and Neglect				169						
Other										

Table A-2. (continued)

	OH[c,e,i,j,at]		OK[b,e,i,j]		OR[l]		PA[c,e,i,j,bl,bm]		RI[b,g]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated[bn]	Substantiated[bo]
Sex										
Male	35,801	7,457	8,787	3,499				2,945	9,381	
Female	36,162	8,434	10,029	4,096				4,988	9,752	
Unknown	273	4								
Age										
0									800	
1			2,670						2,737	
2	29,612	6,411								
3										
4			4,249						4,348	
5										
6										
7									3579	
8	24,857	5,832								
9			6,622							
10									2,804	
11										
12										
13									2,321	
14	15,402	3,511	4,403							
15										
16										
17									2,528	
18										
19										
Unknown	2,365	61								
Race/Ethnicity										
White	51,447	10,627	13,875	5,402						
Black	19,668	5,083	2,457	1,094						
Hispanic	399	14	277	137						
Asian/Pacific Islander	112	25								
Native American/American Indian	90	20	2,052	891						
Other/Unknown			141	56						
Type of Maltreatment										
All Abuse										
Physical Abuse	18,173	2,876		3,497 [bi]				5,109	5,908 [bp]	2,274 [bq]
Sexual Abuse	5,668	2,257		2,040				5,956	1,195 [br]	665 [bs]
Emotional Abuse				1,138				137	24	18
Other Abuse				319				578	426 [bt]	226 [bu]
All Neglect	38,044	9,465								
Physical Neglect				3,690 [bj]					1,931 [bv]	362 [bw]
Emotional Neglect				562					31	7
Medical Neglect	9,974	561		418					239	76
Educational Neglect	4,213	1,542							75	26
Abandonment										
Lack of Supervision									4,634 [bx]	1,793 [by]
Other Neglect				178 [bk]					4,210 [bz]	1,860 [ca]
Other Maltreatment										
Emotional Maltreatment	3,031	354								
Threat of Harm/Potential Maltreatment										
Abuse and Neglect										
Other	4,231	0								

Table A-2. (continued)

	SC[cb,f,g]		SD[b,e,i,j]		TN[a,e,i,k]		TX[a,f,i,j]		UT[c,f]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated
Sex										
Male				1,981	15,058	5,215		20,631		
Female				2,336	17,833	6,812		24,063		
Unknown										
Age										
0					2,549	903		3,599		712
1				478	4,398	1,386				
2								9,545		
3										1,518
4				965	6,259	2,113				
5								9,403		
6										2,212
7										
8				1,580	10,284	3,904		8,955		
9										
10										1,832
11								6,547		
12										
13				741						
14										
15					7,685	3,119		7,145		1,476
16										
17				553						
18										
19										
Unknown					1,836	601				32
Race/Ethnicity										
White				2,049				20,048		6,733
Black								10,552		165
Hispanic								13,354		481
Asian/Pacific Islander								268		89
Native American/American Indian				2,172				70		239
Other/Unknown				96				410		75 [cj]
Type of Maltreatment										
All Abuse										
Physical Abuse	3,488	872		882	8,267 [cc]	2,746 [cd]		13,230		1,607
Sexual Abuse	1,855	738		657	6,442	3,298		6,860		1,846
Emotional Abuse	380	84			767 [ce]	346 [cf]		6,318		
Other Abuse										
Ail Neglect				2,658						
Physical Neglect	5,993	1,880			8,587	2,735		7,687		1,526
Emotional Neglect					248	113				
Medical Neglect	877	286								124
Educational Neglect	377	197			155	93		2,475		
Abandonment					400	273		1,290		58
Lack of Supervision					4,267	1,645		15,998 [ci]		1,139
Other Neglect					224 [cg]	101 [ch]				450 [ck]
Other Maltreatment					2,648	480				
Emotional Maltreatment				838						672
Threat of Harm/Potential Maltreatment	2,430	1,104								
Abuse and Neglect										
Other										

Table A-2. (continued)

	VA[b,e,i,j]		VT[b,f,i,j]		WA[l]		WI[l]		WV[b,e,g,j]	
	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated	Investigated	Substantiated
Sex										
Male		5,638								
Female		6,422								
Unknown		12								
Age										
0										
1										
2		4,032								
3										
4										
5										
6										
7		3,658								
8										
9										
10										
11		2,414								
12										
13										
14										
15										
16		1,932								
17										
18										
19										
Unknown		35								
Race/Ethnicity										
White		7,026								
Black		4,430								
Hispanic										
Asian/Pacific Islander										
Native American/American Indian										
Other/Unknown		616								
Type of Maltreatment										
All Abuse										1,701
Physical Abuse		2,799 [cl]		510						
Sexual Abuse		1,712 [cm]		765						
Emotional Abuse										
Other Abuse										
All Neglect				541						1,649
Physical Neglect		1,421 [cn]								
Emotional Neglect		1,008								
Medical Neglect		535								
Educational Neglect		358								
Abandonment		386								
Lack of Supervision		4,059								
Other Neglect		35 [co]								
Other Maltreatment										
Emotional Maltreatment										
Threat of Harm/Potential Maltreatment										
Abuse and Neglect										
Other										

Table A-2. (continued)

	WY[b,e,i,j,cq]					
	Investigated	Substantiated				
Sex						
Male	2,020					
Female	2,354					
Unknown						
Age						
0						
1						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
Unknown						
Race/Ethnicity						
Non-Hispanic White	3,559					
Black	72					
Hispanic	328					
Asian/Pacific Islander						
Native American/American Indian	352					
Other/Unknown	80 [cp]					
Type of Maltreatment						
All Abuse	1,737	784				
Physical Abuse						
Sexual Abuse						
Emotional Abuse						
Other Abuse						
All Neglect	1,117	494				
Physical Neglect						
Emotional Neglect						
Medical Neglect						
Educational Neglect						
Abandonment						
Lack of Supervision						
Other Neglect						
Other Maltreatment						
Emotional Maltreatment						
Threat of Harm/Potential Maltreatment						
Abuse and Neglect						
Other						

Table A-2. Footnotes

a Numbers are for fiscal year 1988.

b Numbers are for fiscal year 1989.

c Numbers are for calendar year 1989.

d Numbers are for calendar year 1988.

e All cases are counted.

f Only new cases are counted.

g Numbers given are numbers of reports.

h Numbers given are numbers of families.

i Numbers given are numbers of children.

j Numbers given are total counts (same case may appear more than once).

k Numbers given are unduplicated counts.

l State unable to provide this information.

m Physical abuse total is the total number of cases under the following categories: cuts, bruises, welts (2,110), bone fracture (41), brain damage/skull fracture (17), subdural hemorrhage/hematoma (14), dislocations, sprains, twists, shaking (24), internal injuries (9), burns and scalds (71), intentional poisoning (9), death (7), threatened harm/abuse (416), court-ordered supervision (10).

n Sexual abuse total is the total number of cases under the following categories: fondling (1,242), oral sex (306), vaginal intercourse (413), anal intercourse (129), sexual exploitation (88), threatened harm/sex abuse (196), court-ordered supervision (5), other (89).

o Other abuse includes the following categories: other (113), malnutrition (61), failure to thrive (87), exposure to elements (152), locking in/out (103), unintentional poisoning (10).

p Type of maltreatment gives numbers of reports.

q Category = dependent child.

r Category = minor abuse/neglect.

s Figures for race/ethnicity are for 1/1/90-6/12/90, those for type of maltreatment are for fiscal year 1989.

t Numbers for sex, age and race/ethnicity are drawn from Table 2.7, "Demographic Characteristics of Victims By At Least One Verified Finding for Reports Closed FY88-89." From Florida Protective Services System, Child Protective Investigations, Annual Report, July 1988-June 1989. Physical abuse = physical injury, sexual abuse = sexual maltreatment, emotional abuse = mental injury, other abuse = other abuse (942) and drug dependent newborn (1,246). Physical neglect = environmental neglect (4,776) and inadequate food (2,311).

u Numbers for type of maltreatment are drawn from table 2.4, "Maltreatment Categories for Abuse and Neglect with a Verified Finding." Ibid. The maltreatment is counted each time it occurs in a category. A victim may have several maltreatments per report. A report may contain several victims.

v Category includes: Vietnamese and Laotian refugees (18), Chinese (14), Filipino (228), Hawaiian (850), Japanese (39), Korean (20), Samoan (119).

w Category includes: Vietnamese and Laotian refugees (7), Chinese (9), Filipino (131), Hawaiian (578), Japanese (24), Korean (17), Samoan (90).

x Category includes: mixed (1,080), unknown (212), other (44).

y Category includes: mixed (692), unknown (95), other (22).

z Category includes: brain damage/skull fracture (14), subdural hemorrhage or hematoma (11), bone fracture (23), dislocation/sprains/twisting/shaking (4), internal injuries (8), concussion (3), bums/scalds (20), cuts, bruises, welts (536), physical abuse (587).

aa Category includes: malnutrition (13), failure to thrive (14), exposure to elements (22), locking in/our (19), congenital drug addiction (31).

ab Category includes poisoning (unintentional) (5), unknown (55), other (9).

ac Category includes physical abuse (36,325) and death (81).

ad Category includes physical abuse (13,259) and death (52).

ae Category includes all neglect (54,813) and neglect-related deaths (165).

af Category includes all neglect (22,078) and neglect-related deaths (SO).

ag Category includes unknown (130) and other (235).

ah Includes not reported (192) and biracial (805).

ai Includes not reported (12) and biracial (390).

aj The numbers for type of maltreatment are incident counts and may be duplicated.

ak Category includes Hispanics (estimated to be the largest group in this category), Asians, and biracial children.

al Numbers in this column are actually those given for numbers screened in. Based upon other information reported by the state (see Table A-l) approximately 95% of screened-in cases are investigated.

am Category includes other (2,134) and unspecified (1,535).

an Category includes other (1,142) and unspecified (658).

ao Up to 3 types of maltreatment may be recorded on a report. A child subjected to more than one type is counted in each category.

ap Category includes congenital drug addiction (466) and failure to thrive (129).

aq Category includes congenital drug addiction (353) and failure to thrive (39).

ar Numbers in this column are estimated based upon a 40 percent substantiation rate for all categories and all groups within each category.

as This category refers to children of unknown race/ethnicity.

at For type of maltreatment, children with multiple findings are counted on all relevant categories.

au Category includes major physical injury (58) and minor physical injury (943).

av Category = "deprivation of necessities.

aw Numbers are for calendar year 1987.

ax Includes children of other (192) and unknown (515) race/ethnicity.

ay Includes children of other (40) and unknown (127) race/ethnicity.

az Includes reports of allegations of mental or emotional injury or impairment as well as those with unspecified allegations.

ba Numbers for type of maltreatment represent incidents.

bb In the sex and age categories, numbers given are numbers of victims.

bc Category = major injuries.

bd Category = "deprivation of."

be Cases substantiated for neglect only.

bf Numbers are estimates.

bg Category includes children 11 months and younger.

bh Category includes minor injury (1,369) and major injury (80).

bi Category includes beating (1,942), poisoning (4), burning/scalding (82), cutting (12).

bj Category includes environmental neglect (3,525) and failure to provide food (165).

bk Category includes drugs (108) and failure to thrive (70).

bl State does not record reports by age.

bm By law, the State is not permitted to collect this information.

bn Numbers in this column are numbers of allegations.

bo Numbers in this column are numbers of indicated allegations by final finding report status, based upon CANTS risk assessment.

bp Category is total of: death (9), brain damage/skull fracture (19), subdural hematoma (4), internal injuries (5), bums/scalding (120), poisoning/noxious substance (11), wounds (5), malnutrition/starvation (6), bone fractures (48), excessive discipline (3,912), cuts, bruises, welts (1,602), human bites (22), sprains/dislocations (6), tying/close confinement (139).

bq Category is total of: death (6), brain damage/skull fracture (8), subdural hematoma (1), internal injuries (2), burns/scalding (31), poisoning/noxious substance (5), wounds (2), malnutrition/starvation (2), bone fractures (12), excessive discipline (1,468), cuts, bruises, welts (684), human bites (9), sprains/dislocations (2), tying/close confinement (42).

br Category includes: venereal disease (24), sexual intercourse (324), sexual exploitation (45), sexual molestation (802).

bs Category includes: venereal disease (7), sexual intercourse (203), sexual exploitation (26), sexual molestation (429).

bt Category includes: drug/alcohol abuse (388) and other abuse (38).

bu Category includes: drug/alcohol abuse (209) and other abuse (17).

bv Category includes: inadequate food (888), inadequate shelter (796), and inadequate clothing (247).

bw Category includes: inadequate food (152), inadequate shelter (161), and inadequate clothing (49).

bx Category includes: lack of supervision/caretaker (2,484) and lack of supervision/no caretaker (2,150).

by Category includes: lack of supervision/caretaker (989) and lack of supervision/no caretaker (804).

bz Includes other neglect (4,200) and failure to thrive (10).

ca Includes other neglect (1,852) and failure to thrive (8).

cb Numbers are for July, 1989-March, 1990.

cc Includes minor physical abuse (7,834) and severe physical abuse (433).

cd Includes minor physical abuse (2,496) and severe physical abuse (250).

ce Includes emotional abuse (661) and moral abuse (106).

cf Includes emotional abuse (305) and moral abuse (41).

cg Includes failure to thrive (122) and malnourished (102).

ch Includes failure to thrive (80) and malnourished (21).

ci Specific category is "neglectful supervision."

cj Category = unknown.

ck Category includes dependent child (449) and not reported (1).

cl Category includes bruises, cuts, lacerations (2,234), bone fracture (70), skull fracture/brain damage (46), internal injury (18), bums/scalds (100), dislocation, sprains, shaking (37), poisoning (34), and bizarre discipline (260).

cm Category includes: incest (267) and other sexual abuse (1,445).

cn Category includes: lack of food, shelter, clothing (1,391) and malnutrition (30).

co Category = failure to thrive.

cp Category = unknown (44) and other (36). Other includes Asian/Pacific Islander.

cq The numbers in the maltreatment section refer to numbers of cases rather than numbers of children.

Section 5

Section 5. CPS BUDGETARY DATA

Chapter 5 of the State Survey Report noted the difficulty of obtaining comparable data from the States regarding amounts and sources of funding received by their CPS agencies. States varied in which pieces of information- they provided and in the categories they applied; many could not differentiate between the CPS budget and the child welfare budget as a whole. The information the States did supply regarding amounts of funding received from various Federal, State, local and private sources is presented in Table A-3. Again, since these figures are very often incomplete, and categories could be defined differently from State to State, even the most limited attempt at comparison across States should be guided by a careful reading of the footnotes at the end of the table.

Table A-3. Amounts and sources of funding for child-related services, for fiscal years 1985 1989, as reported by States (in thousands of dollars)*

	1985	1986	1987	1988	1989
AK[a,b]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other				94.6	143.6
Children's Justice					
Title IV-B	257.0	257.0	257.0	290.8	422.0
Title IV-E			200.0	479.4	665.2
Title XX/Social Services Block Grant	4323.7	4,824.1	5498.1	5,498.1	6,022.7
Other Federal				81.0	39.1
Total Federal	4,580.7	5,081.1	5,55.1	6,443.9	7,292.0
State					
Legislature	32,446.1 [d]	37,514.7 [e]	335695 [f]	34,248.1 [g]	36,525.5 [h]
Other					
Total State	32,446.1	37,514.7	33,569.5	34248.1	36,525.5
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	37,026.8	42,595.8	39,524.6	40,692.0	43,817.5
AL[c]					
AR[i,b]					
Federal					
NCCAN					
-- Basic		34.0	1243	193.7	193.7
-- Baby Doe			37.9	27.9	47.0
-- Challenge					
-- Unspecified/Other					
Children's Justice					153.7 [j]
Title IV-B				2,744.0	3,276.0
Title IV-E				1,025.3	1329.1
Title XX/Social Services Block Grant				12,583.5	12,721.7
Other Federal		66.1 [k]		173.6 [l]	149.0 [m]
Total Federal		100.1	1622	16,574.4	17,870.2
State					
Legislature				22,067.3	21,839.2
Other			8.1 [n]	145 [o]	15.1 [o]
Total State			8.1	22,081.8	21,854.3
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL			170.3	38,839.8	39,724.5

	1985	1986	1987	1988	1989
AZ[a,b,p]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E				2,525.2 [q]	2,129.0 [q]
Title XX/Social Services					
Block Grant					
Other Federal					
Total Federal				2525.2	5129.0
State					
Legislature				23,250.2	29,405.2
Other					
Total State				2330.2	29,405.2
Other					
Local/Counties					
Other					
Total Other				439.1 [r]	640.1 [r]
OVERALL TOTAL				26,215.3	32,174.5
CA[a,b]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B	20,446.0	20,643.0	19,867.0	21,938.0	22,534.0
Title IV-E	19,078.0	32,464.0	34,186-o	35,770.0	56,056.0
Title XX/Social Services					
Block Grant	84,636.0				
Other Federal	12,417.0 [s]		3,822.0 [s]		105.0 [t]
Total Federal	136,527.0	53,113.0	57,875.0	57,708.0	78,790.0
State					
Legislature	29,621.0	125,167.0	162,513.0	186,449.0	312,849.0
Other					
Total State	29,621.0	125,167.0	162,513.0	186,449.0	312,849.0
Other					
Local/Counties	39,018.0	42,047.0	56,034.0	63418.0	68,520.0
Other					
Total Other	39,018.0	42,047.0	56,034.0	63418.0	68,520.0
OVERALL TOTAL	205,166.0	220,327-O	276,422.0	307,575.0	460,159.0

	1985	1986	1987	1988	1989
CO[a,u]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenge					
– Unspecified/Other		236.9	285.1	311.2	278.0
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal				150.0 [v]	300.0 [w]
Total Federal		236.9	285.1	461.2	578.0
State					
Legislature					
Other					
Total State			43,100.0	44,100.0	47,700.0
Other					
Local/Counties			8,620.0 [x]	8,820.0 [x]	9,540.0 [x]
Other					
Total Other					
OVERALL TOTAL			52,005.1	53,842.4	58,396.0
CT[c]					
DC[c]					
DE[a,b]					
Federal					
NCCAN					
– Basic					
– Baby Doe	32.3	55.4	52.6	61.9	78.5
– Challenge					
– Unspecified/Other					
Children's Justice					
Title IV-B	240.6	327.1	348.3	450.4	383.4
Title IV-E	262.2	433.0	1,093.9	345.6	496.8
Title XX/Social Services Block Grant			3,098.9	3,150.9	3,150.4
Other Federal					
Total Federal	535.1	815.6	4,590.7	4,008.8	4,109.1
State					
Legislature					
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					
FL[c]					

	1985	1986	1987	1988	1989
GA[c]					
HI[c]					
IA[a,b]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenge					
– Unspecified/Other		218.7	228.5	244.9	228.2
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant	33,944.5	33,775.3	32,877.2	38,085.0	32,068.8
Other Federal					
Total Federal		33,994.0	33,105.7	33,329.9	32297.0
State					
Legislature	6,399.0	3,806s	3,743.0	5,813.9	6,882.3
Other					
Total State	6,399.0	3,806s	3,743.0	5,813.9	6,882.3
Other					
Local/Counties	5,038.3	5,049.0	5,137.6	5,338.4	5,554.4
Other				35.0 [y]	35.0 [y]
Total Other	5,038.3	5,049.0	5,137.6	5,373.4	5,589.4
OVERALL TOTAL	45,381.8	42,849.5	41,986.3	44307.2	44,768.7
ID[a,b]					
Federal					
NCCAN					
– Basic	67.2	77.0	79.1	895	84.6
– Baby Doe				2.2	
– Challenge		62.4			
– Unspecified/Other					
Children's Justice					89.6
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant	4,024.8	5,114.5	5,938.5	6,082.1	6,245.9
Other Federal					
Total Federal	4,092.0	5,253.9	6,017.6	6,173.8	6,420.1
State					
Legislature	458.8	625.8	1,473.8	1344.7	1,552.9
Other					
Total State	458.8	625.8	1,473.8	1,344.7	1,552.9
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	4,550.8	5879.7	7,491.4	7,510.5	7,973.0

Table A-3. (continued)

	1985	1986	1987	1988	1989
IL[a,z]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenge		313.0	193.6	165.6	97.5
– Unspecified/Other					
Childnn's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Service5 Block Grant					
Other Federal					
Total Federal		313.0	193.6	165.6	97.5
State					
Legislature					
Other			288.0	300.0	310.0
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALLTOTAL	71,250.2	75,350.2	78,495.8	88,145.3	10493.4
IN[a,aa]					
Federal					
NCCAN					
– Basic					
– Baby Doe				56.0	
– Challenge					
– Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal				56.0	
State					
Legislature					
Other					
Total State	32,1M0.0	38,400.0	41,1xoo.o	54,600.0	73,100.0
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL				54,656.0	

	1985	1986	1987	1988	1989
KS[a,b]					
Federal					
NCCAN					
– Basic	1205	121.6	124.2	127.3	125.2
– Baby Doe	435	37.8	47.0	37.6	37.9
– Challenge		70.9	40.6	43.1	36.7
– Unspecified/Other					
Children's Justice			70.1	83.8	80.2
Title IV-B			1,786.2 [ab]	1,663.4 [ab]	2,176.9 [ab]
Title IV-E			3,723.7 [ac]	4,672.4 [ac]	5598.7 [ac]
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	164.0	230.3	5,791.8	6,627.6	8,055.6
State					
Legislature			23,254.7	25,174.1	29,417.8
Other				75.0 ad	75.0 ad
Total State			23,254.7	25249.1	29,492.8
Other					
Local/Counties					
Other				128.0 [ae]	128.0 [ae]
Total Other				128.0	128.0
OVERALL TOTAL			29,046.5	32,004.7	37,676.4
KY[a,af]					
Federal					
NCCAN					
– Basic					
– Baby Doe		241.2	134.9	218.5	275.4
– Challenge					
– Unspecified/Other	206.7 [ag]	188.1 [ag]	179.1 [ag]	241.6 [ag]	183.2 [ag]
Children's Justice			100.0	92.0	112.4
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal	11,214.5 [ah]	14176.6 [ah]	11,719.6 [ah]	16,445.2 [ah]	14,102.4 [ah]
Total Federal	11,421.2	10,605.9	15133.6	16,997.3	14,673.4
State					
Legislature	4,292.3	8,841.5	12,054.0	11,256.9	14,814.7
Other					
Total State	4,292.3	8,841.5	12,054.0	11,256.9	14,814.7
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	15,713.5	19,447.4	24,187.6	28,254.2	29,408.1

	1985	1986	1987	1988	1989
LA[a,b]					
Federal					
NCCAN					
– Basic					
– Baby Doe		294.7	200.1	246.6	291.9
– Challenge					
– Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal		72,265.6 [ai]	21526.3 [ai]	69,768.4 [ai]	68,182.7 [ai]
State					
Legislature		15247.1	16,549.8	23,310.3	22,648.1
Other		37.1	48.0	80.0	263.0
Total State		15,284.3	16589.8	23390.3	22,911.8
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL		87,549.9	88,116.1	93,158.7	91,094.5
MA[c]					
MD[aj]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenge					
– Unspecified/Other	131.2	215.0	222.3	251.6	247.6
Children's Justice					243.0
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal			188.5 [ak]	141.0 [ak]	160.0 [ak]
Total Federal	131.2	215.0	410.8	392.6	650.5
State					
Legislature					
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					

Table A-3. (continued)

	1985	1986	1987	1988	1989
ME[a,b]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					25.0
-- Challenge					
-- Unspecified/Other					67.0
Children's Justice					
Title IV-B				1364.0	1,294.0
Title IV-E				4,487.0	5,784.0
Title XX/Social Services					
Block Grant					
Other Federal					
Total Federal				5,851.0	7,170.0
State					
Legislature				23,143.0	27,520.0
Other					
Total State				23,143.0	27,520.0
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL.				28,994.0	34,690.0
MI[c]					
MN[a,b]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other	209,575.2 [al]	136,130.8 [al]	178,279.1 [al]	273536.3 [al]	289,412.4 [al]
Children's Justice			153.1	153.4	
Title IV-B	12,167.4 [am]	56,422.7 [am]	58,005.6 [am]	75,714.3 am	176249.9 [am]
Title IV-E / Title XX/Social Services Block Grant	9,780.5 [an]	11,492.1 [an]	12,590.3 [an]	14,099.6 [an]	16,752.2 [an]
Other Federal					
Total Federal	10,002.2	11,648.6	12,979.8	14,602.2	17,217.8
State					
Legislature					
Other	13,898.6 [ao]	16,002.4 [ao]	16,901.2 [ao]	19,053.5 [ao]	22,638.1 [ao]
Total **State**	13,898.6	16,002.4	16,901.2	19,053.5	22,638.1
Other					
Local/Counties	27,797.1 [ap]	34,290.8 [ap]	38,934.2 [ap]	43,060.9 [ap]	51,162.0 [ap]
Other					
Total **Other**	27,797.1	34,290.8	38934.2	43,060.9	51,162.0
OVERALL TOTAL	51,697.9	61,977.8	68,815.1	76,716.S	91,018.0

	1985	1986	1987	1988	1989
MO[aaq]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- &specified/Other		362.0 [ar]	362.0 [ar]	328.0 [ar]	328.0 [ar]
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	6,982.2	9,493.3	14,738.1	17,699.1	9,162.3
State					
Legislature					
Other					
Total State	27,981.3	32,797.2	31,667.6	39,957.5	52,735.0
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	34,963.5	42,290.5	46,405.7	57,656.6	61897.2
MS[as]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other		122.6	122.2	122.2	120.8
Children's Justice					
Title IV-B	2,598.6 [at]	3,153.2 [au]	3,857.6 [av]	4,205.2 [aw]	4,294.8 [ax]
Title IV-E					
Title XX/Social Services Block Grant	19,640.1 [ay]	18,481.6 [az]	17,076.1 [ba]	17,136.4 [bb]	17,298.6 [bb]
Other Federal			2p1.3	2,341.4	3,107.1
Total Federal	22,238.7	21,757.4	23,257.2	23.8052	23,821.3
State					
Legislature					
Other					
Total State			3,794.4 [bc]	5,938.2 [bd]	6,380.2 [be]
Other					
Local/Countics					
Other					
Total Other					
OVERALL TOTAL			27,051.6	29,739.4	30,201.5

Table A-3. (continued)

	1985	1986	1987	1988	1989
MT[a,b]					
Federal					
NCCAN					
-- Basic	59.6	88.9	55.0	49.4	39.5
-- Baby Doe		9.5	31.9	6.8	31.1
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B	271.4 [bf]	271.4 [bf]	271.4 [bf]	271.4 [bf]	271.4 [bf]
Title IV-E	1,068.9 [bg]	1,206.3 [bg]	1,556.0 [bg]	1,892.1 [bg]	1,939.7 [bg]
Title XX/Social Services Block Grant					
Other Federal	195.7 [bh]	128.1 [bi]	236.7 [bj]	287.5 [bk]	240.4 [bl]
Total Federal	1,595.6	1,704.2	2,151.0	2,507.2	2,522.1
State					
Legislature					
Other	3,812.2 [bm]	5,098.7 [bn]	6,004.5 [bo]	6,126.4 [bp]	6,594.3 [bq]
Total State	3,812.2	5,098.7	6,004.5	6,126.4	6,594.3
Other					
Local/Counties	862.7	1,155.0	1,160.0	986.7	928.6
Other	53.3 [br]	54.3 [br]	50.8 [br]	15.4 [br]	
Total Other	916.0	1,209.3	1,210.8	1,002.1	928.6
OVERALL TOTAL	6,323.8	8,012.2	9,366.3	9,635.7	10,045.0
NC[a,b]					
Federal					
NCCAN					
-- Basic	327.0	320.8	3475	338.8	333.1
-- Baby Doe	I		I	I	
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B	1,955.0 [bt]	1,955.0 [bt]	2329.0 [bt]	3,076.0 [bt]	4,074.0 [bt]
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	2,282.0	2,275.8	2,876.5	3,414.8	4,407.1
State					
Legislature	934.0	934.0	1,427.0	1,664.0	2,683.0
Other	934.0	934.0	1,427.0	1,664.0	2,683.0
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	3,216.0	3,209.8	4303.5	$078.8	7,090.1

Table A-3. (continued)

	1985	1986	1987	1988	1989
ND[a]					
Federal					
NCCAN					
-Basic		60.9	61.6	62.1	62.1
-- Baby Doe					
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal					
State					
Legislature					300.0
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					362.1
NE[b,bs]					
Federal					
NCCAN					
-- Basic			94.4	95.6	96.0
-- Baby Doe		35.2	305	36.7	30.0
-- Challenge					39.4
-- Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal		35.2	124.9	132.3	165.4
State					
Legislature			250.0	250.0	250.0
Other					
Total State			250.0	250.0	250.0
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL			374.9	3823	415.3

	1985	1986	1987	1988	1989
NH[a]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other				84.8	86.2
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal					
State					
Legislature					
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALLTGTAL					
NJ[a,bu]					
Federal					
NCCAN					
-Basic	302.1	394.0	288.5	358.6	289.1
-- Baby Doe	77.7	125.7	106.0	97.5	935
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal	321.4 [bv]	615.9 [bv]	666.6 [bv]	1382.8 [bv]	1,376.9 [bv]
Total Federal	701.2	1,135.6	1,061.1	1.8389	1,759.5
State					
Legislature	52,100.0	83,900.0	97,700.0	116,700.0	125,200.0
Other	36,200.0 [bw]	48,300.0 [bw]	65pM.o [bw]	75.7 [bx]	95.0 [by]
Total State	88,300.0	132,200.0	160,900.0	192,400.0	220,200.0
Other					
Local/Counties	18400.0	22400.0	22,100.0	23,800.0	29,600.0
Other				158.2 [bz]	105.1 [bz]
Total Other	18,400.0	22400.0	22,100.0	23,958.2	29,705.1
OVERALL TOTAL	107,401.2	155,735.6	184,061.1	218,197.1	251,664.6

	1985	1986	1987	1988	1989
NM[a,b]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenge.					
– Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E	4374.8	3,098.7	5,688.8	5,673.2	7,353.4
Title XX/Social Services					
Block Grant	14,675.5	15,575.8	15,478.4	15,573.5	15.900.0
Other Federal					
Total Federal	19,050.3	18.6745	21,167.2	21,246.7	23253.4
State					
Legislature	15,105.4	15,504.2	20,666.0	21,276.4	27,385.4
Other	2,232.1 [ca]	742.5 [ca]	729.0 [ca]	1,349.0 [ca]	1,701.0 [ca]
Total State	17,337.5	16,246.7	21,395.0	22,625.4	29,036.4
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	36,387.8	34,921.2	42,562.2	43,872.1	52,289.8
NV[a]					
Federal					
NCCAN					
– Basic				67.0	69.3
– Baby Doe				26.5	23.4
– Challenge					
– Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services					
Block Grant		2,293.5 [cb]	2,197.3 [cb]	1,137.0 [cc]	1,154.1 [cc]
Other Federal					
Total Federal		2,293.5	2,197.3	1,230.5	1.246.8
State					
Legislature					
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					

	1985	1986	1987	1988	1989
NY[a,cd]					
Federal					
NCCAN					
-Basic					
-- Baby Doe					
-- Challenge		584.3	391.6	277.0	203.1
-- Unspecified/Other	520.0	S14.4	811.0	660.0	640.2
Children's Justice			388.1	480.9	452.4
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	520.0	1,098.7	1,590.7	1,417.6	1,295.6
State					
Legislature	52,329.6 ce	62,739.0 ce	72.259.6 ce	74,827.1 ce	89,678.1 ce
Other					
Total State	52,329.6	62,739.0	72,259.6	74,827.1	89,678.2
Other					
Local/Counties	46,501.3 cf	55,484.5 cf	64,315.1 cf	66,669.5 cf	81476.9 cf
Other					
Total Other	46501.3	55,484.5	64,315.1	66,669.5	81,476.9
OVERALL TOTAL	99,350.9	119,322.2	138,165.4	142,914.2	172,450.6
OH[c]					
OK[a]					
Federal					
NCCAN					
-- Basic	246.2	205.8	221.1	209.9	205.5
-- Baby Doe					
-- Challenge					
-- Unspecified/Other					
Children's Justice					104.6
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal					310.1
State					
Legislature					
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL.					

Table A-3. (continued)

	1985	1986	1987	1988	1989
OR[a,cg]					
Federal					
NCCAN					
– Basic	128.7	130.1	132.0	133.0	130.2
– Baby Doe	45.6	39.8	49.8	39.0	39.2
– Challenge					
– Unspecified/Other					
Children's Justice			73.5	88.1	83.8
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	174.3	169.9	255.3	260.1	253.2
State					
Legislature					1,000.0 [ch]
Other					
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					1,253.2
PA[a,b]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenge				78.8	75.5
– Unspecified/Other				150.0 [ci]	150.0 [ci]
Children's Justice					
Title IV-B				14400.0	1,737.2
Title IV-E	42,687.1 [cj]	45,000.0 [cj]	53,182.1 [cj]	65,467.0 [cj]	77,000.0 [cj]
Title XX/Social Services Block Grant	11,450.0 [ck]	11,190.0 [ck]	11,190.0 [ck]	9,000.0 [ck]	9,876-O [cl]
Other Federal	1,381.2	1,700.0	1,274.7	1,700.0	
Total Federal	5SJ18.3	57,390.0	65,646.8	90,795.8	88,838.7
State					
Legislature	127,313.5		138,916.5		
Other					17,986.1 [cm]
Total State	127,313.5				
Other					
Local/Counties	13,647.7				
Other					
Total Other					
OVERALL TOTAL	196,479.5		204,563.3		106,824.8
RI[c]					

Table A-3. (continued)

	1985	1986	1987	1988	1989
SC[a,b]					
Federal					
NCCAN					
– Basic					
– Baby Doe					
– Challenp					
– Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	321475.8	329307.7	315,927.6	309,535.5	315,342.1
state					
Legislature					
Other					
Total State	66,760.8	81,604.5	81,006.2	84,904.9	94,429.6
Other					
Local/Counties	2,296.5	2,910.4	3,602.4	3,671.2	3,863.5
Other					
Total Other	2,296.5	2,910.4	3,602.4	3,671.2	3,863s
OVERALLTOTAL	340333.1	413,822.6	405,536.2	398,109.6	413,655.2
SD[a,bx]					
Federal					
NCCAN					
– Basic					
- B a b y -					
- Challenge					
– Unspecified/Other	93.3	114.9	110.3	326.3	226.9
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	93.3	114.9	110.3	326.3	226.9
State					
Legislature	603.7	647.9	1,048.3	1,246.6	1,407.6
Other					
Total State	603.7	647.9	1,048.3	1,246.6	1,407.6
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	697.0	762.8	1,158.6	1,572.9	1,634.5

	1985	1986	1987	1988	1989
TN[a,b]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other	175.4	2475	265.8	191.9	260.1
Children's Justice					55.0
Title IV-B	4,815.5	4,653.0	4,940.5	5,287.0	4,828.7
Title IV-E					
Title XX/Social Services Block Grant	13,982.3	16,167.6	16,082.6	12,026.5	15,240.0
Other Federal					
Total Federal	18,974.2	21,118.1	21,288.9	17505.4	20,383.8
State					
Legislature	5,027.2	4,184.0	5,952.8	5934.7	6,861.8
Other					
Total State	5,027.2	4,184.0	5,952.8	5,934.7	6,861.8
Other					
Local/Counties	1,238.7	8105	1,054.9	6927	
Other					
Total Other	1,238.7	8105	1,054.9	692.7	
OVERALL TOTAL	25,240.1	26,112.5	28,246.0	24,132.9	27,245.6
TX[c]					
UT[a,cn]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other					104.0
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal					104.0
State					
Legislature					
Other					1,294.0 [co]
Total State					
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					1,398.0

	1985	1986	1987	1988	1989
VA[a,bs]					
Federal					
NCCAN					
-- Basic	222.2	226.5	230.3	249.4	2375
-- Baby Doe	73.2	50.3	63.7	50.9	66.4
-- Challenge		56.6	58.6	63.0	54.0
-- Unspecified/Other					
Children's Justice					223.6
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	395.4	333.4	582.9	354.3	5835
State					
Legislature					
Other	400.0 [cp]	400.0 [cp]	400.0 [cp]	400.0 [cp]	500.0 [cp]
Total State	400.0	400.0	400.0	400.0	500.0
Other					
Local/Counties					
Other					
Total Other					
OVERALLTOTAL	795.4	733.4	982.9	754.3	1,083.5
VT[a,cq]					
Federal					
NCCAN					
-- Basic	47.1	53.5	53.8	81.1	55.0
-- Baby Doe		19.7	19.7	21.9	21.9
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal				58.6 [cr]	267.3 [cs]
Total Federal	47.1	73.2	73.5	161.6	1625
State					
Legislature	8,954.7	9,424.5	11555.3	15,130.5	15,604.2 [ct]
Other					
Total State	8,954.7	9,424s	11555.3	15,130.5	15,604.2
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	9,001.8	9,497.7	11,628.7	15,292.1	15,948.3

Table A-3. (continued)

	1985	1986	1987	1988	1989
WA[cu]					
Federal					
NCCAN					
-- Basic					
-- Baby Doe					
-- Challenge					
-- Unspecified/Other	133.7	186.6	196.1	2335	255.9
Children's Justice					
Title IV-B					
Title IV-E					
Title XX/Social Services Block Grant					
Other Federal					
Total Federal	8,265.0		10,621.5		14,381.4
State					
Legislature					
Other					
Total State	15,257.3		21,633.6		26,152.1
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL	23J22.3		32,255.1		40,433.5
WI[c]					
WV[cv]					
WY[a,b]					
Federal					
NCCAN					
-- Basic	34.8	96.7	64.5	40.7	72.4
-- Baby Doe					
-- Challenge					
-- Unspecified/Other					
Children's Justice					
Title IV-B					
Title IV-E	242.8	164.3	124.8	650.3	1,093.0
Title XX/Social Services Block Grant	458.0	229.3	101.3	391.6	286.7
Other Federal					
Total Federal	7975	458.1	266.8	1,114.3	1,379.7
State					
Legislature					
Other					
Total State					9,201.3 [cw]
Other					
Local/Counties					
Other					
Total Other					
OVERALL TOTAL					10,581.0

*Numbers are taken from budgetary data provided in various forms by the States. Information may be incomplete.

Table A-3. Footnotes

[a] Numbers are for State fiscal year.

[b] Numbers are for all child welfare. services.

[c] State did not provide this information.

[d] Includes: $10,495.8 (Family Services), $3,329.1 (Protective Services), $18,621.8 (Purchased Services).

[e] Includes: $13,087.5 (Family Services), $4,137.8 (Protective Services), $20,289.4 (Purchased Services).

[f] Includes: $13,361.5 (Family Services), $4,191.4 (Protective Services), $19,551.7 (Purchased Services).

[g] Includes: $11,304.1 (Family Services), $3,392.3 (Protective Services), $19,551.7 (Purchased Services).

[h] Includes: $12,644.1 (Family Services), $3,796.4 (Protective Services), $20,085.0 (Purchased Services).

Numbers for 1986 and 1987 were supplied by State and may not be for State fiscal year. Numbers for 1988 and 1989 are for State fiscal year and are drawn from the Annual Summary of Child Welfare Services.

Numbers provided by State CPS as two separate grants of $83,685, and 369,999. One of these might be for a prior year.

[k] Family violence grant.

Category includes: family violence ($50,000), out-of-home investigations ($73,570), and special needs adoption (850,000). Title I and Juvenile Justice funds are not included.

[m] Category includes family violence ($35,997), Sexual Abuse Project ($13,001), and special needs adoption ($100,000). Title I and Juvenile Justice funds are not included.

[n] Child Abuse and Neglect Hotline

[o] Child Abuse and Neglect Hotline. It is unclear whether this is included in the State legislature total above.

[p] Extracted from State budget documents.

[q] Includes IV-E, IV-B, and other smaller Federal grants.

Includes CPS donations, trust fund, tax checkoff.

Title IV-A

Federal grant (exact source unspecified).

[u] Federal figures are for CPS only, State figures are for all child welfare services. State figures do not include salaries.

[v] Respite care.

[w] Respite care ($150,000) and crisis nursery ($150,000).

[x] Counties provide 28% match to State. Figures were estimated from State totals.

Funds from Edna McConnell Clark Foundation.

[z] Figures are for Protective Services, and include appropriated and non-appropriated funds from all sources.

[aa] Indiana is ineligible for most NCCAN funds because its definition of child abuse/neglect does not meet Federal guidelines.

[ab] Most of these funds are targeted to abuse and neglect.

[ac] AU for foster care. State cannot break out the portion related to child abuse and neglect.

[ad] Federal portion of joint State/Federal project. See below.

[ae] State portion of joint State/Federal project.

[af] Only that portion of the funding that goes to CPS is shown.

[ag] Block grant.

[ah] CPS/emergency and prevention.

[ai] Includes Title IV-B, IV-E, Block Grant, SSI, SSDI.

[aj] Numbers are for Federal fiscal year, and appear to be just CPS-related. Local county contributions vary by 24 jurisdictions; these figures cannot be provided for the State as a whole.

[ak] Victims of Crime.

[al] Infant Medical Neglect/Disabled Infants Grant included starting SFY 87.

[am] Title IV-B monies spent on CPS.

[an] Cannot separate out monies spent on CPS.

[ao] Community Social Services Act funds identified for target populations.

[ap] Counties.

[aq] Numbers are totals for funding sources for child protective agency programs in the Department of Family Services.

[ar] Child abuse Federal grants.

[as] Numbers are for Federal fiscal year and for all of children's services, but broken down by program.

[at] Does not include monies for child abuse and neglect programs.

[au] Includes $250,000 for emergency shelter for children, $180,653 for prevention of child abuse/neglect, and $109,306 for child protective services.

[av] Includes 829,796 for prevention of abuse/neglect.

[aw] Includes $114,379 for emergency shelter for children.

[ax] **Includes $464,597 for prevention of abuse/neglect.**

[ay] **Includes $1,397,433 for emergency shelter for children, $1,693,526 for prevention of abuse/neglect of children, and $1,418,014 for child protective services.**

Table A-3. Footnotes (continued)

az Includes $1,234,761 for emergency shelter for children, $1,693,526 for prevention of child abuse/neglect, and $1,418,014 for child protective services.

ba Includes $1,382,515 for emergency shelter for children, $2,800,000 for prevention of child abuse/neglect, and $877,076 for child protective services.

bb Includes $1,424,314 for emergency shelter for children, $2,984,790 for prevention of child abuse/neglect, and $934,960 for child protective services.

bc Category encompasses States/local/other. Includes $238,762 for emergency shelter for children and $9,932 for prevention of abuse/neglect.

bd Category encompasses State/local/other. Includes $257,568 for emergency shelter for children, $627,574 for prevention and $196,582 for child protective services.

be Category encompasses State/local/other. Includes 3219,129 for emergency shelter for children, $1,084,134 for prevention and $215,208 for child protective services.

bf For foster care.

bg For subsidized adoption and foster care.

bh Includes $16,000 for Big Brothers/Big Sisters and 35.7 for Title IV-A, for Protective Services daycare.

bi Title IV-A for Protective Services daycare.

bj Includes $35,700 for Domestic Violence grant and $201,000 of Title IV-A funds for Protective Services daycare.

bk Includes $49,100 for Domestic Violence grant and $238,400 for Protective Services daycare.

bl Includes $45,800 for Domestic Violence grant and $240,400 for Protective Services daycare.

bm Includes $130,800 for Domestic Violence grant and $69,700 for Protective Services daycare.

bn Includes $131,400 for Domestic Violence grant, $261,900 for Protective Services daycare, and $1,900 for the Children's Trust Funds.

bo Includes $150,700 for Domestic Violence, $299,700 for Protective Services daycare, and $52,500 for the Children's Trust Funds.

bp Includes $135,200 for Domestic Violence, $388,400 for Protective Services daycare, and $44,800 for the Children's Trust Funds.

bq Includes $135,500 for Domestic Violence grant, $299,500 for Protective Services daycare, and $43,300 for the Children's Trust Funds.

br Match for Big Brothers/Big Sisters.

bs These monies are only for child abuse/neglect-related functions.

bt CPS portion of Title IV-B funds.

bu Federal funds are for Federal fiscal year and appear to be only those directly related to child abuse/neglect. State and local funds are for State fiscal year, and technically, are all CPS.

bv Discretionary grant(s).

bw State aid.

bx Includes $74,200,000 in State aid and $1,500,000 in casino revenues.

by Includes $90,500,000 in State aid and $4,500,000 in casino revenues.

bz Robert Wood Johnson Foundation grant for medical assessment of children entering foster care.

ca Revenue.

cb Protective services, both direct and purchased.

cc Refers only to purchased protective services. Direct services are included in the overall welfare budget and cannot be broken out.

cd Federal funds indicated are only those related to child abuse/neglect, whereas State funds apply to all child welfare functions. CPS receives 50 percent of funding from State and 50 percent from counties.

ce State share of salaries and purchase of services.

cf Direct salaries and purchase costs.

cg There is no separate CPS budget or staff. Funds indicated here are only those for CPS-related functions.

ch For CPS training. These are the only funds specifically earmarked for CPS.

ci Crisis nursery grant.

cj State estimates that approximately5 percent of Title IV-E funds are CPS-related.

ck State estimates that CPS generally accounts for approximately two-thirds of Title XX funds.

cl CPS accounts for $6,500,000 of Title XX total.

cm To implement the Child Protective Services Law.

cn Figures mostly unavailable. The total child welfare budget for fiscal year 1989 was $13480,863, with funds coming mainly from the state.

co Includes $650,000 for shelter care and $644,090 for child abuse treatment.

cp Family violence prevention.

cq Federal funds are only those related to child abuse/neglect, whereas State funds appear to encompass all child welfare functions.

cr For Drug Free Schools.

cs Includes $85,598 for Drug Free Schools and $181,687 for JJDP Jail Removal.

ct Estimate.

cu NCCAN numbers are for fiscal year. Other numbers indicate the share of Federal and State funds apportioned to CPS, for State Biennia 1985-1987, 1987-1989, and 1989-1991.

Table A-3. Footnotes (continued)

cv State estimates that NCCAN funds per State fiscal year range from $85,000-$100,000. Otherwise, the State could provide no additional information with respect to CPS funding. There is no separate line item for CPS in the State social services budget.

cw Lump sum for Children's Services. Excludes $3,278,157 for social work salaries.

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A REPORT ON HIGH RISK

CHILD ABUSE AND NEGLECT GROUPS:

APPENDIX B

NIS-2 REANALYSIS REPORT

Submitted to:

National Center on Child Abuse and Neglect
Administration for Children, Youth and Families
Administration for Children and Families
U.S. Department of Health and Human Services
Washington, DC 20201

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TABLE OF CONTENT!3

Chapter		Page
	EXECUTIVESUMMARY	i
1.	INTRODUCTION	l-l
	1.1 Study Objectives	l-l
	1.2 Design and Methodology of the NIS-2	1-2
	1.3 The NIS-2 Information Base	1-6
	1.4 Overview of the NIS-2 Reanalysis	l-9
	1.5 Strengths and Limitations of the NIS-2 Data and Reanalysis	l-11
2.	ABUSED AND NEGLECTED CHILDREN NOT INVESTIGATED BY CPS: NUMBERS AND DIFFERENTIATING CHARACTERISTICS	2-1
	2.1 CPS Investigation: General Patterns	2-l
	2.2 NIS-2 Reanalysis Method to Identify Predictors of CPS Investigation	2-9
	2.3 Predicting CPS Investigation of Physically Abused Children	2-12
	2.4 Predicting CPS Investigation of Sexually Abused Children	2-25
	2.5 Predicting CPS Investigation of Physically Neglected or Emotionally Maltreated Children	2-31
	2.6 Predicting CPS Investigation of Educationally Neglected Children	2-41
	2.7 Summary of Findings on the Predictors of CPS Investigation	2-51
	2.8 Maltreated Children Who Are Unserved/ Underserved by CPS	2-58
3.	RISK FACTORS FOR THE OCCURRENCE OF ABUSE AND NEGLECT	3-1
	3.1 Method to Identify Risk Factors in the NIS-2 Database	3-l
	3.2 Factors Predicting Risk of Physical Abuse	3-4
	3.3 Factors Predicting Risk of Sexual Abuse	3-11
	3.4 Factors Predicting Risk of Physical Neglect	3-18
	3.5 Factors Predicting Risk of Emotional Maltreatment	3-25
	3.6 Factors Predicting Risk of Multiple Maltreatment	3-30
	3.7 Factors Predicting Risk of Educational Neglect	3-36

3.8 Summary of Findings on the Risk Factors for Abuse and Neglect 3-43
3.9 Children at Risk of Maltreatment Who Are Unserved/Underserved by CPS 3-51

4. INCIDENCE OF CHILDREN WHO ARE UNSERVED OR UNDERSERVED BY CPS 4-1

4.1 Incidence of Children Unlikely to Have Their Abuse or Neglect Investigated by CPS 4-1
4.2 Incidence of Children Excluded From CPS by Definition 4-15
4.3 Incidence of Children Whose Risk May Be Inadequately Indexed in CPS Risk Assessment Methods 4-17
4.4 Incidence of Children Perceived to Need Special CPS Efforts 4-21
4.5 Overview of Findings Concerning the Identity and Incidence of Unserved or Underserved Children 4-27

5. SUMMARY AND CONCLUSIONS 5-1

5.1 Characteristics of Children and Families Related to the Risk of Occurrence of Abuse or Neglect 5-1
5.2 Characteristics of Children, Families, and Maltreatment Related to the Likelihood of CPS Investigating Abuse or Neglect 5-5
5.3 Correspondence Between Empirically-Identified Risk Factors for Abuse or Neglect and Indicators of "High Risk" Used in CPS Risk Assessment 5-8
5.4 Estimates of the National Incidence of Maltreated Children Identified as Unserved or Underserved by Five Alternative Methods 5-10
5.5 Implications of the Findings 5-14

TABLE OF CONTENTS (Continued)

List of Tables

Table		Page
2-1	Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Physically Abused Children	2-13
2-2	Family Structure Differences in CPS Investigation of Physical Abuse	2-22
2-3	Differences in CPS Investigation of Physical Abuse Related to Number of Other Children in the Household	2-23
2-4	Differences in CPS Investigation of Physical Abuse Related to Presence of Other Suspected Victims in the Household	2-24
2-5	Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Sexually Abused Children	2-26
2-6	Differences in CPS Investigation of Sexual Abuse Related to Presence of Other Suspected Victims in the Household	2-29
2-7	Severity Differences in CPS Investigation of Sexual Abuse	2-30
2-8	Differences in CPS Investigation of Sexual Abuse Related to Perpetrator's Location in Child's Home	2-30
2-9	Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Physically Neglected and/or Emotionally Maltreated Children	2-32
2-10	Race/Ethnicity Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment	2-35
2-11	Family Income Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment	2-36
2-12	Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment Due to Nature of Harm	2-39

2-13 Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment Due to Severity of Harm 2-40

2-14 Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment Due to Perpetrator's Relation to Child 2-41

2-15 Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Educationally Neglected Children 2-42

2-16 Differences in CPS Investigation of Educational Neglect Due to Number of Children in the Household 2-50

2-17 Differences in CPS Investigation of Educational Neglect Due to Recognition Source 2-51

2-18 Factors Associated with Likelihood That CPS Will Investigate Harm Standard Children 2-52

2-19 Children Who Are Unserved/Underserved by CPS 2-59

3-1 Final Multi-Factor Logistic Model to Predict the Occurrence of Physical Abuse 3-7

3-2 Family Income Differences in Risk of Physical Abuse 3-10

3-3 Differences in Risk of Physical Abuse Related to Number of Children in the Household 3-11

3-4 Final Multi-Factor Logistic Model to Predict the Occurrence of Sexual Abuse 3-12

3-5 Sex Differences in Risk of Sexual Abuse 3-17

3-6 Family Income Differences in Risk of Sexual Abuse 3-18

3-7 Final Multi-Factor Logistic Model to Predict the Occurrence of Physical Neglect 3-19

3-8 Family Income Differences in Risk of Physical Neglect 3-22

3-9 County Metropolitan Status Differences in Risk of Physical Neglect 3-25

3-10 Final Multi-Factor Logistic Model to Predict the Occurrence of Emotional Maltreatment 3-26

3-11 Race/Ethnicity Differences in Risk of Emotional Maltreatment 3-29

3-12 Family Income Differences in Risk of Emotional Maltreatment 3-29

3-13 Final Multi-Factor Logistic Model to Predict the Occurrence of Multiple Maltreatment 3-30

3-14 Sex Differences in Risk of Multiple Maltreatment 3-33

3-15 Family Income Differences in Risk of Multiple Maltreatment 3-34

3-16 Family Structure Differences in Risk of Multiple Maltreatment 3-35

3-17 County Metropolitan Status Differences in Risk of Multiple Maltreatment 3-36

3-18 Final Multi-Factor Logistic Model to Predict the Occurrence of Educational Neglect 3-37

3-19 Race/Ethnicity Differences in Risk of Educational Neglect 3-38

3-20 Family Income Differences in Risk of Educational Neglect 3-41

3-21 Family Size Differences in Risk of Educational Neglect 3-42

3-22 County Metropolitan Status Differences in Risk of Educational Neglect 3-43

3-23 Risk Factors for the Occurrence of Harm Standard Maltreatment 3-44

3-24 Distribution of Harm Standard Children in the NIS-2 by Source of Recognition 3-47

3-25 Use of Factors in CPS Risk Assessment Compared to Their Role in Predicting Risk of Harm Standard Maltreatment 3-52

4-1 Distribution of All Children Who Met the Harm Standard According to Their Probability of CPS Investigation, as Predicted From the Applicable Logistic Model(s) 4-4

4-2 Distribution of Children in Each Maltreatment Category According to Model-Based Probability of CPS Investigation 4-10

4-3 Incidence of Children Unlikely to Receive CPS Investigation, Defined by Their Characteristics 4-13

4-4 Incidence Children Identified as Unserved/Underserved on the Basis of Agency-Defined Limitations on CPS Jurisdiction 4-15

4-5 Incidence of Harm Standard Maltreatment for Specified Subgroups of Children and Categories of Maltreatment--Estimated National Totals and Rates per 1,000 4-18

4-6 Incidence of Harm Standard Children Perceived to Need Special CPS Efforts, by the Identified Subgroup Characteristics, Maltreatment Categories, and CPS Investigation 4-23

5-1 Synopsis of the Factors That Predict Risk of Abuse or Neglect 5-2

5-2 Synopsis of the Factors That Predict CPS Investigation of Abuse or Neglect 5-6

5-3 Estimated National Incidence of Groups Identified as Unserved or Underserved by Five Approaches 5-11

TABLE OF CONTENTS (Continued)

List of Figures

Figure		Page
1-1	Schematic Summary of the NIS Methodology	1-4
1-2	Categories of Children in the NIS-2	1-7
2-1	Overall Totals and CPS Investigation of Countable Children	2-2
2-2	CPS Investigation of Harm Standard Children: by Sources	2-4
2-3	CPS Investigation of Harm Standard Children With Different Maltreatment	2-7
2-4	Race and Age Differences in CPS Investigation of Physical Abuse (for Children More Likely to be Known to CPS)	2-14
2-5	Race and Age Differences in CPS Investigation of Physical Abuse (for Children Less Likely to be Known to CPS)	2-15
2-6	Sex and Age Differences in CPS Investigation of Physical Abuse (for Children More Likely to be Known to CPS)	2-17
2-7	Sex and Age Differences in CPS Investigation of Physical Abuse (for Children More Likely to be Known to CPS)	2-18
2-8	Sex and Severity of Harm Differences in CPS Investigation of Physical Abuse (for Children More Likely to be Known to CPS)	2-20
2-9	Sex and Severity of Harm Differences in CPS Investigation of Physical Abuse (for Children Less Likely to be Known to CPS)	2-21
2-10	Race and Age Differences in CPS Investigation of Sexual Abuse (for Children More Likely to be Known to CPS)	2-27
2-11	Race and Age Differences in CPS Investigation of Sexual Abuse (for Children More Likely to be Known to CPS)	2-28

2-12 Sex and Age Differences in CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children More Likely to be Known to CPS) 2-33

2-13 Sex and Age Differences in CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children More Likely to be Known to CPS) 2-34

2-14 Effects of Recognition Source and Other Victims on CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children More Likely to be Known to CPS) 2-37

2-15 Effects of Recognition Source and Other Victims on CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children Less Likely to be Known to CPS) 2-38

2-16 Race/Ethnicity and Age Differences in CPS Investigation of Educational Neglect (for Children More Likely to be Known to CPS) 2-44

2-17 Race/Ethnicity and Age Differences in CPS Investigation of Educational Neglect (for Children Less Likely to be Known to CPS) 2-45

2-18 Age and Family Structure Differences in CPS Investigation of Educational Neglect (for Children More Likely to be Known to CPS) 2-46

2-19 Age and Family Structure Differences in CPS Investigation of Education Neglect (for Children Less Likely to be Known to CPS) 2-47

2-20 Effect of Age and Other Victims on CPS Investigation of Educational Neglect (for Children More Likely to be Known to CPS) 2-48

2-21 Effects of Age and Other Victims on CPS Investigation of Educational Neglect (for Children Less Likely to be Known to CPS) 2-49

3-1 Race and Age Differences in Risk of Physical Abuse for Generally High Risk Children 3-5

3-2 Race and Age Differences in Risk of Physical Abuse for Generally High Risk Children 3-6

3-3 Age and Family Structure Differences in Risk of Physical Abuse for Generally High Risk Children 3-8

3-4 Age and Family Structure Differences in Risk of Physical Abuse for Generally Low Risk Children 3-9

3-5 Age and Race Differences in Risk of Sexual Abuse for Generally High Risk Children 3-13

3-6 Age and Race Differences in Risk of Sexual Abuse for Generally Low Risk Children 3-14

3-7 Age and Family Structure Differences in Risk of Sexual Abuse for Generally High Risk Children 3-15

3-8 Age and Family Structure Differences in Risk of Sexual Abuse for Generally Low Risk Children 3-16

3-9 Age and Family Structure Differences in Risk of Physical Neglect for Generally High Risk Children 3-20

3-10 Age and Family Structure Differences in Risk of Physical Neglect for Generally Low Risk Children 3-21

3-11 Age and Family Structure Differences in Risk of Physical Neglect for Generally High Risk Children 3-23

3-12 Age and Family Structure Differences in Risk of Physical Neglect for Generally Low Risk Children 3-24

3-13 Age Differences in Risk of Emotional Maltreatment for Generally High Risk Children 3-27

3-14 Age Differences in Risk of Emotional Maltreatment for Generally Low Risk Children 3-28

3-15 Age and Race Differences in Risk of Multiple Maltreatment for Generally High Risk Children 3-31

3-16 Age and Race Differences in Risk of Multiple Maltreatment for Generally Low Risk Children 3-32

3-17 Age and Family Structure Differences in Risk of Educational Neglect for Generally High Risk Children 3-39

3-18 Age and Family Structure Differences in Risk of Educational Neglect for Generally Low Risk Children 3-40

4-1 Estimated Incidence of Harm Standard Children by the Probability of CPS Investigation 4-5

4-2 Distribution of Maltreatment for Children with Different Probabilities of CPS Investigation 4-7

4-3 Incidence of Children in Different Maltreatment Categories by the Probability of CPS Investigation 4-8

Appendix A - Methodology for Identifying Predictors of CPS Investigation

Appendix B - Logistic Analyses to Identify Factors Related to the Incidence of Maltreatment

Appendix C - Procedures for Generating Probabilities from Final Logistic Models

Executive Summary

The **Study of High Risk Child Abuse and Neglect Groups** was designed to identify groups which have been underserved or unserved by child abuse and neglect programs and report the incidence of child abuse and neglect among such groups. This report presents the findings of one component of this study, which involved reanalysis of the data from the **Second National Incidence Study of Child Abuse and Neglect** (the NIS-2). The findings of the other study component, which consisted of a survey of Child Protective Service (CPS) specialists in all 50 States and the District of Columbia, are given in a separate document.

The NIS-2 Reanalysis component focused on identifying the characteristics of children and families that are empirically related to the risk of occurrence of abuse or neglect serious enough to fit the NIS-2 Harm Standard and be recognized by community professionals. The Harm Standard narrowed the focus to those children who had already been harmed by abuse or neglect, and it excluded children who may have been endangered, but had not been harmed. The NIS-2 Reanalysis component addressed the issue of who are "unserved/underserved" in two ways: first, by identifying the characteristics of abused or neglected children who fit the NIS-2 Harm Standard but who are not investigated by CPS; and second, by determining whether the factors that are actually related to risk of abuse or neglect (in the NIS-2 data) correspond to the definitions and indicators of "high risk" that are used in CPS agencies. Finally, the NIS-2 data offered the only available information basis for estimating the incidence of child abuse and neglect among different groups of children, so this goal of the High Risk study could only be addressed through the NIS-2 Reanalysis component. Thus, key facets of the findings given here are estimates of the national incidence of maltreated children in all the various groups identified as "unserved" or as "underserved" by any of the above methods (i.e., whether in the State Survey or in the NIS-2 Reanalysis).

The NIS-2 obtained data about abused and neglected children both from CPS and non-CPS agency sources in a national sample of 29 counties. CPS data were obtained on all the children who were reported and accepted for investigation during the three-month study data period in the Fall of 1986. Non-CPS participants in each county included professional staff who were likely to come into contact with maltreated children in public schools, day care centers, short-stay general and children's hospitals, municipal police departments, voluntary social services agencies, mental health agencies, the county juvenile probation and public health departments, and the county sheriff or State police division with jurisdiction over any unincorporated areas not served by municipal law enforcement. These individuals served as "sentinels" by remaining on the lookout for child maltreatment cases throughout the data period. Each child who was reported to the study was evaluated as to his or her "countability" as

abused or neglected in relation to the study definitions, and only children who fit the standards were considered "countable" and entered into the national estimates. The basic countability standard, the *Harm Standard*, was used for the NIS-2 Reanalysis component. This was a stringent standard in that it generally required a child to have already experienced demonstrable harm as a result of maltreatment in order to be countable.

The NIS-2 has several key strengths that make it particularly suitable for the purposes of the High Risk study. First, it provides the only available information concerning abused or neglected children who are *not investigated by CPS*. Therefore, it is capable of addressing the issue of who is unserved/underserved from a unique vantage point. Second, the patterns and relationships that the NIS-2 provides should be *nationally representative* ones, since they were derived from a random sample of counties (and agencies) that was designed to represent the nation. Third, the case weights available in the NIS-2 data also provide the sole basis for generating estimates of total numbers of abused or neglected children in different groups, thereby making it possible to answer questions concerning the incidence of abuse or neglect among children who are members of unserved/underserved groups. Fourth, because of the use of standardized definitions in the NIS-2, findings that are derived from analyses of the database can have clear, unambiguous meanings and implications.

The NIS-2 estimates should, however, be regarded as *minimum* estimates of the true incidence of abuse and neglect, because the data are limited to those abused or neglected children who are reported to CPS and accepted for investigation, or who are encountered by NIS-2 community professionals (in schools, police departments, hospitals, etc.), recognized as abused or neglected by these sentinels, *and* submitted to the NIS-2 study. Also, one should be careful to distinguish CPS investigation per se from actual "services." That is, some of the children who are not investigated by CPS may nevertheless receive adequate services (e.g., not all children and families who are treated by various service providers are reported to CPS), while at the same time, not all children investigated by CPS receive services (e.g., due to scarce CPS resources or changes in the family's circumstances that preclude the need for services).

The principal achievements of the NIS-2 reanalysis effort were new findings in four major areas:

(1) Seven child and family demographic characteristics were found to be empirically related to the risk of occurrence of abuse or neglect;

(2) Thirteen characteristics of children, families, and maltreatment were determined to predict the likelihood that CPS would investigate a child's maltreatment;

(3) Points of noncorrespondence were identified between the empirically-identified risk factors for abuse or neglect (as found in the NIS–2) as compared to the indicators of "high risk" that are used in CPS agencies (as reported in the High Risk Study State Survey); and

(4) Estimates of the national incidence of maltreated children were provided for groups identified in the High Risk study as "unserved" or as "underserved" using five alternative methods.

Risk Factors for Abuse and Neglect

One of the key goals of the NIS-2 Reanalysis component of the High Risk study was to use the information in the NIS-2 database to identify the risk factors for the occurrence of abuse and neglect. To the extent that the NIS-2 provides a nationally-representative sample of maltreated children, the risk factors identified in this database should be broadly generalizable. In addition, one of the approaches used in the NIS-2 Reanalysis component to address the issue of which maltreated children are "unserved/underserved" was to compare the factors that are actually related to risk of abuse or neglect to the definitions and indicators of "high risk" used in CPS agencies.

The NIS-2 data concerning countable abused and neglected children were compared with information about children in the general population, according to the data from the U.S. Bureau of Census Current Population Surveys in March 1986 and March 1987. Seven child and family characteristics were found to be common to the databases, and these were examined in the risk factor analyses. The analyses showed that all seven characteristics examined related to risk of abuse or neglect in some way, but the specific factors that predicted risk and the nature of their relation to risk depended on the type of maltreatment at issue and often on the circumstances of other important predictive factors as well. That is, there were numerous conditions where interactions among the important predictors were found, meaning that one could not say what the effect on risk of one factor would be without simultaneously taking another factor into account. Table 1 summarizes the risk analysis findings.

The central features of these findings are:

- Family income had an extremely strong effect on the risk of virtually every category of abuse and neglect. Compared to children whose families had incomes of $30,000 per year or more, children from families with incomes below $15,000 per year had:
  - more than 13 times greater risk of emotional maltreatment,
  - 16 times greater risk of multiple maltreatment,
  - 21 times greater risk of physical abuse,
  - more than 24 times greater risk of sexual abuse,
  - between 78 and 97 times greater risk of educational neglect, and
  - between 20 and 162 times greater risk of physical neglect.

Table 1. Synopsis of the Factors That Predict Risk of Abuse or Neglect.

FACTOR	ROLE AS PREDICTOR OF RISK		
	Predictive Strength	Nature of Relation to Risk	Qualifications
Family Income	Most important predictor of risk for all maltreatment types	Children in low income families (incomes under $15,000 per year) were at much higher risk in all categories of abuse and neglect	None examined
Child's Age	Played a role in all maltreatment types; usually second in strength after income	Children's risk generally increased with age	Interactions occurred in five of six types (i.e., for all except emotional maltreatment); the appearance and strength of the relation between age and risk depended on family structure, child's race/ethnicity, and/or child's sex
Family Structure	Important in predicting risk for five of six maltreatment types (i.e., for all except emotional maltreatment)	In three categories (physical abuse, educational neglect, multiple maltreatment), children in two-parent families were at greater risk, once family income was taken into account	Interactions occurred, where the relation between family structure and risk depended on the child's age, in the areas of physical abuse, sexual abuse, physical neglect, and educational neglect
Child's Race/Ethnicity	Important in five of six maltreatment types (not a risk factor for physical neglect when other important predictors are taken into account)	No one racial/ethnic group was consistently at higher risk across the categories	The relation to risk depended on the child's age in three categories; those interactions occurred for physical abuse, sexual abuse, and multiple maltreatment
County Metropolitan Status	Urban/rural nature of the county predicted risk of physical neglect, educational neglect, and multiple maltreatment	Children were at greater risk in urban than in rural counties	None examined
Family Size	Number of children in family was predictor of risk for physical abuse and educational neglect	When other important predictors were taken into account, only children were at greater risk than those in multiple-child households	None examined
Child's Sex	Predicted risk of sexual abuse, physical neglect, and multiple maltreatment	Females were at greater risk	Interacted with age in predicting risk of physical neglect

- The child's age played some role in connection with risk in all categories of maltreatment, usually qualified in some way such that child's age only affected specific subgroups or had a stronger effect for some subsets of children; wherever age did influence risk of maltreatment, it was the older children who were at greater risk.

- Family structure predicted risk in nearly all categories of maltreatment, and children in two-parent families were at greater risk of physical abuse, educational neglect, and multiple maltreatment.

- The child's race/ethnicity predicted risk in nearly all categories of maltreatment, and it frequently served to modify the effect of child's age on risk and vice versa. However, the specific races/ethnicities with greater risk varied from one category to another.

- County metropolitan status, family size, and child's sex had more delimited relationships to risk, serving as predictors in three or fewer of the six maltreatment categories studied. Nevertheless, all three showed very consistent patterns in the nature of their relationship to risk, with children in urban areas, only children, and females being at greater risk than their counterparts.

- Only 8 to 20 percent of the variance in the occurrence of abuse and neglect could be accounted for, a fact which implied that many other characteristics of children and their family circumstances are important determinants of the risk of abuse and neglect beyond the few demographic characteristics that could be examined using the NIS-2 information.

Characteristics of Children, Families, and Maltreatment Related to the Likelihood of CPS Investigating Abuse or Neglect

A key approach used in the NIS-2 Reanalysis component to address the issue of which maltreated children are "unserved/underserved" was to consider the characteristics that differentiate maltreated children who are investigated by CPS from those who are not. In 1986 (in the NIS-2), 931,000 children were countable under the Harm Standard, of whom only 44 percent were investigated by CPS agencies. Moreover, considering only the data from sources who could have potentially contributed uninvestigated children to the study (e.g., public schools, police, hospitals, etc.), an even lower overall percent (i.e., only 35 percent) of the countable children recognized by those sources had been investigated by CPS. This reflected 57 percent of physically abused children, 65 percent of those who had been sexually abused, 29 percent of those who had been either physically neglected or emotionally maltreated,[1] and 10 percent of those who had only experienced educational neglect.[2]

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[1]These maltreatment categories evidenced similar patterns and were combined for analysis purposes.

[2]CPS agencies are not required to investigate educational neglect by the Federal regulations that implement the Child Abuse Prevention and Treatment Act.

Fifteen characteristics were considered as possible predictors of CPS investigation, and 13 of these were found to play some role in that capacity. The factors which were found to predict CPS investigation are listed in Table 2, which summarizes their effects, in approximate order of the extensiveness of their influence. Only the rural/urban character of the county and the perpetrator's sex failed to evidence any influence on the likelihood that CPS would investigate a situation of maltreatment. Again, it is evident that the majority of the characteristics that were examined were found to play some important role as predictors, but the specific nature of their relation to CPS investigation generally depended on the type of maltreatment at issue and was often qualified by interactions among the important predictors.

Important aspects of these findings are:

- In virtually no instance did a given factor have the same impact on both the risk of occurrence of abuse and neglect and on the likelihood of CPS investigating maltreatment, and in some instances, a given factor actually had opposite effects in the two contexts--signalling special vulnerabilities for some subgroups of children. Specifically:

  - Children in low income families (those with incomes below $15,000 per year) were especially likely to experience abuse or neglect in all categories. However, those who were physically neglected and/or emotionally maltreated were less likely to have this maltreatment investigated by CPS.

  - Children who live with both parents were found to be at greater risk of experiencing physical abuse when their other characteristics were taken into account, but they were actually less likely to have their physical abuse investigated by CPS.

- The analyses only accounted for a portion of the variance in CPS investigation (between 16 and 34 percent), which implied that there are probably numerous other factors, beyond those examined here, that determine whether CPS investigates a given child.

- Interactions among the predictive factors were found to be important in nearly all instances where they were examined, meaning that the effects of any one factor were typically qualified by the influences of other factors. This indicated that simplistic, single-factor approaches to predicting occurrence of abuse or neglect or the likelihood of CPS investigation will necessarily be incorrect, because they will fail to address the complexity of these events and their multiple determinants and modifiers.

- Sentinels in public schools recognized more than half (54 percent) of all maltreated children who were countable under the Harm Standard, but CPS had investigated the maltreatment of only about one-fourth of these children (26 percent).

Table 2. Synopsis of the Factors That Predict CPS Investigation of Abuse or Neglect.

FACTOR[a]	ROLE AS PREDICTOR OF CPS INVESTIGATION		
	Predictive Strength	Relation to CPS Investigation	Qualifications
Child's Age	Important for all categories of maltreatment.	Age differences varied across types of maltreatment and subgroups of children.	Necessary in every category of maltreatment; predictive strength and nature of relationship to age depended on race/ethnicity, sex, and/or family structure.
Child's Race/Ethnicity	Important for all categories of maltreatment.	Varied with type of maltreatment; no single group was consistently less likely to be investigated.	Depended on age in three categories (all except physical neglect & emotional maltreatment); minorities more likely to be investigated at younger ages, but less likely at older ages.
Other Suspected Victims	Important for all categories of maltreatment.	Less likely when no other victims were suspected.	Depended on recognition source for physical neglect and/or emotional maltreatment; depended on age for educational neglect.
Recognition Source	Predicted CPS investigation in three categories (all except sexual abuse).	More likely if child was recognized by law enforcement or medical services; less likely if recognized by day care, mental health, or social services. Effect of recognition by schools varied with type of maltreatment, but less likely with physical neglect & emotional maltreatment.	Depended on presence of other victims when maltreatment was physical neglect and/or emotional maltreatment.
Severity of Harm	Predicted CPS investigation in three categories (all except educational neglect).	Varied with type of maltreatment; no severity level was consistently less or more likely to be investigated.	Depended on sex for physical abuse (only affected CPS investigation for females).
Family Structure	Predicted CPS investigation of physical abuse and educational neglect.	Mother-only less likely than father-only; effect of both parents varied with type of maltreatment, but less likely for physical abuse.	Depended on age when maltreatment was educational neglect.
Family Size	Predicted CPS investigation of physical abuse and educational neglect.	Varied with type of maltreatment; no group was consistently less likely to be investigated.	None examined.
Child's Sex	Predicted CPS investigation of physical abuse and physical neglect & emotional maltreatment.	Varied with type of maltreatment; neither sex was consistently less likely to be investigated.	Depended on age in both maltreatment categories; for physical abuse, depended also on severity of harm.
Perpetrator Location	Only predicted CPS investigation of sexual abuse.	Less likely if perpetrator is in child's home.	None examined.
Perpetrator Relationship	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when parents & parent/substitutes were not directly perpetrators.	None examined.
Number of Perpetrators	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when more than one perpetrator was involved.	None examined.
Family Income	Only important for physically neglected or emotionally abused children.	Children in families with incomes under $15,000 per year were less likely to be investigated.	None examined.
Nature of Harm	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when only emotional, psychological, or mental injury had occurred.	None examined.

[a] County metropolitan status and perpetrator's sex had no effect on CPS awareness of any type of maltreatment.

Correspondence Between Empirically-Identified Risk Factors for Abuse or Neglect and Indicators of "High Risk" Used in CPS Risk Assessment

For a number of the factors that emerged in this study as important indicators of the risk of maltreatment occurrence, their relative importance or the nature of their relationship to risk of abuse or neglect did not appear to correspond to their use in CPS risk assessment. Discrepancies occurred in relation to every factor that was examined in the risk assessment analyses. Specifically:

- Despite the fact that low family income emerged as a compellingly strong predictor of the occurrence of maltreatment, this factor was included in the risk assessment instruments in only about three-fourths of the States, according to responses to the High Risk State Survey.

- Age was found to be a strong predictor of risk, with increases in risk of Harm Standard maltreatment paralleling increases in age. Although age is very commonly included in risk assessment instruments, its application did not follow these risk factor findings. Instead, risk assessment instruments generally assign younger children higher risk scores.

- Family structure was revealed to be a relatively important predictor of risk, and in connection with physical abuse and educational neglect children in two-parent families were found to be at greater risk. However, fewer than half of the States were found to specifically include family structure in CPS risk assessment and, when it was included, it generally allocated higher risk scores to children from single-parent families.

- Race/ethnicity was also a relatively important predictor of risk in all areas except physical neglect, but its effects were not simple. It frequently served to modify the effect of age on risk, and vice versa. Only about one-fifth of the States include race/ethnicity in risk assessment instruments.

- Geographical area was predictive of children's risk in three categories of maltreatment. Fewer than half the States used that factor in risk assessment instruments.

- Family size was related to risk of physical abuse and of educational neglect, with children who were only children at greater risk than others in both categories. Fewer than half the States included this factor in risk assessment instruments, and those that do so regard children in large families to be the ones at greater risk.

- Children's sex predicted their risk of sexual abuse, physical neglect, and multiple maltreatment, with females at higher risk in each case. Less than one-third of the States used child's sex in CPS risk assessment.

Depending on the goals of using risk assessment methodology in CPS and the ways in which it is applied in practice, these discrepancies suggest that the attention allocated to certain groups of children may be inadequate or misdirected in some CPS agencies.

Estimates of the National Incidence of Abused or Neglected Children Who Are Unserved/Underserved

Using the NIS-2 database, national estimates were generated for a number of different "unserved/underserved" groups, who were identified as such by five alternative methods. Two methods of identifying unserved/underserved groups derived solely from the NIS-2 Reanalysis information; two methods derived solely from the State Survey information; and the remaining method identified unserved/underserved groups on the basis of information from both components taken together.[3]

The first two ways in which potentially unserved/underserved groups were identified were through the NIS-2 Reanalysis component findings concerning the characteristics of children, families, and maltreatment that are related to the likelihood that CPS will investigate a child's maltreatment.

First, the discovered connections between the likelihood of CPS investigation and the different characteristics of the children, their families, and their maltreatment were applied to the actual characteristics (and combinations of characteristics) of all maltreated children in order to determine the numbers of children whose characteristics placed them at each level of probability of receiving CPS attention. Taking this approach, if one considers maltreated children to be underserved if they have no more than a 50 percent chance of being investigated by CPS, then a total of 612,000 children meeting the Harm Standard would be considered unserved/underserved. These included the following additive subgroups:

- 120,000 physically abused[4] children (or 52 percent of all those physically abused);
- 38,000 sexually abused[4] children (36 percent of all sexually abused);
- 221,000 children who were physically neglected or emotionally maltreated[4] (72 percent of that group);
- 7,000 children who were multiply maltreated, having experienced combinations of these different types of maltreatment[4] (15 percent of all multiply-maltreated children); and
- 226,000 children who only experienced educational neglect.

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[3]Note that this discussion omits reference to those groups that were identified as "unserved/underserved" according to yet another approach: on the basis of the perceived nonfit between their service needs and service availability in the State Survey component. These are excluded because the NIS-2 data could not provide incidence information concerning these groups.

[4]With or without educational neglect as well.

Second, the findings concerning the factors that predict CPS investigation were used to define specific groups of maltreated children whose characteristics (and combinations of characteristics) identified them as being less likely to receive CPS investigative attention. Adopting this approach to defining the groups, the ten largest (overlapping and nonadditive) groups of unserved/underserved children are

- 260,000 physically abused children, *not* in father-only households, but living instead with both parents or with mothers only; 103,800 are not investigated by CPS;
- 249,000 physically abused children where the number of children in the household was known; 105,000 are not investigated;
- 249,000 physically neglected or emotionally maltreated children in households where other victims were *not* suspected and who were *not* recognized by day care, social services, or mental health staff; 175,000 are not investigated;
- 222,000 physically abused children in households where no other victims were suspected; 98,000 are not investigated;
- 186,000 physically neglected or emotionally maltreated children from families with incomes below $15,000 per year; 109,000 are not investigated;
- 148,000 children who were only educationally neglected, ages 10 through 17, with no other suspected victims in their households; 134,000 are not investigated;
- 122,000 physically neglected or emotionally maltreated children who were fatally or seriously injured; 82,000 are not investigated;
- 112,000 males, aged 7 or older, who were physically neglected or emotionally maltreated; 84,000 are not investigated;
- 108,000 physically abused non-Blacks ages 0 through 11; 31,000 are not investigated; and
- 107,000 children who were physically neglected or emotionally maltreated by more than one perpetrator; 78,000 are not investigated.

The third and fourth ways in which potentially unserved/underserved groups were identified were through the State Survey, through an examination of categorical exclusions of children from CPS's mission or focus and by obtaining CPS specialists' perceptions of groups who are in need of special CPS efforts.

CPS agency mission statements and definitions were examined in the State Survey for specific indications concerning the groups that are the principal focus of CPS efforts, groups which can

be included at all, and groups which are typically or always excluded from CPS. The following (overlapping and nonadditive) groups were classified as unserved or underserved because CPS mission statements and definitions typically or always excluded them from CPS:

- all 285,000 educationally neglected children,[5] 243,000 of whom were not investigated;
- all 191,000 emotionally maltreated children, 112,000 of whom were not investigated; and
- all 493,000 children who were estimated to have been endangered but not harmed,[6] 170,000 of whom were not investigated.

Specific groups were rank-ordered according to the degree to which State Survey respondents identified them as having unmet needs for special CPS efforts. The following groups were identified as unserved or underserved children on the basis of State CPS specialists' perceptions about the children who are in need of special CPS efforts due to the difficulty in reaching and/or serving them:

- maltreated children in low income families (626,000 overall);
- maltreated children of preschool age (153,000 children), those 15 and older (285,000 children), and preteens and early adolescents (358,000)--a total of 796,000 children in these three categories;
- maltreated children in single parent households (330,000 overall);
- maltreated children of minority races (254,000 overall); and
- maltreated children in rural areas (179,000 children).

The fifth and final way in which unserved/underserved groups were identified was by a method that integrated the findings from both components of the High Risk Study. Specifically, the factors empirically found in the NIS-2 reanalysis to predict the risk of abuse or neglect were compared to the factors used in CPS risk assessment as identified by respondents in the State Survey, and subgroups of children whose actual risk of abuse or neglect may be inadequately or inaccurately assessed by current risk assessment approaches were identified as being potentially underserved. On this basis, the following (overlapping and nonadditive) groups were considered to be potentially underserved:

- maltreated children in urban and suburban counties (752,000 overall), especially those who were physically neglected, multiply-maltreated, or only educationally neglected (a subtotal of 381,000 of these children);

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[5]Regardless of whether other maltreatment had also occurred.

[6]I.e., they met the criteria of the NIS Endangerment Standard but failed to meet the Harm Standard.

- maltreated children in low income families (626,000 overall);
- maltreated children in two-parent families (602,000 overall), especially those who were physically abused, multiply-maltreated, or only educationally neglected (338,000 of the children);
- maltreated White children (574,000 overall), especially those who are multiply-maltreated or only educationally neglected (197,000 children).
- maltreated older children, ages 12 and over (511,000 overall); and
- maltreated only children (228,000 overall), particularly those who were physically abused or educationally neglected (126,000 children).

Implications of the Findings

There are several areas in which the study findings clearly point to important issues on which current approaches need to be clarified or reconsidered, and to questions that need to be answered in order to guide future policy and services for abused and neglected children and their families. Specifically:

(1) **A number of the study findings indicate the need to improve coordination of services across different systems:**

- **Between human services and income support services**--The finding concerning the strength of family income as a risk factor for all categories of abuse and neglect underscored the need to explore methods by which human services and income support services can be coordinated and better integrated with each other. Income support services include AFDC, Food Stamps, WIC, housing subsidies, job training, and other employment and economic survival services.
- **Between child protection and education**--The findings emphasized the importance of school personnel as sources of recognition of countable abused and neglected children, and particularly of the sector who are not investigated by CPS agencies. This implied that a substantially larger proportion of countable abused and neglected children would be investigated by CPS if better linkages could be forged between CPS agencies and the local community schools.
- **Between child protection and juvenile justice**--Special attention to this linkage was recommended. Adolescents, particularly males and minorities, were found to be at greater risk of abuse or neglect than younger children but were generally less likely to be investigated by CPS. This suggested that existing policies and priorities in child protective services may inadvertently enlarge the scope of other problems, such as the sizes of the runaway, delinquent, and even criminal youth populations.

(2) **Greater consensus among Federal and State policy makers and program administrators is needed concerning the categories of children and families who should come within the purview of CPS. This will enable:**

- Given consensus about who should be investigated by CPS, those subgroups defined to be appropriately within the scope of CPS who were found to be especially unlikely to be investigated by CPS could be targeted for additional attention; and

- Given consensus about which subgroups are actually outside of the proper scope of CPS jurisdiction, policy makers may consider allocating responsibility for the outstanding needs of these subgroups to other public and private sector agencies.

(3) **Substantial further work in the area of CPS risk assessment is needed in order to achieve three purposes:**

- **Elaborate the risk assessment systems themselves so that they better reflect the complex and interactive relationships among the factors that predict risk.** The findings suggest that the state-of-the-art in risk assessment would be appreciably advanced by the development of interactive risk assessment models.

- **Clarify the goals of using risk assessment in the CPS context.** The results indicated considerable gaps between the predictors of risk found here to apply in the general population and the markers of risk in use within CPS, but depending on what the goals of CPS risk assessment are determined to be, these gaps could be appropriate. Better definition is needed to decide this issue.

- **Provide for more extensive ongoing feedback concerning the effectiveness of risk assessment systems that can help to shape their further evolution.**

(4) **Needs for additional research in other areas were uncovered. Specifically, further investigation is needed in order to identify:**

- **The specific nature of the barriers to CPS investigation of children who should be investigated.** The NIS-2 children who were not investigated by CPS represent an enigma because, within the context of the NIS-2 methodology, it is not possible to determine the reason they were not investigated. That is, a child may not have been investigated by CPS because no one reported the child or because CPS screened out the child's case prior to investigation. Further study is needed in order to determine what factors account for the relatively low rates of CPS investigation for some of the groups of countable children.

- **Additional important predictors of risk of abuse and neglect.** The risk predictors that were examined here were all demographic observables and were generally not outstanding in their ability to account statistically for the occurrence of maltreatment. Future research should examine the role of other potentially important predictors so as to improve the predictive capability of the models as well as to incorporate factors that may be more amenable to clinical intervention.

- **More effective approaches to the organization and management of CPS agency activities.** To date, scant research attention has been paid to devising model approaches to how CPS agencies should be structured and run. Different management models need to be pilot-tested and evaluated. Issues in that arena need to be isolated and examined.

1. Introduction

1.1 Study Objectives

The central goal of the **Study of High Risk Child Abuse and Neglect Groups** was to fulfill one of the research mandates in the Child Abuse Prevention, Adoption and Family Services Act of 1988 (P.L. 100-294): to identify groups which have been underserved or unserved by child abuse and neglect programs and to report the incidence of child abuse and neglect among such groups.[1] The study involved two principal components: a survey of Child Protective Service (CPS) specialists in all 50 States and the District of Columbia, and reanalysis of the data from the **Second National Incidence Study of Child Abuse and Neglect** (the NIS-2). This report presents the findings of the NIS-2 Reanalysis Component of the High Risk Study.

The two components of the High Risk Study had complementary and related objectives so that, taken together, they addressed the High Risk Study mandate. The State Survey component aimed to identify the definitions of "high risk" and the uses of risk assessment in CPS, and to determine what groups are unserved or underserved under CPS agency practices. In that study, potentially "unserved/underserved" groups were identified in a number of different ways. First, CPS agency mission statements and definitions indicated which groups were the principal focus of CPS efforts, which could be included at all, and which were typically or always excluded from CPS. Second, the nonfit between service needs and service availability was examined across a broad range of service categories, indicating what types of service needs are unmet or inadequately met by existing resources. Third, specific groups were rank-ordered according to the degree to which survey respondents identified them as having unmet needs for special CPS efforts. Finally, the State Survey also considered the uses of risk assessment, the characteristics that serve to differentiate high from low risk cases, and the implications of different risk findings for subsequent service allocation.

The NIS-2 Reanalysis component focused on identifying the characteristics of children and families that are empirically related to the risk that abuse or neglect will occur. In addition, this component addressed the issue of who are "unserved/underserved" in two ways: first, by identifying

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[1]This mandate was given in Section 105, which was entitled "High Risk Study." At the same time, a subsidiary goal of the present study was to address another research mandate in P.L. 100-294: to assess the incidence of children who have developed disabling conditions as a result of child abuse or neglect. (See Section 102 of the Act, entitled "Child Abuse and Disability.") The latter goal was treated in the State Survey component of the present study, but was most directly fulfilled by another study, *A Report on the Maltreatment of Children with Disabilities*, Westat, 1992.

the characteristics of abused or neglected children who are not investigated by CPS; and second, by determining whether the factors that are actually related to risk of abuse or neglect (in the NIS-2 data) correspond to the definitions and indicators of "high risk" that are used in CPS agencies. Finally, the NIS-2 data offered the only available database for estimating the incidence of child abuse and neglect among different groups of children, so this goal of the High Risk Study could only be addressed through the NIS-2 Reanalysis component. Thus, key facets of the findings given here are estimates of the national incidence of maltreated children in all the various groups identified as "unserved" or as "underserved" by any of the above methods (i.e., whether in the State Survey or in the NIS-2 Reanalysis).

The remaining sections in this chapter summarize the NIS-2 methodology, indicate the nature of the information in the NIS-2 data, including its strengths and limitations, and give a general overview of the methods that were used in developing the findings that are reported in subsequent chapters. Chapter 2 examines the characteristics that differentiate maltreated children who are investigated by CPS from those who are not, using that perspective to define groups who are "unserved" or "underserved." Chapter 3 identifies the factors that are related to the risk of being abused or neglected in ways that fit the NIS-2 Harm Standard criteria, and considers whether and how these risk factors are reflected in CPS agencies' definitions of "high risk" or in the risk assessment instruments that are in use. Chapter 4 summarizes all the information gathered in the High Risk Study concerning groups who appear to be "unserved" and/or "underserved" and presents estimates of the incidence of child abuse and neglect in these unserved/underserved groups. Chapter 5 concludes with an overview of the NIS-2 Reanalysis findings in the context of the overall objectives of the High Risk Study, and discusses the implications for future Federal program and policy initiatives.

1.2 Design and Methodology of the NIS-2

Both the first and the second National Incidence studies on child abuse and neglect (commonly termed the NIS-1 and the NIS-2) were conducted in response to specific Congressional mandates.[2] Their purpose was to go beyond cases of child maltreatment that come to the attention of the official Child Protective Services system and attempt to assess the overall national incidence of the problem of child maltreatment. The NIS-2 had the additional purpose of discovering how the severity, frequency, and character of child maltreatment had changed since the first National Incidence Study

[2]The NIS-1 was mandated in the Child Abuse Prevention and Treatment Act, P.L. 93-247. The NIS-2 was mandated in the Child Abuse Amendments of 1984, P.L. 98-457.

(NIS-1) was conducted. The NIS-1 was conducted in 1980; the NIS-2 data were collected in 1986 and the first findings were published in 1988.[3] Although these studies provide some information about children reported to CPS, they give only limited information about this set of children. Their principal purpose was to focus on the total picture of abuse and neglect in the nation. Figure 1-1 provides a schematic summary of the key components of the NIS methodology, which are discussed in the ensuing paragraphs.

Data Sources. The guiding assumption was that children who are officially reported to Child Protective Services (CPS) agencies may represent only the "tip of the iceberg." For this reason, NIS-2 obtained data about abused and neglected children from both CPS and non-CPS agency sources in a national sample of 29 counties.

In every sampled county, the county CPS agency was a key participant. The data collected in the participating CPS agencies represented all the children who were reported and accepted for investigation during the study data period, which was from September 7 to December 6, 1986.

Non-CPS participants in each county included professional staff who were likely to come into contact with maltreated children in public schools, day care centers, short-stay general and children's hospitals, municipal police departments, voluntary social services agencies, mental health agencies, the county juvenile probation and public health departments, and the county sheriff or State police division with jurisdiction over any unincorporated areas not served by municipal law enforcement. Across all counties, a total of 798 non-CPS agencies were targeted for participation,[4] of which 706 actually participated, representing an 88.5 percent participation rate.

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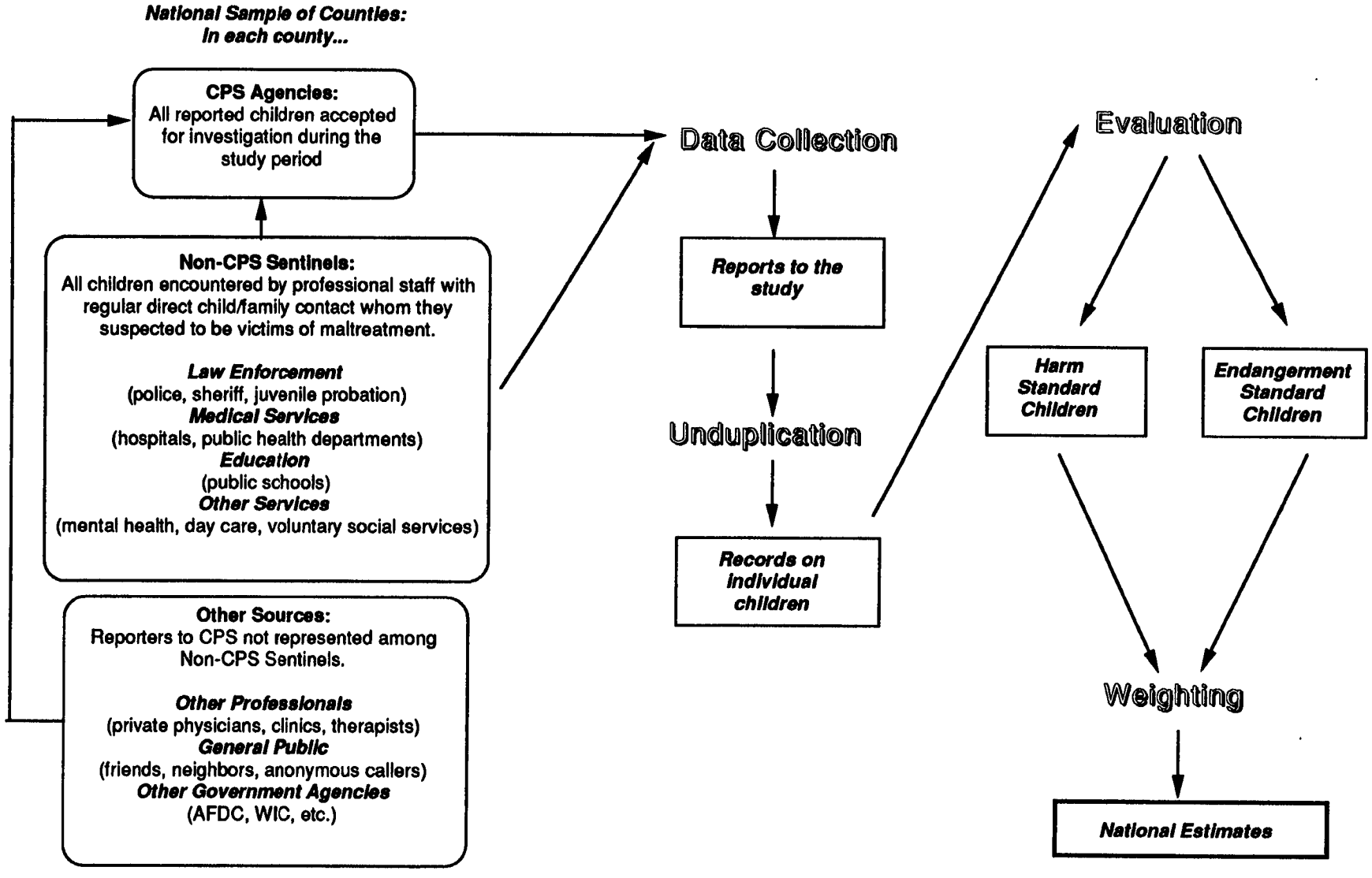
[3]Further information about these studies and their findings is available in the two key findings reports: National Center on Child Abuse and Neglect (1981). *Study Findings: National Study of the Incidence and Severity of Child Abuse and Neglect.* U. S. Department of Health and Human Services, Washington, D.C. 20201. (DHHS Publication No. OHDS 81-30325) and Sedlak, A. J. (September 1991). *Study of the National Incidence and Prevalence of Child Abuse and Neglect: 1988. Revised Report.* Rockville, MD: Westat, Inc. Submitted to the National Center on Child Abuse and Neglect, U. S. Department of Health and Human Services, Washington, D.C. 20201.

[4]For each non-CPS agency category, a specific number of agencies was targeted in each county. See Sedlak, A. J. & Alldredge, E.-E. (1987). *Study of the National Incidence and Prevalence of Child Abuse and Neglect: Report on Data Collection.* Technical Report, National Center on Child Abuse and Neglect, DHHS, Washington, DC 20201.

Figure 1-1. Schematic Summary of the NIS Methodology



The community professionals at non-CPS agencies served as "sentinels" by remaining on the lookout for child maltreatment cases. They were trained in the study definitions of maltreatment at the outset of the study and submitted a study data form on each maltreated child they encountered during the study period.

The study received a final total of 7,185 data forms (1,624 long CPS data forms, 2,285 short CPS data forms, and 3,276 non-CPS data forms).[5]

Definitions of Abuse and Neglect. Each child who was reported to the study was evaluated as to his or her "countability" as abused or neglected in relation to the study definitions, and only children who fit the standards were considered "countable" and entered into the national estimates. In order for a child to be considered "countable," she or he had to meet age, residence, and custody status standards, and the maltreatment had to be classifiable under the categories defined in the study and meet specific requirements concerning its date of occurrence, the perpetrator's relation to the child, the degree of harm resulting from the maltreatment, and the degree of credible evidence available to support the assumption that the maltreatment had occurred as alleged.

In assessing the countability of cases in relation to the required degree of harm and perpetrator relationship, two different standards were used in the NIS-2. One was the same standard that had been used in the NIS-1--the *Harm Standard.* The *Harm Standard* usually required that a child have already experienced demonstrable harm as a result of maltreatment in order to be countable. Exceptions were made in a few categories where the nature of the maltreatment itself was so egregious that harm could be inferred when direct evidence of it was not available. (Those categories included abandonment, the more extreme types of sexual abuse, and the emotional abuse category of close confinement.) By contrast, the second standard used in the NIS-2 was called the *Endangerment Standard.* It was developed to meet a criticism of the NIS-1 findings which showed that a substantial proportion of children who had been substantiated by CPS were not countable under the Harm Standard criteria. In comparison to the Harm Standard, the Endangerment Standard relaxed the perpetrator requirements to some degree and, most importantly, allowed cases to be countable if the child was thought to have been seriously endangered by maltreatment. This standard also automatically included all the children whose cases were substantiated by CPS. All of the in-depth analyses of the NIS-2 data that have been done to date, including those reported here, have focussed on the Harm Standard because

[5] Because cases reported to the participating CPS agencies were often sampled (see Sedlak & Alldredge, *ibid.*), the CPS data forms we received actually represented a total of 36,719 official reports to the 29 participating agencies during the study data period.

it reflects the more objective definition and should, therefore, be less vulnerable to subjective differences as to what is considered "endangerment" by different sentinel groups.

Unduplication and Weighting. Two basic aspects of how the data were treated will be important to understanding the findings presented here. First, duplicate data forms about the same child were identified and "unduplicated" so that each child was counted by the study only once. Second, the data were weighted to represent the numbers of children who would be maltreated in the course of a year in the nation as a whole. Thus, all the numerical estimates given in subsequent chapters of this report represent numbers of children maltreated in the U.S. in the course of a year (circa 1986).[6]

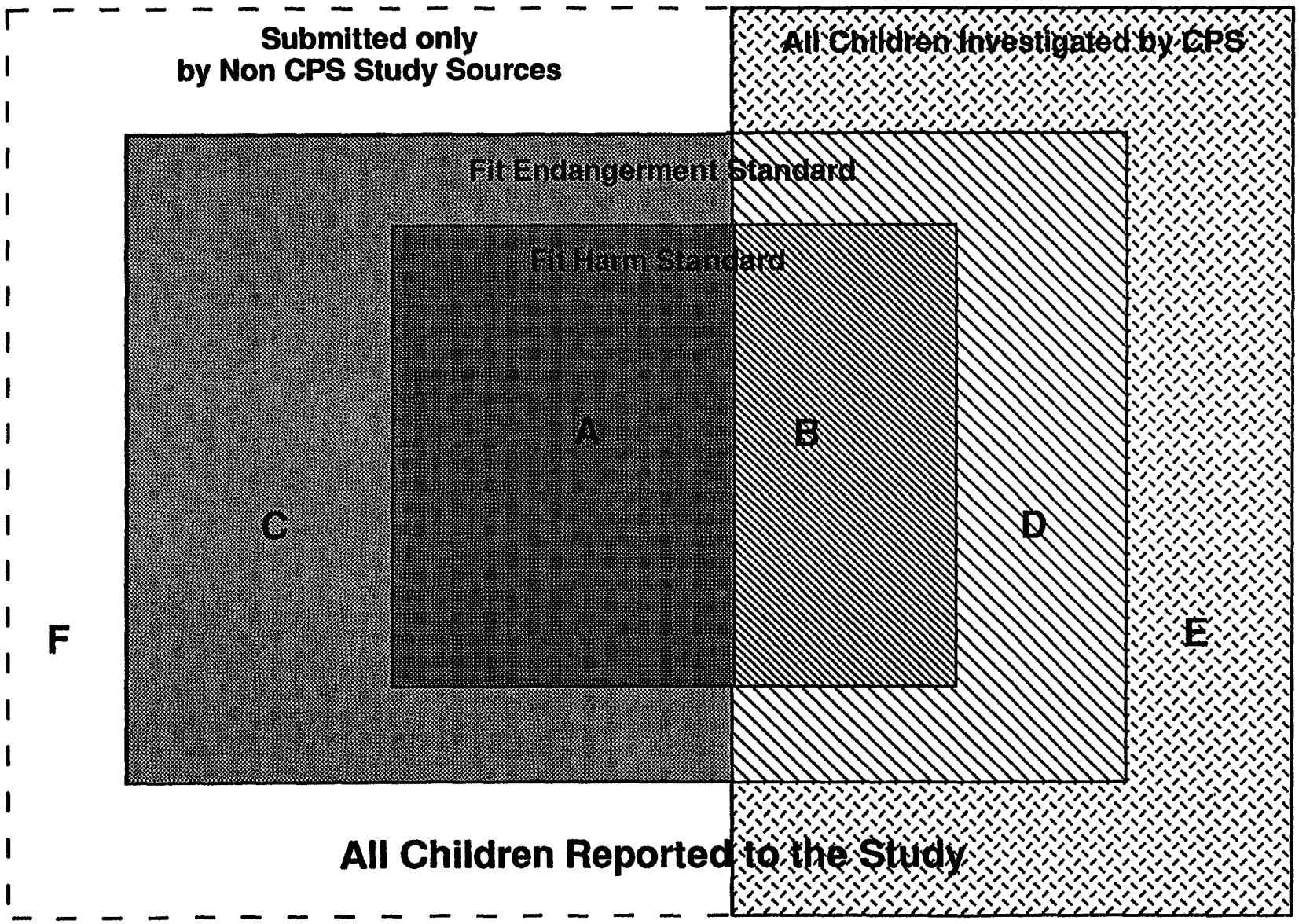
1.3 The NIS-2 Information Base

Figure 1-2 shows the different categories of children included in the NIS-2 and how they relate to each other. The center rectangle (sections A and B taken together) represents all the children who fit the Harm Standard. The next larger rectangle (C and D) represents those who fit the Endangerment Standard. Endangerment Standard children include all the children who fit the Harm Standard (i.e., the larger C+D rectangle contains the "core" A+B rectangle) but the Endangerment Standard also includes other children (i.e., those who were not actually harmed, but who were considered seriously endangered by their maltreatment).

Some of the children who fit each definitional standard were among those who had been investigated by CPS. That is, as the figure shows, section B children were countable by the Harm Standard and investigated by CPS; section D children were countable by the Endangerment Standard and investigated by CPS. The remaining countable children under each standard (i.e., those in sections A and/or C) were *not* investigated by CPS. At the same time, however, it is important to realize that the full set of children investigated by CPS (those in section E) also includes children who were not countable by either of the definitional standards used in the NIS-2. By the same token, not all the children who were reported to the study by community professionals were countable as maltreated according to the study definitions (i.e., section F includes children beyond those in sections C or A).

[6]Further information about the data processing and weighting can be found in: Sedlak, A. J., McFarland, J., & Rust, K. (1987). *Study of the National Incidence and Prevalence of Child Abuse and Neglect: Report on Data Processing and Analysis*. Technical Report to the National Center on Child Abuse and Neglect, DHHS, Washington, DC 20201.

Figure 1-2. Categories of Children in the NIS-2.



Given the categories of children shown in Figure 1-2, the NIS-2 data can be used to address at least five basic kinds of questions about child abuse and neglect in the U.S. With NIS-2 data, it is possible to:

1) Estimate the total numbers of children nationwide who were maltreated (i.e., those in sectors A+B and/or C+D in Figure 1-2) and determine whether there were changes from the time of the NIS-1 to the time of the NIS-2 in the numbers who were maltreated;

2) Determine the percentage of abused or neglected children who come to the official attention of CPS agencies (i.e., the percentage of children in B of all in A+B, or the percentage of those in D of all in C+D);

3) Identify the factors that distinguish countable children who come to the attention of CPS from those not known to CPS (i.e., what distinguishes children in B from those in A; what distinguishes those in D from those in C);

4) Compare countable children with the rest of the general population to identify the risk factors for maltreatment--the factors that make it more likely that a child will be maltreated (i.e., what distinguishes children in A+B from the general population; what distinguishes those in C+D from the general population); and

5) Examine some of the characteristics of the full set of children investigated by CPS, whether or not these children met the NIS definitional standards (i.e., explore the demographics of the full set of children in section E).

The first and second questions were the general subjects of the initial findings report on the NIS-2,[7] and some basic information pertaining to the third and fifth questions was also developed previously.[8] The NIS-2 reanalyses presented in this report provide in-depth responses to questions 3 and 4, above. In addition, the incidence estimates for different groups of children considered to be

[7] Sedlak, A. J. (September 1991). *op. cit.* Sedlak, A. J. (October 1991). *Study of the National Incidence and Prevalence of Child Abuse and Neglect: Final Report: Appendices. (Revised).* Rockville, MD: Westat, Inc. Technical Report to the National Center on Child Abuse and Neglect, DHHS, Washington, DC 20201.

[8] Sedlak, A. J. (August 1991). *Supplementary Analyses of Data on the National Incidence of Child Abuse and Neglect. (Revised).* Rockville, MD: Westat, Inc. Report to the American Enterprise Institute, Washington, D.C.; and Sedlak, A. J. (February, 1991). *National Prevalence of Child Abuse and Neglect.* Paper presented at the conference on Child Welfare Reform Experiments, sponsored by the American Enterprise Institute, Washington, D.C.

unserved and/or underserved can be regarded as fine-tuned, special-purpose approaches to the first question.

1.4 Overview of the NIS-2 Reanalysis

For this High Risk Study, three major categories of reanalysis efforts were pursued, each paralleling one of the question areas described above.

Factors Related to Whether or Not Children Countable by the Harm Standard Are Investigated by CPS. The NIS-2 Reanalysis component defined "unserved or underserved" in terms of whether or not CPS investigated cases where children experienced abuse or neglect countable under the Harm Standard. As mentioned above, the NIS obtained study data forms in each community. By locating all the duplicate records in the database, it was possible to discover whether or not a given child who was reported to the study by a non-CPS participant (e.g., a teacher, a social worker in a hospital, etc.) was also among those who had been reported to and investigated by the local CPS agency. By knowing whether or not a given child was in the CPS data, it was possible to say whether a report on the child had been made to CPS and accepted by CPS for official investigation. Using this information, it was possible to estimate what percentage of children was officially known to CPS (i.e., investigated by CPS) out of all those who counted as abused or neglected in the study.

In order to identify the factors that were related to the likelihood of a child coming to the official attention of CPS, preliminary steps were first necessary in order to limit the analyses to the most relevant information in the database and in order to make it feasible to conduct the analyses with all the appropriate weights. These preliminary steps, and their rationale, are summarized in the initial sections of the next chapter; further details on these procedures are given in the technical appendix to this report. Then, logistic models were developed for different categories of maltreatment, in order to identify the factors that predicted the likelihood of CPS investigating children who had experienced the type of maltreatment in question. Chapter 2 presents the final multi-factor models and provides an overview of the factors that were discovered to be important in predicting the likelihood of CPS investigation in each case and graphic illustrations of the relationships that were found. For readers interested in further details concerning the statistical analyses, the technical appendix describes the specific model-building strategies used in developing the multiple-factor models for the different maltreatment categories, and presents the model parameters and significance statistics for all the single-factor and final multiple-factor models that were developed.

It should be noted that the Harm Standard definitions were selected as the central focus of these analyses because those definitions are tied to objective evidence of harm. In contrast, the Endangerment Standard definitions have much less objective meaning, since they are linked to perceptions of "endangerment" which can vary in indeterminate ways from respondent to respondent.

Factors Related to the Risk of Experiencing Maltreatment Countable by the Harm Standard. Children who experienced maltreatment as defined by the Harm Standard were compared with children in the general population, using a recent Census survey sample of general population children for comparison. Here again, logistic models were developed in order to predict the likelihood of a child being among those in the NIS-2 Harm Standard database and separate logistic models were developed for the different categories of maltreatment. The factors that emerged as important are identified in Chapter 3, which presents the final multi-factor models and discusses the findings in a nontechnical manner, providing graphs and/or tables that describe the nature of the relationships between the different factors and a child's risk of being maltreated. As with all logistic models that were developed, additional technical details are relegated to the appendix, which summarizes the strategies by which the different multiple-factor models were generated, and provides the details concerning the model parameters and significance statistics for all the initial and final models that were calculated.

Estimates of the National Incidence of Abused or Neglected Children Who Are Unserved/Underserved. Using alternative definitions of the "unserved/underserved" groups that were identified either in the State Survey or in the NIS-2 Reanalysis component of this High Risk Study, the NIS-2 database was used to generate national estimates of the total number of children in the group in question who experienced maltreatment countable by the Harm Standard in the course of a year. Chapter 4 presents the various maltreated groups that were identified as unserved/underserved, and provides the numerical estimates of their national incidence.

1.5 Strengths and Limitations of the NIS-2 Data and Reanalysis

The NIS-2 has several key strengths that make it particularly suitable for the purposes of the High Risk Study. First, it provides the only available information concerning abused or neglected children who are *not investigated by CPS*, so it can be used to address the issue of who is unserved/underserved from a unique vantage point.[9] Second, the patterns and relationships it provides should be *nationally representative*, since they were derived from a random sample of counties (and agencies) that was designed to represent the nation. Third, the case weights available in the NIS-2 data also provide the sole basis for generating estimates of total numbers of abused or neglected children in different groups, thereby making it possible to answer questions concerning the incidence of abuse or neglect among children who are members of unserved/underserved groups. Fourth, because of the use of standardized definitions in the NIS-2, findings that are derived from analyses of the database can have clear, unambiguous meanings and implications.

At the same time, the information in the NIS-2 has several limitations, which should be borne in mind throughout the presentation in the remaining chapters. First, although the NIS-2 does go beyond the abuse and neglect that comes to the attention of CPS, it does so within the framework of a specific survey methodology and assumes specific definitions of what constitutes abuse and neglect.

Second, despite the fact the NIS-2 goes beyond what is known to CPS, the study findings still do not reflect the total scope of the abuse and neglect problem in the U.S. Short of posting a credible sentinel who is guaranteed to report everything that occurs in every household, it is not possible to gauge definitively the full extent of abuse and neglect. The children who were identified as abused or neglected in the NIS-2 represent only the portion of abused or neglected children who are encountered by NIS-2 community professionals (in schools, police departments, hospitals, etc.), who are recognized as abused or neglected by these sentinels, *and* submitted to the NIS-2 study. Abused and neglected children who do not encounter NIS-2 community professionals, who are not recognized by those professionals as abused or neglected or who, for other reasons, are not submitted to the NIS-2 study remain undocumented and uncounted by the NIS-2 methodology. This means that estimated totals of abused or neglected children derived from the NIS-2 data must be regarded as *minimum* estimates of the true incidence of abuse and neglect. Moreover, if the unobserved children are systematically different

[9] Although the data that were obtained by Straus and Gelles did go beyond the cases that were investigated by CPS, at least in the category of physical abuse, it is not possible to distinguish in their database between children who were investigated by CPS and those who were not, so that database cannot be used to estimate the numbers and differentiating characteristics of the investigated children compared to the non-investigated children. See Straus, M. A. & Gelles, R. J. (1986). Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. *Journal of Marriage and the Family, 43,* 465-479 and Straus, M. A. & Gelles, R. J. (1990). *Physical Violence in American Families: Risk Factors and Adaptations to Violence in 8,145 Families.* New Brunswick, NJ: Transaction Press.

from those who are indexed in the NIS-2, then the patterns that are to be found in the NIS-2 data may not hold true for *all* abused or neglected children. The following chapters discuss the implications that the unobserved, maltreated child population may have for the present findings at several critical junctures.

Third, taking the approach of defining who is "unserved" or "underserved" on the basis of whether or not they were investigated by CPS may render a distorted picture in that CPS investigation may not accurately index actual receipt of services. That is, some of the children who are not investigated by CPS may nevertheless receive adequate services (e.g., not all children and families who are treated by various service providers are reported to CPS) while, at the same time, not all children investigated by CPS receive services (e.g., due to scarce CPS resources or changes in the family's circumstances that preclude the need for services). In this connection also, there are those who distinguish CPS investigation per se from actual "services."[10]

Fourth, although the NIS-2 children who were not investigated by CPS will be regarded here as unserved or underserved, at least insofar as CPS investigation is concerned, they represent an enigma to the study: it is not possible to determine the reason they were not investigated. That is, we cannot tell whether a child was not investigated by CPS because no one reported the child or because CPS screened out the child's case prior to investigation. For this reason, we do not use the term reporting rate but instead refer only to "CPS investigation" of the children.[11] Nevertheless, this ambiguity concerning the reasons for non-investigation by CPS means that the policy implications of the findings cannot be differentially focused on either mandated reporters or CPS screening practices, but must rather be drawn more broadly, since the non-investigation may stem from either or both of these sources. Moreover, in some instances, non-investigation may simply reflect the fact that a specific category of maltreatment included in the NIS-2 study was not reportable under State law,[12] in which case, whether the suspected maltreatment was not reported in the first place or was screened out by CPS as an inappropriate report may be a moot point. It should also be noted that "CPS screening practices"

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[10]Cf. Salovitz, B. & Keys, D. (June 1988). *Is Child Protective Services Still a Service?* Paper presented at the Sixth National Conference on Research, Demonstration, and Evaluation in Public Human Services. Washington, D.C.

[11]Earlier reports have sometimes referred to "CPS awareness" of the children, or to children who were "officially known to CPS."

[12]That is, there is no Federal requirement that States define child maltreatment uniformly. To be eligible for Basic State grants under the Child Abuse Prevention and Treatment Act, a State must provide for reporting, investigation, and services in cases of alleged child abuse and neglect. The statute and regulations define "child abuse and neglect" as the "physical or mental injury, sexual abuse or exploitation, negligent treatment, or maltreatment of a child" and the State is permitted to use different language as long as the definition used in the State is the same in substance.

cover all that occurs from the time of a report, and none of these influences can be differentiated from each other in the NIS-2 data.[13]

Fifth, the NIS-2 database allowed only a limited number of factors to be examined as risk factors or as predictors of CPS investigation. The NIS-2 obtained only basic demographic information about children and their families and only enough information about the maltreatment situation to permit the case to be evaluatively coded for its fit or nonfit with the study definitions. There are a number of other potentially important predictors (e.g., more direct measures of parental skills deficits or of the level of family stress) that the analyses reported here could not consider. For this reason, the findings reported here should be regarded as giving a basic but incomplete picture of the important factors that are predictive of risk of occurrence or of CPS investigation. It should also be noted that most of the factors that were represented in the NIS-2 data relied on the knowledge and perceptions of the sentinels, and biases may have affected their responses about these factors.

The NIS-2 Reanalysis component capitalized on the strengths of the NIS-2 data in order to address the goals of the High Risk study. The conclusions drawn from the findings offered here must be tempered by reference to the inherent limitations of this information base.

[13]For instance, it was not possible to determine whether the children had been investigated by CPS at some point in the past, prior to the three-month study data period. This meant that if CPS handles repeat or duplicate reports over time differently depending on the type of maltreatment (e.g., physical neglect may be labeled "ongoing" or "chronic" and not receive reinvestigation), this differential treatment will contribute to differences in the patterns of characteristics that are found to be associated with the likelihood of CPS investigation.

2. Abused and Neglected Children Not Investigated By CPS: Numbers and Differentiating Characteristics

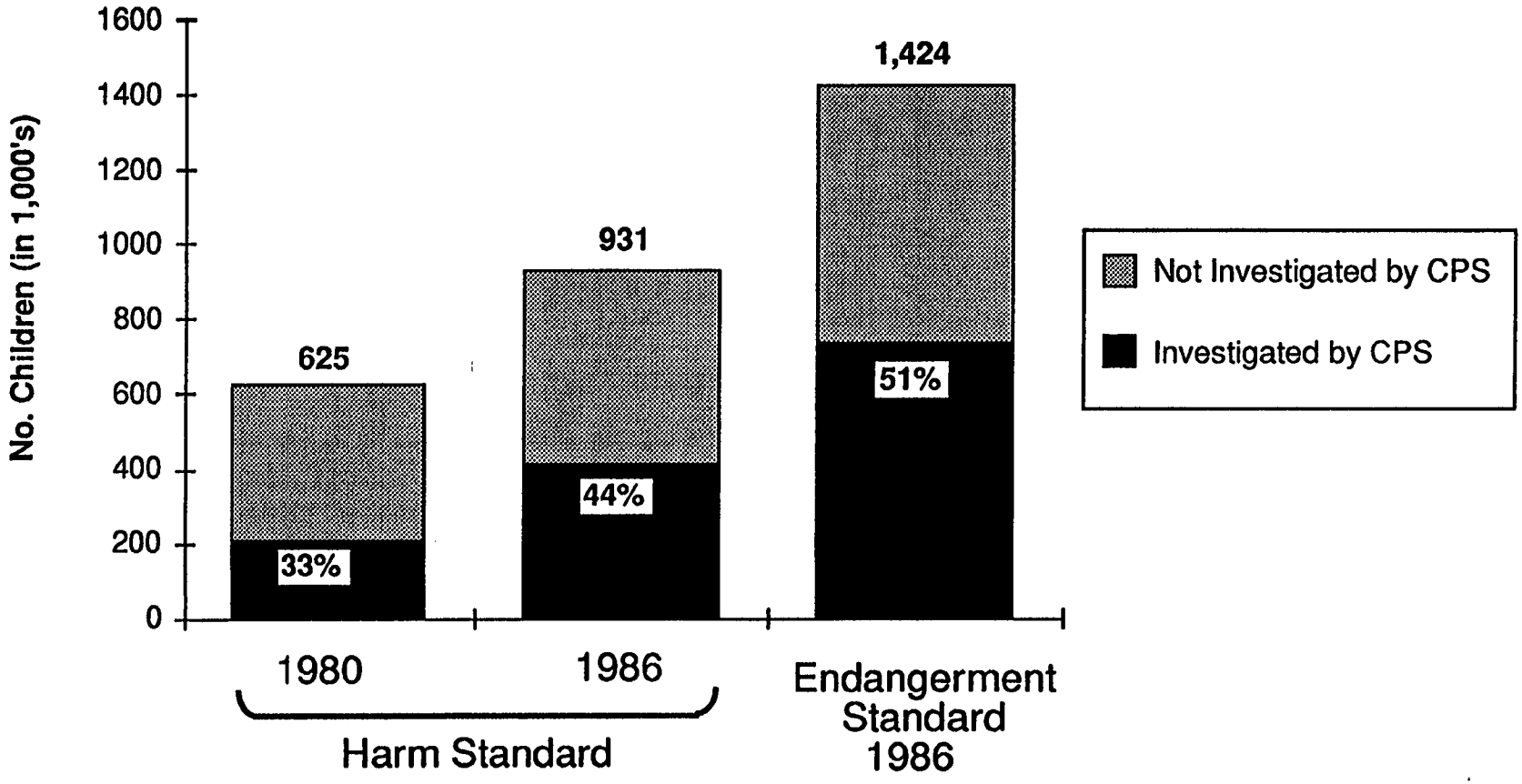
A key approach used in the NIS-2 Reanalysis component to address the issue of which maltreated children are "unserved/underserved" was to consider the characteristics that differentiate maltreated children who are investigated by CPS from those who are not. This chapter reports the results of analyses that focused on this distinction. The first section begins with the general NIS-2 finding concerning the percentages of countable children who were accepted for investigation by CPS. Next, we summarize the general patterns of CPS investigation in relation to the different agency categories of non-CPS study participants and the various types of maltreatment. These discussions set the stage for the overview given in the next section, which describes what portion(s) of the NIS-2 data were included in the reanalysis that are subsequently presented and how those reanalysis were generally approached. The remainder of the chapter presents the detailed findings regarding the factors related to CPS investigation for each of four major categories of maltreatment (physical abuse, sexual abuse, physical neglect and/or emotional maltreatment, and educational neglect). The chapter concludes with a synopsis of these findings.

2.1 CPS Investigation: General Patterns

As described in the previous chapter, the NIS design made it possible to discover which of all the countable children reported to the study were among those investigated by the local CPS agency in each community. Using this information, it was possible to estimate the numbers and percentages of countable children who were officially known to CPS (i.e., investigated by CPS). The overall patterns are given in Figure 2-1. In 1980 (in the NIS-1), 625,000 children were countable under the Harm Standard, of whom only 33 percent were investigated by CPS agencies. The percentage of children countable under the Harm Standard officially known to CPS did increase to 44 percent of the total of 931,000 estimated to have experienced Harm Standard maltreatment in 1986 (in the NIS-2), but that increase was *not* reliable enough across the counties to reflect a statistically significant national pattern.[1] As described earlier, the NIS-2 also provided estimates concerning children who fit the

[1] Sedlak, A.J. *Technical Amendment to the Study Findings--National Incidence and Prevalence of Child Abuse and Neglect: 1988.* Technical Report, National Center on Child Abuse and Neglect, OHDS, DHHS, Washington, D.C. (1990).

Figure 2-1. Overall Totals and CPS Investigation of Countable Children



Endangerment Standard, which was more lenient and permitted children to be countable if they were perceived as endangered by maltreatment.

An estimated 1,424,400 children experienced Endangerment Standard maltreatment in 1986, of whom 51 percent had been investigated by CPS. This particular pattern concerning Endangerment Standard children should be interpreted cautiously because those definitions of maltreatment automatically assigned "perceived endangerment" to children who were substantiated by CPS but who did not fit the Harm Standard. This allowed a sector of the children investigated by CPS an additional avenue into countability under the Endangerment Standard, and may have disproportionately increased the tallies of Endangerment Standard children known to CPS compared to those who were not known to CPS. Because the extent of this type of distortion cannot be determined from the data, and because the Endangerment Standard was inherently subjective, reliant as it was on *perceptions* of endangerment which might vary considerably from one observer to another, the NIS-2 reanalysis efforts that will be described here focused on the children countable under the Harm Standard. The remainder of the subsequent discussion in this report concerns only children who experienced maltreatment countable under the more stringent Harm Standard, whereby documented harm from maltreatment was usually required in order for a child to be countable.[2]

Returning to the 44 percent figure representing the percentage of children countable under the Harm Standard investigated by CPS, we will first consider two ways in which this overall percentage can be misleading--both overstating and understating the proportion of abused and neglected children officially known to CPS. These different distortions can best be clarified by exploring some of the underlying patterns, specifically focusing on the questions of who recognized these children as abused or neglected in the first place and what kinds of abuse or neglect were involved.

Who Encountered and Recognized Maltreatment. Figure 2-2 subdivides the 1986 children countable under the Harm Standard (where overall 44 percent were known to CPS) based on the agency of the community professional who recognized the child as maltreated. Children who had been recognized by persons from more than one of the listed categories were put into the first listed category that applied to them, reading the categories from top to bottom in the figure. Thus, the totals shown in the figure as having been recognized by medical services staff (hospitals and public health departments) actually reflect additional children identified by these medical services staff, over and above

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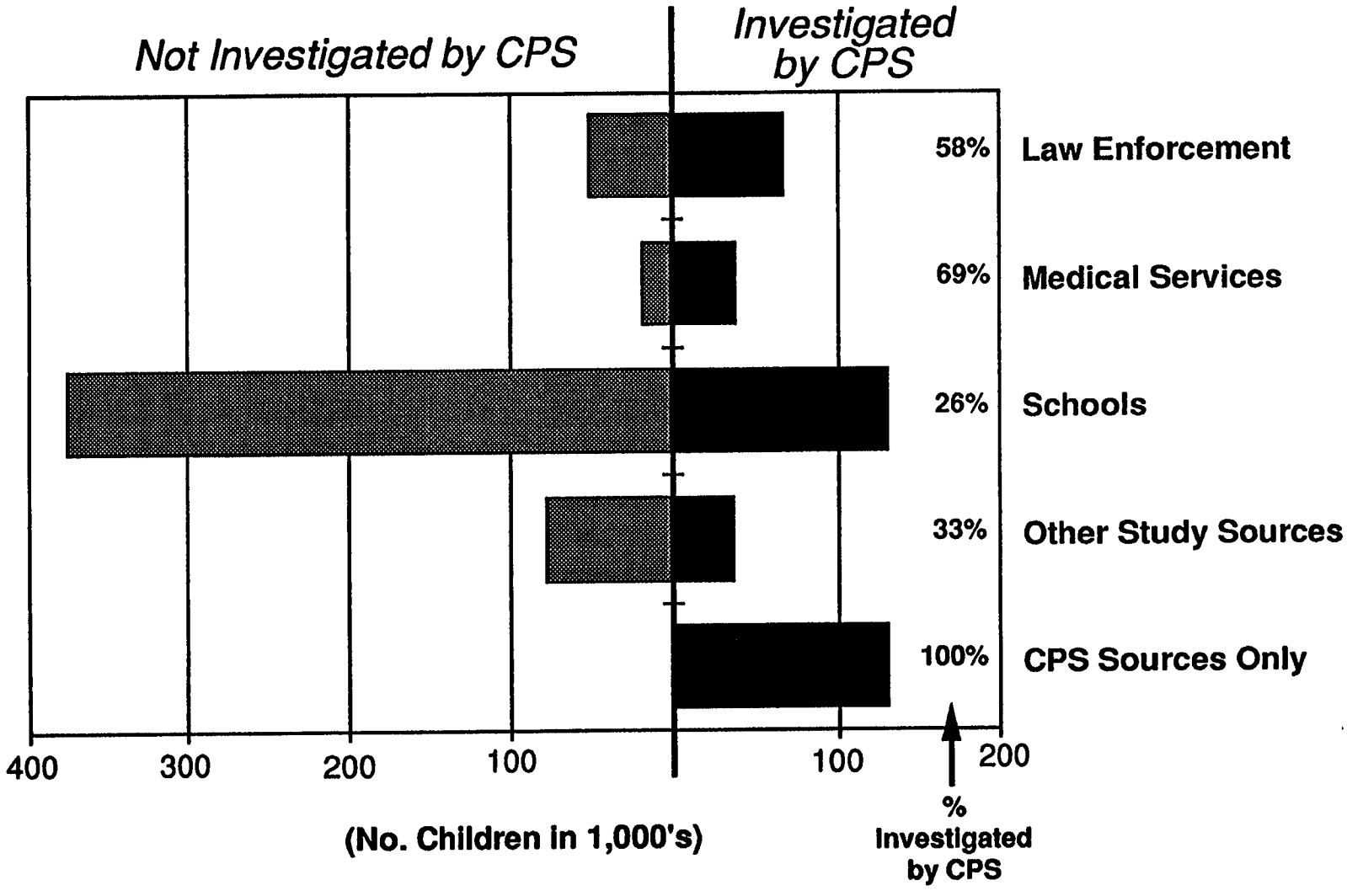
[2]The exception to documented harm was in cases where the nature of the maltreatment itself was so severe as to permit evaluators to infer the presence of harm even if it was not explicitly mentioned in the study report or yet observed in the child (i.e., with the more serious forms of sexual abuse, with blatant abandonment, and with tying or locking the child up in close confinement).

Figure 2-2. CPS Investigation of Harm Standard Children: by Sources



those who had been recognized by law enforcement personnel (in juvenile probation departments, police agencies, or sheriff's departments). Note that this means that, except for law enforcement (the highest priority agency category), the estimates for numbers of children recognized by agencies in the other categories should be regarded as minimum, not total, estimates.[3]

The absolute sizes of the bars in the Figure 2-2 graph reflect the totals of children who were recognized in each of the different categories. Perhaps the most striking feature of this figure is the overwhelming predominance of public schools as a recognition source. Teachers, nurses, and counselors at public schools recognized by far the greatest number of children countable under the Harm Standard (507,400 children nationwide). In their own right, schools recognized more than half the Harm Standard countable children--54 percent. The next most important recognition source was the category of reporters to CPS who were not included in the non-CPS portion of the NIS-2. These were from the general public (neighbors, family, self-reports, and anonymous calls), from professionals not included in the NIS-2 design (such as physicians or therapists in private practice, staff in private schools, etc.), and finally, from the welfare department in the county.[4] These sources recognized 130,000 children countable under the Harm Standard. Law enforcement agencies were the third-ranking source of information about maltreated children, having recognized 120,200 children. Staff in the "other study sources" category (day care, mental health, and social services) were fourth in total children recognized, having recognized 114,600 children. The fewest children countable under the Harm Standard were recognized by staff in medical services. (Only 58,800 of the children countable under the Harm Standard were identified by this source.)

Overall, the likelihood of CPS investigating a case appeared to be quite different for children identified by different sources of recognition. Among the categories of professionals included in the non-CPS section of the NIS-2 study, the percentages of children known to CPS were highest for medical services (69 percent) and law enforcement (58 percent) and lower for schools (26 percent) and other study sources (33 percent). The notably low likelihood of CPS investigation for children recognized by schools, taken together with the remarkable predominance of schools as a recognition source, means that a disproportionately large portion of the non-investigated children countable under the Harm Standard were recognized by mandated reporters in public schools. Specifically, school personnel recognized 72 percent of the estimated 522,700 children countable under the Harm Standard who were *not* investigated by CPS (i.e., those children shown on the left-hand side in Figure 2-2). Other study

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[3]This categorization scheme was devised in the NIS-1 and replicated in the NIS-2 to facilitate comparisons of the studies' findings.

[4]The general public was the largest segment, representing 91 percent of this category.

sources (i.e., day care centers, social services, and mental health agencies) recognized 15 percent of the non-investigated children, law enforcement agencies recognized 10 percent, and medical services staff recognized only 4 percent.

In another vein, Figure 2-2 also illustrates why the overall finding of 44 percent investigated by CPS given above is actually an overstatement of the extent to which children countable under the Harm Standard experienced the official attention of CPS--i.e., those children recognized by the category at the bottom in the figure (reporters to CPS only) were 100 percent known to CPS *by definition*. Readers may refer again to the NIS design schema which was given in Figure 1-1. There it can be seen that children who were recognized by "other sources" (i.e., reporters to CPS not represented among non-CPS sentinels in the NIS-2) could only be found in the CPS sector of NIS-2 cases. Since these recognition sources could not contribute any children in the left side of the graph in Figure 2-2, their inclusion in the percentage calculation artificially shifted the overall percentage of children countable under the Harm Standard investigated by CPS upward. When this last category (i.e., the bottom-most bar in Figure 2-2) is omitted from the calculation, one finds that only 35 percent of the Harm Standard children were investigated by CPS.

Note that a further implication of this is that the NIS estimates of the total number of abused and neglected children in the U.S. and of the subtotal of countable children not investigated by CPS are underestimates. There is yet another part of the "iceberg" of children not investigated by CPS who are not addressed in the NIS, and therefore not represented in any of the figures presented in this report (i.e., children countable under the Harm Standard recognized by professionals in private practice and by the general public but **not** investigated by CPS).

Type of Maltreatment Involved. Figure 2-3 shows how all the children countable under the Harm Standard were distributed across major maltreatment categories. The categories shown in this figure represent mutually exclusive classes. This distinguishes these categories from the categories that have been used elsewhere with the NIS-2 database, so readers are cautioned to keep this feature in mind when comparing the findings here from those given in other reports on the NIS-2 findings. It was considered important to use mutually exclusive categories in the present study in order to be able to distinguish clearly the children who experienced multiple types of maltreatment, since the factors that affect CPS investigation of the multiply-maltreated children[5] may be a complex function that depends on the various kinds of maltreatment they suffered.

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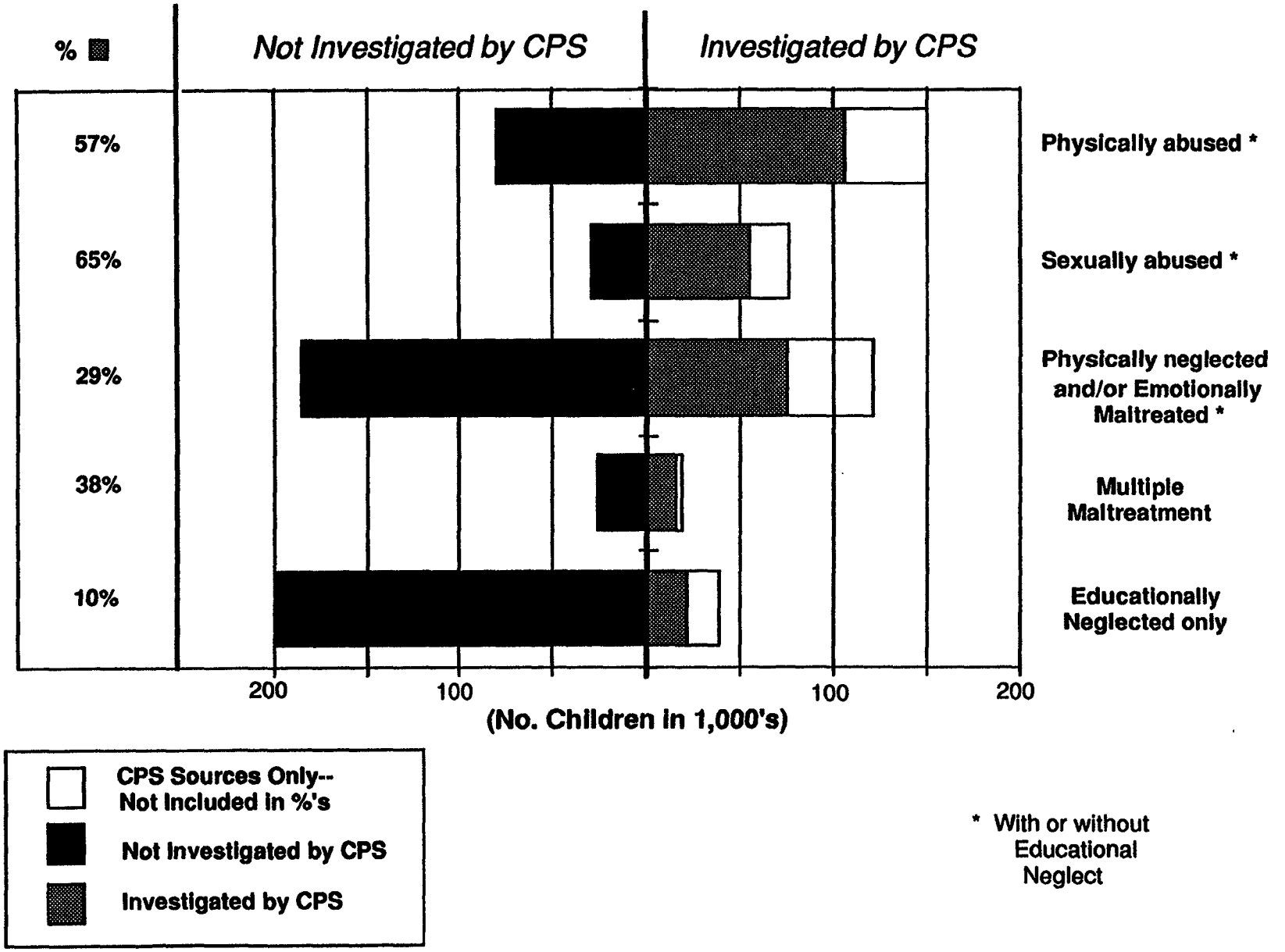
[5]Throughout this report, "multiply-maltreated children" refers to children who experienced multiple forms of maltreatment.

Figure 2-3. CPS Investigation of Harm Standard Children With Different Maltreatment



* With or without Educational Neglect

The first three mutually exclusive categories that were used here (physical abuse, sexual abuse, and physical neglect and/or emotional maltreatment) included children who experienced these forms of maltreatment either *alone* or *in conjunction with educational neglect.* Educational neglect was essentially ignored when it occurred in conjunction with any of these other forms of maltreatment because, in those circumstances, it was assumed that the child would have come under the official scrutiny of CPS primarily because of these other forms of maltreatment, while educational neglect would have been secondary or irrelevant to this result. This assumption was shaped by the findings of the State Survey component of this High Risk study, which indicated that 36 States (i.e., 71 percent of the responding jurisdictions) defined educational neglect as partially or entirely outside of CPS jurisdiction. Moreover, the pattern shown in Figure 2-3 also bears this out in that only 10 percent of the children who had experienced *only* educational neglect (the bottom-most bar in the graph) had been investigated by CPS.[6] The third category represents the combination of physical neglect and emotional maltreatment (whether emotional abuse or emotional neglect). These maltreatment forms were combined because they had comparable overall likelihoods of being investigated by CPS and because our early analyses indicated that the same configuration of factors appeared to account for the likelihood of CPS investigating children who were countable under these different types of maltreatment. As can be seen from the small size of the next bar in Figure 2-3, relatively few children experienced the fourth category, "multiple maltreatment," which involved combinations of the maltreatment types that were experienced by the first three groups. The fact that comparatively few children were in this category departs from the findings of other researchers, and probably stems from the fact that the Harm Standard criteria used here were far more stringent than those used in other studies.[7]

The relative size of the bars in Figure 2-3 shows how the children countable under the Harm Standard were distributed over these five categories. Overall, an estimated 232,000 of these children had been physically abused or both physically abused and educationally neglected; 107,700 had been sexually abused (with or without educational neglect), and 309,200 had been physically neglected and/or emotionally maltreated (with or without educational neglect). Only 45,800 had experienced some combination of these different maltreatment types (e.g., physical and sexual abuse, sexual abuse and physical neglect, etc.). A sizeable number, 241,000 children, were *only* educationally neglected.

This graph also depicts the relative extent to which CPS had been officially aware of (had accepted for investigation) the children in these different categories. Those Harm Standard children who had been recognized by CPS-only reporters in the NIS-2 (i.e., children who by definition could have no

[6]This is not surprising, in view of the fact that States are not required by Federal law specifically to include educational neglect within the categories of child abuse and neglect.

[7]Diana English, private communication.

uninvestigated counterparts) are depicted by the white portions of the bars in Figure 2-3. Ignoring these in the calculations, the percentages of children who were investigated by CPS are shown in the figure. CPS officially knew about the majority of children who had been physically abused (57 percent) and of children who had been sexually abused (65 percent). However, fewer than half of those in the other maltreatment groups received CPS investigation: 38 percent of those who had been multiply maltreated, 29 percent of those who had been physically neglected and/or emotionally maltreated, and only 10 percent of those who had experienced only educational neglect.

The figure emphasizes that educational neglect contributes substantially to the numbers of children who are *not* known to CPS in the NIS-2. Moreover, as noted above, the High Risk survey of CPS specialists in all 50 States and D.C. indicated that 36 excluded educational neglect either entirely or in many cases.[8] Fifteen States did not define educational neglect as within the purview of CPS by either law or policy, and 21 others put limitations on their involvement in educational neglect cases (by explicitly excluding simple truancy altogether, by including it only if it occurred in conjunction with other maltreatment, or by imposing other special requirements, such as only pursuing cases involving younger children, only accepting the case within CPS as a last resort after the school has acted, etc.). Given these factors, it was inappropriate to mix the children who had been only educationally neglected in with all the others when calculating the "overall" percentages (and overall estimated numbers) of children who were investigated by CPS against those who were not investigated. When educational neglect was excluded from the total and the overall percentage recalculated (continuing to exclude the CPS-only reporters as well), 44 percent of Harm Standard children were found to have been investigated by CPS.

2.2 NIS-2 Reanalysis Method to Identify Predictors of CPS Investigation

In order to identify the factors that were related to the likelihood of a child coming to the official attention of CPS, preliminary steps were first necessary so that the results would be free from potential distortions (such as from the CPS-only reporters) and so that it would be feasible to conduct the analyses with all the appropriate weights. This section summarizes these preliminary steps and their rationale; further details on these procedures are given in the technical appendix to this report.

First, as noted in the discussion above, findings concerning the prevalence of CPS investigation of Harm Standard children and regarding the different factors that differentiate CPS-

[8] As noted earlier, there is no Federal requirement that States specifically include educational neglect within CPS purview.

investigated children from those not investigated by CPS can be seriously distorted if one does not recognize that the NIS-2 data include some children who were recognized by sources who could reveal only CPS-investigated children to the study. In order to avoid distortions from this source, the full Harm Standard countable database in the NIS-2, which consists of 2,235 children, was reduced to an analysis file of 1,980 children which excluded those who had been recognized by CPS-only reporters.[9]

Second, the structure of the case weights in the NIS-2 database precluded certain kinds of analyses that were of interest. As a result, for the special purpose of this analysis file, the original NIS-2 weights were given a slightly different structure which did allow the conduct of those analyses.[10] Appendix A provides a more detailed discussion of the reasons why the original weights were not amenable to the planned analyses and the methods used to realign the database weighting structure. Here, it suffices to point out that the resulting database developed for these analyses should provide undistorted information concerning the factors that differentiate children who were investigated by CPS from those who were not.[11]

Using this special-purpose database, logistic models were developed in order to identify the factors that predicted the likelihood of CPS investigating children who had experienced Harm Standard maltreatment. Early analyses were conducted on the entire special-purpose database, but because these revealed strong differences across the different maltreatment types in terms of the overall likelihood of CPS investigation and in terms of the factors that systematically related to this likelihood, the bulk of the analytic efforts focused separately on the different categories of maltreatment. That is, the special-purpose database was further subdivided into five separate files, reflecting the five categories of maltreatment graphed in Figure 2-3. Specifically, the five groups of children were mutually exclusive and were defined as follows:

1) **Physically Abused Children:** those whose only countable Harm Standard maltreatment had been physical abuse, or physical abuse and educational neglect;

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[9]While most of the excluded children were those recognized by CPS-only reporters, this analysis file also excluded a few children who had unknown information concerning sex, age, and the presence of other victims in the household.

[10]It should be noted that the adjustment necessary here related to the weighting *structure*, not the actual numerical values of the weights themselves, and so this adjustment was *entirely unrelated* to the corrections of the NIS-2 weights that were provided in the technical amendment, which is referenced above in footnote 1 of this chapter.

[11]That special-purpose database does, however, include certain distortions due to the fact that the realignment of the weighting structure preserved the accuracy of the specific weights only in certain respects and not others. For this reason, only the information concerning the likelihood of CPS investigation was derived from that special database, and all other findings, most especially any weighted totals, were developed from the full, NIS-2 database with the original weighting structure.

2) **Sexually Abused Children:** those whose only countable Harm Standard maltreatment had been sexual abuse, or sexual abuse and educational neglect;

3) **Physically Neglected and/or Emotionally Maltreated Children:** those whose only countable Harm Standard maltreatment had been physical neglect and/or emotional maltreatment, or physical neglect and/or emotional maltreatment and educational neglect;

4) **Multiply-Maltreated Children:** those who had countable Harm Standard maltreatment that included combinations of physical abuse, sexual abuse, physical neglect, and/or emotional maltreatment, whether or not they had also been educationally neglected; and

5) **Educationally Neglected Children:** those whose only countable Harm Standard maltreatment had been educational neglect.

Four parallel series of logistic analyses were conducted, each examining CPS investigation in one of these groups of children. The group of multiply-maltreated children were not examined separately because there were too few children in this group to support the development of detailed, multi-factor logistic models. Instead, we included the multiple-maltreatment children at the very end, after developing the final logistic models for each of the maltreatment categories, to see whether each applicable model appeared to account for the likelihood of CPS investigation of these children. A brief discussion of these results is given in the summary section at the end of this chapter, and technical details concerning those findings are presented in Appendix A.

In developing the logistic models, we first conducted single-factor logistic analyses for each of the four maltreatment groups, exploring the overall effects on the likelihood of CPS investigation of nearly any characteristic that could be derived from the NIS-2 information. Specifically, we systematically examined the following characteristics in relation to each maltreatment category: child's sex, child's age, child's race/ethnicity, family income, family structure, number of other children in the household, presence of other suspected victims in the household, county metropolitan status, source that recognized the child as maltreated, nature and severity of harm from the maltreatment, relation between the child and the perpetrator, perpetrator's location relative to the child (in home or not), perpetrator's sex, and number of perpetrators involved in the maltreatment. Again, note that these were the only factors that could be derived from the NIS-2 information and, although other factors may be important predictors of CPS investigation, they could not be included in the logistic models because they were not represented in the NIS-2 database.

Regardless of whether or not there was any overall relation between CPS investigation and the child's age, race/ethnicity, or sex, we explored the possibility that the effects of age on the likelihood of CPS investigation might depend on the child's race or ethnic group (or vice versa), as well as the possibility that the impact of the child's age might depend on the child's gender (or vice versa). These

reflect possible *interactions* among these different factors. For those characteristics that evidenced an overall relationship to the likelihood of CPS investigation, we also determined whether those particular factors were involved in other possible interactions. In searching for the predictors of CPS investigation in this manner, we applied a fairly lenient standard, and considered a characteristic or factor to have a noteworthy relationship to CPS investigation if the t-value associated with its parameter was 1.00 or greater. Once we had identified the factors and possible interactions that, in their own right, appeared to be related to CPS investigation, we proceeded to build more complex multi-factor logistic models. That is, we gradually increased the complexity of the logistic model by adding each of the apparently important factors (and interactions) together in the same model until all were eventually included together. This strategy determined whether each of the apparently important factors still had a noteworthy effect on CPS investigation when the effects of the other apparently important factors were taken into account. Factors were eliminated from the larger model whenever their importance waned and dropped below the t=1.00 standard in the context of another factor (or interaction)--i.e., when taking that other factor (or interaction) into account. In this manner, we successively built increasingly more complex logistic models to account for CPS investigation of children in each maltreatment group, and the resulting final model includes all those factors and interactions that continued to meet the standard when taking the effect of each of the other included factors into account. For statistically sophisticated readers, the additional technical information about these models is given in Appendix A, which gives the details of the model-building activities and presents the model parameters and significance statistics for all of the single-factor and final multiple-factor models that were developed.

The subsequent sections in this chapter describe the factors that were discovered to be important in predicting the likelihood of CPS investigation for each type of maltreatment, providing graphic illustrations of any interactive relationships that were identified in the final model.

2.3 Predicting CPS Investigation of Physically Abused Children

As given above, 57 percent of physically abused children recognized by study sources were investigated by CPS during the NIS-2 data period. Of the 15 factors that were examined, five were found to be unrelated to the likelihood of CPS investigation of physically abused children: family income, county metropolitan status, nature of harm from the maltreatment, perpetrator's sex, and number of perpetrators involved in the maltreatment. Two of the remaining ten factors (the relation between the child and the perpetrator, and whether the perpetrator was located in the child's home or not) were discovered to have marginal relationships with CPS investigation when they were considered in themselves, but these relationships disappeared when the effects of the other important factors were

taken into account. The final model, which is given in Table 2-1, included eight characteristics or factors and three interactions among them, and accounted for 15.6 percent of the variance in the distribution of CPS investigations for the physically abused children who were countable under the Harm Standard. The eight factors that proved to be noteworthy predictors of the likelihood that CPS will investigate a physically abused child are discussed below.

Table 2-1. Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Physically Abused Children.[12]

Parameter	Parameter Estimate	t
Intercept	0.54694	0.45
Females	1.02494	0.60
Age in Years	-0.09691	-1.58
Other Victims	1.49131	2.13
Day care, Mental Health, Social Services	-0.65325	-1.71
Father Only	1.39672	1.44
Moderate Injury	0.27275	0.29
Age X Females	0.09006	1.00
Moderate Injury X Females	-2.23485	-1.65
Unknown Number of Children	1.69043	1.53
Blacks	1.81430	1.19
Age X Blacks	-0.13587	-1.01
Model R^2 Value	0.156	
Model F-value	4.658 ** (p<.01)	
Model df	11,11	

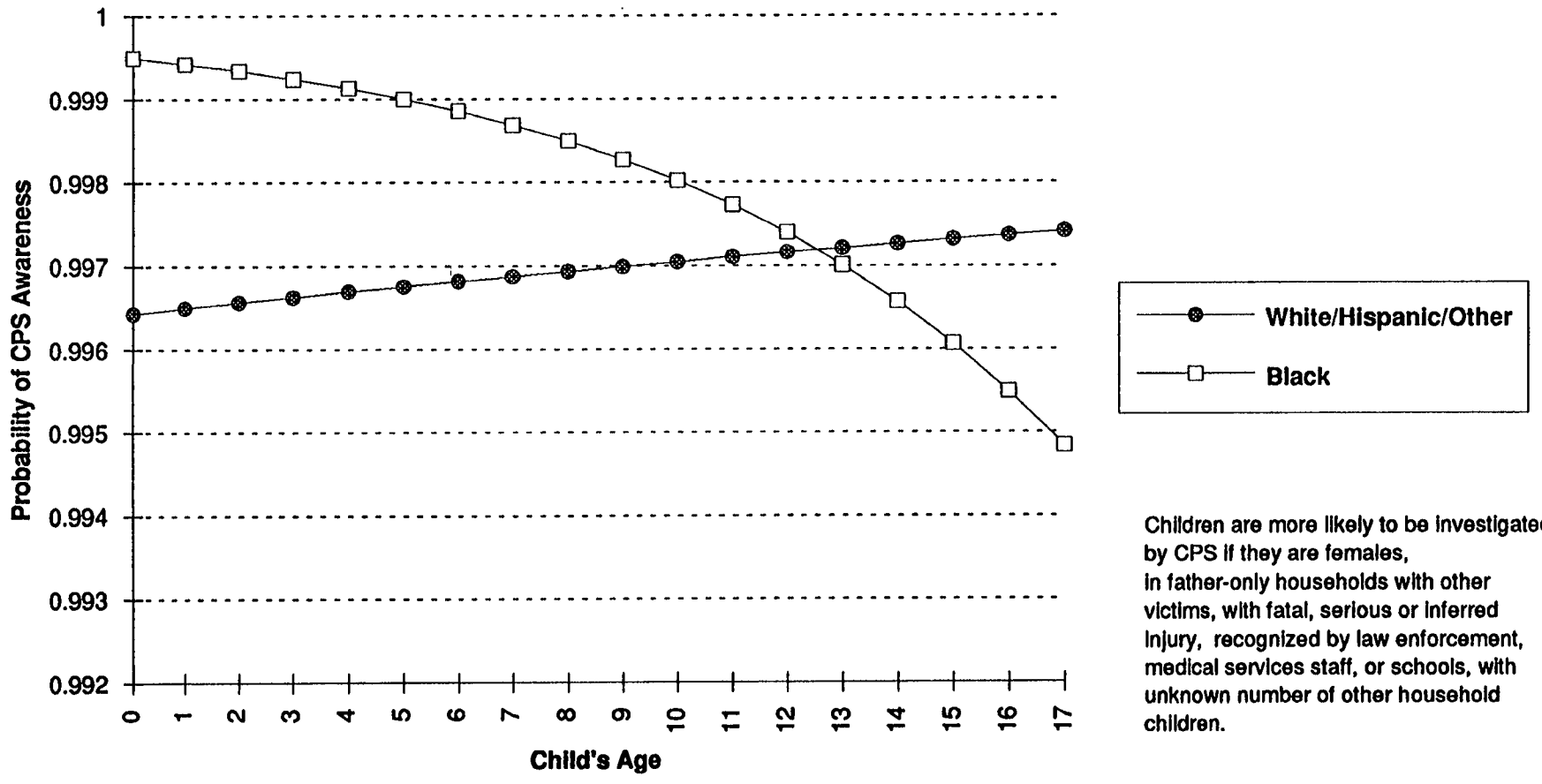
Child's Age, Sex, and Race/Ethnicity. Children's ages were systematically related to whether or not CPS investigated their physical abuse, but the nature of this relationship depended on two other factors: the child's race/ethnicity and the child's sex.

The way in which race/ethnicity interacts with age in predicting CPS investigation is depicted graphically in Figures 2-4 and 2-5.[13] In presenting the relationships reflected in multi-factor

[12]This model excludes children with unknown race/ethnicity and multiple maltreatment. It was based on a sample N of 566 cases, of which CPS had investigated 176 and had not investigated 390.

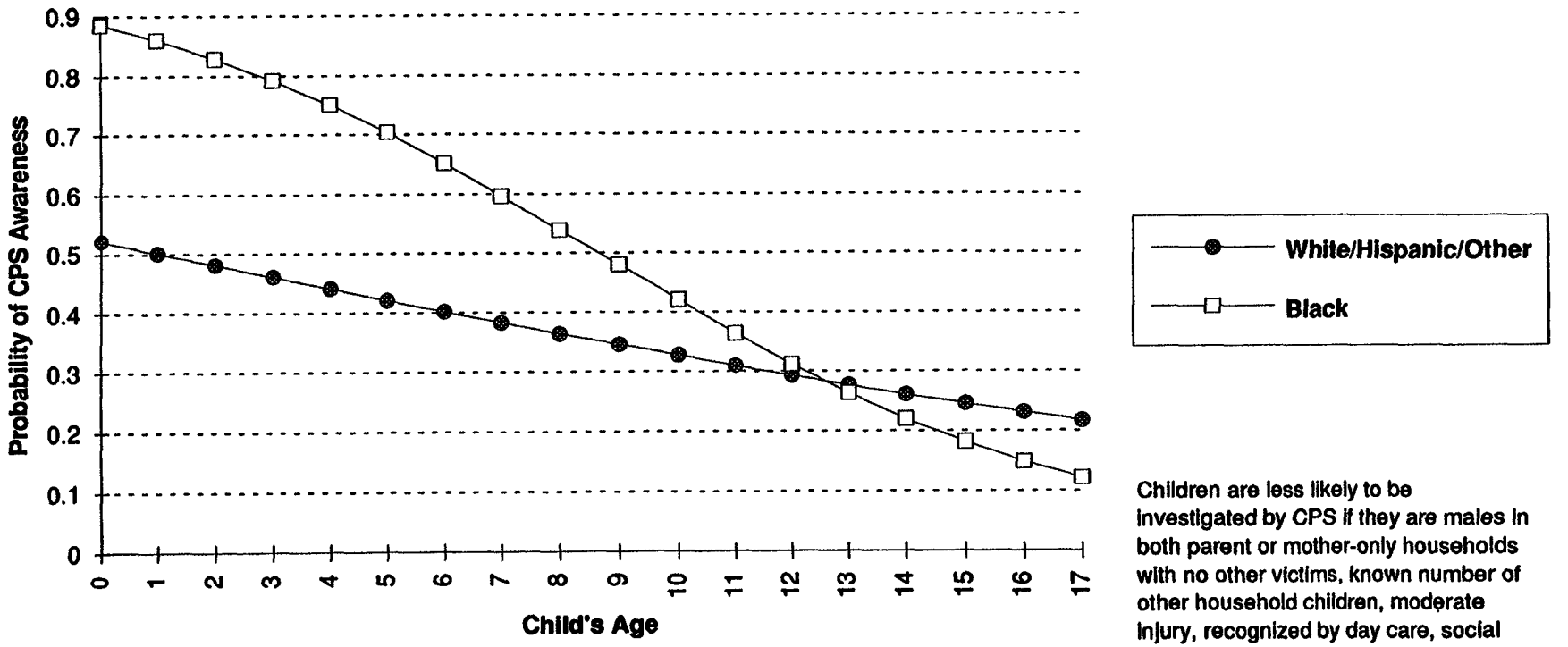
[13]Here and throughout the subsequent sections of the chapter, all predicted likelihoods were calculated from the model that included all unknown race/ethnicity children. In the example here, the model used to calculate the predicted probabilities appears in section B of Table A-7 in Appendix A. The procedures used to generate predicted probabilities from this and other logistic models are detailed in Appendix C.

Figure 2-4. Race and Age Differences in CPS Investigation of Physical Abuse (for Children More Likely to Be Investigated by CPS).



Children are more likely to be investigated by CPS if they are females, in father-only households with other victims, with fatal, serious or inferred injury, recognized by law enforcement, medical services staff, or schools, with unknown number of other household children.

Figure 2-5. Race and Age Differences in CPS Investigation of Physical Abuse (for Children Less Likely to Be Investigated by CPS).



Children are less likely to be investigated by CPS if they are males in both parent or mother-only households with no other victims, known number of other household children, moderate injury, recognized by day care, social services or mental health.

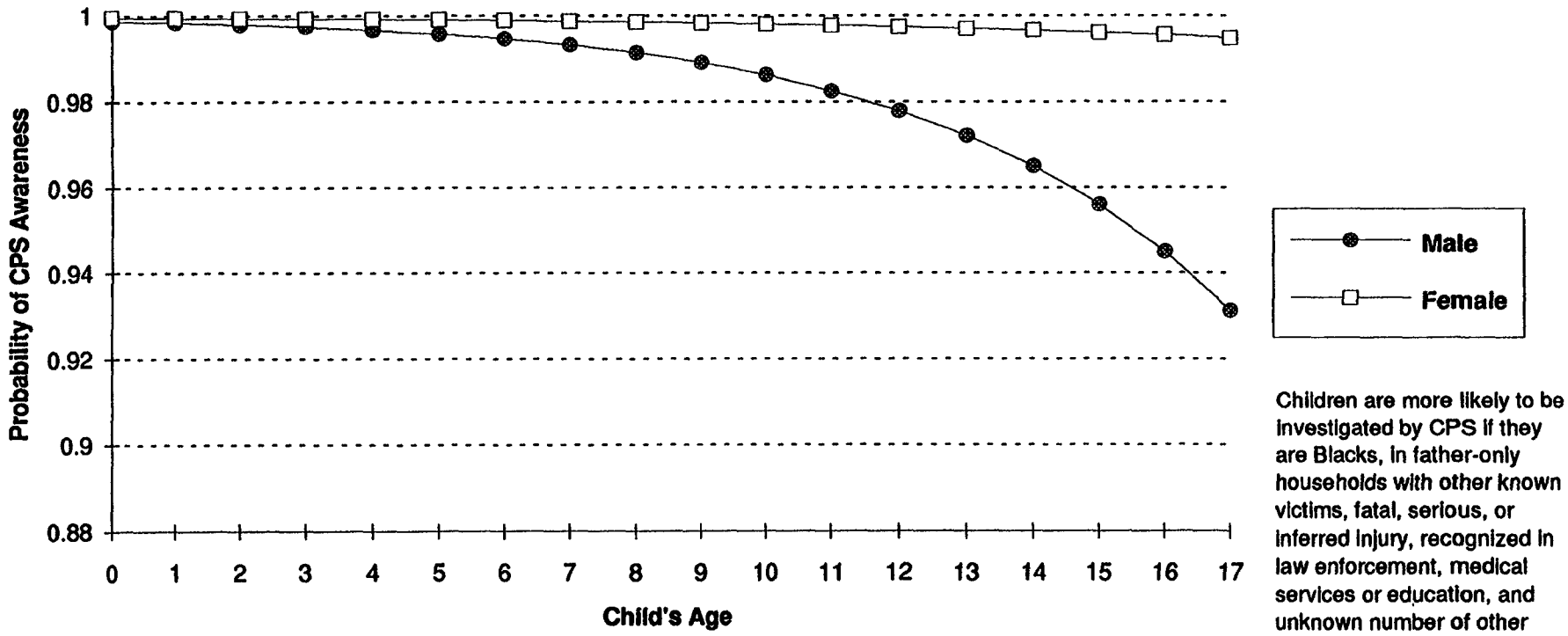
logistic models, the effects of any one factor or relationship can only be specified by making explicit assumptions about the child in terms of all the other important, predictive factors included in the miodel. The two graphs shown here represent race/ethnicity and age interaction in the context of two different sets of assumptions about the other factors in the model. That is, Figure 2-4 presents the probabilities of CPS investigation for children who are relatively *more likely* to be known to CPS on the basis of their other predictive characteristics (i.e., children are more likely to be known to CPS if they are females, in father-only households, with other suspected victims in the household but where the actual number of other children in the household is unknown, when they have experienced fatal, serious, or inferred injury,[14] and when they are recognized as maltreated by law enforcement, medical services, or education services rather than by day care centers, social services, or mental health services). In contrast, the probabilities that are graphed in Figure 2-5 were calculated on the basis of assuming that the children were relatively less *likely to* be investigated by CPS according to their other predictive characteristics. That is, they were males, in two-parent or mother-only households where there were no other victims in the household, with a known number of other household children, experienced moderate injury, and the recognition source was day care, social services, or mental health personnel. Despite the fact that these two graphs are based on completely opposite series of assumptions, the patterns they depict are remarkably similar. There is a clear tendency for the likelihood of CPS investigation to be lower for Blacks as their age increases, whereas White, Hispanic, and other-race[15] children experience no age-related decrease in their likelihood of CPS investigation when the overall likelihood of CPS investigation is generally high (i.e., Figure 2-4), or a much less pronounced age-related decrease in CPS investigation probability when other factors make that probability relatively low overall (i.e., Figure 2-5).

The child's sex also played a role in determining the likelihood of CPS investigation in conjunction with the child's age, as shown in Figures 2-6 and 2-7. Again, the two figures given represent different extremes in the overall likelihood of CPS investigation based on the other characteristics that were found to be predictive of this. Figure 2-6 indicates the sex and age interaction effect for children who are otherwise highly likely to be investigated by CPS. (See note on the graph.) Children highly likely to be investigated are Blacks in father-only households, with other suspected victims but where the number of other household children is not known, where the child was *not* moderately injured, but instead experienced fatal, serious, or inferred injury, and where the child was recognized as maltreated by law enforcement, medical services, or mental health staff. A graph of this relationship based on the opposite set of assumptions (i.e., those associated with relatively low likelihood of CPS investigation) is given in Figure 2-7. The two graphs both indicate that males have a

[14]That is, any level of severity other than moderate.

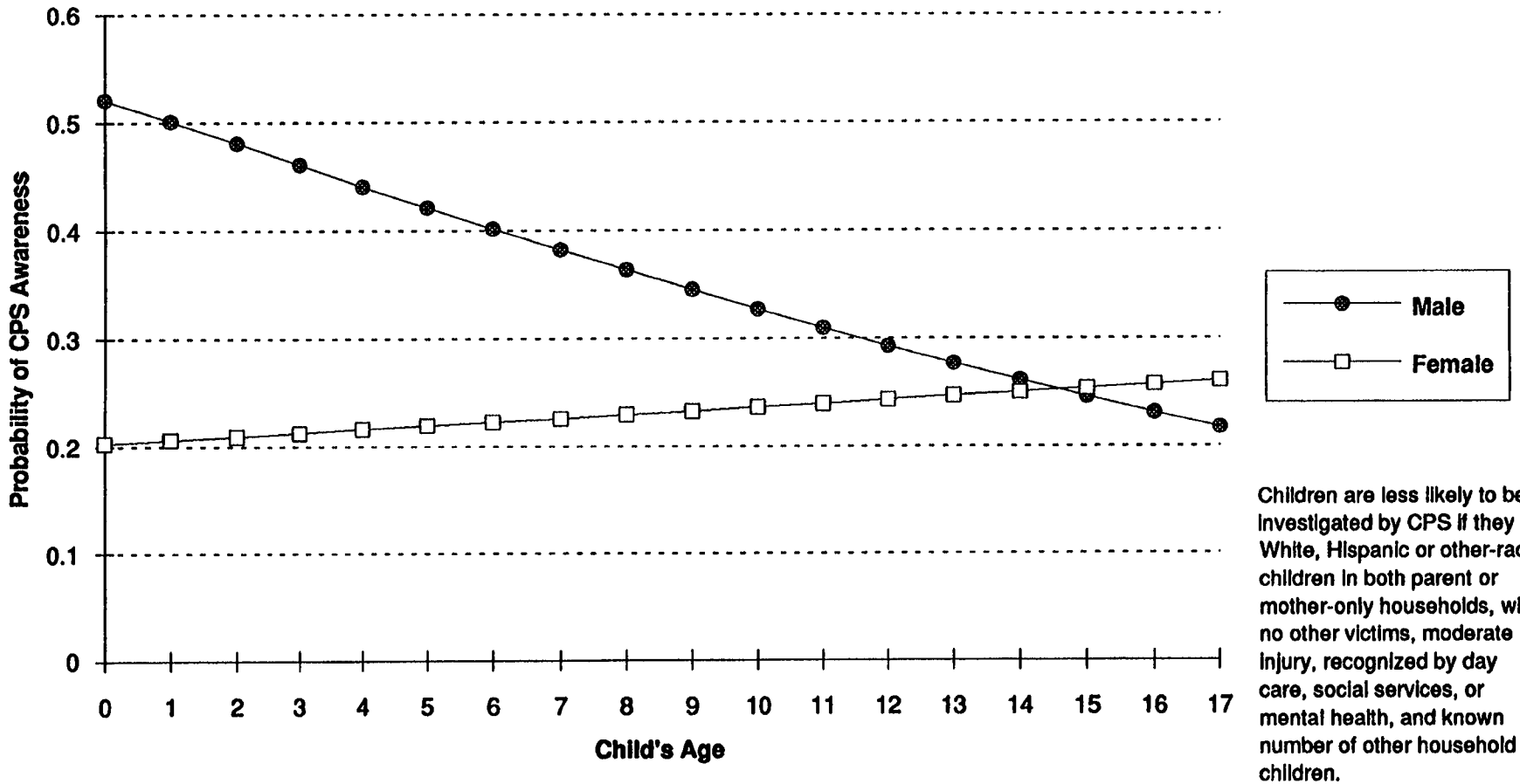
[15]That is, children who were Oriental or Asian/Pacific Islander, American Indian or Alaskan, or of mixed racial heritage.

Figure 2-6. Sex and Age Differences in CPS Investigation of Physical Abuse (for Children More Likely to Be Investigated by CPS).



Children are more likely to be investigated by CPS if they are Blacks, in father-only households with other known victims, fatal, serious, or inferred injury, recognized in law enforcement, medical services or education, and unknown number of other household children.

Figure 2-7. Sex and Age Differences in CPS Investigation of Physical Abuse (for Children Less Likely to Be Investigated by CPS).



Children are less likely to be investigated by CPS if they are White, Hispanic or other-race children in both parent or mother-only households, with no other victims, moderate injury, recognized by day care, social services, or mental health, and known number of other household children.

decreasing likelihood of coming to official CPS attention with increasing age, whereas the probability for females is not related to their ages. The one major difference between the patterns shown in the two plots is the overall level of the likelihood for males to be known to CPS compared to the overall level for females. The reason underlying this discrepancy will become apparent in the ensuing paragraph, where the sex and severity interaction is described.

Child's Sex. The children's sex also emerged as predictive of the likelihood that CPS would investigate their physical abuse, but the effect of gender depended on the child's age, as well as on the severity of the injury or harm the child had experienced. The age and sex interaction is described immediately above, so the focus in this section is on the interactive effect relating to the child's sex and severity of harm. Figures 2-8 and 2-9 depict the way that the probability of CPS investigation depends jointly on these two factors.

Children who are relatively more likely to be investigated by CPS are graphed in Figure 2-8 with one exception, which was an alteration in the assumed age that was adopted for the sake of greater clarity in this instance.[16] The sex and severity effects for children less likely to be investigated by CPS are shown in Figure 2-9. Again note the striking similarity of the pattern in both figures, despite the large discrepancies in their probability scales. Child's sex has an effect on the likelihood of CPS investigation when fatal, serious, or inferred injuries are involved, but not in the case of moderate injuries. In fact, females are markedly more likely than males to receive CPS investigation only in circumstances where fatal, serious, or inferred injuries are involved. This explains the discrepancy, noticed earlier, between Figures 2-6 and 2-7. Figure 2-6, where females are consistently more likely to receive official CPS attention, was based on the assumption that the children all had suffered fatal, serious, or inferred injuries. Alternatively, Figure 2-7, where males are more likely to receive CPS attention except at the very oldest ages, was based on the assumption that the children all had received moderate injuries. Thus, the differences in the patterns in the two figures that depict the sex and age interaction can be understood as stemming from the other interaction that also obtains between sex and severity of harm.

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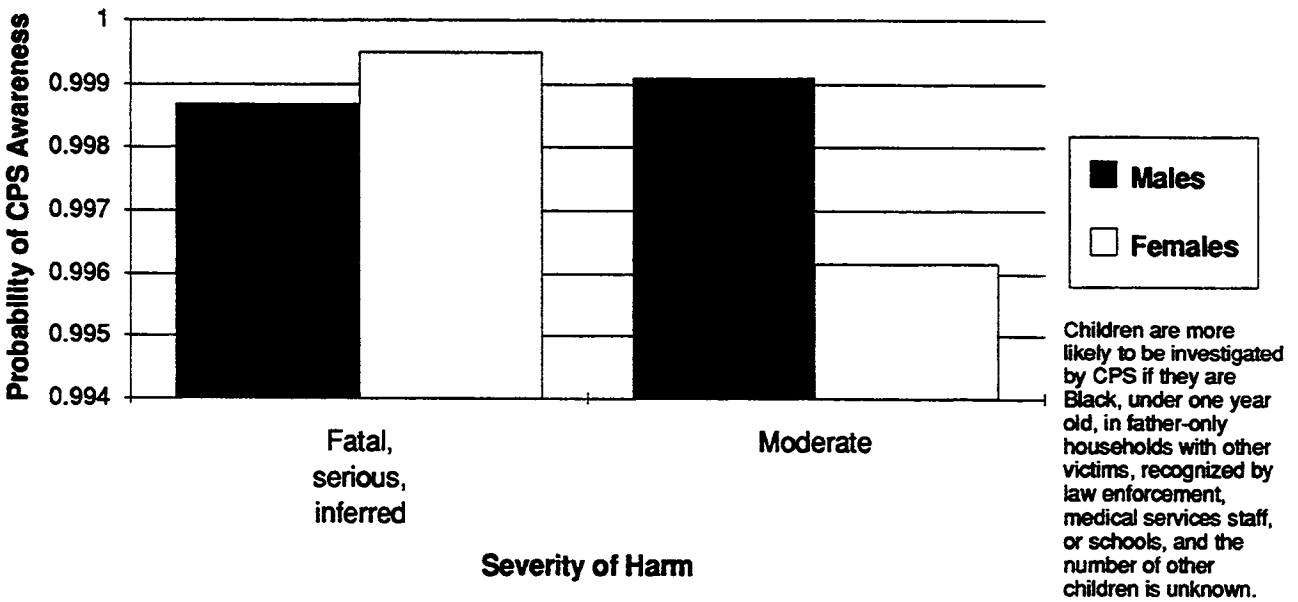
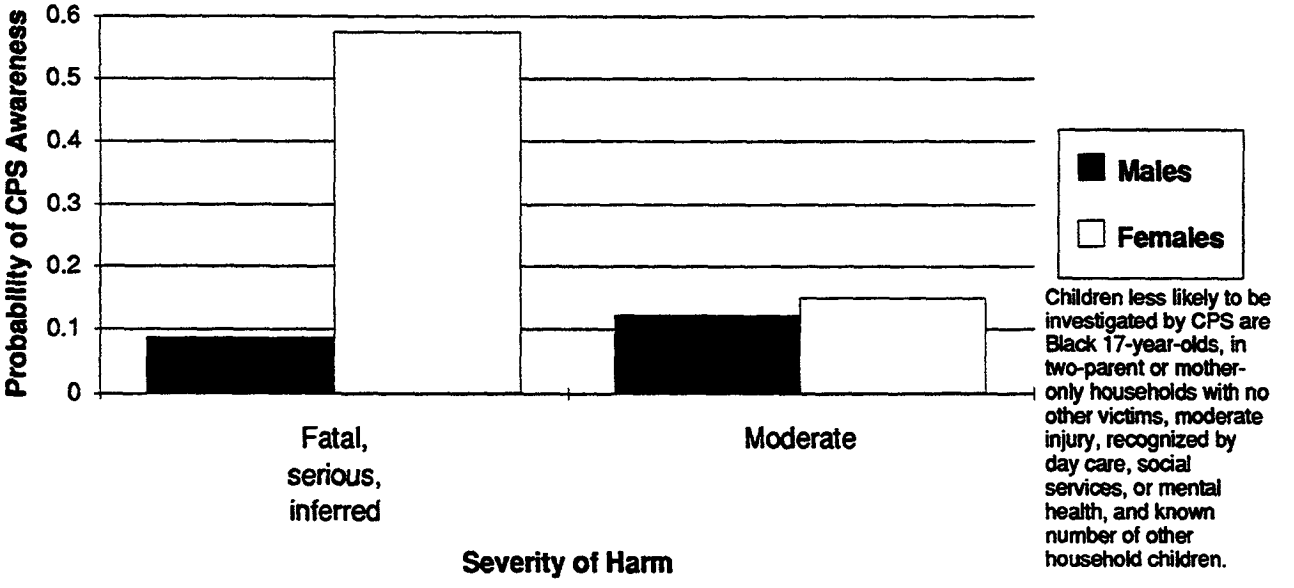
[16]That is, as depicted in Figure 2-6, the highest likelihood of CPS investigation is associated with the youngest children, under one year of age, but Figure 2-8 reflects the pattern for children at the other extreme of the age range, the 17-year-olds. This was chosen as the assumed age of the child in order to avoid, insofar as possible, complications in the patterns shown due to the interaction of sex with age (i.e., the pattern shown in Figures 2-6 and 2-7). At age 17, the relative ordering of the sexes is the same--females are more likely to be investigated by CPS than are males. That ordinal relationship is lost when different age assumptions are made.

Figure 2-8. Sex and Severity of Harm Differences in CPS Investigation of Physical Abuse (for Children More Likely to Be Investigated by CPS).



Children are more likely to be investigated by CPS if they are Black, under one year old, in father-only households with other victims, recognized by law enforcement, medical services staff, or schools, and the number of other children is unknown.

Figure 2-9. Sex and Severity of Harm Differences in CPS Investigation of Physical Abuse (for Children Less Likely to Be Investigated by CPS).



Children less likely to be investigated by CPS are Black 17-year-olds, in two-parent or mother-only households with no other victims, moderate injury, recognized by day care, social services, or mental health, and known number of other household children.

Family Structure. Differences in CPS investigation likelihood also emerged in association with the parental structure of the family. CPS investigations of countable physical abuse were less likely in families where both parents of the child were present (or where there were two parent figures in the household, including step-parents), and in families which were headed by single mothers. In contrast, when families were headed by single fathers, CPS investigations of physical abuse were more likely. The differences in likelihood for the children who are otherwise highly likely and for those who are otherwise relatively less likely to receive CPS investigation are given numerically in Table 2-2:

Table 2-2. Family Structure Differences in CPS Investigation of Physical Abuse.[17]

Children More Likely to be Known to CPS	
Both parents or Mother-only	0.9985
Father-only	0.9995
Children Less Likely to be Known to CPS	
Both parents or Mother-only	0.12
Father-only	0.30

Although the difference due to family structure is relatively slight when all other factors portend a high likelihood of official CPS attention, the pattern is nevertheless the same in all circumstances--children who live with single fathers are more likely to be investigated by CPS than those who live with single mothers or both parents. In fact, children in father-only households are more than twice as likely to be investigated by CPS when other circumstances of the case lead to a relatively low overall probability of CPS investigation.

Number of Other Children in the Household. Although the actual number of other children in the household did not appear to make a difference for the likelihood of CPS investigation, what did matter was whether or not the number of other household children was known. Table 2-3 delineates this relationship.

[17]Those more likely to be known to CPS were assumed to be females under one year old who were Black, in households with other known victims but where number of other household children was not known, with fatal, serious, or inferred injuries, and where recognized by law enforcement, medical services, or schools. Those less likely to be known to CPS were here considered males, age 17 years, where no other victims were suspected, the number of other household children was known, the injury was moderate, and the child was recognized as maltreated by day care, social services, or mental health staff.

Table 2-3. Differences in CPS Investigation of Physical Abuse Related to Number of Other Children in the Household.[18]

Children More Likely to be Known to CPS	
Number of Children Known	0.997
Unknown Number of Children	0.999
Children Less Likely to be Known to CPS	
Number of Children Known	0.12
Unknown Number of Children	0.42

Again, differences in the probabilities of CPS investigation remain relatively slight (but consistent) when all other factors portend a high likelihood of official CPS attention, and the same pattern is evident in its strongest form at the other extreme, where children with relatively low likelihood of CPS investigation are considered. When the number of other household children was not known to the source that recognized the child as maltreated, the child was more likely to be investigated by CPS. Although it cannot be said whether this is due to differential behavior on the part of reporters or CPS, the pattern may indicate the need to understand a physically abused child's circumstances more fully before concluding that official intervention is not needed.

[18]Those more likely to be known to CPS were females under one year old who were Black, in father-only households with other known victims, with fatal, serious, or inferred injuries, and were recognized by law enforcement, medical services, or schools. Those less likely to be known to CPS were males, age 17 years, living with both parents or with mother-only and with no other victims suspected, injury was moderate, and the child was recognized as maltreated by day care, social services, or mental health staff.

Presence of Other Suspected Victims in the Household. When other children in the household were also suspected to be victims, physically abused children were significantly more likely to be investigated by CPS than when there were no such suspicions. Specific examples of this relationship for the two likelihood extremes are given in Table 2-4.

Table 2-4. Differences in CPS Investigation of Physical Abuse Related to Presence of Other Suspected Victims in the Household.[19]

Children More Likely to be Known to CPS	
Other Suspected Victims	0.999
No Other Suspected Victims	0.998
Children Less Likely to be Known to CPS	
Other Suspected Victims	0.37
No Other Suspected Victims	0.12

The pattern here should be read judiciously, because the presence of other suspected victims might be either a determinant or a by-product of CPS investigation. Nevertheless, it was especially strongly related to CPS investigation, having emerged as a significant factor both when considered in its own right and when the influence of other noteworthy predictors was taken into account.

Source That Recognized the Child as Maltreated. Not surprisingly, a difference in the likelihood that CPS would investigate a child emerged in relation to the agency affiliation of the person who had recognized the child as physically abused. When physically abused children were recognized as such by mandated reporters in law enforcement, hospitals, public health departments, or schools, they were more likely to receive CPS investigation than when they were recognized by mandated reporters in day care centers, mental health clinics, or voluntary social service agencies. The data do not allow us to discern whether this pattern reflected differences in reporting rates by these different sources or whether it instead reflected differences in CPS's response to reports submitted from different agency categories. One of the interesting aspects of this finding, however, is that the likelihood of CPS investigating physically abused children who were recognized by schools more closely resembled the likelihood of CPS investigating those recognized by law enforcement and medical

[19]Those more likely to be known to CPS were females under one year old who were Black, in father-only households with the number of other household children unknown, with fatal, serious, or inferred injuries, and where recognized by law enforcement, medical services, or schools. Those less likely to be known to CPS were here males, age 17 years, living with both parents or with mother-only and with known number of other household children, injury was moderate, and the child was recognized as maltreated by day care, social services, or mental health agency staff.

services, than it did the likelihood of CPS investigating children recognized in mental health clinics, voluntary social service agencies, or day care centers.

2.4 Predicting CPS Investigation of Sexually Abused Children

Across all the maltreatment categories, children who were sexually abused were most likely to be investigated by CPS; 65 percent of those who were recognized by NIS-2 study sources and who fit the Harm Standard were investigated by CPS during the study data period. Seven of the 15 factors that were explored as predictors emerged as having no evident relationship with the likelihood of CPS investigation of sexually abused children: child's sex, family structure, number of other children in the household, county metropolitan status, source that recognized the child as maltreated, nature of harm from the maltreatment, and number of perpetrators involved in the maltreatment. Three factors initially appeared to be related to CPS investigation of sexually abused children when they were considered alone, but those associations were not maintained when the influences of other important predictors were taken into account; these were family income, child's relation to the perpetrator, and perpetrator's sex. The remaining five factors (including an interaction between two of these factors) constituted the final multi-factor logistic model, which is shown in Table 2-5. As the R^2 value in this table indicates, this model accounted for 33.8 percent of the variance in the occurrence of CPS investigations among sexually abused children.

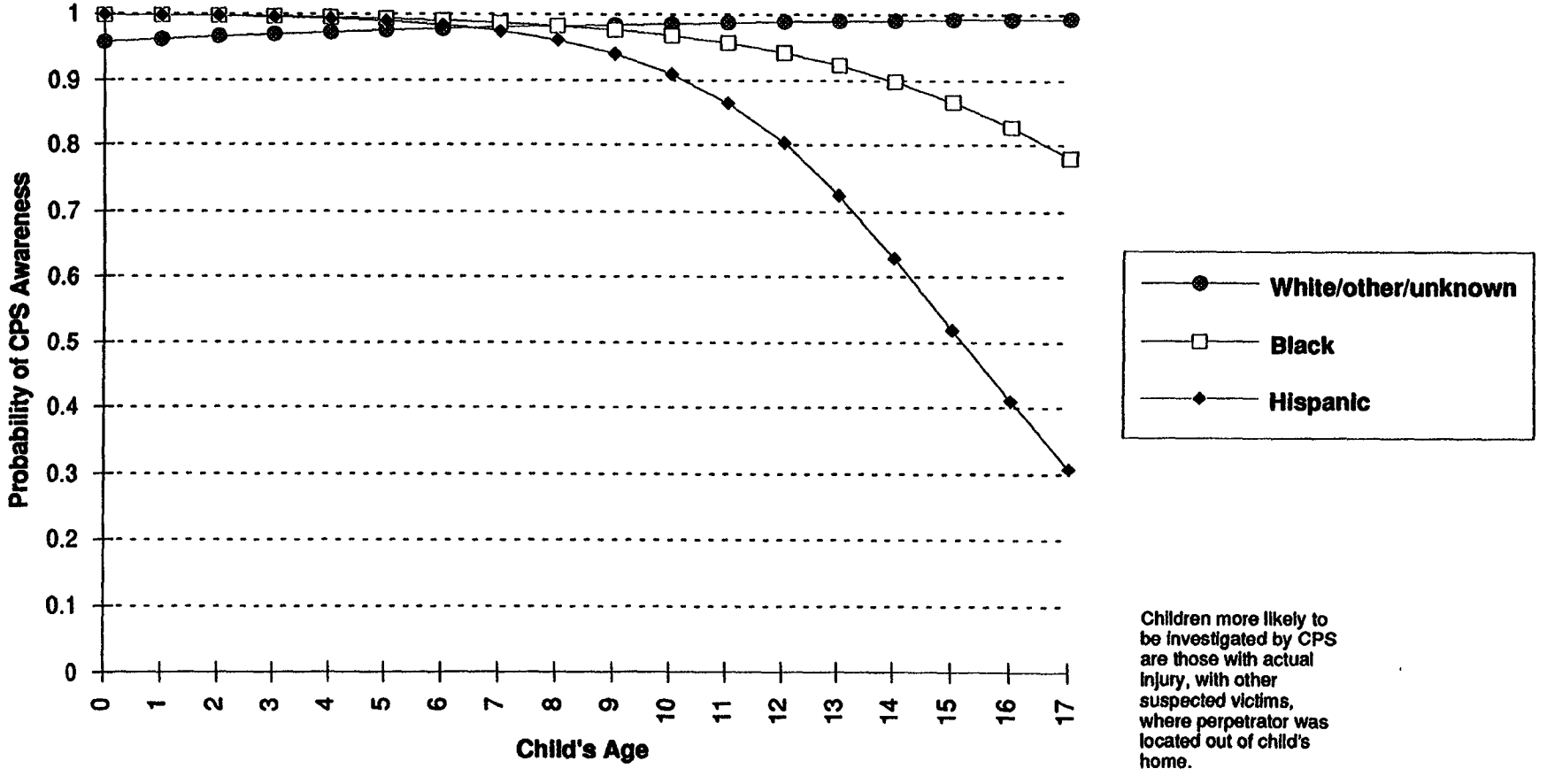
Table 2-5. Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Sexually Abused Children.[20]

Parameter	Parameter Estimate	t
Intercept	-0.86616	-0.60
Blacks	3.41557	1.57
Hispanics	3.58584	1.08
Age in Years	0.10273	1.33
Other Victims	2.64119	2.58
Age X Blacks	-0.41414	-2.48
Age X Hispanics	-0.54371	-1.94
Inferred Harm	-0.75907	-1.18
Perpetrator out of Home	1.21235	1.48
Model R^2 Value	0.3379	
Model F-value	3.255	* (p<.05)
Model df	8,14	

Child's Age and Race/Ethnicity. Both of these factors were related to the likelihood of CPS investigation of sexual abuse, but they interacted in their effect, i.e., the effect that each had depended on the other factor. This relationship is graphed in Figures 2-10 and 2-11. Blacks and Hispanics showed a decreasing likelihood of receiving CPS investigation with increasing age. When children were otherwise highly likely to have their sexual abuse investigated by CPS (see note on Figure 2-10), these minority groups began to diverge from White children at about age 9. Children who were of other races and those whose race was unknown resembled White children in their probability of CPS investigation. Among the children who were otherwise highly likely to have CPS investigate their sexual abuse, Hispanics in fact experienced a sharper decline with age in the probability that they would receive this attention. The decline with age for Blacks and Hispanics was particularly marked for children whose other characteristics portended an overall low likelihood of CPS investigation. (See Figure 2-11.) Under those circumstances, the age-related decline began in the earliest years. Note, however, that in contrast to Figure 2-10, Figure 2-11 does indicate that there are ages and circumstances

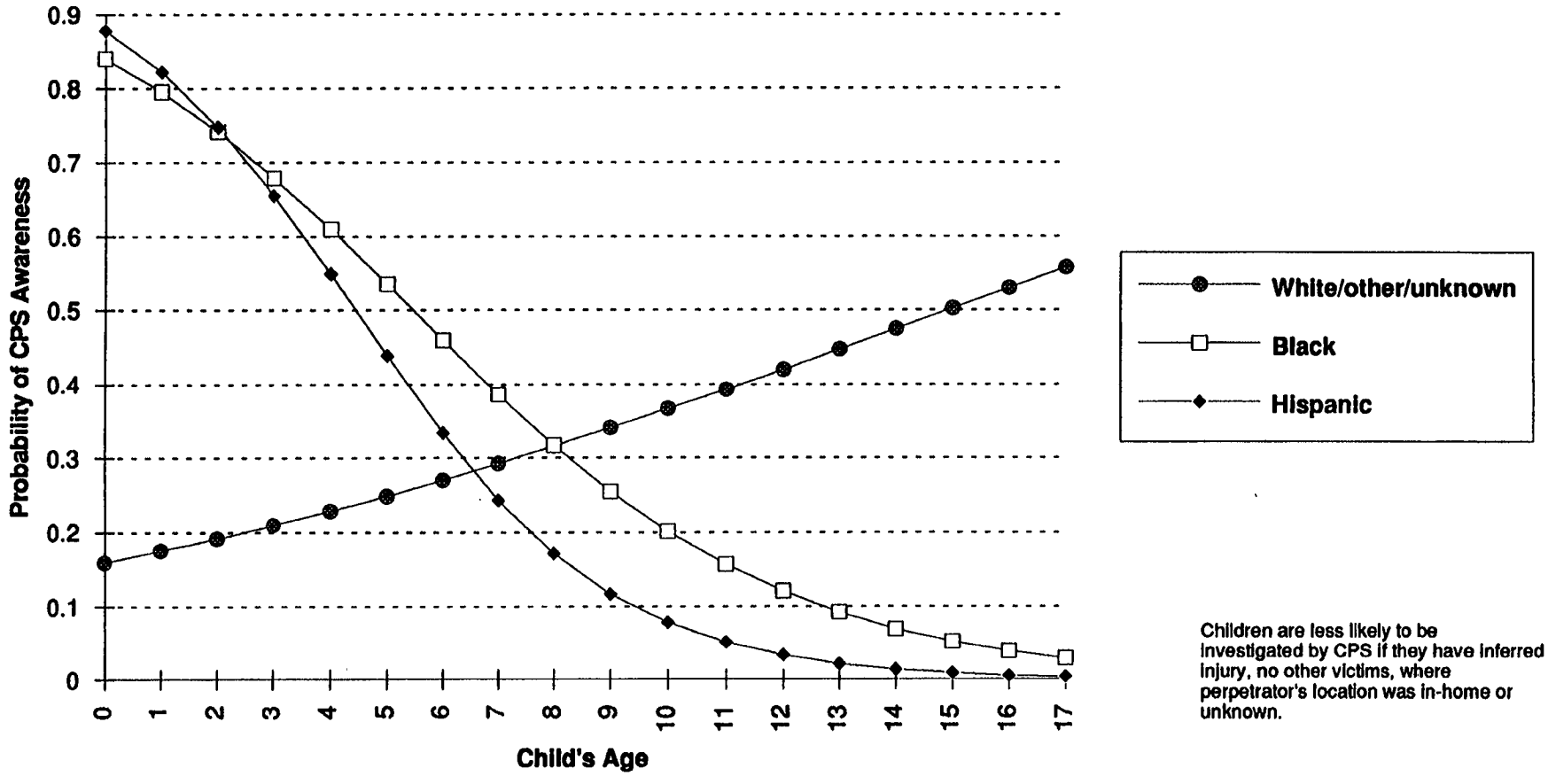
[20]This model excludes children with unknown race/ethnicity and multiple maltreatment. It was based on a sample N of 400 cases, of which CPS had investigated 95 and had not investigated 305.

Figure 2-10. Race and Age Differences in CPS Investigation of Sexual Abuse (for Children More Likely to Be Investigated by CPS).



Children more likely to be investigated by CPS are those with actual injury, with other suspected victims, where perpetrator was located out of child's home.

Figure 2-11. Race and Age Differences in CPS Investigation of Sexual Abuse (for Children Less Likely to Be Investigated by CPS).



Children are less likely to be investigated by CPS if they have inferred injury, no other victims, where perpetrator's location was in-home or unknown.

under which Black and Hispanic children are more likely to have their sexual abuse investigated by CPS than are White, Other, or unknown race children.

Presence of Other Suspected Victims in the Household. Similar to the pattern found with physically abused children, those who were sexually abused were more likely to be investigated by CPS if there were other suspected victims in the household. This relationship for sexually abused children is given in Table 2-6.

Table 2-6. Differences in CPS Investigation of Sexual Abuse Related to Presence of Other Suspected Victims in the Household.[21]

Children More Likely to be Known to CPS	
Other Suspected Victims	0.999
No Other Suspected Victims	0.982
Children Less Likely to be Known to CPS	
Other Suspected Victims	0.056
No Other Suspected Victims	0.004

As before, bear in mind that the presence of other suspected victims is of ambiguous status: it is a factor that might be either a determinant or a by-product of CPS investigation.

Severity of Harm from the Maltreatment. As described earlier, "inferred" harm was one of the severity categories used in the NIS-2 for certain circumstances (more serious forms of sexual abuse, blatant abandonment, tying or close confinement) where there was no actual evidence of injury or harm but where the nature of the maltreatment itself was such that, given its occurrence, the coding system provided for harm to be inferred. In the area of sexual abuse, harm could be inferred when the evidence supported the conclusion that genital molestation or actual intrusion had occurred. The logistic analyses revealed that the distinction between whether there had been actual evidence of harm or whether harm had been inferred systematically related to the likelihood of CPS investigation. Investigation was more likely in cases where there was actual evidence of harm, as shown in Table 2-7.

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[21]Those more likely to be known to CPS were Hispanics under one year old with actual, rather than inferred injuries, where the perpetrator did not reside in the child's home. Those less likely to be known to CPS were Hispanics 17 years of age, with inferred injury, where the perpetrator resided in the child's home or where his or her location relative to the child's residence was not known.

Table 2-7. Severity Differences in CPS Investigation of Sexual Abuse.[22]

Children More Likely to be Known to CPS	
Evidence of Actual Harm	0.999
Inferred Harm Only	0.987
Children Less Likely to be Known to CPS	
Evidence of Actual Harm	0.009
Inferred Harm Only	0.004

Note that information concerning actual harm in sexual abuse cases is similar to the presence of other suspected victims in that the feature is ambiguous with respect to whether it is a cause or an effect of CPS investigation. That is, once CPS has opened an investigation of sexual abuse, any harm that had occurred may be more likely to be documented. The information available in the NIS-2 data does not afford any mechanism for distinguishing the causal directionality in this relationship.

Perpetrator's Location in Child's Home. CPS investigation was more likely to occur when the perpetrator was not a person who resided in the child's home, in comparison to the likelihood of an investigation when the perpetrator did reside in the child's home or when his/her place of residence was not known. Table 2-8 illustrates the pattern.

Table 2-8. Differences in CPS Investigation of Sexual Abuse Related to Perpetrator's Location in Child's Home.[23]

Children More Likely to be Known to CPS	
In Child's Home or Unknown	0.996
Out of Child's Home	0.989
Children Less Likely to be Known to CPS	
In Child's Home or Unknown	0.004
Out of Child's Home	0.012

[22]Those more likely to be known to CPS were Hispanics under one year old, with other suspected victims, where the perpetrator did not reside in the child's home. Those less likely to be known to CPS were Hispanics 17 years of age, with no other victims, where the perpetrator resided in the child's home or where his or her location relative to the child's residence was not known.

[23]Those more likely to be known to CPS were Hispanics under one year old with actual, rather than inferred injuries, where there were other suspected victims. Those less likely to be known to CPS were Hispanics 17 years of age, with inferred injury, where there were no other victims.

2.5 Predicting CPS Investigation of Physically Neglected or Emotionally Maltreated Children

Children who experienced maltreatment in this category were relatively unlikely to receive CPS investigation--only 29 percent of those who were recognized by study sources had been investigated by CPS during the study period. The analyses concerning this category of maltreatment yielded the most complex set of findings of any of the maltreatment categories examined in this study. Of the 15 factors that were explored, only one turned out to have no evident relationship with CPS investigation of this combined maltreatment category: county metropolitan status. All 14 remaining factors evidenced a relationship with CPS investigation either on initial examination, in the final multi-factor model, or in both contexts. Six factors initially demonstrated systematic variation with CPS investigation but did not retain the association when other important predictors were taken into account: family structure, number of other children in the household, perpetrator's location relative to the child's home, perpetrator's sex, and number of perpetrators involved in the maltreatment. Additionally, an interaction between two of the remaining factors, age and race, appeared only during the initial analyses and not in the context of the final multi-factor model where all other important factors were taken into account. This final model is given in Table 2-9, which indicates that it accounted for 33.2 percent of the variance in CPS investigation of physically neglected and/or emotionally maltreated children.

At the outset, it should be noted that these more complex and somewhat different findings concerning the predictors of CPS investigation probably reflect the distinctive treatment of cases in this category. A physically neglected child may be more likely to be reported on multiple occasions over time. Also, a number of CPS agencies have different procedures that apply when physical neglect is rereported. When the agency has already investigated and substantiated a case, it is labelled an ongoing or chronic case and is not reinvestigated again. The issue of repeated or duplicated reports and how they may be differentially handled would be expected to have particular impact on the findings here, because NIS-2 cases were either known or not known to have been accepted for investigation during the three-month study data period and it was not possible to determine whether the children had been investigated by CPS at some point in the past.

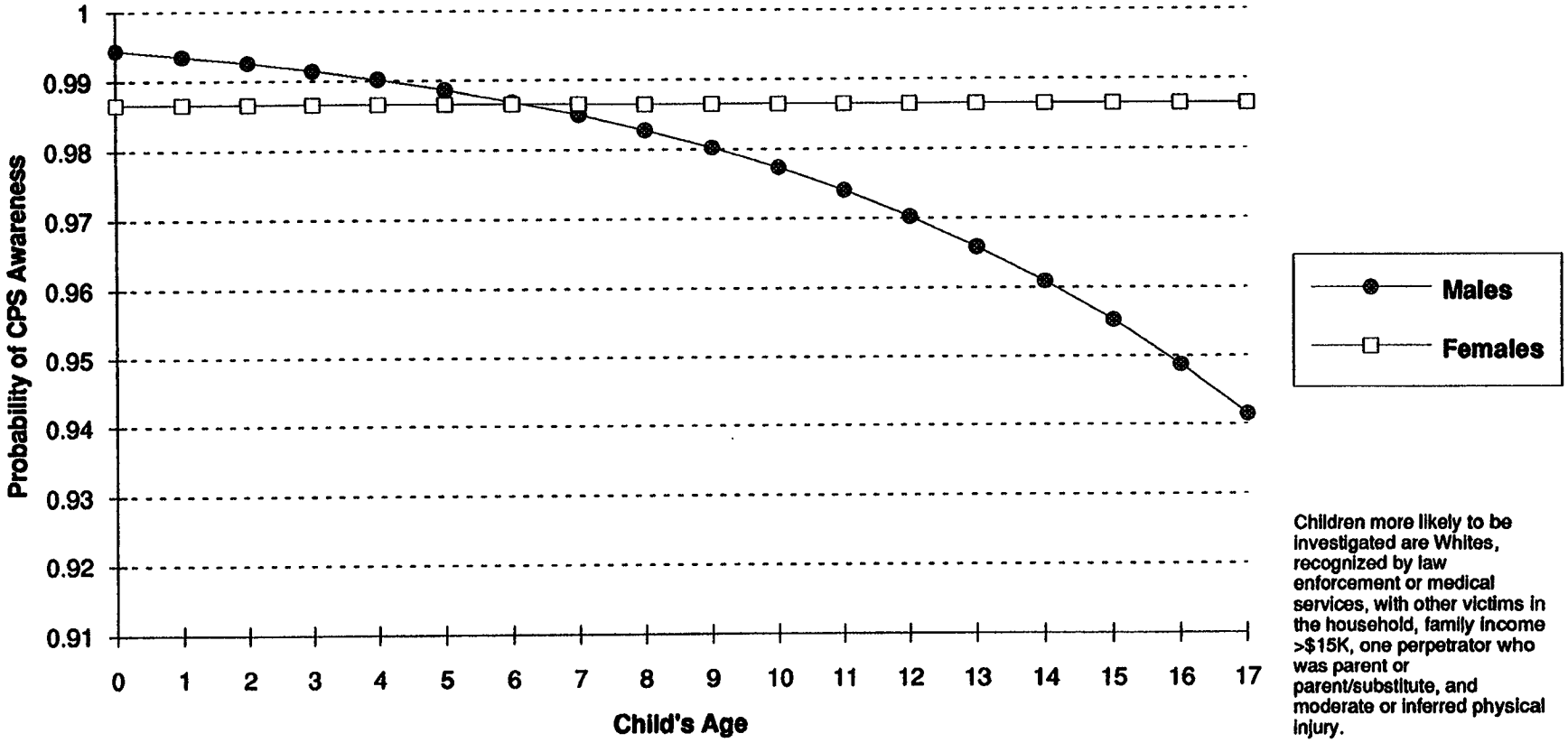
Table 2-9. Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Physically Neglected and/or Emotionally Maltreated Children.[24]

Parameter	Parameter Estimate	t
Intercept	2.33891	1.97
Blacks & Hispanics	-0.74401	-2.03
Age in Years	-0.14978	-1.56
Other Victims	1.21102	2.85
Schools	-2.52250	-3.90
Day care, Mental Health, Social Services	-1.30416	-1.79
Other Victims X Day Care, Mental Health, Social Services	-1.51287	-1.11
Two or More Perpetrators	-1.10077	-2.51
Non-parental Perpetrators	-2.22199	-1.24
Moderate & Inferred Injury	0.84510	1.50
Females	-0.87595	-1.09
Age X Females	0.14912	1.88
Income $15,000+	0.86772	1.70
Income Unknown	0.41281	1.02
Physical Condition/Impairment	-1.13349	-1.42
Moderate & Inferred Injury	-1.45517	-1.50
Model R^2 Value	0.3324	
Model F-value	3.431	m (p<.10)
Model df	15,7	

Child's Sex and Age. Children's ages related systematically to the likelihood that CPS would investigate their physical neglect and/or emotional maltreatment, but the specific pattern of this relationship depended on the child's sex. The association is shown for children with high and low probabilities of CPS investigation in Figures 2-12 and 2-13, respectively. Regardless of the other factors and their effects on the overall probability of official CPS investigation, the figures indicate an age-related decrease in the likelihood of CPS investigation for males, but no age-related changes for females. Notice that males are more likely than females to receive CPS investigation for physical neglect and/or emotional maltreatment below 6 years of age, but they are less likely to be investigated above that age.

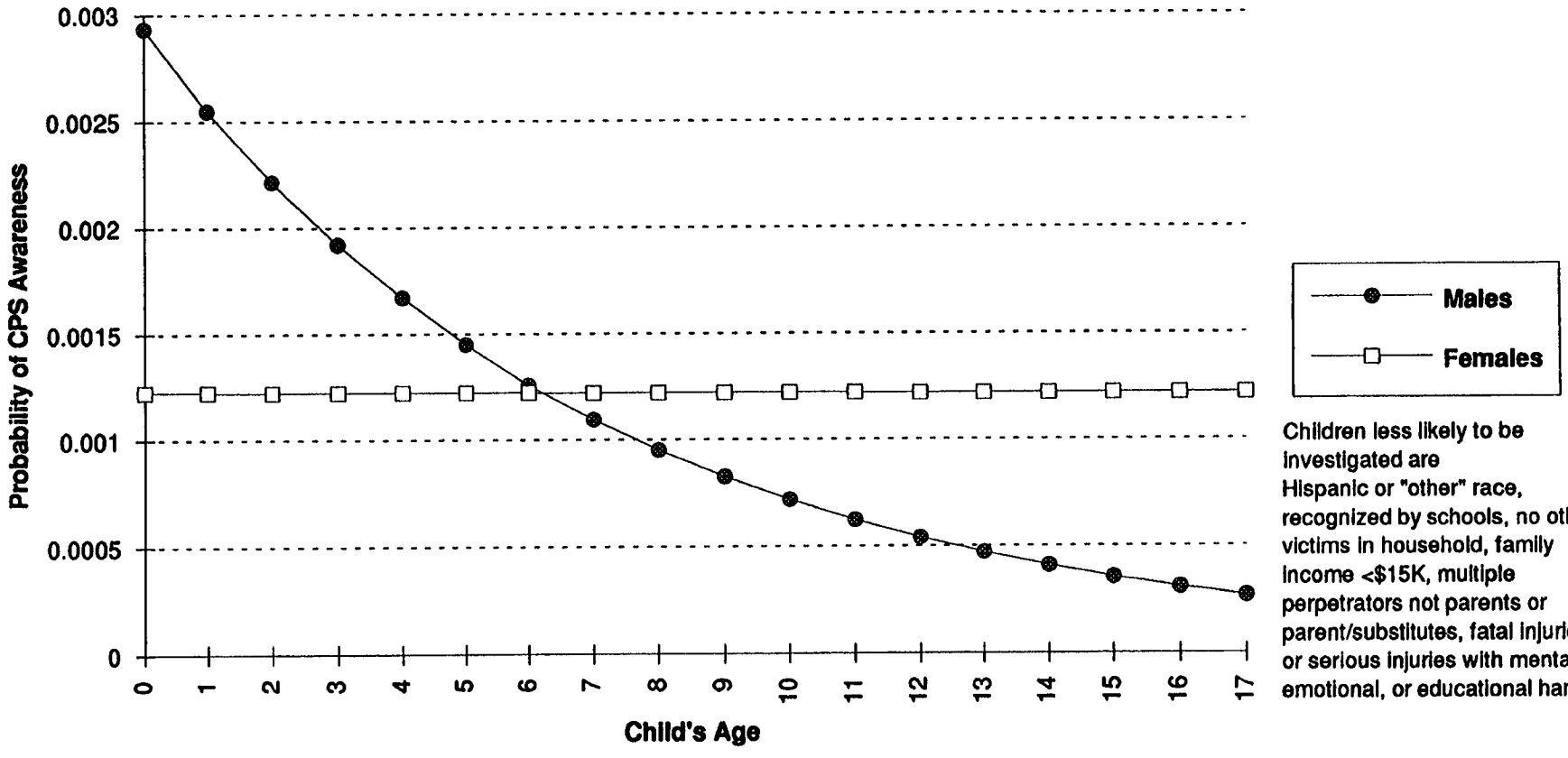
[24]This model excludes children with unknown race/ethnicity and multiple maltreatment. It was based on a sample N of 638 cases, of which CPS had investigated 114 and had not investigated 524.

Figure 2-12. Sex and Age Differences in CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children More Likely to Be Investigated by CPS).



Children more likely to be investigated are Whites, recognized by law enforcement or medical services, with other victims in the household, family income >$15K, one perpetrator who was parent or parent/substitute, and moderate or inferred physical injury.

Figure 2-13. Sex and Age Differences in CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children Less Likely to Be Investigated by CPS).



Children less likely to be investigated are Hispanic or "other" race, recognized by schools, no other victims in household, family income <$15K, multiple perpetrators not parents or parent/substitutes, fatal injuries, or serious injuries with mental, emotional, or educational harm.

Child's Race/Ethnicity. The likelihood of CPS investigation depended on children's race/ethnicity, with investigations more likely for White or Black children than for Hispanic children or those from other race/ethnicity groups. Examples of actual model-generated probabilities are given in Table 2-10.

Table 2-10. Race/Ethnicity Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment.[25]

Children More Likely to be Known to CPS	
White, Black, or unknown	0.994
Hispanic or Other Race	0.988
Children Less Likely to be Known to CPS	
White, Black, or unknown	0.0006
Hispanic or Other Race	0.0003

Family Income. The annual income of the child's family related to the likelihood of CPS investigation only for this category of maltreatment. Table 2-11 shows that this effect was contrary to the direction some might expect, especially those who argue that low income families are subject to greater scrutiny by public authorities.

[25]Those more likely to be known to CPS were males under one year old, recognized by law enforcement or medical services, with other victims in the household, annual family income of more than $15,000, one perpetrator who was the child's parent or parent/substitute, and moderate or inferred injury involving physical harm. Those less likely to be known to CPS were males 17 years of age, recognized by schools, with no other victims in the household, annual family income under $15,000, multiple perpetrators not the child's parents or parent/substitutes, fatal injuries or serious injuries with mental, emotional, or educational harm.

Table 2-11. Family Income Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment.[26]

Children More Likely to be Known to CPS	
Under $15,000	0.989
$15,000 or more	0.994
Unknown	0.992
Children Less Likely to be Known to CPS	
Under $15,000	0.0003
$15,000 or more	0.0005
Unknown	0.0004

Children from families with notably low annual family incomes (under $15,000) were actually less likely to be investigated by CPS than those from families whose incomes were greater. This pattern may, in part, reflect the fact that poverty related deprivation is not within the province of CPS because, by most agencies' definitions, it does not constitute physical neglect. Children from the very poorest families may thus be excluded from CPS investigations because the allegation is assumed to reflect circumstances that stem from the family's poverty rather than from caretaker neglect per se.

Source That Recognized the Child as Maltreated and Presence of Other Suspected Victims in the Household. These two factors interacted in their effects on the likelihood of CPS investigation, with the impact of each dependent on the particular circumstance of the other. This interaction is graphed in Figures 2-14 and 2-15. For children who were more likely to be investigated by CPS on the basis of their other circumstances (graphed in Figure 2-14), it can be seen that physically abused or emotionally maltreated children who were recognized by schools were noticeably less likely to be investigated, particularly when there were no other suspected victims in the child's home. Figure 2-15 shows the children with overall low likelihood of CPS investigation. The analyses showed the presence of other victims to have a differential effect *only* for children recognized in schools, so the apparent difference in connection with law enforcement and medical services in this figure was actually not statistically reliable. What should be noted across both figures, however, is that,

[26]Those more likely to be known to CPS were White or Black males under one year old, recognized by law enforcement of medical services, with other victims in the household, one perpetrator who was the child's parent or parent/substitute, and moderate or inferred injury involving physical harm. Those less likely to be known to CPS were Hispanic or Other Race males 17 years of age, recognized by schools, with no other victims in the household, multiple perpetrators not the child's parents or parent/substitutes, fatal injuries or serious injuries with mental, emotional, or educational harm.

Figure 2-14. Effects of Recognition Source and Other Victims on CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children More Likely to Be Investigated by CPS).

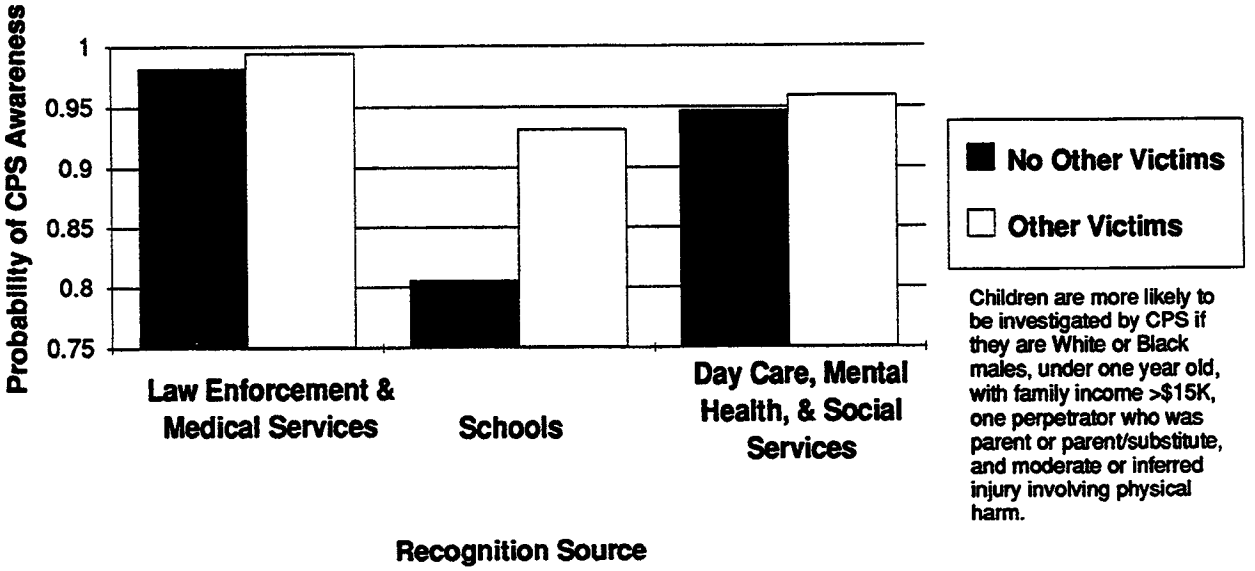
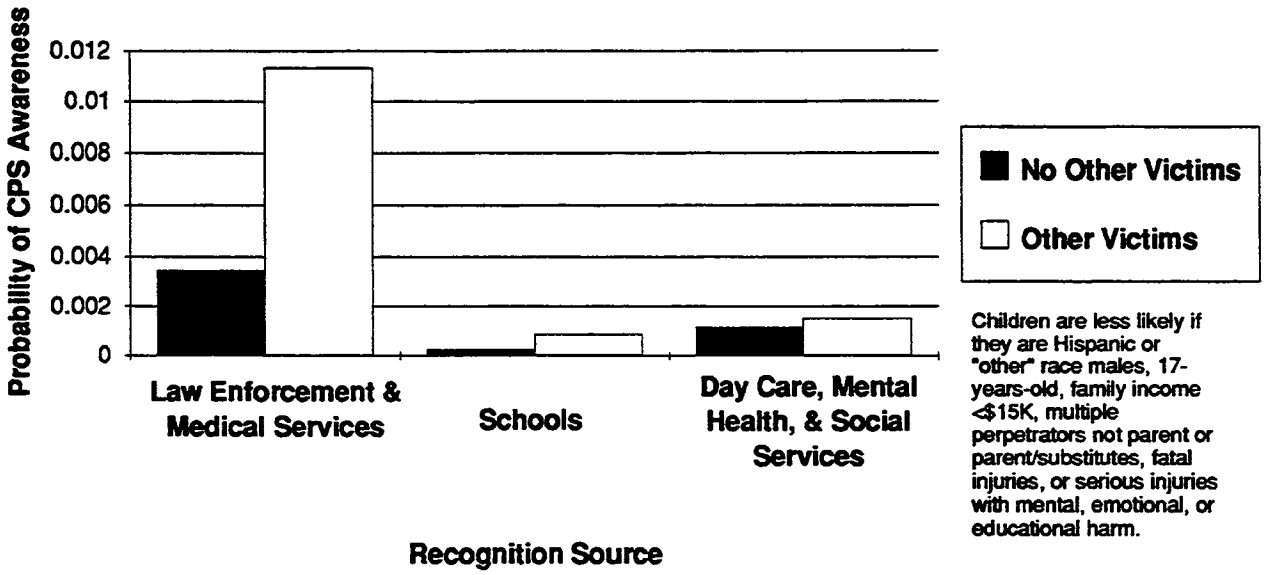


Figure 2-15. Effects of Recognition Source and Other Victims on CPS Investigation of Physical Neglect and/or Emotional Maltreatment (for Children Less Likely to Be Investigated by CPS).



overall, physically neglected or emotionally maltreated children who were recognized as such by law enforcement or medical services were generally most likely to be investigated by CPS, that children recognized in day care, social service agencies, or mental health clinics have intermediate likelihood of coming to official CPS attention, while those recognized by mandated reporters in schools trailed behind all sources in the overall likelihood they would receive CPS attention.

Nature of Harm from the Maltreatment. The type of harm that occurred as a result of Harm Standard physical neglect and/or emotional maltreatment also related to the likelihood that CPS investigated the child's case. Table 2-12 provides the probabilities of CPS investigation that were associated with different kinds of harm, both for children otherwise high in likelihood of CPS investigation and for those otherwise relatively low in likelihood of CPS investigation.

Table 2-12. Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment Due to Nature of Harm.[27]

Children More Likely to be Known to CPS	
Physical injury	0.994
Physical condition	0.983
Mental, emotional, or educational	0.976
Children Less Likely to be Known to CPS	
Physical injury	0.0011
Physical condition	0.0004
Mental, emotional, or educational	0.0003

Physically injured children were most likely to receive CPS investigations. Next most likely were children for whom the harm had precipitated some ongoing physical condition (e.g., malnutrition). Least likely to receive CPS investigation were children who had experienced the less tangible forms of harm: mental, emotional, or educational harm.

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[27]Those more likely to be known to CPS were White or Black males under one year old, recognized by law enforcement or medical services, with other victims in the household, annual family income greater than $15,000, one perpetrator who was the child's parent or parent/substitute, and moderate or inferred injury. Those less likely to be known to CPS were Hispanic or Other Race males 17 years of age, recognized by schools, with no other victims in the household, annual family income below $15,000, multiple perpetrators not the child's parents or parent/substitutes, fatal injuries or serious injuries.

Severity of Harm from the Maltreatment. The degree of severity of the child's injury or other harm also made a difference in the probabilities of CPS investigating the case. Table 2-13 shows the pattern in connection with this result.

Table 2-13. Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment Due to Severity of Harm.[28]

Children More Likely to be Known to CPS	
Fatal or serious	0.985
Moderate or inferred	0.994
Children Less Likely to be Known to CPS	
Fatal or serious	0.0003
Moderate or inferred	0.0007

Perhaps somewhat surprisingly, children whose harm had been moderate or inferred were more likely to receive CPS investigation of their physical neglect and/or emotional maltreatment, whereas those whose harm had been fatal or serious were somewhat less likely to be investigated. This particular finding is most likely the result of the structure of the NIS-2 Harm Standard definitions. There were very few circumstances where physically neglected or emotionally maltreated children could be considered countable if their harm was of only moderate severity, so the comparison is largely between children with fatal or serious harm and those with inferred harm. As described previously, harm could be inferred only in special circumstances that were particularly extreme forms of maltreatment--such as tying or locking a child in close confinement (a form of emotional maltreatment) or blatant abandonment (a form of physical neglect). This finding is probably better understood if it is regarded as a comparison between these more extreme types of maltreatment and other forms of maltreatment within the physical neglect and/or emotional maltreatment categories (such as inadequate supervision, inattention to physical needs, inattention to emotional needs, etc.). Understood in this light, it is reasonable to find that children who were abandoned or who had been tied up or locked in a closet were more likely to have their maltreatment investigated by CPS than were those who had been inadequately supervised, etc.

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[28]Those more likely to be known to CPS were White or Black males under one year old, recognized by law enforcement or medical services, with other victims in the household, annual family income greater than $15,000, one perpetrator who was the child's parent or parent/substitute, and physical injury. Those less likely to be known to CPS were Hispanic or Other Race males 17 years of age, recognized by schools, with no other victims in the household, annual family income below $15,000, multiple perpetrators not the child's parents or parent/substitutes, and mental, emotional, or educational harm.

Relation Between the Child and the Perpetrator. The child's relation to the perpetrator of physical neglect and/or emotional maltreatment also made a difference for the likelihood of CPS investigation. Those who had been maltreated by parents or parent/substitutes were more likely to receive investigation than were those who had been maltreated by other family members or other, non-family caretakers. This is not surprising in light of the fact that the primary province of CPS is maltreatment within the family, by those regularly responsible for the child's care.

Table 2-14. Differences in CPS Investigation of Physical Neglect or Emotional Maltreatment Due to Perpetrator's Relation to Child.[29]

Children More Likely to be Known to CPS	
Parent or Parent/substitute	0.994
Other	0.945
Children Less Likely to be Known to CPS	
Parent or Parent/substitute	0.0027
Other	0.0003

2.6 Predicting CPS Investigation of Educationally Neglected Children

Inasmuch as States have discretion as to whether to recognize educational neglect in State law as a form of child neglect that should come under CPS purview, it was not surprising to observe that children in this category of maltreatment were least likely to be investigated by CPS. Only 10 percent of the children who had been recognized by non-CPS sources as educationally neglected (with no other maltreatment) had been investigated by CPS. Thirteen factors were examined as possible predictors of the likelihood of CPS investigations among children who had only been educationally neglected.[30] Of these, four factors had no evident relationship with the likelihood of CPS investigation of children who had only experienced educational neglect: county metropolitan status, child's relation to the perpetrator,

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[29]Those more likely to be known to CPS were White or Black males under one year old, recognized by law enforcement or medical services, with other victims in the household, annual family income greater than $15,000, and moderate or inferred physical injury. Those less likely to be known to CPS were Hispanic or Other Race males 17 years of age, recognized by schools, with no other victims in the household, annual family income below $15,000, fatal injuries or serious mental, emotional, or educational harm.

[30]Two of the factors explored in connection with the other categories of maltreatment were not considered here. Nature of harm was not examined because educational neglect could, by definition, only result in educational harm to the child. No analysis of the influence of perpetrator's location was possible because nearly all perpetrators of educational neglect lived in the child's household.

perpetrator's sex, and number of perpetrators involved in the maltreatment. Three factors initially appeared related to CPS investigation of those who were only educationally neglected when each was considered as the sole predictor of that event, but the relationship to CPS investigation was not maintained when the effects of other important predictors were simultaneously taken into account in the more complex logistic models; these factors were the child's sex, family income, and the severity of educational harm that resulted from the maltreatment. The remaining six factors, including three interactions among them, constituted the final multiple-factor logistic regression model. That final model, which is given in Table 2-15, accounted for 31.1 percent of the variance in the occurrence of CPS investigation among only educationally neglected children.

Table 2-15. Final Multi-Factor Logistic Model to Predict the Likelihood of CPS Investigating Educationally Neglected Children.[31]

Parameter	Parameter Estimate	t
Intercept	1.05378	0.52
Nonwhites	5.82370	1.46
Age	-0.22908	-1.36
Other Victims	-4.51240	-1.28
Mother-only	-9.10670	-1.45
Day care, Social Services, Mental Health	-3.91944	-1.55
Age X Other Victims	0.49891	1.59
Age X Nonwhite	-0.41680	-1.48
Age X Mother-only	0.57862	1.25
2 to 3 children	-0.91805	-1.43
Model R^2 Value	0.3113	
Model F-value	0.848 n.s.	
Model df	9,12	

Child's Age, Race/Ethnicity, Family Structure, and Presence of Other Victims. The child's age affected the likelihood of CPS investigation, but its effects varied depending on the child's race/ethnicity, the parental structure of the child's household, and whether or not other victims in the family were also suspected. Each of these interactions will be described in turn.

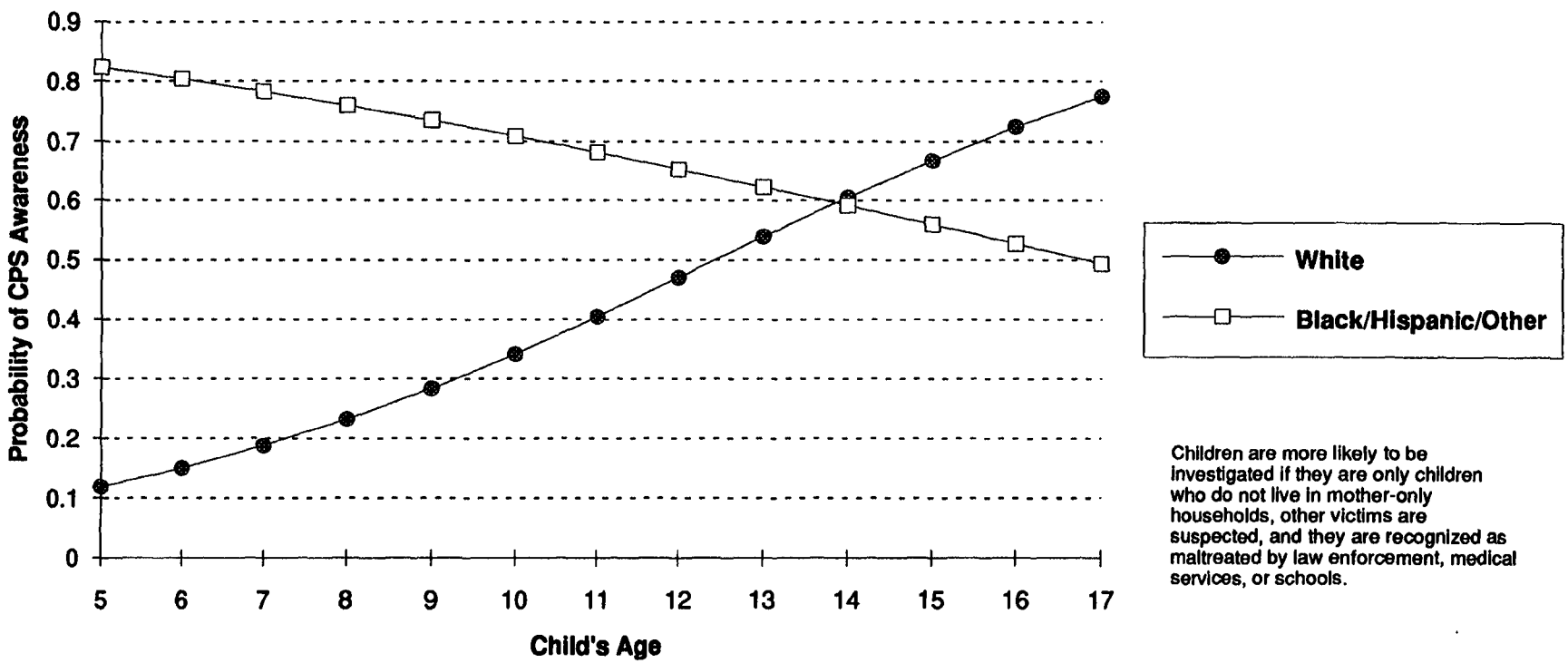
[31]This model excludes children with unknown race/ethnicity. It was based on a sample N of 217 cases, of which CPS had investigated 32 and had not investigated 185.

Together with age, the child's race/ethnicity predicted the likelihood that CPS would investigate the case of a child who had only experienced educational neglect. The interactive relationship of these factors is depicted in Figures 2-16 and 2-17. Among those children who were only educationally neglected, the likelihood of being investigated by CPS declined with age for White children, and rose with age for children who were Black, Hispanic, or of other races. Another way to describe the pattern is to note that, under age 14, Blacks, Hispanics, and Other race children were less likely than White children to be investigated, but the older minority children were more likely than Whites to have their educational neglect investigated by CPS.

The influence of the child's family structure, in conjunction with the age effect, is shown in Figures 2-18 and 2-19. There, one can see that younger children were more likely than older children to have their educational neglect investigated by CPS when they lived in households with both parents or in father-only households. Children who lived in mother-only households revealed an increasing likelihood of CPS investigation with age when other factors predicted an overall high likelihood that CPS would investigate the case (Figure 2-18). There were only slight age differences in the likelihood of mother-only children receiving CPS investigation when other influential factors portended a relatively low overall probability of CPS investigation (Figure 2-19).

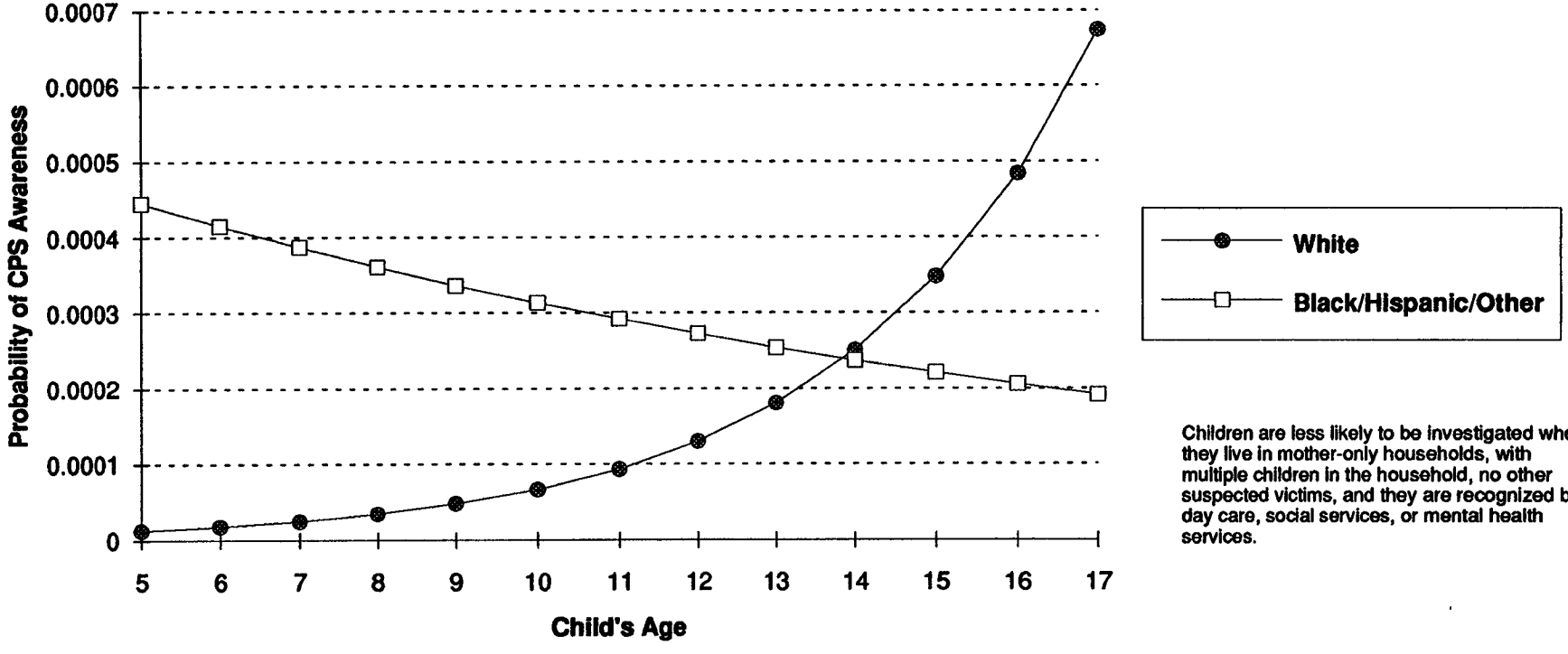
The way in which the presence of other victims interacted with the child's age to predict CPS investigation of those who had only been educationally neglected is shown in Figures 2-20 and 2-21. When other victims in the household were also suspected, there was the likelihood of CPS investigation of an only-educationally neglected child increased with the child's age. When no other victims appeared to be involved in the situation and all other factors implied a relatively high likelihood of CPS investigation, children who had been only educationally neglected were less likely to receive CPS investigation at older ages (Figure 2-20). When all other factors predicted a relatively low likelihood of CPS investigation and no other victims were suspected, age did not appear to have any notable effect on CPS investigation for children who were only educationally neglected (Figure 2-21).

Figure 2-16. Race/Ethnicity and Age Differences in CPS Investigation of Educational Neglect (for Children More Likely to Be Investigated by CPS).



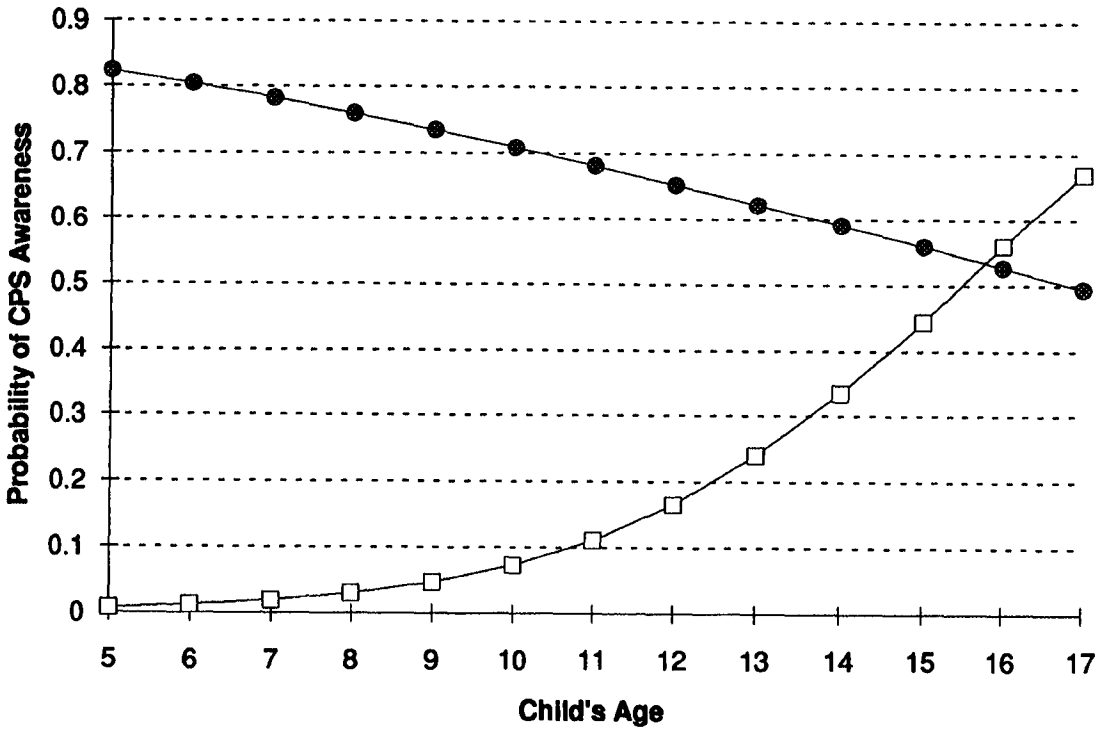
Children are more likely to be investigated if they are only children who do not live in mother-only households, other victims are suspected, and they are recognized as maltreated by law enforcement, medical services, or schools.

Figure 2-17. Race/Ethnicity and Age Differences in CPS Investigation of Educational Neglect (for Children Less Likely to Be Investigated by CPS).



Children are less likely to be investigated when they live in mother-only households, with multiple children in the household, no other suspected victims, and they are recognized by day care, social services, or mental health services.

Figure 2-18. Age and Family Structure Differences in CPS Investigation of Educational Neglect (for Children More Likely to Be Investigated by CPS).

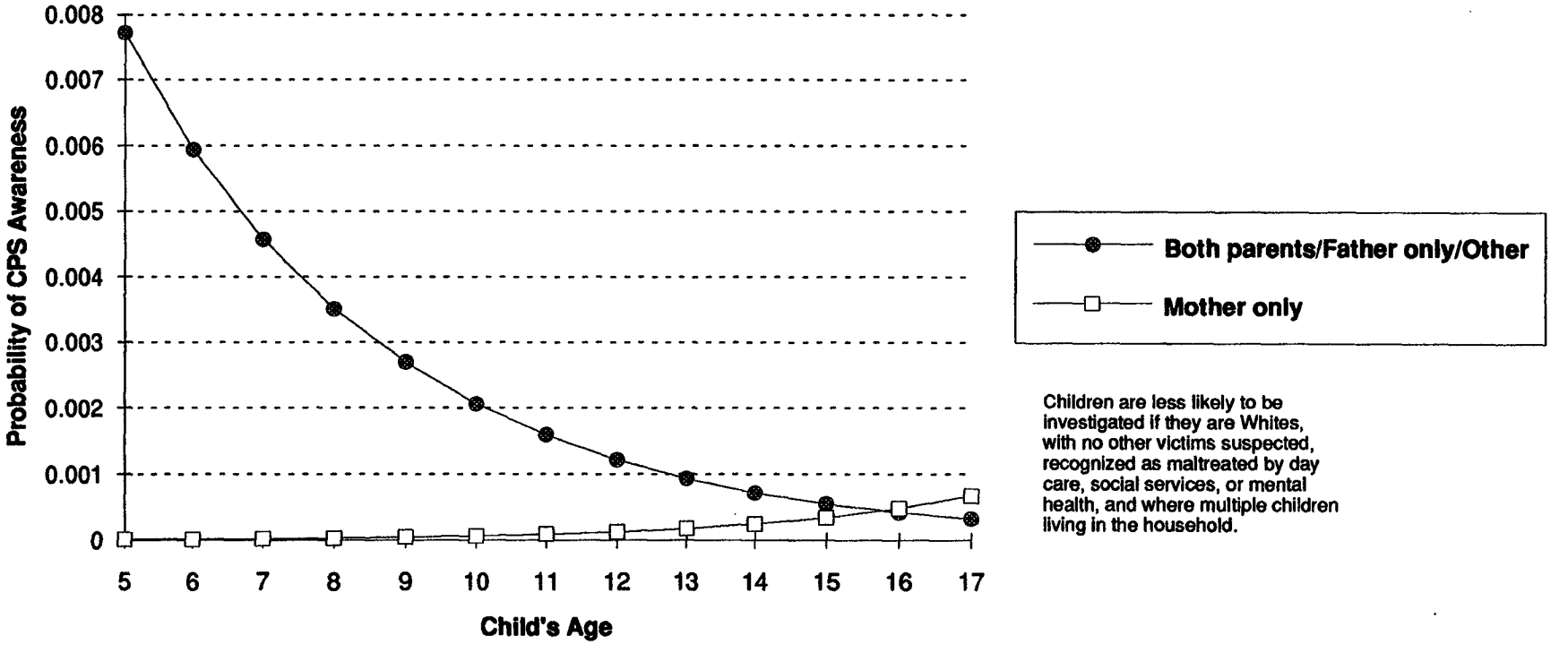


Both parents/Father only/Other

Mother only

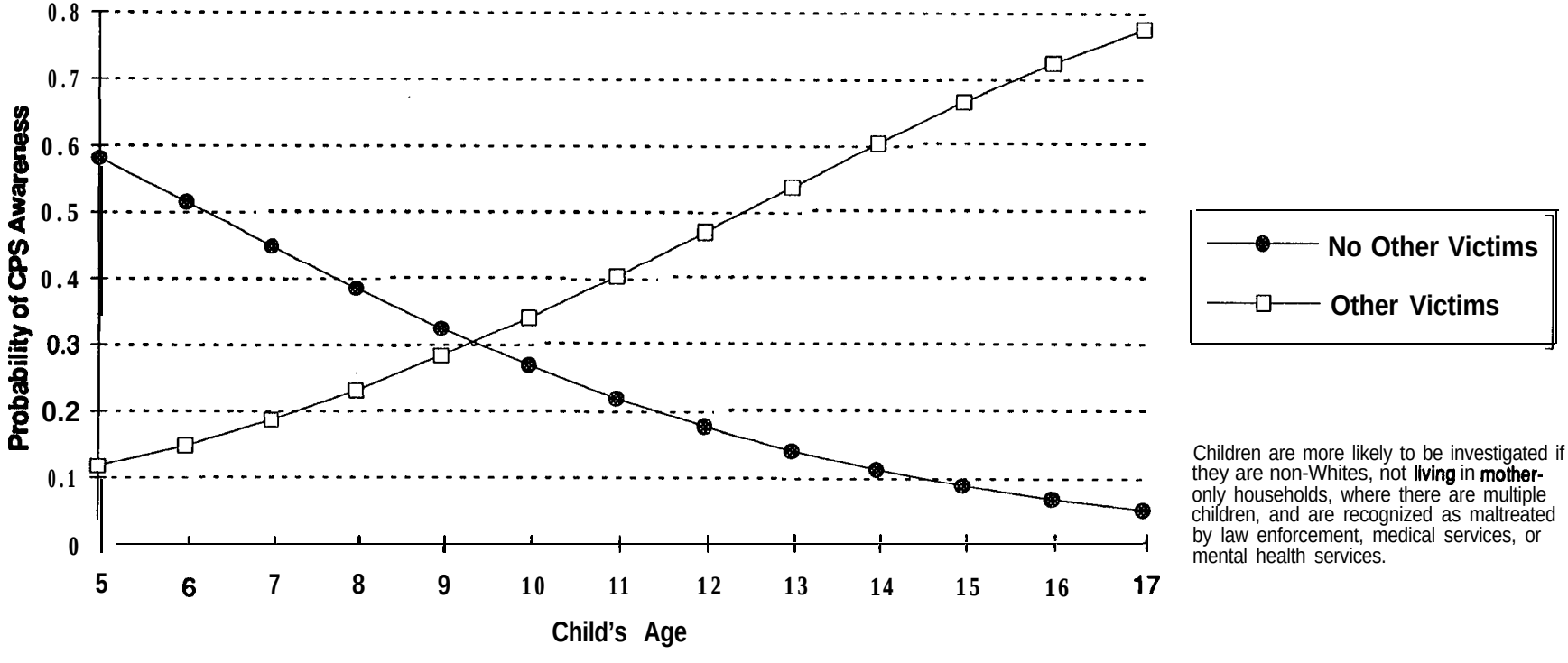
Children are more likely to be investigated if they are non-Whites, with other suspected victims, recognized as maltreated by law enforcement, medical services, or schools, and where only one child lived in the household.

Figure 2-19. Age and Family Structure Differences in CPS Investigation of Educational Neglect (for Children Less Likely to Be Investigated by CPS).



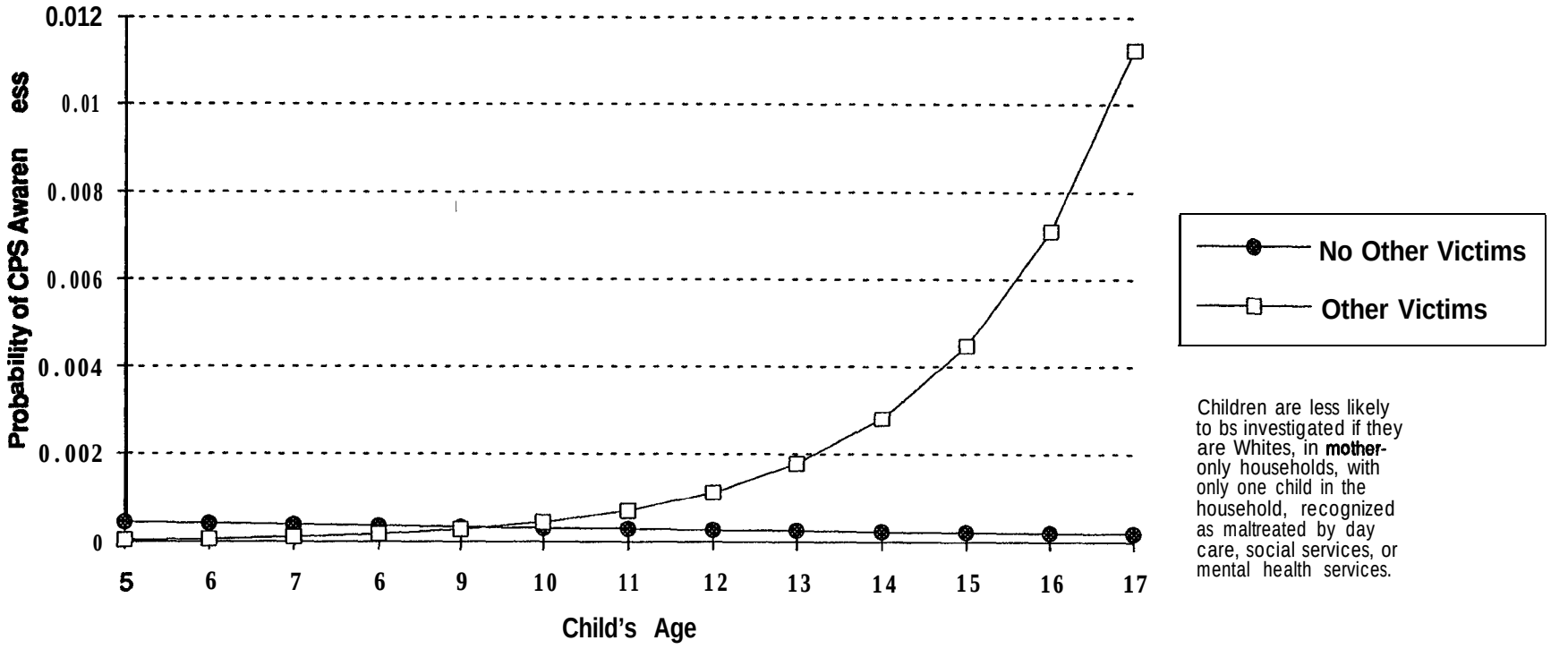
Children are less likely to be investigated if they are Whites, with no other victims suspected, recognized as maltreated by day care, social services, or mental health, and where multiple children living in the household.

Figure 2-20. Effects of Age and Other Victims on CPS Investigation of Educational Neglect (for Children More Likely to Be Investigated by CPS).



Children are more likely to be investigated if they are non-Whites, not living in mother-only households, where there are multiple children, and are recognized as maltreated by law enforcement, medical services, or mental health services.

Figure 2-21. Effects of Age and Other Victims on CPS Investigation of Educational Neglect (for Children Less Likely to Be Investigated by CPS).



Children are less likely to bs investigated if they are Whites, in mother-only households, with only one child in the household, recognized as maltreated by day care, social services, or mental health services.

Number of Other Children in the Household. CPS investigation was more likely to occur for educationally neglected children in households by themselves than for those in households consisting of two or more children. The pattems for those otherwise likely to receive CPS investigation and for those otherwise unlikely to receive CPS investigation are given in Table 2-l 6.

Table 2-16. Differences in CPS Investigation of Educational Neglect Due to Number of Children in the Household.[32]

Children More Likely to be Known to CPS	
One child	0.67
Two or more children	0.41
Children Less Likely to be Known to CPS	
One child	0.0013
Two or more children	0.0004

Recognition Source. Children whose educational neglect had been recognized by sentinels in law enforcement, medical services, or schools were more likely to receive CPS investigation than those recognized by other sentinel sources (i.e., personnel in day care centers, social service agencies, or mental health clinics). Table 2-17 gives the model probabilities for children otherwise highly likely and those otherwise unlikely to receive CPS investigation on the basis of their other important characteristics.

[32] Those more likely to be known to CPS were non-White 17 year olds, recognized by law enforcement, medical services, or schools, in mother-only living circumstances, with other victims in the household. Those less likely to be known to CPS were non-White five year olds, recognized by day care, social services, or mental health staff, with no other victims in mother-only households.

Table 2-17. Differences in CPS Investigation of Educational Neglect Due to Recognition Source.[33]

Children More Likely to be Known to CPS	
Law enforcement, medical services, schools	0.67
Day cam, social services, mental health services	0.03
Children Less Likely to be Known to CPS	
Law enforcement, medical services, schools	0.0265
Day care, social services, mental health services	0.0004

2.7 Summary of Findings on the Predictors of CPS Investigation

The complex findings presented in this chapter are summarized in Table 2-18, which provides a nontechnical description of the factors that are related to the likelihood that CPS will investigate children who experienced different types of maltreatment.[34] As discussed earlier, the categories in the table should be regarded as mutually exclusive, because multiple maltreatment was excluded from these analyses.[35] Each relationship described in this table was found to hold true when all the other effects described in the column were taken into account.

Perhaps the most important aspect of this table is its complexity; the prevailing message appears to be that the factors that predict whether or not CPS knows about a maltreated child are

33Those more likely to be known to CPS were non-White 17 year olds, recognized by law enforcement, medical services, or schools, in mother-only living circumstances, with other victims in the household. Those less likely to be known to CPS were non-White five year olds, recognized by day care, social services, or mental health staff, with no other victims in mother-only households.

34As with the previous table, each relationship reported here was examined while taking into account the effects of all the other important factors in the maltreatment category.

35These analyses did not examine multiple maltreatment as a separate category because of the limited numbers of cases available to make the comparisons needed in connection with CPS awareness. (See Appendix for more detailed discussion of this.) Educational neglect was ignored when it occurred in combination with other maltreatment. Thus, physical abuse included physical abuse alone or in combination with educational neglect; sexual abuse consisted of sexual abuse with or without educational neglect, etc.

Table 2-18. Factors Associated with Likelihood that CPS Will Investigate Harm Standard Children.[a]

	PHYSICAL ABUSE	SEXUAL ABUSE	PHYSICAL NEGLECT & EMOTIONAL MALTREATMENT	EDUCATIONAL NEGLECT. ONLY
Child's Sex	Depends on both age & severity of harm: females more likely han males with fatal, serious, or inferred injuries, but not different with moderate injuries; females more likely than males at highest ages	No relationship	Depends on age: males more likely below age 6, females more likely above age 6	Related to CPS investigation when other factors are ignored; not relevant when other factors identified as important in this column are taken into account
Child's Age	Depends on race and sex: Blacks less likely with increasing age: weaker or no age difference for others; males less likely with increasing age but not so for females	Depends on race: likelihood increases w/age for Whites, decreases w/age for Blacks & Hispanics	Depends on sex: males less likely with increasing age; no age effect for females	Depends on race, other victims, & family structure: with increasing age, Whites more likely & nonwhites less likely; less likely with age in both-parent and father-only families, more likely with age when other victims are also suspected
Child's Race	Depends on age: Blacks more likely below 12.5 yrs., Blacks less likely than all other races above 12.5 yrs.	Depends on Age: Blacks & Hispanics more likely than Whites below age 7(Hispanics) and 8 (Black) but less likely at older ages	Hispanics and other minorities less likely than Whites and Blacks	Depends on age: nonwhites more likely below age 14; Whites more likely at older ages
Number of Children	More likely for unknown number of children in household	No relationship	Related to CPS investigation when other factors are ignored; not relevant when other factors identified as important in this column are taken into account	More likely when only one child in household
Family Structure	More likely for children in father-only families	No relationship	Related to CPS investigation when other factors are ignored; not relevant when other factors identified as important in this column are taken into account	Depends on age: leas likely under age 16 in mother-only families
Family Income	No relationship	Related to CPS investigation when other factors are ignored, not relevant when other factors identified as important in this column are taken into account	More likely when family has income more than $15,000 per year	Related to CPS investigation when other factors are ignored; not relevant when other factors identified as important in this column are taken into account

Table 2-18. (continued)

	PHYSICAL ABUSE	SEXUAL ABUSE	PHYSICAL NEGLECT & EMOTIONAL MALTREATMENT	EDUCATIONAL NEGLECT ONLY
Recognition Sou	Less likely if recognized by day care, social services. or mental health staff	No relationship	More likely if recognized by law enforcement or medical services; when recognized by day care, social services, or mental health staff, presence of other victims has no effect	Less likely if recognized by day care, social services, or mental health staff
Other Suspected Victims in Household	More likely when there are other suspected victims	More likely when there are othe suspected victims	More likely with other victims; but this effect does not appear for those recognized by day care, social services, or mental health agency staff	Depends on age: more likely with other victims above age 9.5
Nature of Harm	No relationship	No relationship	More likely with physical injury	No relationship
Severity of Harm	Depends on sex: for females, more likely for fatal, serious, and inferred injuries; for males, no effect of severity of harm	Less likely if actual evidence of harm is not available	More likely for moderate and inferred harm	Related to CPS investigation when other factors are ignored;; not relevant when other factors identified as important in this column are taken into account
Perpetrator Relationship	No relationship	No relationship	More likely for parents & parent/substitutes	No relationship
Perpetrator Location	Related to CPS investigation when other factors are ignored, not relevant when other factors identified as important in this column are taken into account	More likely if perpetrator is no in child's home	Related to CPS investigation when other factors are ignored; not relevant when other factors identified as important in this column are taken into account	No relationship
Number of Perpetrators	No relationship	No relationship	Less likely if more than one perpetrator was involved	No relationship

a Two additional factors were also examined and found not to be associated with CPS awareness for any maltreatment category: County Metropolitan Status and Perpetrator's Sex.

complex--no one factor holds across the board, and those that do have an impact often work in concert with one another, modifying and qualifying each other's effects. The overview here is organized in terms of the different factors, considering the simple or interactive influences of each one in turn.

Child's Sex. Sex was related to the likelihood that a child would be investigated by CPS when he or she had been physically abused or physically neglected but not when the maltreatment that had occurred was sexual abuse or only educational neglect In the next chapter, we will observe that the child's sex was strongly related to the likelihood of sexual abuse occurring in the first place, so it is particularly interesting to see here that the child's gender did not affect the likelihood that he or she would be known to CPS once sexual abuse had occurred (i.e., sexually abused girls were no more likely to be investigated by CPS than were sexually abused boys). Also, note that the child's sex did appear to be related to CPS investigation of educational neglect when it was the only factor that was considered, but not when the other important factors (such as age, race, number of other household children, etc.) were taken into account It is also of interest that in the two categories where the child's sex did predict the likelihood of CPS investigation--physical abuse and physical neglect/emotional maltreatment--the effect of sex depended on the child's age. Specifically, females were more likely to be investigated by CPS, but only at older ages. Also, in the case of physical abuse, the impact of the child's sex on CPS investigation was further qualified by an interaction with the severity of harm that had been experienced. The child's gender did not appear to play any role unless the injury involved was something other than moderate in its severity.

Child's Age. Regardless of the type of maltreatment that was involved, the likelihood that children would have their maltreatment investigated by CPS was somehow dependent on their age. However, the exact nature of the relationship to age differed from one maltreatment form to another, and was modified by interactions with other factors as well. In three categories, the child's race/ethnicity affected the age relationship, with minority children showing decreasing likelihood of CPS investigation at progressively older ages, with Whites showing either increasing likelihood with age (in the case of sexual abuse and when only educational neglect was involved) or showing no age differences in the probability of CPS investigation (in the case of physical abuse). The child's sex affected the influence of age on CPS investigation in two maltreatment categories: physical abuse and physical neglect/emotional maltreatment. For both of these categories of maltreated children, males were progressively less likely to be investigated by CPS with increasing age, whereas the probability of females' maltreatment receiving CPS attention did not appear to vary with age.

Child's Race/Ethnicity. The child's race/ethnicity was an important predictor of CPS investigation regardless of the type of maltreatment that had occurred. Note, however, that the effects of

race/ethnicity on the probability of CPS investigation depended on the child's age in three of the four maltreatment categories examined. In the case of physical abuse, sexual abuse, and educational neglect, Blacks were more likely than Whites to be known to CPS below certain ages and less likely to receive CPS attention at older ages. For children who had been physically neglected and/or emotionally maltreated, age did not appear to have any modifying impact on the effect of race/ethnicity. Among these children, race/ethnicity differences applied equally at all age levels: Hispanics and other (non-Black) minority children (such as Asian, American Indian, etc.), were less likely than Whites or Blacks to have their maltreatment investigated by CPS.

Number of Other Children in the Household. This factor appeared to affect the probability of CPS investigation for two categories of children--those who had been physically abused, and those who had only been educationally neglected--but the nature of the relationship was different in the two circumstances. Physically abused children were more likely to be investigated by CPS if the number of other children in their households was not precisely known. This could reflect a concern about the possibility of there being additional, hidden victims in the situation. Children who had only been educationally neglected were more likely to have this maltreatment investigated by CPS if they were the only child in the household. The number of other household children initially appeared to be related to CPS investigation of physical neglect/emotional maltreatment, but that relationship disappeared when the other important predictors of CPS investigation were taken into account. (See the other effects listed in the third column in Table 2-18.)

Family Structure. The probability that CPS would investigate a child's maltreatment depended on family structure for children who had been physically abused, and for those who had been only educationally neglected. Here again, however, the actual nature of the relationship depended on which of these two types of maltreatment had been involved. Physically abused children were more likely to receive CPS investigation when they were living only with their father. Children who had been only educationally neglected were in fact less likely to be investigated by CPS if they lived only with their mother, but this was dependent on their age as well, and the effect of family structure was stronger at younger ages and disappeared for the older adolescents. It should also be observed that the initial, simple analyses showed that family structure was related to the probability that CPS would investigate physical neglect/emotional maltreatment when family structure was the only factor under consideration. However, this relationship did not hold up when the effects of the other influential factors listed in Table 2-18 were taken into account

Family Income. In the next chapter, it will be seen that family income is a powerful predictor of the occurrence of all types of Harm Standard abuse or neglect. In connection with CPS

investigation, however, this factor was a predictor only for children who had been physically neglected and/or emotionally maltreated, and in that instance the direction of the relationship was actually *contrary* to the popular view. Physically neglected and/or emotionally maltreated children were in fact less likely to receive CPS investigation if they were from lower income families. As suggested earlier, this may stem from the fact that poverty-related deprivation is not considered to be of concern to CPS. The finding here would imply that allegations involving physical neglect may simply be discounted on this basis prior to any CPS investigation. Moreover, for children who were physically abused, sexually abused, or only educationally neglected, those from lower income families were *not any* more likely to receive CPS investigation. Taken together, the findings here certainly contradict the popular belief that lower income families are simply reported to CPS more often, or simply more likely to be investigated by CPS once they are reported.

It is also noteworthy that, for three of the categories of maltreatment, the findings shown in Table 2-18 concerning the effects of family income only emerged when the other important predictive factors were taken into account. When family income was the only factor that was considered, the popular conception about its effects appeared to apply to children who were physically neglected and/or emotionally maltreated and to those who had been only educationally neglected. Family income, considered alone, also appeared to be related to CPS investigation of sexually abused children, but in the opposite direction. Table 2-18 shows that when the effects of the other important predictors were taken into account, family income effects disappeared altogether for sexually abused children and those only educationally neglected, and emerged as quite different for those who had been physically neglected and/or emotionally maltreated. This suggests that family income differences are associated with other factors and that the latter are the more important predictors of CPS investigation.

Recognition Source. For three categories of children--those physically abused, those physically neglected and/or emotionally maltreated, and those who were only educationally neglected--the recognition source played an important role in predicting the likelihood of CPS investigation. A similar pattern appeared in all three cases: children who had been recognized as maltreated by sentinels in day care centers, voluntary social services agencies, or mental health clinics were less likely to receive CPS investigation of their maltreatment. As discussed earlier, it is not possible for us to determine whether CPS investigation did not occur because these sentinels were less likely to report the children to CPS or because CPS was less likely to accept the case for investigation when it was reported by sentinels in these agency categories. But whatever the reason, the findings clearly indicate lower levels of CPS attention to children recognized by these sources. For children who were physically neglected and/or emotionally maltreated, there was also an interactive effect involving recognition source and the presence of other victims, as shown in Table 2-18.

Other Suspected Victims. For all children, regardless of the type of maltreatment they had experienced, CPS investigation of their circumstances was more likely when there were other suspected victims than when they were the only suspected victims. However, in two cases, this effect was modified by the influence of other factors. For children who were physically neglected and/or emotionally maltreated, recognition source modified the effect, and the presence of other victims made no difference for CPS investigation when the maltreatment had been recognized by sentinels in day care centers, social services agencies, or mental health clinics. For children who had only been educationally neglected, the impact of other victims was modified by age--the effect only appeared among children older than age 9 and one-half.

Nature of Harm. The specific nature of harm experienced by the child made a difference for the likelihood of CPS investigation in only one category of maltreatment: among children who had been physically neglected and/or emotionally maltreated, CPS investigation was more likely when the child had been physically injured than when the child had been harmed in other ways (such as by some resultant physical condition or emotionally, psychologically, or educationally).

Severity of Harm. One would expect to see that CPS investigation systematically relates to severity of harm--and that is, in fact, evident here. However, for physical neglect and emotional maltreatment, the direction of the effect is the opposite of what one would expect--CPS investigation was more likely when children had only moderate hann or when their harm was inferred than when they evidenced serious or fatal harm. Moreover, among children who were physically abused, the expected pattern of more serious injury being more likely to precipitate CPS investigation held only for females.

Perpetrator Factors. Finally, it was found that perpetrator-related factors also had some influence on CPS investigation, but the different effects were not pervasive, and the influence of each appeared to be limited to a single category of maltreatment, as summarized in Table 2-18. Furthermore, there was no evidence that the perpetrator's sex had any impact on CPS investigation.

County Metropolitan Status. Regardless of the type of maltreatment, there was *no* evidence that the urban, suburban, or rural character of the county of residence made any difference for the likelihood that a maltreated child would receive CPS investigation

2.8 Maltreated Children Who Are Unserved/Underserved by CPS

Children in the groups that are listed in Table 2-19 are considered to be "unserved/underserved" if one defines these as children who are comparatively *unlikely* to be investigated by CPS.

Table 2-19. Children Who Are Unserved/Underserved by CPS.

Physically abused children who...
- are older males with fatal, serious, or inferred injury,
- are younger females with moderate injury,
- are older Blacks (age 14 or older),
- are younger non-Blacks (ages 0 through 1 1),
- are recognized by day care, social services, or mental health staff,
- are *not* associated with other suspected victims,
- are *not* in father-only households,
- are in households where the total number of household children is known.

Sexually abused children who...
- are Black or Hispanic aged 8 or older,
- are *not* associated with other suspected victims,
- are associated with demonstrated harm and not just inferred harm,
- were abused by in-home perpetrators.

Physically neglected and/or emotionally maltreated children who...
- are males aged 7 or older,
- are females aged 0 through 5,
- are Hispanic or of "other" (i.e., non-Black minority) races,
- are from families with incomes below $15,000 per year,
- are recognized as maltreated by sentinels in schools or in day care, social services, or mental healtb agencies
- are *not* associated with other suspected victims and are not recognized by sentinels in day care, social services, or mental health agencies
- are physically injured,
- are fatally or seriously injured,
- are *not* maltreated by a parent or parent/substitute,
- are maltreated by more than one perpetrator.

Only educationally neglected children who...
- are White aged 5 through 13,
- are non-White, aged 15 through 17,
- are associated with other suspected victims and are aged 5 through 8,
- are *not* associated with other suspected victims and are aged 10 through 17,
- are in mother-only households and are aged 5 through 15,
- are in households with more than one child,
- are recognized by sentinels in day care, social services, or mental health agencies

3. Risk Factors for the Occurrence of Abuse and Neglect

One of the key goals of the NIS-2 Reanalysis component of the High Risk Study was to use the information in the NIS-2 database to identify the risk factors for the occurrence of abuse and neglect. To the extent that the NIS-2 provides a nationally representative sample of maltreated children, the risk factors identified in this database should be broadly generalizable. In addition, the second approach used in the NIS-2 Reanalysis component to address the issue of which maltreated children am "unserved/underserved" was designed to compare the factors that are actually related to the risk of abuse or neglect to the definitions and indicators of "high risk" used in CPS agencies.

This chapter reports the findings concerning what factors am related to risk of maltreatment according to the NIS-2 data, and compares these to the factors that are used in CPS to index risk. The first section summarizes the general approach taken in the NIS-2 reanalyses to identify risk factors in that database. The sections that follow present the detailed findings regarding the risk factors for each of six major categories of maltreatment: physical abuse, sexual abuse, physical neglect, emotional maltreatment, educational neglect, and multiple maltreatment. The chapter concludes with a synopsis of the findings concerning risk, and a discussion of their relation to the factors used to indicate risk in CPS agencies.

3.1 Method to Identify Risk Factors in the NIS-2 Database

A total of 931,000 children were estimated to have experienced Harm Standard maltreatment in 1986, and these were distributed across the different categories of maltreatment as described at the outset of the previous chapter. By comparing the characteristics of these children to the characteristics of other, non-maltreated children in the general population, it was possible to identify the important features that distinguished maltreated from non-maltreated children.

The NIS-2 database includes a nationally representative sample of children who were countable under the Harm Standard. In order to analyze the factors associated with the risk of maltreatment, it was necessary to obtain a representative sample of non-maltreated children for comparison. Although the NIS-2 database does include children who were not countable according to the Harm Standard, they were submitted to the NIS study because of suspected maltreatment or because they had been reported to CPS, and this criterion-related method of selection means that they do *not* represent the general population of non-maltreated children. In order to identify the factors that were

related to the risk of abuse or neglect, we had to locate an appropriate comparison database of non-maltreated children and then integrate that comparison database together with the NIS-2 Harm Standard children so that a single, unified database was available for the risk factor analyses. The comparison database that was used was a combined file including the U.S. Bureau of Census Current Population Survey data from both March 1986 and March 1987. Further details on the procedures used to construct the risk factor analysis file from these sources are given in the technical appendix.

Using this special-purpose database then, logistic models were developed in order to identify the factors that predicted the occurrence of Harm Standard maltreatment. As with the models described in the previous chapter, our early analyses revealed strong differences across the different maltreatment types in terms of the factors that systematically related to risk, so the analytic efforts primarily focused independently on the different categories of maltreatment. Specifically, six separate series of risk factor analyses were conducted, each focusing on one of the following mutually exclusive groups of children :

1) **Physically Abused Children: those** whose only countable Harm Standard maltreatment had been physical abuse, or physical abuse and educational neglect;

2) **Sexually Abused Children: those whose only** countable Harm Standard maltreatment had been sexual abuse, or sexual abuse and educational neglect;

3) **Physically Neglected Children: those** whose only countable Harm Standard maltmatment had been physical neglect, or physical neglect and educational neglect;

4) **Emotionally Maltreated Children: those** whose only countable Harm Standard maltmatment had been emotional maltmatment, or emotional maltreatment and educational neglect;

5) **Multiply-Maltreated[1] Children: those** who had countable Harm Standard maltmatment that included *combinations* of physical abuse, sexual abuse, physical neglect or emotional maltreatment, whether or not they had also been educationally neglected; and

6) Educationally Neglected **Children: those** whose only countable Harm Standard maltreatment had been educational neglect.

Notice that the **categories of physical abuse, sexual abuse, physical neglect, emotional** maltreatment, and multiple maltreatment included children who had experienced the specific type of maltreatment in question, either *alone* or *only in conjunction with educational neglect. Also* notice that, in contrast to the way in which maltreatment was categorized in the last chapter, the approach here distinguishes physical neglect from emotional maltreatment. This was because early analyses indicated that the risk factors for these two forms of maltreatment might differ sufficiently to warrant separate

[1]"Multiply maltreated children" are those who experienced multiple forms of maltreatment.

exploration. Readers will also observe that the multiply-maltreated children were actually analyzed separately in their own right in the risk factor analyses. This was because, unlike the situation in the last chapter, there were sufficient numbers of these children to support the risk factor analyses?

Using this structure, six parallel series of logistic analyses were conducted, each examining the risk factors of maltreatment for one of these groups of children. In developing the logistic models, we first conducted single-factor logistic analyses for each of the six maltreatment groups, exploring the overall effects on the likelihood of maltreatment of every characteristic that was available *both* in the NIS-2 information and in the U.S. Current Population Survey data. Specifically, we systematically examined the following characteristics in relation to each maltreatment category: child's age, race/ethnicity, sex, family income, family structure, family size (i.e., number of children in the household), and county metropolitan status. As with the logistic models described in Chapter 2, we again applied a relatively lenient standard in the risk factor analyses, and considered a characteristic or factor to have a noteworthy relationship to maltreatment risk if the t-value associated with its parameter was 1 .00 or greater. Once we had identified the factors that, in their own right, appeared to be related to CPS awareness, we proceeded to build more complex multi-factor logistic models. That is, we gradually increased the complexity of the logistic model by adding each of the apparently important factors together in the same model until all were eventually included together. This strategy determined whether each of the apparently important factors still had a noteworthy effect on CPS awareness when the effects of the other apparently important factors were taken into account. Factors were elhninated from the larger model whenever their importance waned and dropped below the t=1.00 standard in the context of another factor. In this manner, we built increasingly more complex logistic models to account for the risk of children being in each maltreatment group. Finally, we explored the possibility of different interactions among some of the factors that were included in the final models. The resulting final models include all those factors and interactions that continued to meet the standard when taking the effect of each of the other included factors into account Appendix B contains a more detailed discussion of the approach used in the series of risk factor logistic regressions, and also presents the model parameters and significance statistics for all the single-factor and final multiple-factor models that were developed.

The subsequent sections in this chapter describe the factors that were found to be important in predicting risk for each type of maltreatment, providing graphic illustrations of any interactive

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[2] In the risk factor analyses, (1) it was not necessary to exclude the sizable portion of children who were reported to CPS by CPS-only reporters, as the CPS-awareness analyses had require& and (2) the subdivision of these children into those known to CPS and those not known to CPS was irrelevant here, so greater numbers were available for subdivision according to the risk factors of interest.

relationships that were identified in the final model. Throughout this presentation, readers will note that the amount of variance accounted for by the models here is less than that generally accounted for under the models described in Chapter 2 concerning the likelihood of CPS investigation. This probably stemmed from two sources. First, the models concerning the occurrence of maltreatment were attempting to account for a relatively rare event in comparison to the earlier models. It is inherently more difficult to account for substantial variance in occurrence when the event in question is very infrequent. Second, it is probably true that the types of factors that were employed in the Chapter 2 models concerning CPS awareness more closely conformed to the types of cues that do, in fact, govern the probability of CPS awareness. In contrast, fewer factors could be examined in connection with the risk of occurrence of maltreatment, and those were limited to gross demographic characteristics, which probably do not conform well to the underlying determinants of abuse and neglect.

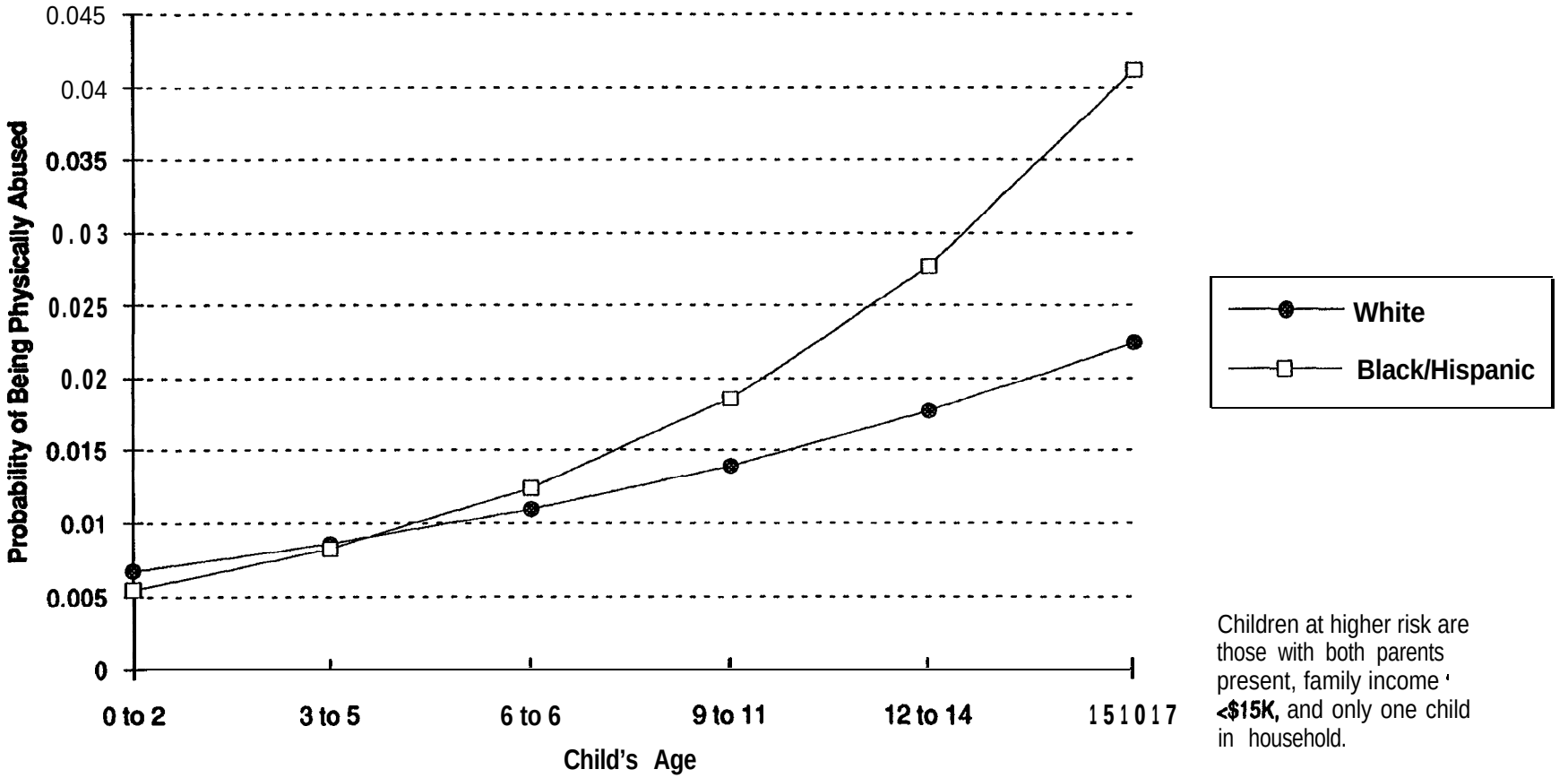
3.2 Factors Predicting Risk of Physical Abuse

Of the seven factors that were examined, two were unrelated to the risk of physical abuse: child's sex and county metropolitan status. The remaining five factors were all found to have significant relationships to risk of physical abuse in themselves, and their relative importance as risk factors was retained when the effects of all five were simultaneously taken into account. In addition, the final model, which is given in Table 3-1, accounted for 8.2 percent of the variance in the occurrence of physical abuse and it included two interactions among the five factors. 'These findings are discussed below.

Child's age, race/ethnicity, and family structure. Children's ages were systematically related to their risk of being physically abused, but the nature of this relationship depended on two other factors: the child's race/ethnicity and the structure of the child's family.

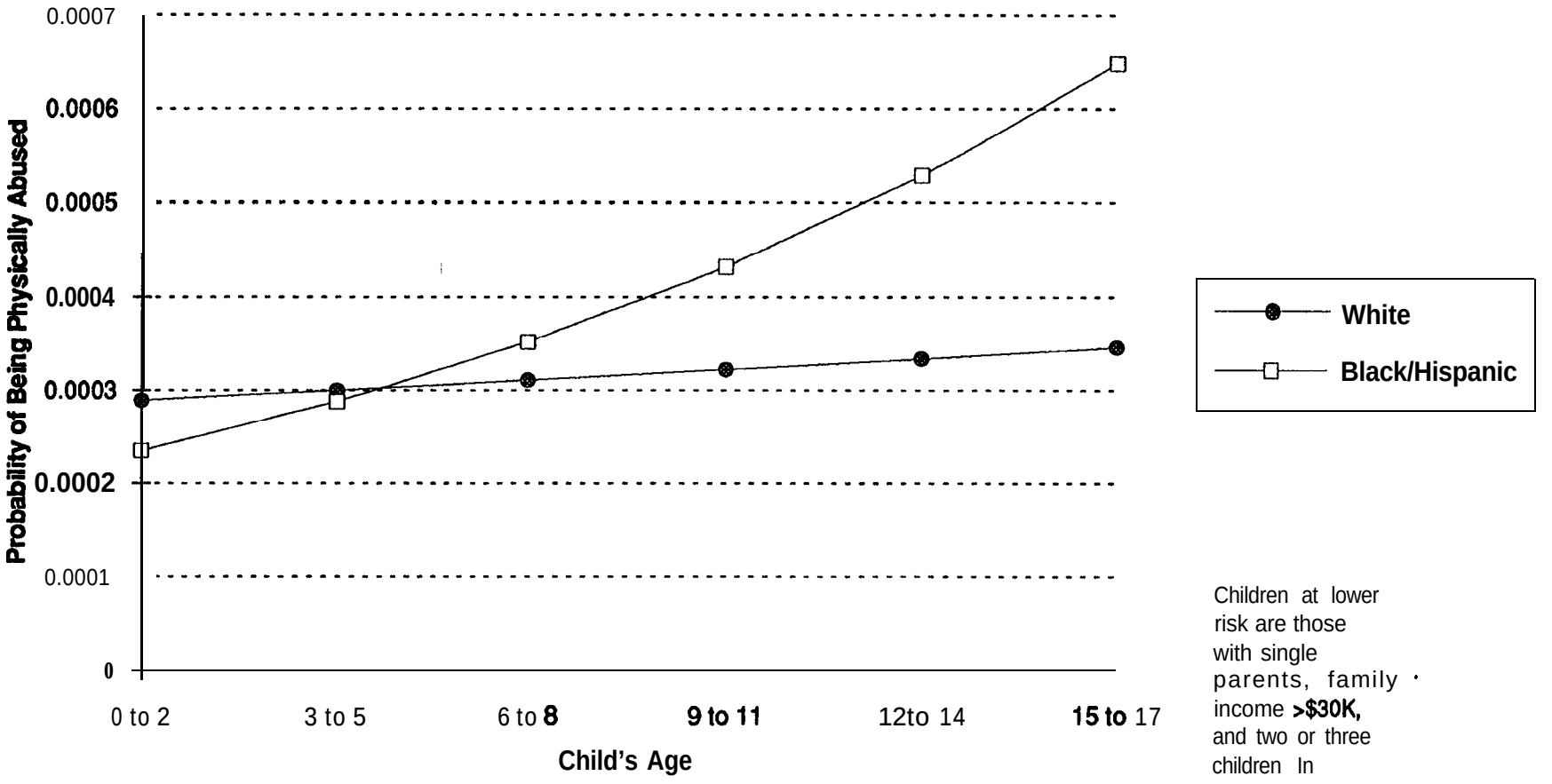
The way in which race/ethnicity interacts with age in predicting physical abuse is depicted graphically in Figures 3-l and 3-2. As in the previous chapter, the results presented here will always provide specific probabilities in the context of two different sets of assumptions about the other important predictive factors in each model. Accordingly, Figure 3-1 presents the probabilities of physical abuse for children who are relatively more *likely to be* physically abused on the basis of their other predictive characteristics (i.e., those with both parents present, family income under $15,000 per year, and only one child in the household). In contrast, the probabilities that are graphed in Figure 3-2 were calculated on the basis of assuming that the children were relatively less *likely to be* physically abused according to their other predictive characteristics. That is, they were in families headed by single parents, with family incomes greater than $30,000 per year, and with two or three children in the

Figure 3-1. Race and Age Differences in Risk of Physical Abuse for Generally High Risk Children.



Children at higher risk are those with both parents present, family income < $15K, and only one child in household.

Figure 3-2. Race and Age Differences in Risk of Physical Abuse for Generally Low Risk Children.



Children at lower risk are those with single parents, family income >$30K, and two or three children In household.

Table 3-1. Final Multi-Factor Logistic Model to Predict the Occurrence of Physical Abuse.[3]

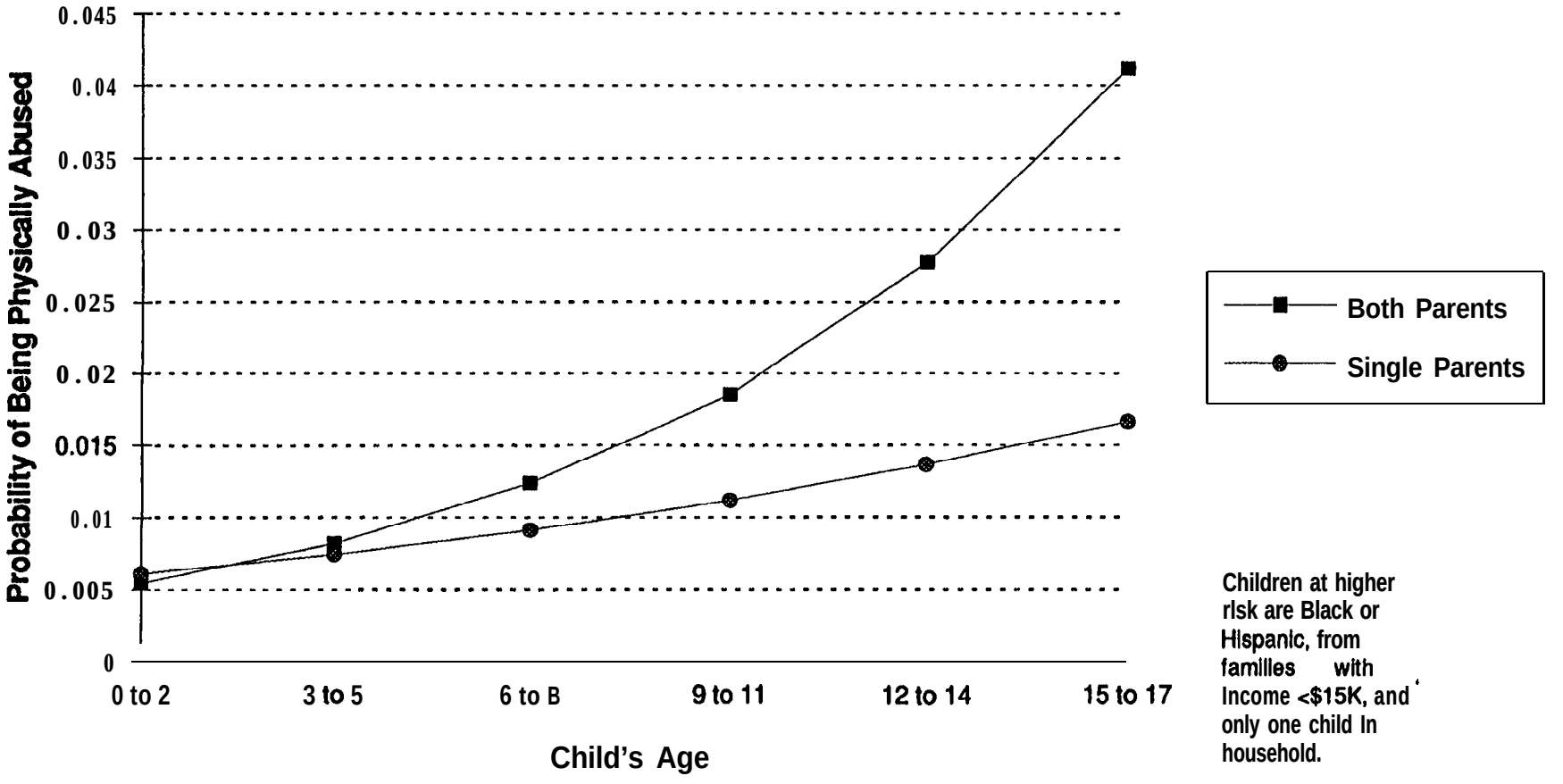
Parameter	Parameter Estimate	t
Intercept	-5.23856	-21.43
Age categories	024421	4.09
Black or Hispanic	-0.37504	-1.11
Income $15,000-29,999	-0.75037	-4.22
Income $30,000+	-2.89336	-8.17
2 to 3 children	-0.37216	-2.79
4 or more children	-0.25048	-1.06
Single parents	0.3 1873	0.67
Black/Hispanic X Age	0.16690	1.96
Single parent X Age	-0.20806	-1.76
Model R^2 Value	0.0819	
Model F-value	22.579 ** (p<.005)	
Model df	9,13	

household. Despite the dramatic differences in their underlying assumptions, these two graphs are amazingly similar. There is clearly a strong tendency for the risk of physical abuse to increase with age for Black and Hispanic children, whereas White children experience only slightly increasing risk with age, if any.

Family structure also determined the risk of physical abuse in conjunction with the child's age, as shown in Figures 3-3 and 3-4. Again, the two figures given represent different extremes in the overall likelihood of a child being physically abused, based on the other characteristics that were predictive. Figure 3-3 indicates the age and family structure interaction effect for children who are otherwise at high risk of physical abuse. (See note on the graph: i.e., Blacks or Hispanics in families with incomes under $15,000 per year, and with only one child in the household.) A graph based on the

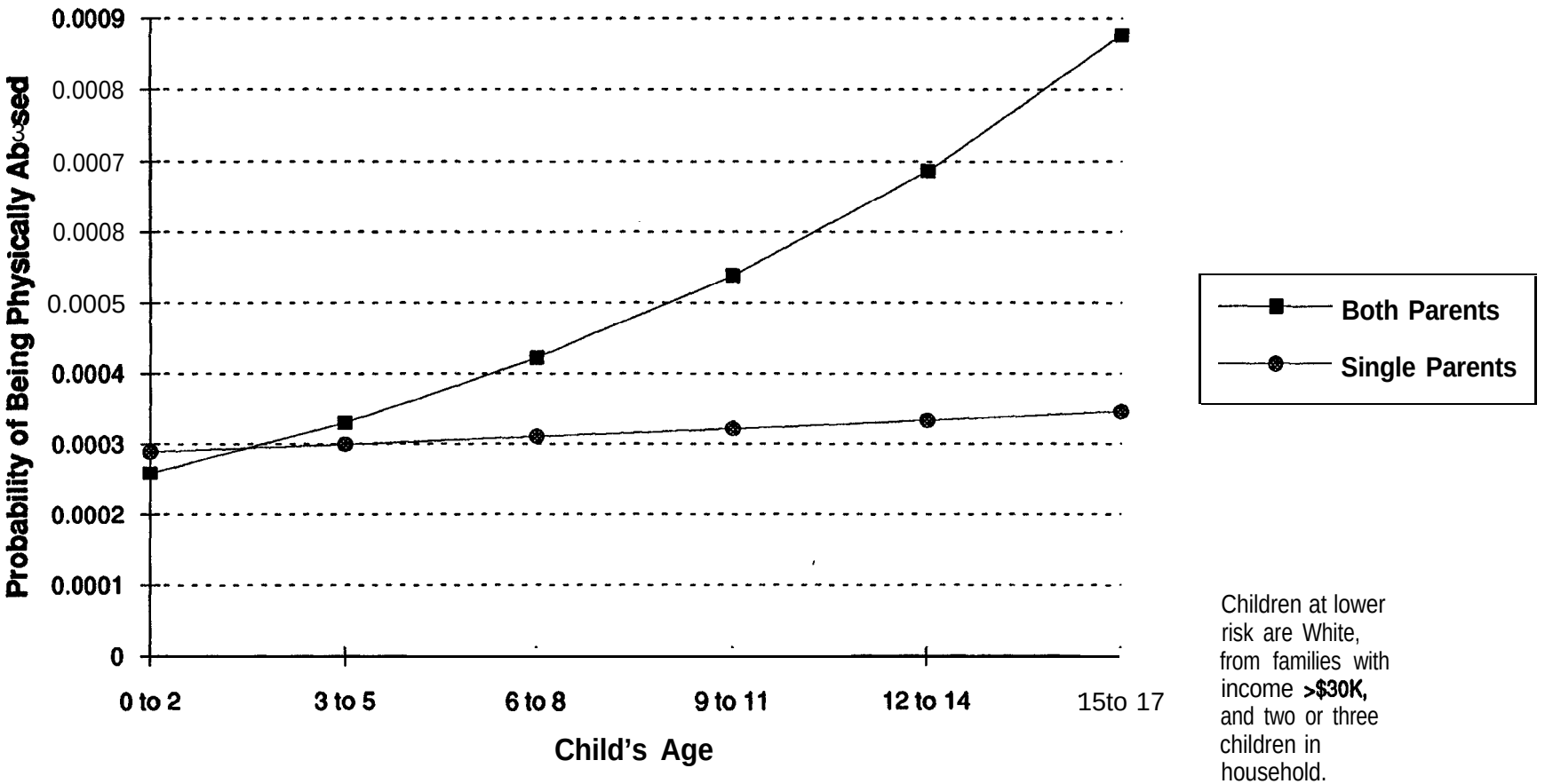
[3]This model was based on a sample N of 4,462 (combined NIS-2 and Census datasets), within which 664 children were maltreated according to the Harm Standard and 3,798 were not.

Figure 3-3. Age and Family Structure Differences in Risk of Physical Abuse for Generally High Risk Children.



Children at higher risk are Black or Hispanic, from families with Income <$15K, and only one child in household.

Figure 3-4. Age and Family Structure Differences in Risk of Physical Abuse for Generally Low Risk Children



Children at lower risk are White, from families with income >$30K, and two or three children in household.

opposite set of assumptions is given in Figure 3-4. These graphs indicate that children in two-parent families are at increasing risk of physical abuse with increasing age, whereas there are very slight or nonexistent age differences in risk for children in single-parent families.

Family income. Despite the fact that only a rather gross index of family income was available to us,[4] family income emerged as the strongest risk factor in relation to physical abuse, alone accounting for 5.2 percent of the variance in occurrence of physical abuse. The dramatic income-related differences in risk of physical abuse are shown in Table 3-2, for children who are otherwise at high risk and for children otherwise at low risk of physical abuse, on the basis of the other important risk factors for this maltreatment. Even ignoring the number of persons in the family, children from families where annual income was below $15,000 per year were at 21 times greater risk in comparison to those in families with incomes of $30,000 per year or more.

Table 3-2. Family Income Differences in Risk of Physical **Abuse.**

Generally High Risk Children	
< $15,000	.041
$15,000 to $29,999	.020
$30,000 +	.002
Generallv Low Risk Children	
< $15,000	.0042
$15,000 to $29,999	.0020
$30,000 +	.0002

[4]That is, we were limited to the use of a three-part categorization of families into those with annual incomes under $15.000, between $15.000 and $30,000, and over $30.000.

[5]Those at higher risk were 15- to 17-year-old Blacks or Hispanics in two-parent households, with only one child in the household. Those who were otherwise at lower risk of physical abuse were Blacks or Hispanics aged 0 to 2 years, living with single parents and with two or three children present in the household.

Family size. The number of children in the household also appeared to be related to a child's risk of beiig physically abused. Table 3-3 delineates this relationship.

Table 3-3. Differences in Risk of Physical Abuse Related to Number of Children in the Household.[6]

Generally High Risk Children	
One Child	.041
Two or Three Children	.029
Four or More Children	.032
Generally Low Risk Children	
One Child	.00034
Two or Three Children	.00023
Four or More Children	.00026

Again, differences in risk of physical abuse are consistent. Only children appear to be at the greatest risk of physical abuse. Those in multiple-child households are at lower risk. However, notice that the lowest risk is associated with the two to three child household; children in households with four or more children are at slightly greater risk, but not as great as the risk of only children.

3.3 Factors Predicting Risk of Sexual Abuse

Two of the seven factors that were explored emerged as having no evident relationship with the risk of sexual abuse occurring to children: family size (i.e., number of children in the household) and county metropolitan status. The remaining five factors were related to the risk of sexual abuse when they were considered alone, and all of them retained their risk factor status when the influences of the other important predictors were taken into account. These five factors (including two interactions among them) constituted the final multi-factor logistic model to account for risk of sexual abuse, which is shown in Table 3-4. This model accounted for 12.0 percent of the variance in the occurrence of sexual abuse among children.

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[6]Those at greater risk of physical abuse were living in households with both parents present, family income was under $15,000 per year, child was Black or Hispanic and aged 15 to 17. Those at lower risk were living with single parents, family income $30,000 per year or more, Black or Hispanic and aged 0 to 2 years.

Table 3-4. Final Multi-Factor Logistic Model to Predict the Occurrence of Sexual Abuse.[7]

Parameter	Parameter Estimate	t
Intercept	-6.76845	-12.17
Female	1.21550	2.72
Age categories	0.28048	2.99
"Other" races	1.11882	1.49
Income $15,000-29,999	-1.42888	-5.26
Income $30,000+	-3.28111	-6.83
Mother-only	-1.30187	-1.44
Father-only	-1.39673	-0.95
"Other" races x Age	-0.57852	-2.58
Mother-only X Age	0.13012	0.54
Father-only X Age	0.42413	1.13
Model R^2 Value	0.1195	
Model F-value	48.439 ** (p<.005)	
Model df	10,12	

Child's age, race/ethnicity, and family structure. These three factors were involved in two interactions related to the likelihood of a child experiencing sexual abuse. Age predicted risk of sexual abuse, but its effect depended both on the child's race/ethnicity and on the family structure in the situation The way in which the impact of age depended on the child's race/ethnicity is graphed in Figures 3-5 and 3-6. Whites, Blacks, and Hispanics were similar in their risk of sexual abuse, and this risk increased with their age. In contrast, other minority children (such as Asians, American Indians, Alaskan natives, etc.) showed a decreasing risk of sexual abuse with increasing age. It is not possible to say whether the lower risk for children of "other" racial/ethnic groups is due to the operation of special cultural factors in these groups or to special barriers to detecting sexual abuse among these children through the sentinel methodology used in the MS-2.

Family structure also served to modify the way in which the child's age related to risk of sexual abuse. The effect is graphed in Figures 3-7 and 3-8 for children who are otherwise at relatively high risk of sexual abuse and those at relatively low risk, respectively. As can be seen, the pattern

[7] This model was based on a sample N of 4,244 (combined MS-2 and Census datasets). within which 446 children were maltreated according to the Harm Standard and 3,798 were not.

Figure 3-5. Age and Race Differences in Risk of Sexual Abuse for Generally High Risk Children.

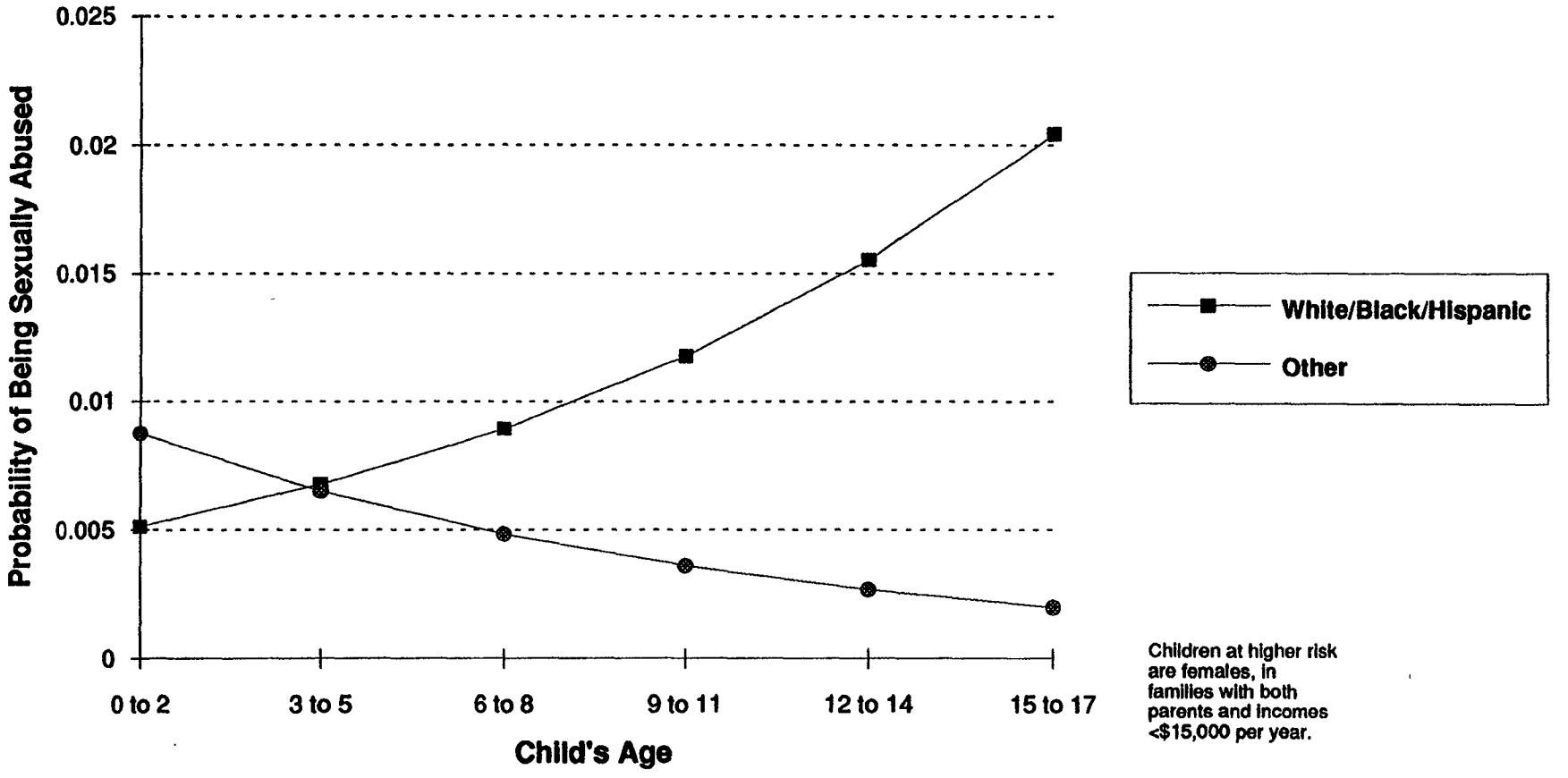
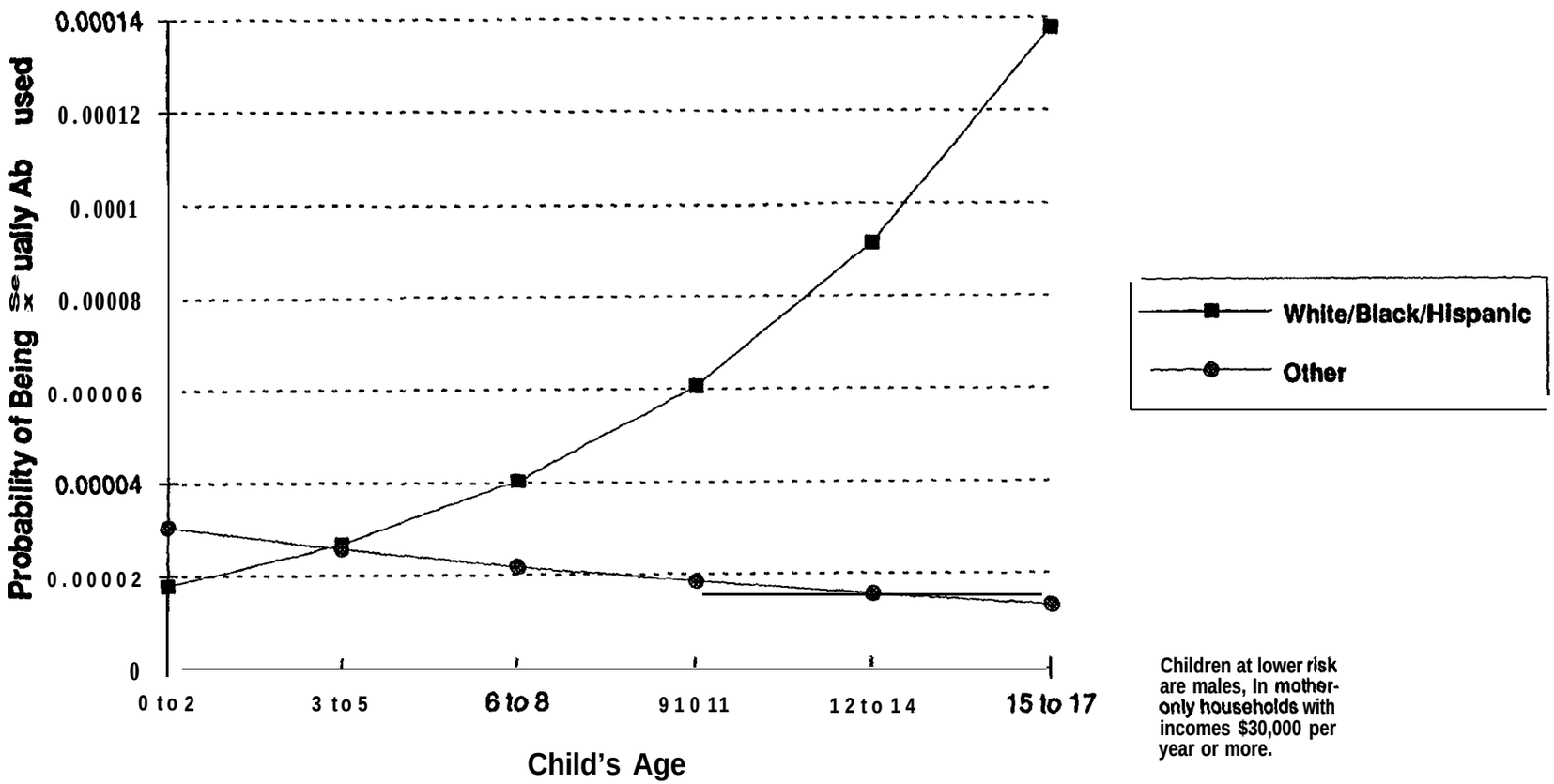
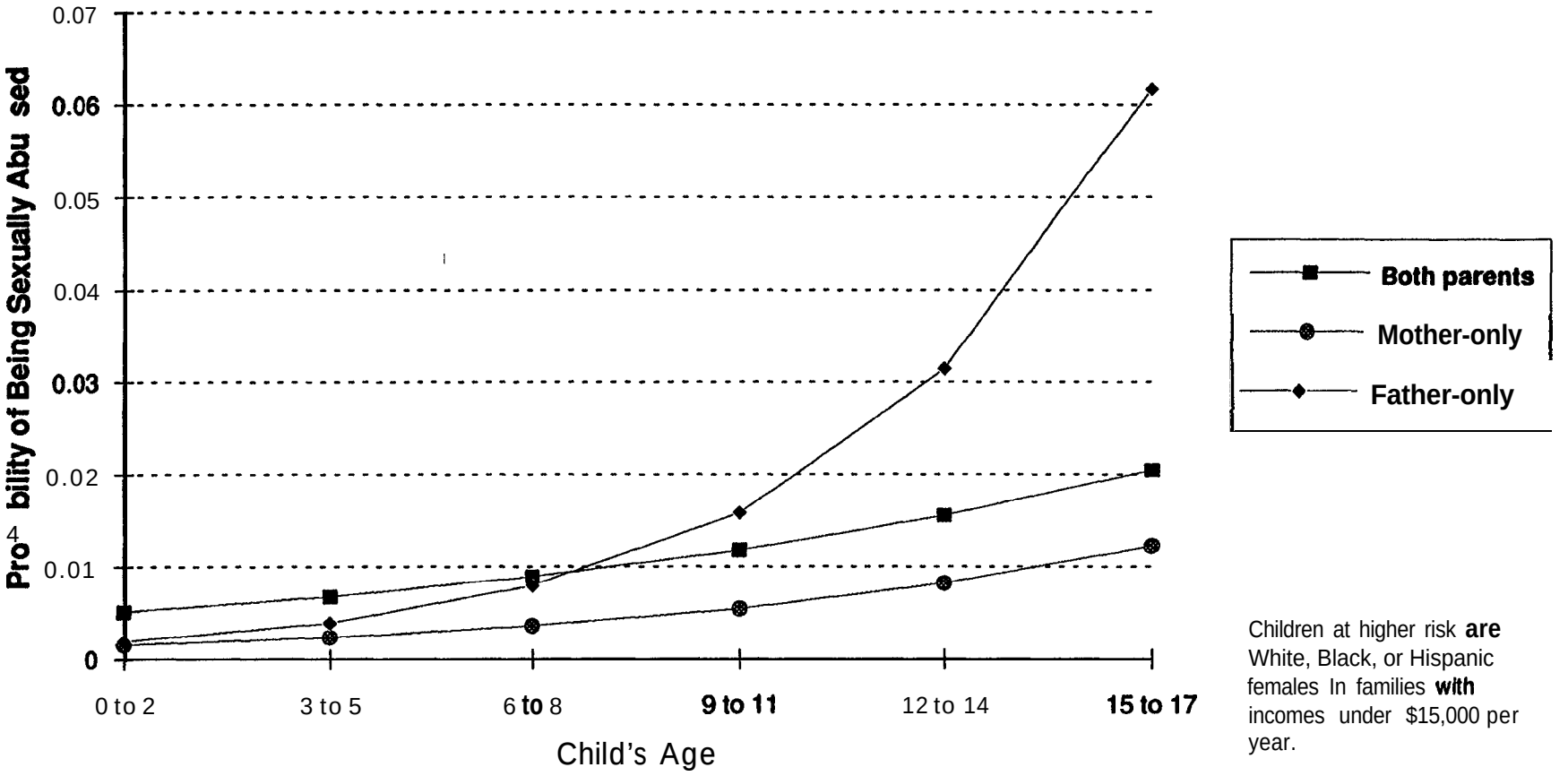


Figure 3-6. Age and Race Differences in Risk of Sexual Abuse for Generally Low Risk Children.



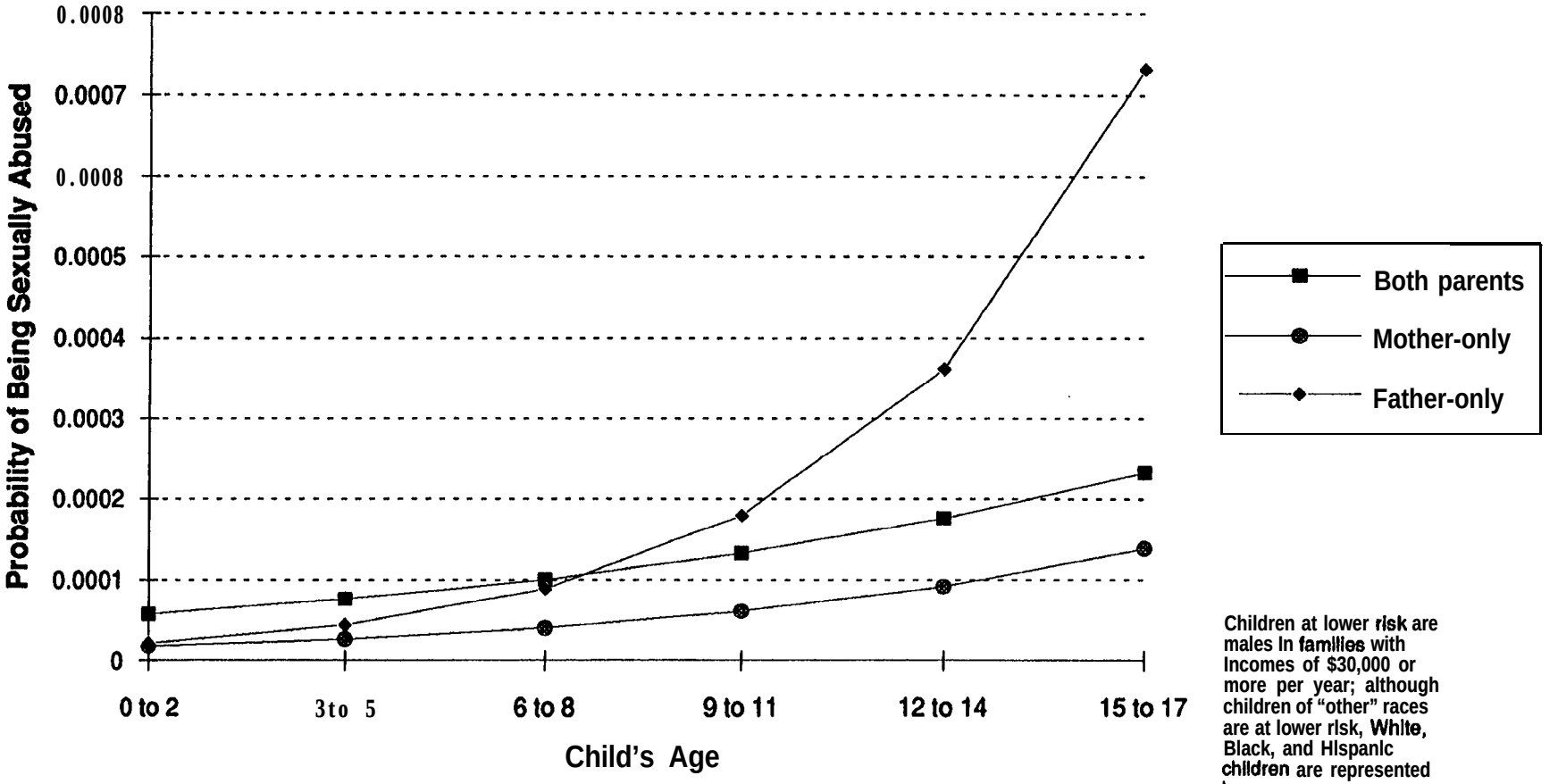
Children at lower risk are males, In mother-only households with incomes $30,000 per year or more.

Figure 3-7. Age and Family Structure Differences in Risk of Sexual Abuse for Generally High Risk Children.



Children at higher risk are White, Black, or Hispanic females In families with incomes under $15,000 per year.

Figure 3-8. Age and Family Structure Differences in Risk of Sexual Abuse for Generally Low Risk Children.



Children at lower risk are males in families with incomes of $30,000 or more per year; although children of "other" races are at lower risk, White, Black, and Hispanic children are represented here.

of increasing risk with increasing age holds only among children living in father-only households. Children in mother-only households and those living with both parents show no important age-related differences in risk.

Child's sex. Not surprisingly, the child's sex was a significant risk factor for sexual abuse, whether considered alone or in conjunction with the other important risk factors for this maltreatment type. The effect of a child's sex is shown in Table 3-5, for children otherwise at high risk and for children otherwise at relatively low risk.

Table 3-5. Sex Differences in Risk of Sexual Abuse.*

Generally High Risk Children	
Males	.002
Females	.005
Generally Low Risk Children	
Males	.00002
Females	.00006

Family income. Again, family income emerged as the strongest predictor of the risk of sexual abuse. When considered in itself, it accounted for 6.8 percent of the variance in the occurrence of

[8] Those at greater risk were 15- to 17-year-olds who were White, Black, or Hispanic, living with both parents, and in families with incomes under $15,000 per year. Those at lower risk were Whites, Blacks, or Hispanics who were ages 0 to 2 years, living in mother-only households where family income is $30,000 or more per year.

sexual abuse, and it remained a **highly** significant predictor in the context of the other important risk factors. The noteworthy strength of the differences in risk of sexual abuse are shown in Table 3-6.

Table 3-6. Family Income Differences in Risk of Sexual Abuse.9

Generally High Risk Children	
< $15,000	.0051
$15,000 to $29,999	.0012
$30.000 +	.0002
Generally Low Risk Children	
< $15.000	.00047
$15,000 to $29.999	.0001 1
$30,000 +	.00002

Children in families with incomes under $15,000 experienced more than 24 times the level of risk associated with children in families with incomes of $30,000 or more.

3.4 Factors Predicting Risk of Physical Neglect

All seven of the characteristics examined demonstrated some relationship to risk of physical neglect when considered alone. However, two of these, the child's race/ethnicity and the family size, were eliminated as possible risk factors when the effects of the other important predictors were taken into account. Five factors and two interactions comprised the final multi-factor logistic model, which is given in Table 3-7. As the table shows, this model accounted for 20.2 percent of the variance in the occurrence of physical neglect.

[9] Those at higher risk were 15- to 17-year-old females who were White, Black, or Hispanic and living in two-parent households. Those who were otherwise at lower risk were males aged 0 to 2 who were White, Black, or Hispanic living with their mother only.

Table 3-7. Final Multi-Factor Logistic Model to Predict the Occurrence of Physical Neglect.[10]

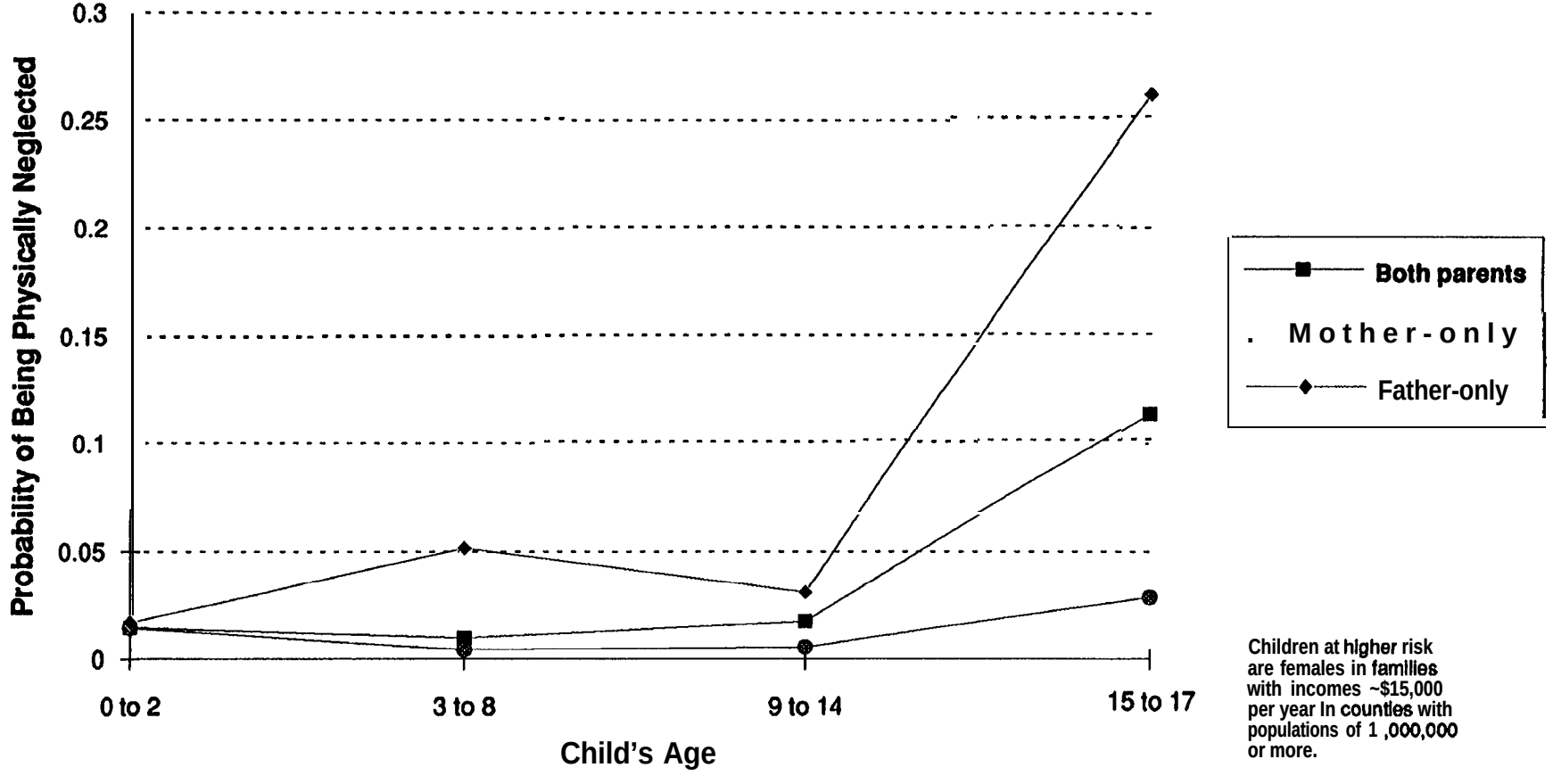
Parameter	Parameter Estimate	t
Intercept	4.14428	-13.18
3-8 year olds	-0.39700	-1.31
9-14 year olds	0.19562	0.50
15-17 year olds	0.83387	0.58
Income $15,000-29,999	-1.89876	-3.55
Income $30,000+	-524725	-6.83
Other MSA & Non-MSA	-1.31109	-2.18
Mother-only	-0.01197	-0.04
Father-only	0.15599	0.30
Mother-only X 3-8 yr olds	-0.78401	-2.43
Mother-only X 9-14 yr olds	-1.12620	-2.94
Mother-only X 15-17 yr olds	-1.45642	-2.35
Father-only X 3-8 yr olds	1.54030	2.70
Father-only X 9-14 yr olds	0.42254	0.71
Father-only X 15-17 yr olds	0.85520	1.35
Females	-0.06718	-0.25
Females X 15-17 yr olds	1.32303	1.01
Model R^2 Value	0.202	
Model F-value	7.483 * (p<.025)	
Model df	16,6	

Child's *age, sex,* **and family structure.** As with all other forms of maltreatment, child's age proved to be an important risk factor for the occurrence of physical neglect. However, as has also been commonly true, the effect of age on risk was modified by other factors--in this case, the child's sex and family structure.

Figures 3-9 and 3-10 depict the way in which age and family structure interact to determine the child's level of risk for physical neglect. Regardless of whether one considers children who are at relatively high risk of physical neglect (Figure 3-9) or those at relatively low risk of physical neglect (Figure 3-10) in other respects, the pattern appears to be that age-related increases in risk of physical neglect are essentially limited to children who reside in father-only families. Among these children, there

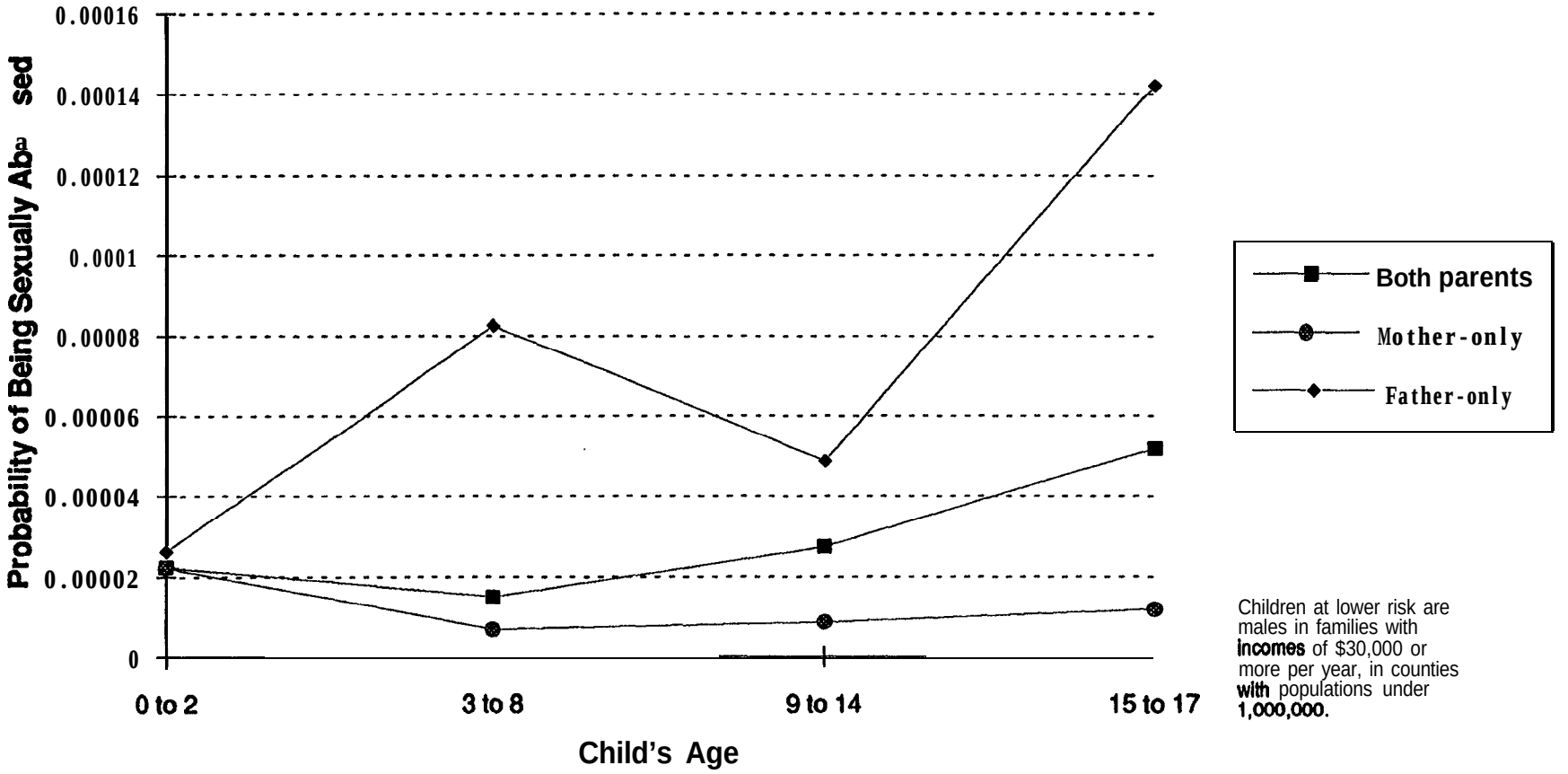
[10] This model was based on a sample N of 4,228 (combined NIS-2 end Census datasets), within which 430 children were maltreated according to the Harm Standard and 3,798 were not.

Figure 3-9. Age and Family Structure Differences in Risk of Physical Neglect for Generally High Risk Children.



Children at higher risk are females in families with incomes ~$15,000 per year In counties with populations of 1 ,000,000 or more.

Figure 3-10. Age and Family Structure Differences in Risk of Physical Neglect for Generally Low Risk Children.



Children at lower risk are males in families with incomes of $30,000 or more per year, in counties with populations under 1,000,000.

is some degree of discontinuity in the way in which maltreatment is related to age. It appears that those in the 15 to 17 year age bracket are at greatest risk, but those next highest in risk may be the children in the 3 to 8 year bracket, at least among those children who are at generally low risk according to their other characteristics (Figure 3-10).

The child's sex also serves to modify the influence of age on risk of physical neglect, as can be seen in Figures 3-l 1 and 3-12. Only females experience greater risk of physical neglect in the older age brackets.

Family income. Consistent with the findings concerning all other forms of maltreatment examined, family income was the strongest predictor of risk of physical neglect. By itself, with no other factors considered, it accounted for 11.2 percent of the variance in the occurrence of physical neglect, and it remained the most significant risk factor when all the other important factors were included in the multi-factor logistic model. The magnitudes of the risk differences due to income are shown in Table 3-8.

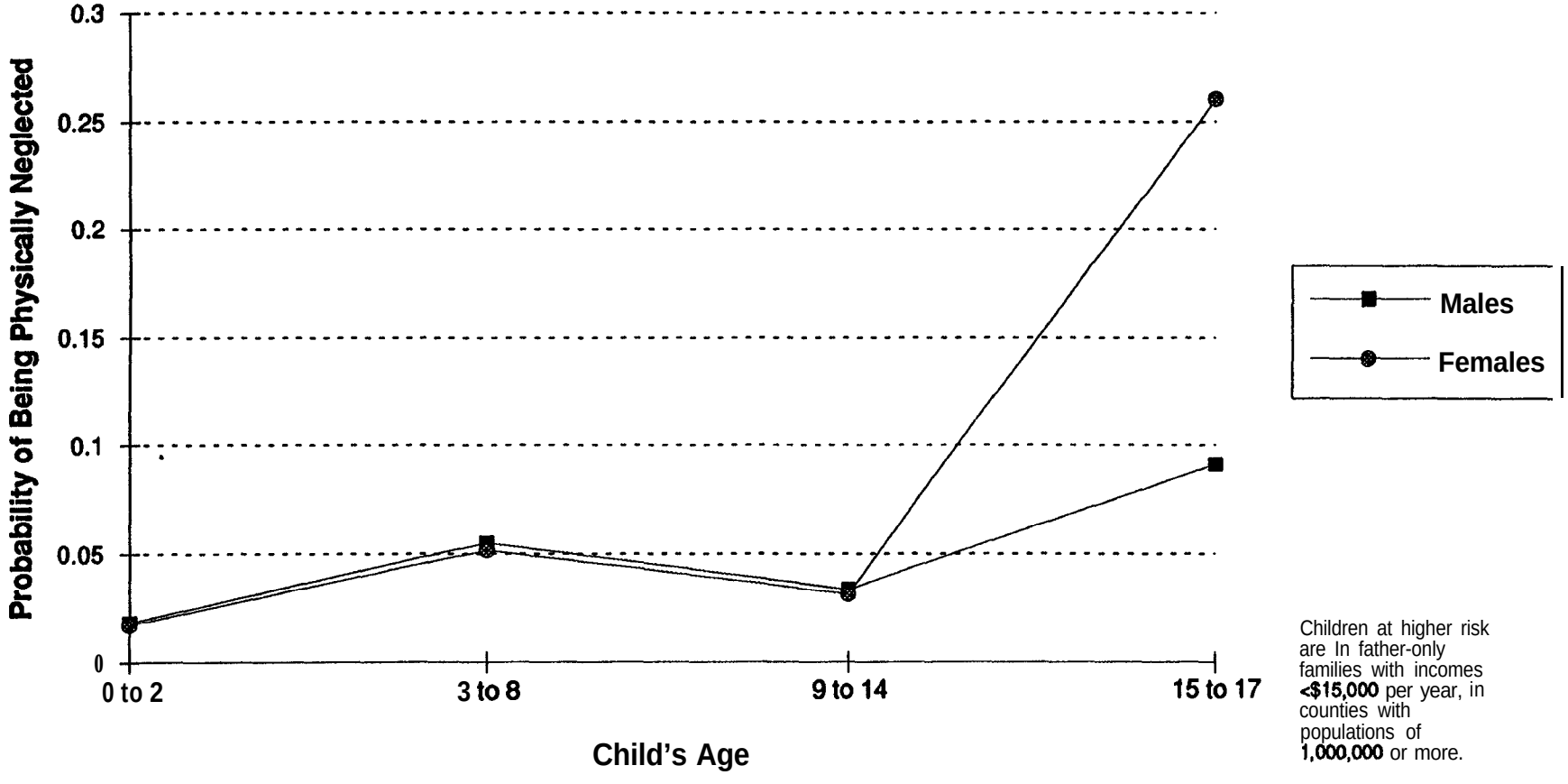
Table 3-8. Family Income Differences in Risk of Physical Neglect.[11]

Generally High Risk Children	
< $15,000	.1136
$15,000 to $29,999	.0188
$30,000 +	.0007
Generally Low Risk Children	
< $15,000	.00121
$15,000 to $29,999	.00018
$30,000 +	.00006

When risk of physical neglect was generally low, due to the configuration of their other characteristics, those children in families with incomes under $15,000 were at nearly 20 times greater risk of physical neglect than those with family incomes of $30,000 or more per year. When risk of physical neglect was

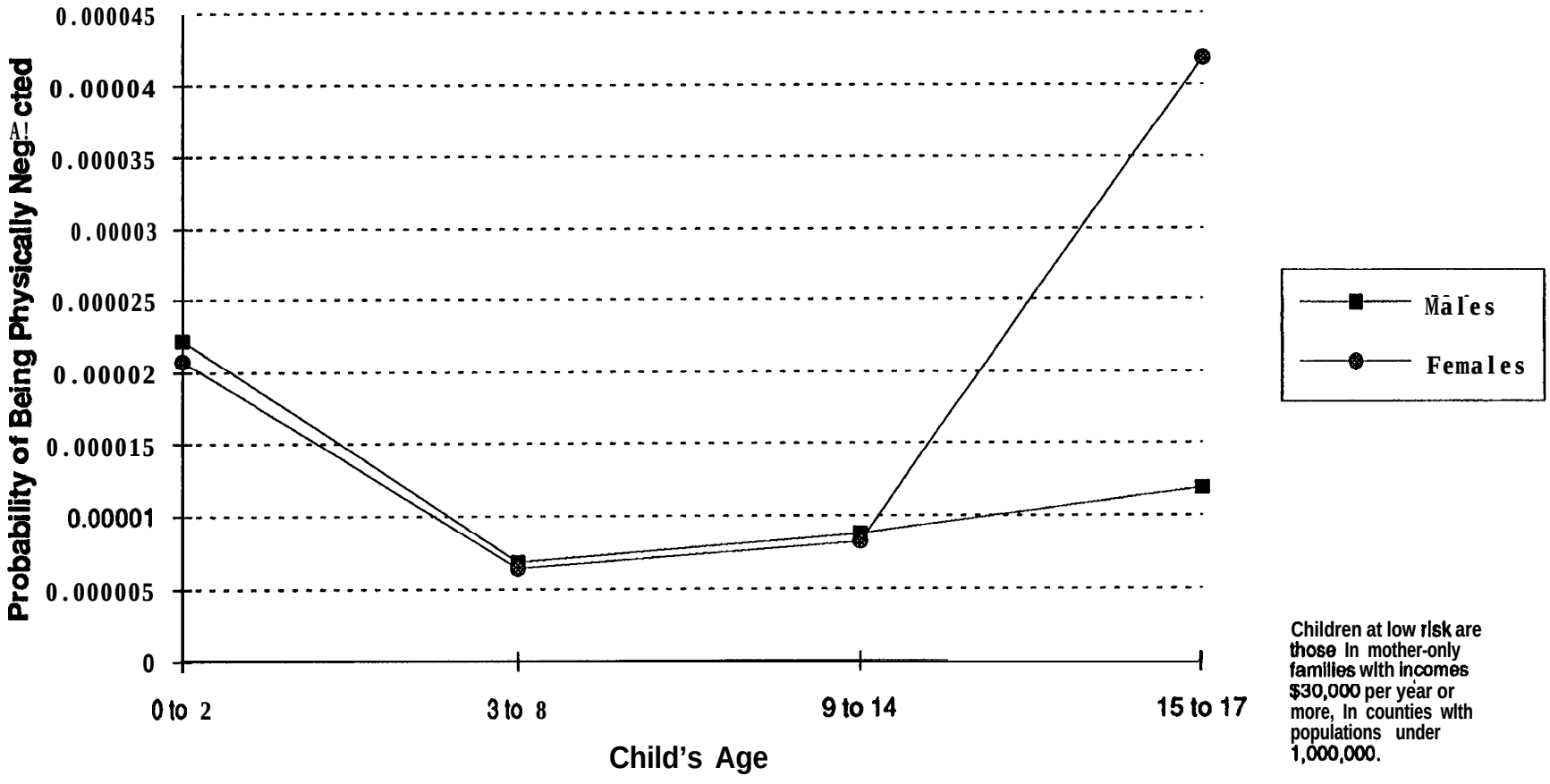
[11] Those at higher risk were 15- to 17-year-old females in counties with populations of 1,000,000 or more. Although children living in father-only households are actually at higher risk, the predicted probabilities shown are for children living in both parent households in order to avoid using for illustration an especially uncommon group (given all the other qualifiers as well). Those who were otherwise at lower risk were males aged 3 to 8 living with their mother only in counties with populations under 1,000,000.

Figure 3-11. Age and Family Structure Differences in Risk of Physical Neglect for Generally High Risk Children.



Children at higher risk are In father-only families with incomes <$15,000 per year, in counties with populations of 1,000,000 or more.

Figure 3-12. Age and Family Structure Differences in Risk of Physical Neglect for Generally Low Risk Children.



Children at low risk are those in mother-only families with incomes $30,000 per year or more, in counties with populations under 1,000,000.

generally high on the basis of other characteristics, children from families in the lowest income category were at *more than* 162 *times* greater *risk* than those from families in the highest income category.

County metropolitan status. Children's risk of experiencing physical neglect also varied with the metropolitan status of their county of residence. Those who lived in counties with populations of 1,000,000 or more were at substantially greater risk for physical neglect than those in counties with smaller populations. The risk differences associated with county metropolitan status are shown in Table 3-9.

Table 3-9. **County Metropolitan Status Differences in Risk of Physical Neglect.**[12]

Generally High Risk Children	
population 1,000,~	.114
population < l,OOO,OOO	.033
Generally Low Risk Children	
population 1,000,000+	.000024
population < 1,000,000	.000006

In considering the possible reasons for this effect of county metropolitan status, it is important to remember that it emerged in the form shown here even when the effects of the other important risk factors, such as family income, were taken into account.

3.5 Factors Predicting Risk of Emotional Maltreatment

Only four of the seven factors examined were found to have any role in predicting risk of emotional maltreatment in and of themselves, and the effect of one of these (family size) disappeared when it was tested in the context of the other three important risk factors. The result was a simple, three-factor logistic model with no interaction terms, which accounted for 12.0 percent of the variance in the occurrence of emotional maltreatment. See Table 3-10.

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[12] **Those at higher risk were 15- to 17-year-old females in families with incomes under $15,000 per year. Although children living in father-only households are actually at higher risk, the predicted probabilities shown are for children living in both parent households in order to avoid using for illustration an especially uncommon group (given all the other qualifiers as well). Those who were otherwise at lower risk were males aged 3 to 8 living with their mother only in families with incomes of $30,000 or more per year.**

Table 3-10. Final Multi-Factor Logistic Model to Predict the Occurrence of Emotional Maltreatment.[13]

Parameter	Parameter Estimate	t
Intercept	-7.40889	-26.12
Agecategories	0.53820	8.06
"Other" races	1.49757	3.39
Income $15,000-29,999	-1.02085	-4.23
Income $30,000+	-2.55762	-6.39
Model R2 Value	0.1201	
Model F-value	24.778 ** (p<.005)	
Model df	4,18	

Child's age. The effect of age on risk of emotional maltreatment is shown in Figures 3-13 and 3-14. Regardless of whether the other factors portended a generally high risk of emotional maltreatment (Figure 3-13)[14] or a generally low risk (Figure 3-14), children were at increasingly greater risk of emotional maltreatment with increasing age.

[13] This model was based on a sample N of 4,072 (combined NIS-2 and Census datasets). within which 274 children were maltreated according to the Harm Standard and 3,798 were not.

[14] Although it is children of "Other" races who are at higher risk, this figure shows the pattern for Whites, Blacks, and Hispanics in order to avoid using an especially uncommon group to illustrate the generality of the pattern.

Figure 3-13. Age Differences in Risk of Emotional Maltreatment for Generally High Risk Children.

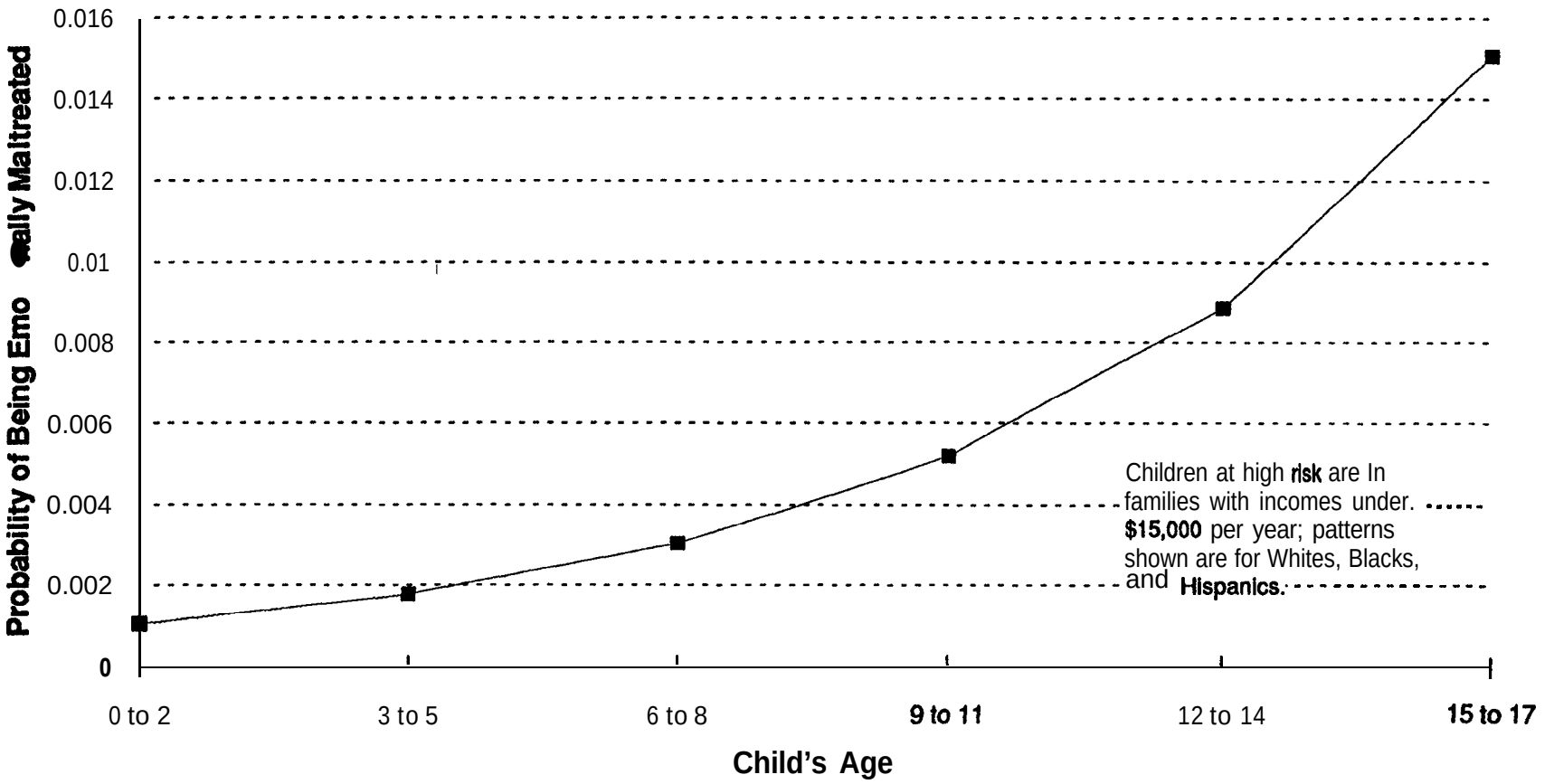
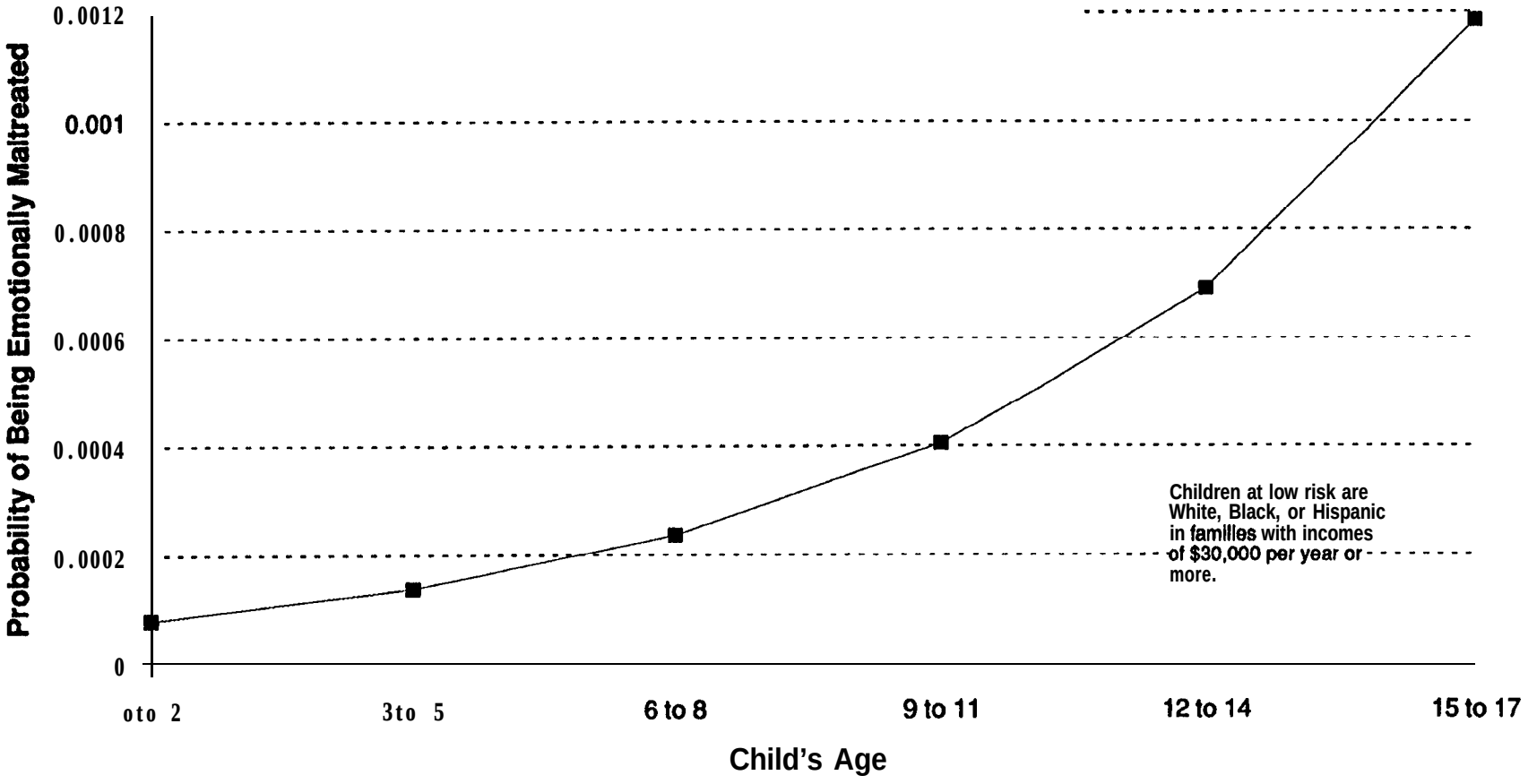


Figure 3-14. Age Differences in Risk of Emotional Maltreatment for Generally Low Risk Children.



Child's race/ethnicity. The effect of race/ethnicity on risk of emotional maltreatment is given in Table 3-11. Whites, Blacks, and Hispanics did not differ in risk, but other minority children were at greater risk for this form of maltreatment.

Table 3-11. Race/Ethnicity Differences in Risk of Emotional Maltreatment.15

Generally High Risk Children	
Whites. Blacks. Hispanics	.015
Other Races	.064
Generallv Low Risk Children	
Whites, Blacks, Hispanics	.00008
Other Races	.00036

Family income. Again, family income proved to be the strongest predictor of risk of for this maltreatment type. Considered alone, it accounted for 5.6 percent of the variance in the occurrence of emotional maltreatment. The actual degrees of risk experienced by children in the different income groups are shown in Table 3-12. Children in families in the lowest income bracket were at mon than 13 times the risk of those in families in the upper income bracket.

Table 3-12. Family Income Differences in Risk of Emotional Maltreatment.16

Generallv High Risk Children	
< $15,000	.015
$15,000 to $29,999	.005
$30,000 +	.001
Generallv Low Risk Children	
< $15.000	.00104
$15,000 to $29,999	.00037
$30,000 +	.00008

15 Those at higher risk were 15- to 17-year-olds in families with incomes under $15,000 per year. Those who were at lower risk were 0 to 2 year olds in families with incomes of $30,000 or more.

16 Those at higher risk were 15- to 17-year-olds. Although children of "other" races are actually at higher risk, the predicted probabilities shown are for Whites, Blacks, and Hispanics in order to avoid using for illustration an especially uncommon group. Those at lower risk were 0 to 2 year old Whites, Blacks, or Hispanics.

3.6 Factors Predicting Risk of Multiple Maltreatment

Of the seven factors analyzed, only family size (number of children in the household) turned out to have no relation to the risk that a child would experience multiple types of maltreatment (combinations of physical abuse, sexual abuse, physical neglect, and/or emotional maltreatment). Six factors were found to be related to the risk of multiple maltreatment. The final model, given in Table 3-13, also included an interaction between age and race/ethnicity, and accounted for 9.5 percent of the variance in the occurrence of multiple maltreatment throughout the general population of the U.S.

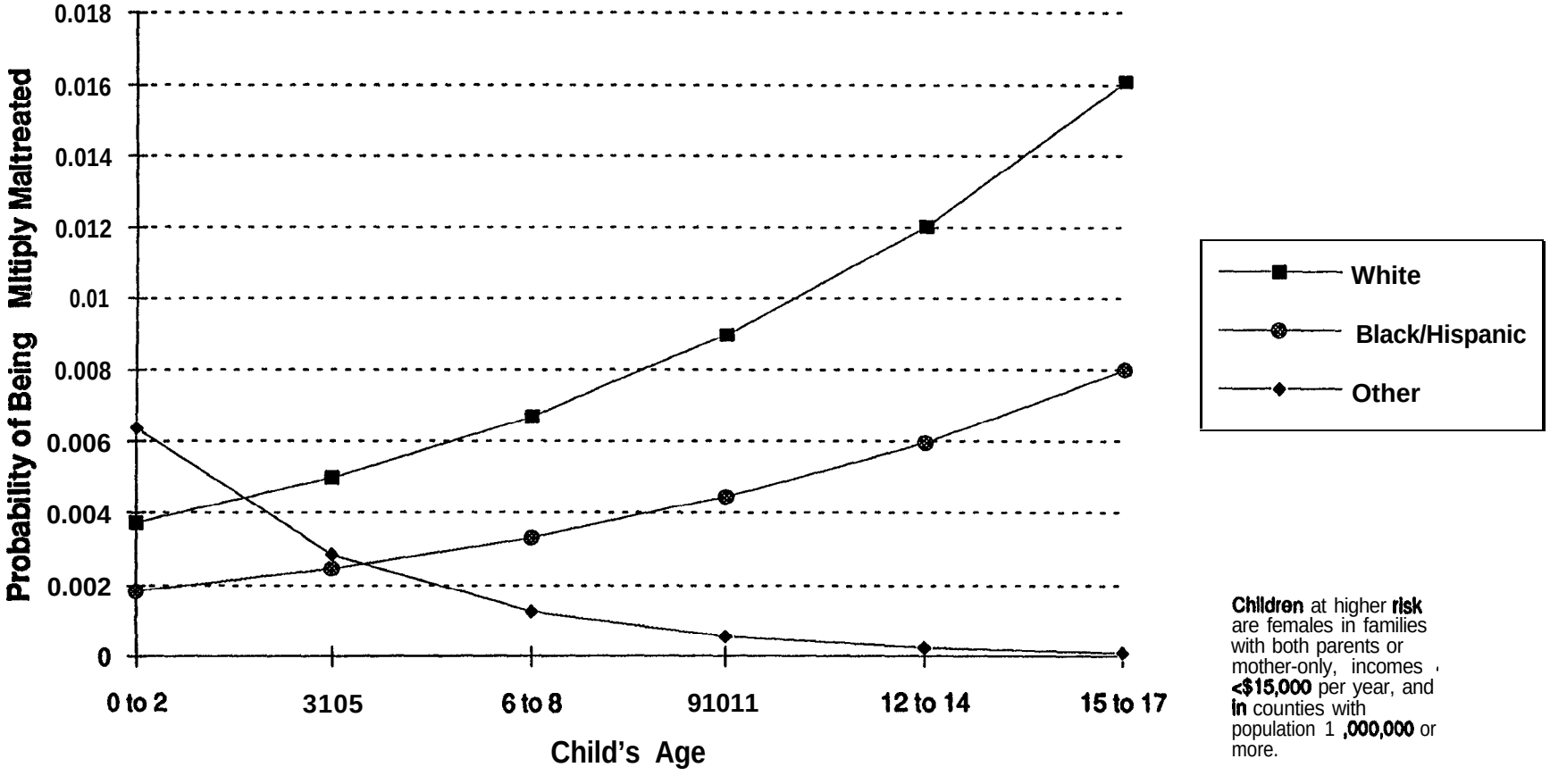
Table 3-13. Final Multi-Factor Logistic Model to Predict the Occurrence of Multiple Maltreatment.[17]

Parameter	Parameter Estimate	t
Intercept	-6.50494	-8.10
Females	0.61677	1.71
Agecategories	0.29579	2.04
Blacks & Hispanics	-0.70775	-1.25
"Other" races	1.64811	2.19
Income $15,000-29,999	-1.41213	-3.34
Income $30,000+	-2.79076	-5.04
Other MSA & Non-MSA	-1.11120	-1.45
Father-only	-1.52179	-1.44
"Other" races X Age	-1.10573	-3.67
Model R^2 Value	0.0954	
Model F-value	9.623 ** (p<.005)	
Modeldf	9,13	

Child's age and race/ethnicity. There was an interaction between the child's age and race/ethnicity in determining risk of multiple maltreatment, which meant that the risk related to differences in age depended on the child's race/ethnicity, and vice versa. Figures 3-15 and 3-16 give the pattern of risk differences for children at high risk of multiple maltreatment and children at low risk of multiple maltreatment, respectively. As can be seen, increasing age was associated with higher risk of multiple maltreatment for Whites, and to some extent this was also true for Blacks and Hispanics.

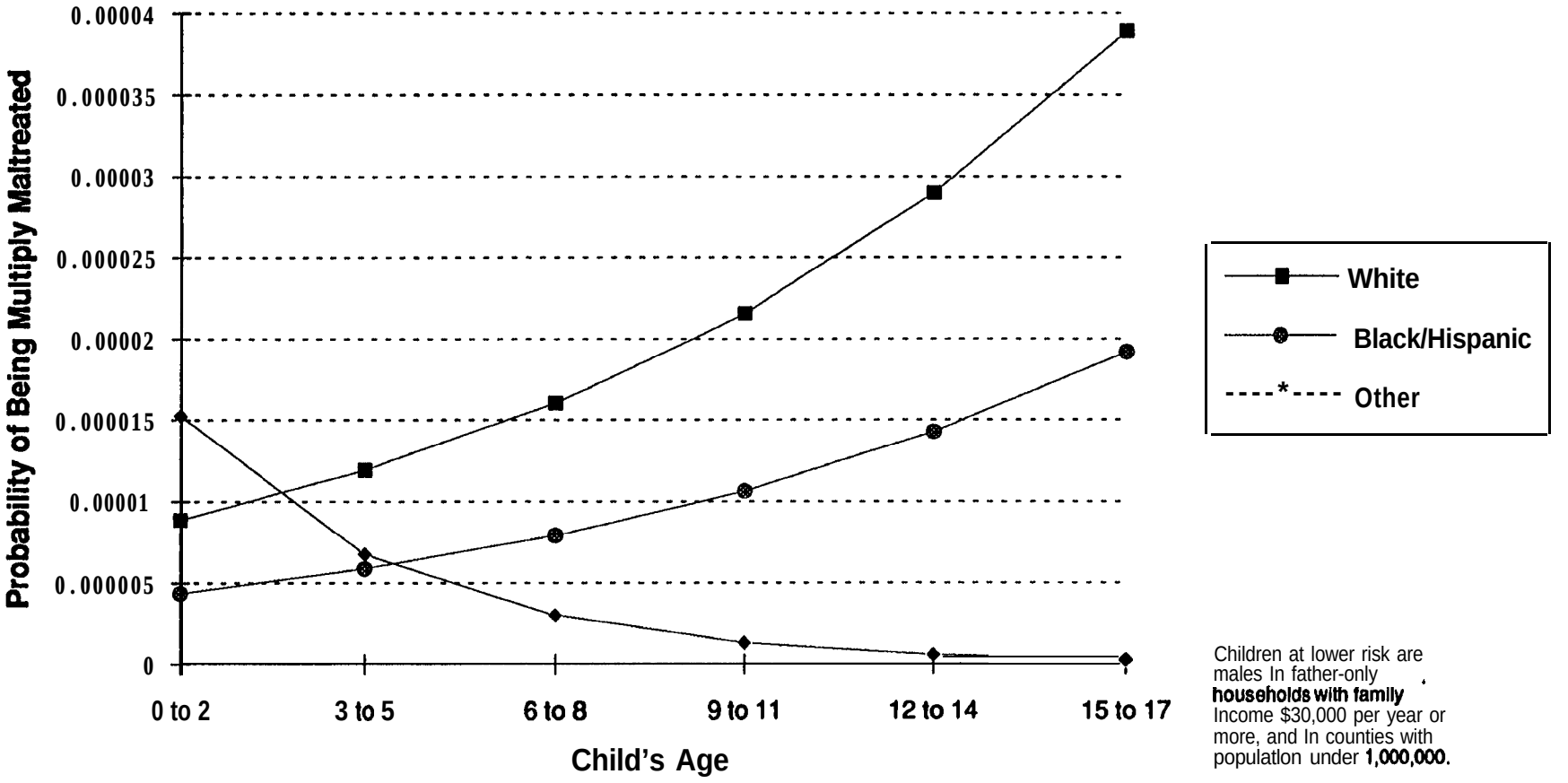
[17] This model was based on a sample N of 3,962 (combined NIS-2 and Census datasets), within which 164 children were maltreated according to the Harm Standard and 3,798 were not.

Figure 3-15. Age and Race Differences in Risk of Multiple Maltreatment for Generally High Risk Children.



Children at higher **risk** are females in families with both parents or mother-only, incomes **<$15,000** per year, and **in** counties with population 1 **,000,000** or more.

Figure 3-16. Age and Race Differences in Risk of Multiple Maltreatment for Generally Low Risk Children.



Children at lower risk are males In father-only **households with family** Income $30,000 per year or more, and In counties with populatlon under **1,000,000.**

Children of Other races, however, showed the opposite trend; they appeared to be at decreasing risk of emotional maltreatment with increasing age.

Child's sex. Children's sex was an important predictor of their risk of multiple maltreatment, with females being at greater risk than males. The actual probabilities of multiple maltreatment for the different genders are given in Table 3-14 for children generally at high risk and those generally at low risk. Females were at more than 1.8 times the risk of males, regardless of whether their other factors portended generally low or generally high risk

Table 3-14. Sex Differences in Risk of Multiple Maltreatment.18

Generally High Risk Children	
Males	.009
Females	.016
Generally Low Risk Children	
Males	.00002
Females	.00004

[18] Those at higher risk were 15- to 17-year-old Whites in two-parent or mother-only families with incomes under $15.000 per year in counties with populations over 1,000,000. Those who were at lower risk were 15- to 17-year-old children in father-only families with incomes of $30,000 or more in counties with populations under 1,000,000. Although children of other races were actually at higher risk, the predicted probabilities shown are for Black and Hispanic children in order to avoid using for illustration an especially uncommon group.

Family income.. Family income maintained its consistent role as the strongest predictor of risk in the category of multiple maltreatment. By itself, family income accounted for 5.2 percent of the variance in the occurrence of multiple maltreatment. The risks of multiple maltreatment for children in families with different income levels are given in Table 3-15.

Table 3-15. Family Income Differences in Risk of Multiple Maltreatment.[19]

Generally High Risk Children	
< $15,000	.016
$15,000 to $29,999	.004
$30,000 +	.001
Generally Low Risk Children	
c $15.000	.00031
$15,000 to $29,999	.00008
$30,000 +	.00002

Children in the lowest income families were at 16 times greater risk than those in the highest income category.

[19]Those at higher risk were 15- to 17-year-old White females in families with two parents or a mother only, and in counties with populations over 1,000,000. Those at low risk were 15- to 17-year-old males living in father-only households, and in counties with populations below 1,000,000. Although children of other races were actually at higher risk, the predicted probabilities shown are for Black and Hispanic children in order to avoid using for illustration an especially uncommon group.

Family structure. The parental structure of the child's family was also related to the probability of multiple maltreatment occurring. Children who lived in households with both parents present or with their mother only were at greater risk of multiple maltreatment than those who lived with only their father. The pat&em is given in Table 3- 16.

Table 3-16. Family Structure Differences in Risk of Multiple Maltreatment.[20]

Generally High Risk Children	
Both parents or mother-only	.016
Father-only	.004
Generally Low Risk Children	
Both parents or mother-only	.00009
Father-onlv	.00002

County metropolitan status. Children in counties with populations over I ,000,000 were at notably higher risk of multiple maltreatment than those in less populous counties. The magnitude of the effect in terms of probabilities of multiple maltreatment is shown in Table 3-17 for the generally high and low risk groups of children in this maltreatment category.

[20] Those at higher risk were 15- to 17-year-old White females in families with incomes below $15,000 per year, and in counties with populations over 1,000,000. Those at low risk were 15- to 17-year-old males living in families with incomes $30.000 or more per year, and in counties with populations below 1,000,000. Although children of other races were actually at higher risk, the predicted probabilities shown are for Black and Hiianic children in order to avoid using for illustration an especially uncommon group.

Table 3-17. County Metropolitan Status Differences in Risk of Multiple Maltreatment.[21]

Generally High Risk Children	
Population 1,000,000+	.016
Population < 1 .000.000	.005
Generally Low Risk Children	
Population 1 ,000,000+	.00011
Ponulation <1,000,000	.00004

3.7 Factors Predicting Risk of Educational Neglect

The only factor found to be unrelated to the occurrence of educational neglect was the child's sex. All six remaining factors that were explored as potential risk factors were important in themselves, and maintained their association with the risk of educational neglect when simultaneously considered in a multiple-factor logistic model. As discussed below, the analyses also revealed that the child's age and family structure interacted in determining risk of educational neglect, The final model, which appears in Table 3-18, includes all six factors and this interaction term. This model accounted for 17.4 percent of the variance in the occurrence of educational neglect.

[21] Those at higher risk were 15- to 17-year-old White females in families with both parents or a mother only. and incomes below $15,000 per year. Those at low risk were 15- to 17-year-old males living in father-only households with incomes of $30,000 or more per year. Although children of other races were actually at higher risk, the predicted probabilities shown are for Black and Hispanic children in order to avoid using for illustration an especially unwmmon group.

Table 3-18. Final Multi-Factor Logistic Model to Predict the Occurrence of Educational Neglect.[22]

Parameter	Parameter Estimate	t
Intercept	-3.40916	-4.26
9-11 year olds	-0.71875	-1.09
12-14 year olds	0.57907	0.90
15-17 year olds	1.18165	1.52
Hispanic	-1.27429	-4.51
"Other" races	-2.15894	-1.32
Income $15,000-29,999	-1.53964	-5.21
Income $30,000+	4.34692	-4.34
Non-MSA	-1.26482	-1.76
2-3 children	-0.35559	-1.76
4 or more children	-0.18371	-1.21
Single parents	-0.23430	-0.37
Single parents X 9-11 yr olds	0.80254	0.87
Single pafs X 12-14 yr olds	-0.20929	-0.26
Single oar's X 15-17 yr olds	-1.51455	-2.19
Model R^2 Value	0.1738	
Model F-value	27.222 ** (p<.005)	
Model df	14,8	

Child's age and family structure. In order to best account for children's risk of experiencing educational neglect, it is necessary to consider simultaneously both their age and the parental structure of their family situations. The way in which family structure modifies the effect of age on risk can be seen in Figures 3-17 and 3-18.[23] **School-age children are at increasing risk of educational neglect as their age increases, but this pattern is true only for those** who live in households with both parents present. When children live with a single parent, whether mother-only or father-only, their age is unrelated to their risk of educational neglect.

[22] This model was based on a sample N of 2.791 (combined NIS-2 and Census datasets for children over 5 years of age). within which 247 children were maltreated according to the Harm Standard and 2,544 were not.

[23] Although it is other minority children who are at lower risk, this figure shows the pattern for Hispanics in order to avoid using an especially uncommon group to illustrate the generality of the pattern.

Child's race/ethnicity. Significant differences in risk of educational neglect occurred for different race/ethnicity groups. Table 3-19 reveals these differences for both high and low risk children.

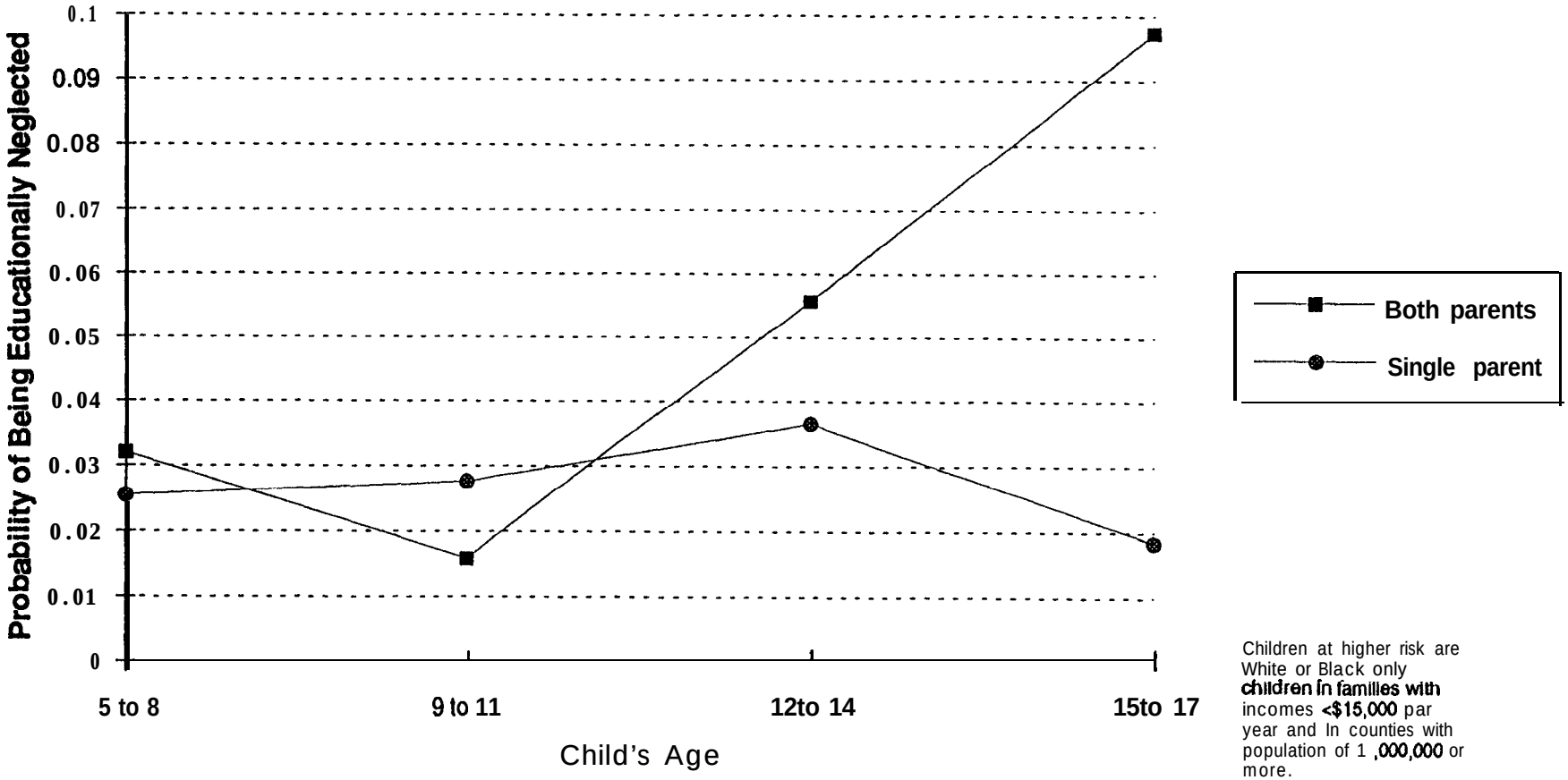
Table 3-19. Race/Ethnicity Differences in Risk of Educational Neglect.[24]

Generally High Risk Children	
White or Black	.097
Hispanic	.029
Other Races	.012
Generally Low Risk Children	
White or Black	.000067
Hispanic	.000004
Other Races	.000008

White and Black children were at the highest risk of educational neglect; Hispanics and Other Race children were at much lower risk of this type of maltreatment.

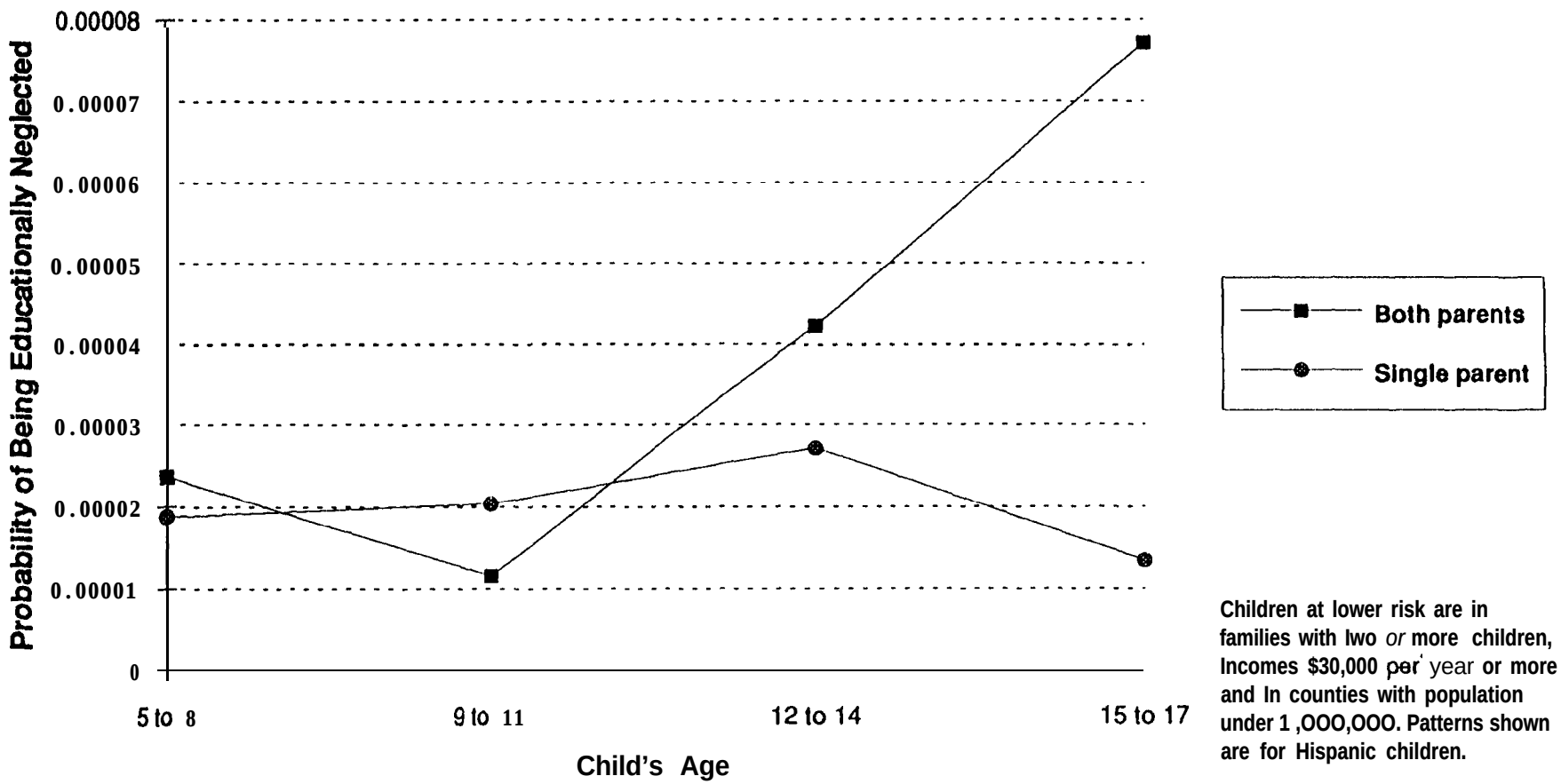
[24]Those at high risk were only children, 15- to 17-year-old youth, in families with both parents, family incomes of $15,000 per year or less, and living in urban or suburban counties. Those at low risk were 5- to 8-year-old children in families with single parents. two or three children, incomes $30.000 per year or more, and living in rural counties.

Figure 3-17. Age and Family Structure Differences in Risk of Educational Neglect for Generally High Risk Children.



Children at higher risk are White or Black only children in families with incomes <$15,000 par year and In counties with population of 1 ,000,000 or more.

Figure 3-18. Age and Family Structure Differences in Risk of Educational Neglect for Generally Low Risk Children.



Children at lower risk are in families with Iwo *or* more children, Incomes $30,000 per year or more and In counties with population under 1 ,OOO,OOO. Patterns shown are for Hispanic children.

Family income. Family income was the most potent risk factor for educational neglect. Alone, it accounted for 10.0 percent of the variance in occurrence, and it retained its predominance in the context of all other important risk factors for educational neglect. Table 3-20 presents the risk of educational neglect in families with different incomes.

Table 3-20. Family Income Differences in Risk of Educational Neglect.[25]

Generally High Risk Children	
< $15,000	.097
$15,000 to $29,999	.023
$30,000 +	.001
Generally Low Risk Children	
c $15,000	.00157
$15.000 to $29.999	.00034
$30.000 +	.00002

[25] Those at high risk were only children, 15- to 17-year-old White or Black youth, in families with both parents, and living in urban or suburban counties. Those at low risk were 5- to S-year-old children in households with two or three children, living with single parents, and in rural counties. Although it is children of "Other" races who are at lower risk, the pattern shown is for Hispanics in order to avoid using an especially uncommon group to illustrate the generality of the pattern.

Children in families with incomes less tban $15,000 were at greatest risk of educational neglect, more tban 4 times the risk of those in the middle-income group, and between 78 to 97 times the risk of those in the highest income group, depending on the presence of other risk factors.

Family size. Risk of being educationally neglected depended on the number of children in the family, as shown in Table 3-21.

Table 3-21. Family Size Differences in Risk of Educational Neglect.[26]

Generally High Risk Children	
One child	.097
Two to three children	.070
Four or more children	.082
Generally Low Risk Children	
One child	.000029
Two to three children	.000020
Four or more children	.000024

The relationship between the probability of educational neglect and the number of children in the household appears to be curvilinear. Only children were at greatest risk of educational neglect, and those in families with two to three children were at lowest risk. Cbildren in families with more than four children are at greater risk than those in two-to-three child families, but not so great as tbe risk that only cbildmn appear to face.

County metropolitan status. The metropolitan status of the county was also associated witb the risk of educational neglect, but the distinctions that were important in tbis relationship were different from the kinds discussed previously in connection with other types of maltreatment. The intercounty distinctions and their associated levels of risk for educational neglect are given in Table 3-22.

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[26] **Those at high risk were 15- to 17-year-old White or Black youth, in families with both parents, incomes under $15,000 per year, and living in urban or suburban counties. Those at low risk were 5 to 8 year old children in single parents families with incomes of $30.000 or more, and in rural counties. Although it is other minority children who are at lower risk, the pattern shown is for Hispanics in order to avoid using an especially uncommon group to illustrate the generality of the pattern.**

Table 3-22. County Metropolitan Status Differences in Risk of Educational Neglect.[27]

Generally High Risk Children	
Urban or suburban	.097
Rural	.030
Generally Low Risk Children	
Urban or suburban	.00007
Rural	.00002

The highest risk of educational neglect was experienced by children in urban or suburban counties, with no distinction in risk between these, whereas children living in rural counties were at notably lower levels of risk.

3.8 Summary of Findings on the Risk Factors for Abuse and Neglect

The numerous findings discussed in the preceding sections of tbis chapter are summarized in Table 3-23, which verbally identifies the factors that are related to the risk of a child experiencing each of the different types of maltreatment. As discussed earlier, only a limited number of factors could be examined in the NIS-2 database, so the findings were necessarily limited to these factors. The fact that the risk factor models accounted for only 8 to 20 percent of the variance in the occurrence of abuse and neglect probably stems from the fact that many other characteristics of children and their family circumstances are important determinants of the risk of abuse and neglect beyond the few demographic characteristics that could be examined here. Also note that, the categories in Table 3-23 were mutually exclusive, in that the children who were included in each category do not overlap with the children included in any other category.[28] Each relationship described in this table was found to hold true when all the other effects described in the column were taken into account.

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[27] Those at high risk were only children. 15- to 17-year-old White or Black youth, in families with both parents, and incomes under $15.000 par year. Those at low risk were 5- to g-year-old children in single parent families with incomes of $30,000 or more and two or three children in the household. Although it is other minority children who are at lower risk, the pattern shown is for Hispanics in order to avoid using an especially uncommon group to illustrate the generality of the pattern.

[28] Educational neglect was ignored when it occurred in combination with other maltreatment. Thus, physical abuse included physical abuse alone or in combination with educational neglect; sexual abuse consisted of sexual abuse with or without educational neglect, etc.

Table 3-23. Risk Factors for the Occurrence of Harm Standard Maltreatment.

	PHYSICAL ABUSE	SEXUAL ABUSE	EMOTIONAL MALTREAT-MENT	PHYSICAL NEGLECT	EDUCATIONAL NEGLECT-ONLY	MULTIPLE MALTREAT-MENT
Child's sex	No relationship	Females at greater risk	No relationship	Depends on age: females at greater risk at 15-17 years	No relationship	Females at greater risk
Child's age	Depends on race and family structure; older at greater risk especially Blacks and Hispanics and with both parents present	Depends on race and family structure; older at greater risk for Whites, Blacks, & Hispanics, (but not other minorities) and for children in father-only households	Older children at greater risk	Depends on sex and family structure; older at greater risk for females and in father-only families	Depends on family structure; older children at greater risk with both parents present	Depends on race; older at greater risk for Whites, Blacks, and Hispanics, not other minorities
Child's race	Depends on age; Blacks and Hispanics at greater risk as age progresses	Depends on age; Whites, Blacks & Hispanics at greater risk than Other Races at older ages	Othct minorities at greater risk than Whites, Blacks, or Hispanics	Related to risk of maltreatment when other factors ignored; not relevant when other important factors in this column are taken into account	Whites and Blacks at greater risk than Hispanics and other minorities	Depends on age; Whites at greater risk than other racc/ethnicities at older ages
Family income	Higher risk in lower income families	Higher risk in lower income families	Higher risk in lower income families	Higher risk in lower income families	Higher risk in lower income families	Higher risk in lower income families
County Metropolitan status	No relationship	No relationship	No relationship	Higher risk in very large urban counties (pop 1 million +)	Higher risk in urban than in rural counties	Higher risk in urban than in rural counties
Number of Children in Household	Higher risk with only one child in household	No relationship	Related to risk of maltreatment when other factors ignored; not relevant when other important factors in this column are taken into account	Related to risk of maltreatment when other factors ignored not relevant when other important factors in this column are taken into account	Higher risk with only one child in household	No relationship
Family Structure	Depends on age; two parent families at greater risk above 5 years of age	Depends on age; father-only families a greater risk at older ages	No relationship	Depends on age; 15-17 yr olds at greater risk in father-only families	Depends on age; both parent families at greater risk at older ages	Both parent and mother-only families at greater risk than father-only families

Again, the picture offered is one of undeniable complexity; factors differ somewhat in their effects on risk for the different maltreatment categories, and a number of interactive effects are evident. The overview given below is organized in terms of the different factors, considering the simple and/or interactive influences of each one in turn The discussion concerning family income, which was the only factor to have a strong, unqualified, across-the-board effect, is deferred until last and given more extensive treatment.

Child's sex. Sex was related to risk in three of the six maltreatment categories: sexual abuse, physical neglect, and multiple maltreatment. In all cases, females were at greater risk than males. Moreover, the influence of a child's sex on risk of physical neglect was modified by age. Females were at greater risk than males in the 15 to 17 year old group, but not at younger ages.

Child's age. Regardless of the type of maltreatment that was involved, children's risk of being maltreated varied with their age in some way. For all maltreatment categories, older children were at greater risk, but the relationship with age was generally modified by interactions with other factors as well. Only emotional maltreatment evidenced a simple, unqualified age effect For four types of maltteatment, the impact of age depended on family structure. Nevertheless, the exact nature of the interactions differed across these categories: for sexual abuse and physical neglect, older children were at greater risk only in father-only families; for physical abuse and educational neglect, older children were at greater risk only in two-parent households. Race/ethnicity modified the influence of age on risk for three types of maltreatment. Higher levels of risk among older children held for Whites, Blacks, and Hispanics (but not for other minorities) in the case of sexual abuse and for multiple maltreatment. The age effect held only for Blacks and Hispanics with physical abuse. The child's sex affected the age relationship for physical neglect, with older children showing higher risk only among females.

Child's race/ethnicity. The child's race/ethnicity was an important predictor of risk of maltteatment for all except physical neglect, where its impact disappeared when the effects of other important predictors were taken into account Simple effects of race/ethnicity emerged with emotionally maltreated children and for children who were only educationally neglected, but these effects were nearly opposite in the two cases. Other minorities were at greater risk of emotional maltreatment than were Whites, Blacks, or Hispanics, whereas Whites and Blacks were at greater risk of educational neglect than were Hispanics and other minorities. Race/ethnicity effects on risk of physical abuse, sexual abuse, and multiple maltreatment were modified by the child's age, with different race/ethnicity distinctions being important across these categories, as described in Table 3-23.

County metropolitan status. This factor played a role in connection with the risk of physical neglect, educational neglect, and multiple maltreatment. In all cases, children in more populous, urbanized counties were at greater risk of maltreatment. For physical neglect and multiple maltreatment, children who lived in counties with populations of l,OOO,OOO or more were at greater risk than children in less populous counties. Children were at greater risk of experiencing educational neglect alone if they lived in urban or suburban counties, rather than in rural counties.

Number of other children in the household. This factor appeared to affect the probability of being physically abused and of being educationally neglected. In both cases only children were at greater risk than others, but the effect for physical abuse was non-linear in that risk did not consistently decrease with increasing numbers of children--in fact, children from families with 4 or more children had a slightly higher probability of abuse than children from familes of 2 to 3 children.

Family structure. This factor had a simple, unqualified effect on the risk of multiple maltreatment, where children in both parent and mother-only families were at greater risk. In four other categories of maltreatment, the impact of family structure depended on the child's age. Children in two parent families were at greater risk of physical abuse and of educational neglect, but only above certain ages. On the other hand, it was the children in father-only families who were at greater risk of sexual abuse and physical neglect, but only at older ages.

Family income. This factor had significant and dramatically strong effects on risk for every category of maltreatment. To date, the potency of this effect has consistently emerged in the NIS2 data regardless of the analytic approach taken.[29] Given the pervasiveness of the finding, some discussion of how it might or might not arise from biases related to the NIS-2 methodology will be useful in understanding its implications. Two possibilities will be explored here:

(1) Can it be due to the NIS-2 sentinels simply seeing more low income families than middle and upper income families?

(2) Could it stem from NIS-2 respondents' stereotypes about abuse and neglect that presume it occurs more in lower income families than in middle and upper income families?

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[29] It emerged in the findings reported in the original findings report and in the supplementary analyses reported in 1989: Study *Findings: Study of the National Incidence and Prevalence of Child Abuse and Neglect: 1988*---Revised Report. Rockville, MD: Westat Inc. Technical Report to the National Center on Child Abuse and Neglect, DHHS. Washington, D.C. 20201; Sedlak, A. J. (1991). *Supplementary Analyses of Data on the National Incidence of Child Abuse and Neglect.* Report prepared by Westat, Inc. for the American Enterprise Institute, Washington, D.C.. under the support of Grant No. 88-VF-GX-0004 from the Office for Victims of Crime, Office of Justice programs, U. S. Department of Justice. (Originally prepared in 1989.)

Although one might initially suppose that children in lower income families more frequently come to the attention of the NIS-2 sentinels, differential observation of the different income sectors is not adequate to account for the findings reported here. That explanation fails on two important grounds: it ignores the substantial degree to which the NIS-2 sentinels do observe children and families at the middle and upper income levels, and it requires that one assume there is an astounding number of undetected children in the nation who experience Harm Standard maltreatment. The first problem will be considered here, while the second failure will be discussed below. It is important to recognize that the families observed by the NIS-2 sentinels in the normal course of their activities do include a substantial proportion with incomes over $15,000 per year. Although the NIS-2 sentinels did include some agency categories which may disproportionately encounter low income families (police and sheriff departments, juvenile probation, public health, welfare), those sources recognized only a relatively small sector of all Harm Standard children (a total of 18 percent, combining all categories of maltreatment). The large majority of Harm Standard children (82 percent) were recognized by sentinels likely to encounter children and families at all income levels, as shown in Table 3-24.

Table 3-24. Distribution of Harm Standard Children in the NIS-2 by Source of Recognition.

Sources likely to disproportionately encounter low income families:	**18%**
Police/sheriff	8%
Juvenile probation	5%
Public health	3%
Welfare	2%
Sources likely to encounter income families of all income levels:	**82%**
Schools	54%
General Public (friends, neighbors, anonymous)[30]	11%
Social Services	8%
Hospitals	4%
Day Care Centers	3%
Mental Health	1%
Other Professionals[31]	1%

Note that the majority of NIS-2 children were recognized by sentinels in schools. Even though the NIS-2 included only public schools, approximately 90 percent of the U.S. population of school-age children attend public schools,[32] so those attending the public schools in the NIS-2 should

[30] Referred to as CPS-only sources in the Chapter 2 discussion.

[31] Included as CPS-only sources in Chapter 2.

[32] *Key Statistics for Private Elementary and Secondary* Education: School Year 1988-89. December, 1988. Early Estimates, National Center for Education Statistics, Government Publication No. CS-89-067. This report indicated

have represented a broad spectrum of family income levels. Similarly, the NIS-2 hospitals encounter a broad spectrum of the population. They were not limited to public hospitals, but included any hospitals in study counties (private as well as public) that provided general medical and surgical services, were primarily short-stay facilities, and met the required minimum of 4,000 admissions annually. Also, social services and mental health agencies were limited to non-governmentally administrated (i.e., voluntary agencies), and included private agencies. Thus, it appears highly improbable that the findings concerning a very strong relationship between income and child maltreatment stem from the types of agencies that participated in the NIS-2.

It is, however, plausible to suppose that subjective perceptions by the NIS-2 sentinels contributed to the income findings to some degree. MS-2 participants were typically not in a position to know the actual amount of the family's income, although it was possible that at least some would have had enough familiarity with the family to provide an educated guess on this question. In completing the NIS-2 data forms, all participants were told that they could estimate a family's income on the basis of their observation of the household or of the surrounding neighborhood, but if they had no available basis from which to make an estimate, they did not do so. Nevertheless, some respondents may have been more willing to hazard guesses than others, and since both components of the association, family income and child maltreatment, depended on their perceptions and interpretations, it is at least theoretically possible that the relationships that emerged were partially a function of respondents' beliefs (or stereotypes) about the existence and nature of the association.

However, research shows that distortions due to subjective impressions typically diminish with increased personal familiarity. [33] Taken together with the fact that (1) participants at schools (teachers, nurses, counselors) recognized a majority of the maltreated children, and that (2) it seems reasonable to suppose that these would be persons who are, in general, rather familiar with the children and their family circumstances -- at least notably more so than would be expected of respondents at many of the other types of agencies (such as police, hospitals, etc.), one would expect that income information for the *majority* of the recognized children, was probably subject to *minimal* bias by stereotypes concerning the relation between maltreatment and poverty.

Moreover, the sheer strength of the relationship between income and risk of maltreatment poses a serious challenge to any efforts to discount it as solely an artifact of some type. On the one

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that about 4,873,400 school-age children attend private schools of the total of 45,437,800 school-age children enrolled for the '88-'89 school year. Thii represents about 10.7 percent of the school age population.

[33] **Deaux, K. (1976). Sex: A perspective on the attribution process. In J.H. Harvey, W.J. Ickes, and R.F. Kidd (Eds.), New *Directions in Attribution Research, Vol. I*. Hillsdale, N.J.: Lawrence Erlbaum Associates, pp. 336-352.**

hand, if one argues that the income finding is an artifact of selective observation of low income families, one is then logically committed to believe that the overall incidence of Harm Standard child maltreatment is much larger than the NIS-2 estimates convey. This is because, if maltreatment is not differentially connected with income, enough undetected middle- and upper-income Harm Standard children would have to exist to equate the maltreated proportions across different income brackets. Specifically, if the same per capita rates of occurrence that were observed for Harm Standard maltreatment in the under $15,000 per year income bracket were to also apply to children in families with higher incomes, this would mean that ***an additional 1,105,400 children*** would have to have suffered Harm Standard maltreatment but remained hidden to the NIS-2 sentinels.[34] Thus, to assume that there is no real relationship between family income and Harm Standard maltreatment is also to assume that them are really more than twice as many Harm Standard children in the nation than the NIS-2 data indicated. On the other hand, if one argues that the income finding is an artifact of stereotype biases, then one would need to assume that overwhelmingly stronger biases operated among NIS-2 sentinels than any distorting biases that have been documented in previous research on that subject.[35]

Finally, note that the finding concerning a strong association between income and maltreatment is consistent with findings from numerous other studies beyond the NIS-2 data. For example, Pelton's research[36,37] concerning socioeconomic factors in child maltreatment suggests a strong association between economic and cultural impoverishment and maltreatment, as does the work of

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[34] An estimated 29.3 children per 1,000 (or a total of 487,500 children) experienced Harm Standard maltreatment among children in families with incomes under $15,000, whereas only 5.5 per 1,000 (or a total of 253,700) were observed in the higher income levels. For higher income children to experience Harm Standard maltreatment at the same rate, there would have to be 1,359,200 maltreated children in the upper income brackets, or 1,105,400 more than were estimated on the basis of the observations of the NIS-2 sentinels.

[35] Nor can the income findings be discounted as due to bias introduced by missing income information. Here, missing income data was imputed in accordance with the distribution of the known cases. In previous analyses, the missing cases were hypothetically assigned all to the lower income group, or all to the upper income group, and none of these variations undermmed the key fmding that children in low income families experienced higher rates of maltreatment.

[36] Pelton, L. (1978). Child abuse and neglect: The myth of classlessness. *American Journal of Orthopsychiatry, 48*, 608-617.

[37] Pelton, L. (Pd.) (1981). *The Social Context of Child Abuse and Neglect. New* York: Human Sciences Press.

Kinard and Klerman,[38] and the findings of Gil,[39] of the American Humane Association,[40] and of Smith, Hanson, and Hoble,[41] among others. While some[42] continue to argue that even the diverse set of corroborating evidence on the greater risk of maltreatment at the lower socioeconomic levels reflects biases in detecting and investigating cases, there nevertheless are a number of problems associated with poverty that are also plausible causal contributors to child maltreatment--including factors such as social mobility, lack of education, and all the stressors that poverty adds to daily life. In this connection, Garbarino[43,44] notes that socioeconomic factors are associated with the availability of social support systems that can assist parents in their child care responsibilities and has concluded that, although economic factors remain the most important variable, their influence is mediated by the social structure of thecommunity.

It is interesting that the idea that child maltreatment has an essentially classless distribution has persisted in face of repeated findings, using widely varying methods and data, of its strong relationship with socioeconomic class. As suggested by Biller and Solomon,[45] the longevity of the myth of classlessness may stem from the popularity of models of the etiology of child maltreatment that focus on intrapsychodynamic factors and view the problem as a disease. Also contributing to this belief

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[38] Kinard, EM.. & Klerman, L. V. (1980). Teenage parenting and child abuse. Are they related? ***American Journal of Orthopsychiatry, 50, 481-488.***

[39] Gil, D. G. (1970). ***Violence against children.*** Cambridge, MA: Harvard University Press.

[40] Russell, A. B. & Trainor, C. M. (1984). ***Trends in child abuse and neglect: A national perspective.*** Denver, CO: American Association for Protecting Children American Humane Association.

[41] Smith, S., Hanson, R., & Hoble. S. (1975). Parents of battered children: A controlled study. In A. Franklin (Ed.), ***Concerning child abuse.*** Edinburgh: Churchill Livingstone.

[42] For example, some attribute the overrepresentation of the lower socioeconomic families in the maltreatment statistics to the reluctance of child protective workers to interfere in the lives of more affluent and influential individuals, and to the fact that middle-income families have resources (such as the financial wherewithal to get treatment by private service providers) for preventing CPS from hearing about the incident Cf. U. S. Department of Health, Education, and Welfare. (1977). ***Child abuse and neglect programs: Practice and theory.*** Washington, D.C.: U. S. Government Printing office.

[43] Garbarino, J. (1980). What kind of society permits child abuse? ***Infant Mental Health Journal, 1,*** 270-281.

[44] Garbarino, J. (1981). An ecological approach to child maltreatment In L. H. Pelton (Ed), ***The Social Context of Child Abuse and Neglect. New York:*** Human Sciences Press.

[45] cf. Biller, H. and Solomon, R. (1986). ***Child Maltreatment and Paternal Deprivation: A Manifesto for Research, Prevention, and Treatment. Lexington,*** MA Lexington Books.

may be the fact that income per se is assumed to influence the occurrence of abuse or neglect through intermediary factors (such as heightened stress, lack of social network support, lower levels of educational achievement) only indirectly, while it is these intermediary factors that have stronger causal connection to abuse or neglect and speak to unmet service needs. Also in this connection, note that Chapter 2 reported the finding that physically neglected and/or emotionally maltreated children were less likely to be investigated by CPS when they came from families with incomes under $15,000 per year. Thus, the myth of "classlessness" concerning the occurrence of maltreatment appears to be tempered by an assumption that neglect among lower income families stems from conditions that are not as amenable to treatment as those giving rise to neglect among other income classes.

3.9 Children at Risk of Maltreatment Who Are Unserved/Underserved by CPS

The second way of addressing the issue of unserved/underserved children in the NIS-2 Reanalysis component was to compare the factors that are actually related to risk of abuse or neglect (as found for all maltreated Harm Standard children in the NIS-2 database) to the factors that are treated as indicators of "high risk" by CPS agencies. Seven factors were examined as potential risk factors in the NIS-2 reanalyses, and all seven were found to play some role as predictors of risk for at least some categories of maltreatment. Their predictive strength depended on the nature of maltreatment that was involved, as discussed in the preceding sections. We have listed these factors in Table 3-25 in approximate order of their value as indicators of the risk of maltreatment. This table also summarizes the findings concerning the use of these factors in CPS risk assessment as reported by participants in the State Survey component of this study.

Table 3-25. Use of Factors in CPS Risk Assessment Compared to Their Role in Predicting Risk of Harm Standard Maltreatment.

FACTOR	ROLE AS PREDICTOR OF RISK[a]	USE IN CPS RISK ASSESSMENT[b]
Family Income	Most important for all maltreatment types: children in low income families were at much higher risk of experiencing abuse/neglect.	Included in risk assessment by 32 of 44 responding States. Low income families were assigned higher risk scores.
Child's age	For all maltreatment types children's risk increased with increasing age. Interactions occurred in five of six types, where the relation between age and risk depended on family structure, child's race/ethnic@, and/or child's sex.	Included in risk assessment by 40 of 44 responding States. Higher risk scores were typically given to younger children. Interactive effects not included+
Family structure	Important in five of six maltreatment types: in three of these, children in both-parent families were at greater risk, once family income was taken into account. Interactions occurred in 4 of the 5 types, where the relation between family structure and risk depended on the child's age.	Included in risk assessment by 21 of 44 responding States.[c] Instruments used generally assigned greater risk to children in single parent families. Interactive effects were not included.
Child's Race/Ethnicity	Important in five of six maltreatment types: for multiple maltreatment, Whites were at greater risk than other race/ethnicities. In three types, interactions occurred, where the relation between race/ethnicity and risk depended on the child's age.	Included in risk assessment by only 9 of 44 responding States. Typically, higher risk scores were assigned to minorities. Interactive effects were not included.
Geographical area	Metropolitan status of the county predicted degree of risk for three types of maltreatment. Children were at greater risk in urban than in rural counties.	Family's geographic location was included in scoring risk by 23 of 44 responding States.
Family size	Number of children in family was predictor of risk for physical abuse and educational neglect. When other important predictors were taken into account, only children were at greater risk than those in multiple-child households.	Family size was used to decide degree of risk in 21 of 44 responding States.[c] Families with multiple children were assigned higher risk scores.
Child's sex	Predictive of risk of three maltreatment types: females were at greater risk. Interacted with age in predicting risk of physical neglect.	Only 14 of 44 responding States included sex in risk assessment. Interactive effects were not included.

[a] According to NIS-2 Reanalyses, reported here.
[b] As reported by State CPS specialists in State Survey component of High Risk study.
[c] State Survey questions did not distinguish family structure from family size.

As was emphasized above, family income was the strongest predictor in the NIS-2 reanalyses concerning the risk factors for maltreatment, and this is shown by its location as the first entry in Table 3-25. Of the 44 States who responded to the question in the State Survey component of this study, 32 reported that family income was included as a factor in their risk assessment instrument. Notice that this degree of attention is not commensurate with the overwhelming importance of family income in determining risk of maltreatment. That is, the importance of family income as a predictor of the occurrence of abuse and neglect does not appear to have been acknowledged in the current use of risk assessment by CPS. This may suggest that children in low income families are likely to be unserved/underserved by CPS relative to their risk of experiencing abuse/neglect.

Children's age was perhaps the next most important predictor of risk of abuse and neglect. It also appears to be very frequently included in the risk assessment instruments in use by CPS across the States. As Table 3-25 indicates, of the seven factors under consideration, age was the one most commonly included in the risk assessment instruments that were in use. Specifically, the instruments in use in 40 of the 44 responding States included this factor. However, as described and graphed in the preceding sections, the relation between age and abuse and neglect was (1) generally one in which children's risk increased with increasing age, and (2) nearly always qualified by interactions with other factors, such as race, family structure, and sex. (See Table 3-23.) The way in which age is generally used in risk assessment instruments does not correspond to these patterns. Typically, such instruments assign higher risk to younger children (because of their greater vulnerability when abusive and/or neglectful actions occur). Also, existing risk assessment instruments are not generally designed to provide for interactive patterns where two or more factors are considered jointly in determining risk scores. Thus, the comparison between actual risk indicators and the assessment of risk in CPS implies that older children may be unserved/underserved relative to younger ones, in that their actual degree of risk may not be adequately indexed in the current risk assessment scoring systems. In addition, different subgroups should often be distinguished when using age to index children's risk of abuse and neglect, and this is not occurring in the actual practice of risk assessment in CPS.

Table 3-25 lists family structure as the next most important predictor of child abuse and neglect. Earlier, we noted that it was an important factor involved in interactions with age in the final risk factor models developed in the MS-2 reanalyses. The High Risk State Survey questions did not distinguish between family structure[46] and family size (or number of other children in the household). Only 21 of the 44 responding States indicated that their risk assessment instruments included these

[46] Which was termed "family composition" in that survey, see Table 4-6 in the State Survey Report.

factors. Also, when this factor was considered, it was the single parent families who were considered to be at higher risk, which was *opposite the* pattern found for physical abuse and educational neglect in the NIS-2 findings here (see Table 3-23), at least when the other important predictors (such as family income) were taken into account. This suggests (1) that there has been inadequate attention to family structure in current risk assessment practice, and (2) that current risk assessment instruments do not accurately reflect the actual directionality of risk differences under different parental configurations. Moreover, the instruments that are generally in use do not use different fommlae for assigning risk based on one characteristic (the child's age) depending on another characteristic (family structure). Nevertheless, the NIS-2 reanalyses concerning risk indicated this type of interactive use of multiple factors was definitely needed in connection with physical abuse, sexual abuse, physical neglect, and educational neglect.

Race/ethnicity also emerged in the NIS-2 reanalyses as an important predictor of risk in all areas except physical neglect, particularly insofar as it served to modify the effect of age as a predictor of maltreatment risk. However, among the seven factors considered, race/ethnicity was the one least often used in CPS risk assessment, as can be seen in Table 3-25, which shows that only 9 of the 44 responding States claimed that their risk assessment instruments included race/ethnicity. This was consistent with what was noted in the State Survey Report, i.e., a general lack of attention to context in risk assessment instruments, which could signal the potential for cultural and/or racial biases insofar as it means that risk assessment practice may not be sensitive to cultural differences. Here, taken together with the fact that the NIS-2 reanalyses indicated there are race/ethnicity differences in risk, it means that those States that have avoided the use of race/ethnicity markets may not be adequately indexing the risk of different racial/ethnic groups in their application of risk assessment

In the analyses reported here, the metropolitan status of the county in which the child lived was found to be predictive of his/her risk of experiencing physical neglect, educational neglect, and multiple maltreatment. Respondents to the State Survey were asked whether their risk assessment instruments included the family's geographic location as a factor in scoring degree of risk. Fewer than half the States (23 of 44 which responded) claimed that this was included in their instruments, which implies that children in urban areas may not be receiving CPS attention to the degree that their actual risk of experiencing abuse and neglect would seem to requite.

In the NIS-2 reanalyses, family sire, or the number of children in the family, was found to be an important predictor of the risk of physical abuse and of educational neglect. In both cases, only children were at greater risk of maltreatment, when other important predictors were taken into account, although family size actually had a nonlinear relationship to the risk of physical abuse. In the High Risk

State Survey, the number of children in the family was reportedly used to decide risk in 21 of the 44 responding States.[47] However, when it was used, families with multiple children were assigned the higher risk scores. Again, the comparison between the way in which this factor was related to risk in the NIS-2 database does not directly correspond to the way in which it is reportedly used in CPS.

Children's sex was predictive of their risk of sexual abuse, physical neglect, and multiple maltreatment, with females at higher risk of these forms of maltreatment. The NIS-2 reanalyses also showed that age was an important modifier of the risk related to sex in the case of physical neglect-that females were only at higher risk in the oldest age bracket. Only 14 of the 44 responding States reported that the child's sex was included in the risk assessment instruments they were using. Like race/ethnic&y, the prevailing attitude appeared to be that less attention to the characteristic would avoid biasing risk scores on its basis. Ironically, however, bias is actually introduced by ignoring a factor that is, in fact, associated with differential degrees of risk. In those States that do not consider sex when assigning risk scores, females may not be adequately served by CPS if they are sexually abused, multiply maltreated, or physically neglected because the instruments do not recognize their greater risk for these kinds of maltreatment.

Risk assessment instruments have proliferated in recent years, with very little (if any) empirical grounding for the factors they contain and the methods by which those factors are combined. Thus, it is not surprising that the findings here show that there is a considerable gap between the predictors of risk in the general population and the markers of risk in use within CPS. It should be noted that, among those familiar with the current uses of risk assessment, the general view has always been that the models were dynamic, not static, and that, as information accumulated, the models would need revision. In addition, to be completely fair, it should be pointed out that the risk factors that distinguish maltreated children from non-maltreated children in the general population may not be the most useful factors to make this distinction within the group of children who are reported to CPS. Many children (especially those who were educationally neglected, physically neglected or emotionally maltreated) can be considered unserved/underserved because they fail to even enter the CPS system (see Chapter 2). This means that the children who are reported to CPS may be so nonrepresentative of the general population that one really needs to use different risk markers for them in order to gauge accurately their risk *relative to each other. This* is an empirical question, which could be addressed by systematic research and analyses on the subject. Further analyses of the NIS-2 database in the future could focus on this. However, differences in CPS screening criteria and in the groups of children

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[47] Although, as noted above, the High Risk State Survey questions did not distinguish between family structure and family size.

reported to CPS in different States and counties would make locally-tailored research more useful. Fmally, there is a distinction between the risk that was assessed in these analyses (i.e., the risk of maltreatment occurring in the first place) and the interest in CPS use of risk assessment, which typically concerns the risk of reoccurrence and often involves the use of the "risk assessment" system as a tool for caseplanning.

Notwithstanding these qualifications, the findings from the High Risk Study NIS-2 Reanalyses emphasize the need for better articulation of the goals and more careful scrutiny of the effectiveness of the risk assessment methods that are used in CPS. At the time of the High Risk Study State Survey, only seven States had conducted research of any sort on risk assessment and, of these, only five had actually involved tests of the predictive ability of risk assessment within CPS. The findings underscore the need for concerted efforts to fill this gap. Moreover, the fact that interactive effects emerged as very important in the predictive models implies that simple matrix approaches to risk assessment will probably not be sufficient in the long run. Instead, risk assessment models which require some analysis of the input information beyond simple addition of individual scores, despite their greater complexity, may better fit with reality insofar as they are more able to incorporate interactions among the different factors. The findings certainly suggest that the state-of-the-art in risk assessment would be appreciably advanced by the development of interactive risk assessment models.

4. Incidence of Children Who Are Unserved or Underserved by CPS

Having used several different strategies to identify children as underserved or unserved by child abuse and neglect programs, a central goal of the **Study of High Risk Child Abuse and Neglect Groups was** to report the incidence of child abuse and neglect among such groups. As discussed at the outset of this report, this goal could only be addressed through the NIS-2 Reanalysis component of the study because the NIS-2 data offered the only available database for estimating the incidence of child abuse and neglect among different groups of children. This chapter provides incidence estimates of the numbers of children who experienced Harm Standard maltreatment in groups identified as unserved/underserved by four different strategies:

(1) groups identified in the NIS-2 Reanalysis as unlikely to have their abuse or neglect investigated by CPS;

(2) groups which were indicated by the State Survey to be typically or always excluded from CPS on the basis of CPS agency mission statements and definitions;

(3) groups whose true risk of abuse or neglect (as indexed in the NIS-2 data) are unlikely to be accurately reflected by the indicators of "high risk" that are used in CPS agencies; and

(4) groups identified as having unmet needs for special CPS efforts by State Survey respondents.[1]

The different sections of this chapter provide incidence estimates for the various groups identified as or underserved via each of these four strategies.

4.1 Incidence of Children Unlikely to Have Their Abuse or Neglect Investigated by CPS

This section reports incidence estimates for countable children not likely to receive CPS investigation using two separate approaches--a probability-based approach and a characteristic-based

[1]Note that the State Survey component of this High Risk Study also identified groups as "unserved/underserved" according to a fifth approach: i.e., on the basis of the perceived nonfit between their service needs and service availability in the State Survey component. Because the NIS-2 data did not include information about the perceived service needs of the children and families, it was not possible to estimate the incidence of unserved/underserved children defined by this approach.

approach. In the probability-based approach, the logistic models were used to predict the probability of CPS investigation for each child in the NIS-2 database who met the Harm Standard, and national estimates of the numbers of children were calculated for different probabilities of CPS investigation. In the characteristic-based approach, the characteristics (and combinations of characteristics) that were found to be associated with low likelihood of CPS investigation were used to define groups likely to be unserved or underserved, and national estimates of the numbers of Harm Standard children who have those characteristics (or combinations of characteristics) were developed.

Under both approaches, the different groups of children were derived from the multi-factor logistic models presented in Chapter 2, which were developed to predict CPS investigation of children who were countable under the Harm Standard. Those logistic models were constructed to account for CPS investigation of four mutually-exclusive categories of children: those physically abused (with or without educational neglect); those sexually abused (with or without educational neglect); those physically neglected and/or emotionally maltreated (with or without educational neglect); and those only educationally neglected. In order to generate estimates of the full incidence of unserved/underserved children that would be expected according to these models, it was also necessary to include in the incidence estimates two groups of children who had not been used in the development of the logistic models, namely, (1) children who had been recognized as maltreated by CPS-only reporters rather than by NIS sentinels, and (2) multiply-maltreated children. As was discussed earlier, the logistic analyses concerning CPS-investigation patterns had excluded children who were recognized by CPS-only reporters, because those children had no non-CPS counterparts to provide comparison cases of children who were not investigated by CPS. Nevertheless, those children were included in the incidence estimates by generalizing the logistic models to include them as well. That is, it was assumed that their characteristics predicted their likelihood of CPS investigation in the manner specified by the logistic models? an assumption that had only a small impact on the estimated numbers of unserved/underserved children, as shown below. It was also necessary to include the multiply-maltreated children in the probability-based totals of unserved/underserved children, despite the fact that it had not been possible to construct a separate logistic model for those children[3] In order to do so, it was assumed that the overall likelihood of CPS investigating their maltreatment was a joint function of the independent probabilities of

***There was no available alternative to this assumption. It was made here out of necessity, although it is admittedly possible that different factors predict the probability of CPS investigation for children who are recognized by CPS-only reporters (who consisted predominantly of the general public, e.g., friends, neighbors, "anonymous" callers, etc.). Fortunately, this assumption did not have a large impact on the estimated totals given, as indicated below.**

[3]Multiply-maltreated children included those who were both physically and sexually abused, both physically abused and physically neglected, etc. A separate multi-factor logistic model was not developed for these children because of the small number of cases available for analysis. See Chapter 2 discussion.

CPS investigation associated with each separate category of maltreatment they had experienced. The specific formula used to estimate the joint function is described in Appendii C.

4.1.1 Probability-based Definition of Children Unlikely to Receive CPS Investigation

Each child who met the Harm Standard in the NIS-2 database was classified according to the type(s) of countable abuse and neglect he or she had experienced. Then, by using the final logistic model(s) that applied to the applicable type(s) of maltreatment, the child was assigned a predicted probability of receiving CPS investigation on the basis of his or her relevant characteristics. The exact method by which the predicted probability of CPS investigation is calculated is detailed in Appendix C. Finally, by determining how many of the (weighted) children had predicted probabilities of CPS investigation in different ranges, the distribution given in Figure 4-l was developed. The figure graphically represents the distribution of all children countable under the Harm Standard according to their model-based probabilities of CPS investigation.[4] As the figure depicts, the extension of the modelled probabilities to children who were recognized by CPS-only reporters involved only relatively few of the countable children, and those were fairly broadly distributed across the different probability levels. Most importantly, however, the figure also reveals that relatively large estimated numbers of children appear to have extremely low likelihood of receiving CPS investigation. Table 4-1 provides the same information in numerical form, also indicating the cumulative frequencies and percentages of children at each probability level.

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[4] The estimated incidence at different Probability levels is a combined function of the children's Predicted probabilities of CPS investigation and their case weights in the NIS-2 database. Because the case weights are tied to the actual NIS-2 data, the curve given in Figure 4-1 cannot be "smoothed."

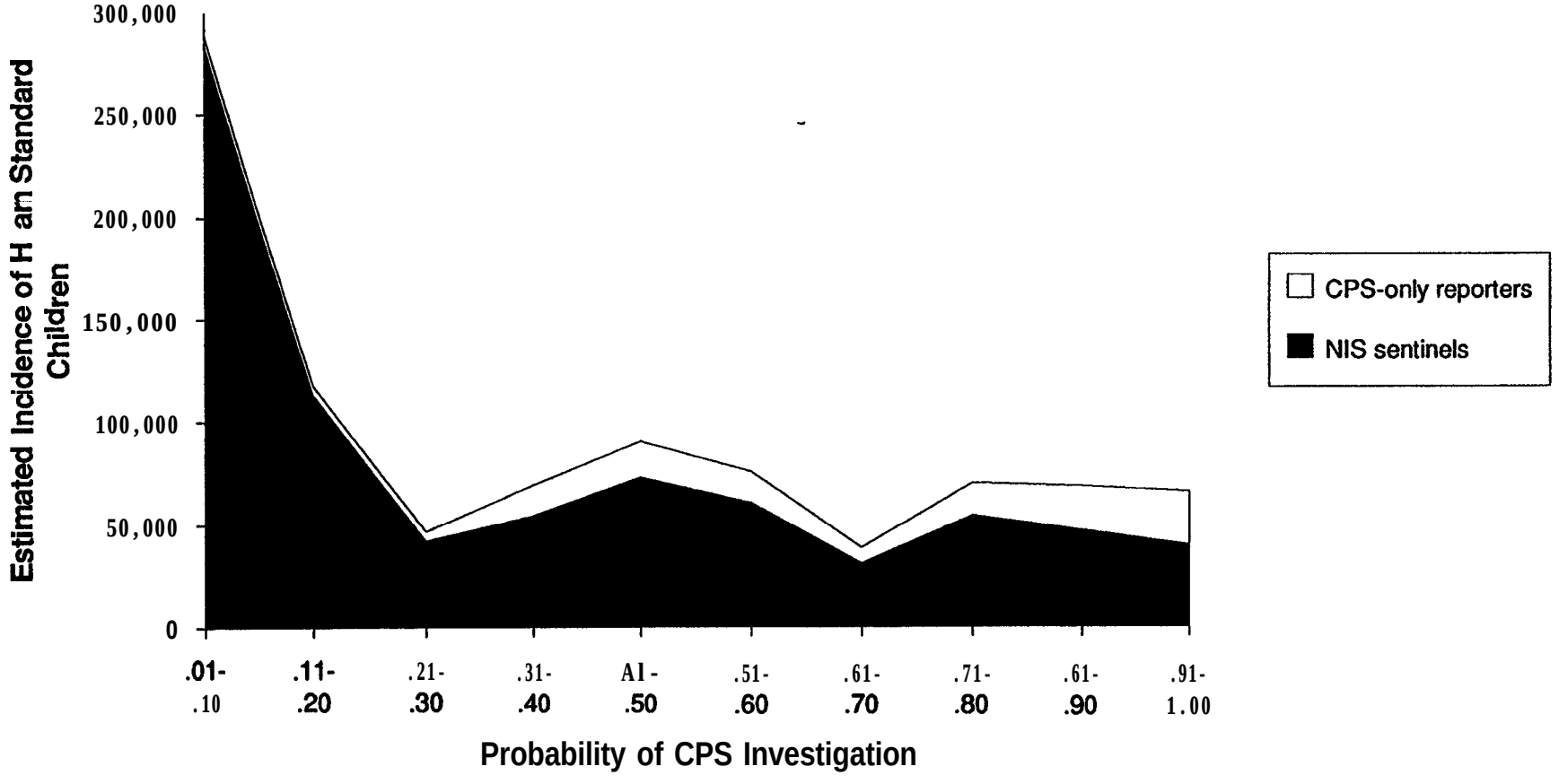
Table 4-1. Distribution of All Children Who Met the Harm Standard According to Their Probability of CPS Investigation, as Predicted From the Applicable Logistic Model(s).

Probability of CPS Investigation	Estimated number[5]	Percent of Total	Cumulative Percent
.01-.10	288,000	31%	31%
.11-.20	118,000	13%	44%
.21-.30	47,000	5%	49%
.31-.40	69,000	7%	56%
.41-.50	90,000	10%	66%
.51-.60	76,000	8%	74%
.61-.70	39,000	4%	78%
.71-.80	70,000	8%	86%
.81-.90	68,000	7%	93%
.91-1.00	66,000	7%	100%
Total	931,000	100%	

According to the distribution shown in this table, nearly one-third (31 percent) of all children who met the Harm Standard have probabilities of receiving CPS investigation below 0.10, and approximately half (49 percent) have probabilities below 0.30. The estimated incidence of children who are "'underserved" by CPS will depend on what level probability one prefers to use in order to demarcate the "underserved" children here. Observe, however, that wherever the criterion is set, quite a sizeable number of underserved children will be identified, since approximately three-fourths of the children have probabilities below 0.60. For example, if one considers children to be relatively unserved/underserved if they have an 80 percent or lower chance of receiving CPS investigation, then 797,000 countable children would be defined as unserved/underserved--i.e., the sum of the estimated numbers of children in all probability levels from zero to 0.80 in the table. Alternatively, if one sets a probability of 0.40 as the standard for defining those who are unserved/underserved (i.e., if one preferred to use a 40 percent chance of receiving CPS investigation as the unacceptable cut-off level under which children would be considered to be unserved/underserved), then an estimated 522,000 children would fall into the unserved/underserved sector.

[5] Rounded to the nearest 1,000.

Figure 4-1. Estimated Incidence of Harm Standard Children by the Probability of CPS Investigation



The different sub-parts of Figure 4-2 illustrate the distribution of maltreatment types at different likeliiood of CPS investigation. This figure graphically reveals that the majority of children with very low probabilities of CPS awareness were physically neglected and/or emotionally maltreated, or only educationally neglected. Among those with probabilities in the 0.01-0.20 range, 39 percent were physically neglected and/or emotionally maltreated, and 50 percent were only educationally neglected. In the 0.21-0.40 range, 41 percent were physically neglected and/or emotionally maltreated, and 15 percent were only educationally neglected. In contrast, among children with higher probabilities of receiving CPS investigation, the categories of sexual abuse, physical abuse, and multiple maltreatment represented the types of maltreatment experienced by the greater proportion of the children. For instance, among children who had probabilities of being investigated by CPS somewhere between 0.81 and 1.00, these three categories accounted for 67 percent of the children. Twenty-nine percent of this group were sexually abused; 23 percent were physically abused; and 15 percent were multiply-maltreated. Among those with probabilities of CPS investigation between 0.61 and 0.80, the combined group of sexually abused, physically abused, and multiply-maltreated reflected 72 percent of the children. Fifteen percent of this group were sexually abused; 47 percent were physically abused; and 10 percent were multiply-maltreated. These three categories of maltreatment represented 74 percent of the group of children who had probabilities of CPS investigation between 0.41 and 0.60. Fifteen percent of this group were sexually abused; 52 percent were physically abused; and 7 percent were multiply-maltreated.

An alternative way of examining the distribution of likelihoods by maltreatment types is given in Figure 4-3, which shows the incidence of children with different likelihoods of CPS investigation within each maltreatment category. This figure reveals that some numbers of children who were physically abused and sexually abused had relatively low probabilities of CPS awareness, while some of the children who were physically neglected and/or emotionally maltreated actually were quite likely to receive CPS investigation. For this reason, readers may find it useful to examine the specific incidence estimates at each probability level for each category of maltreatment. These are provided in Table 4-2, along with the cumulative percent distribution for each category. The different categories of maltreatment in this table are mutually exclusive, and the n's given in each of the rows sum to the corresponding totals presented earlier, in Table 4-1.[6]

Table 4-2 details the large discrepancies across the distributions of the different maltreatment types. The fewest unserved/underserved children, by any criterion, are found among the

[6] With allowance for rounding error.

Figure 4-2. Distribution of Maltreatment for Children With Different Probabilities of CPS Investigation

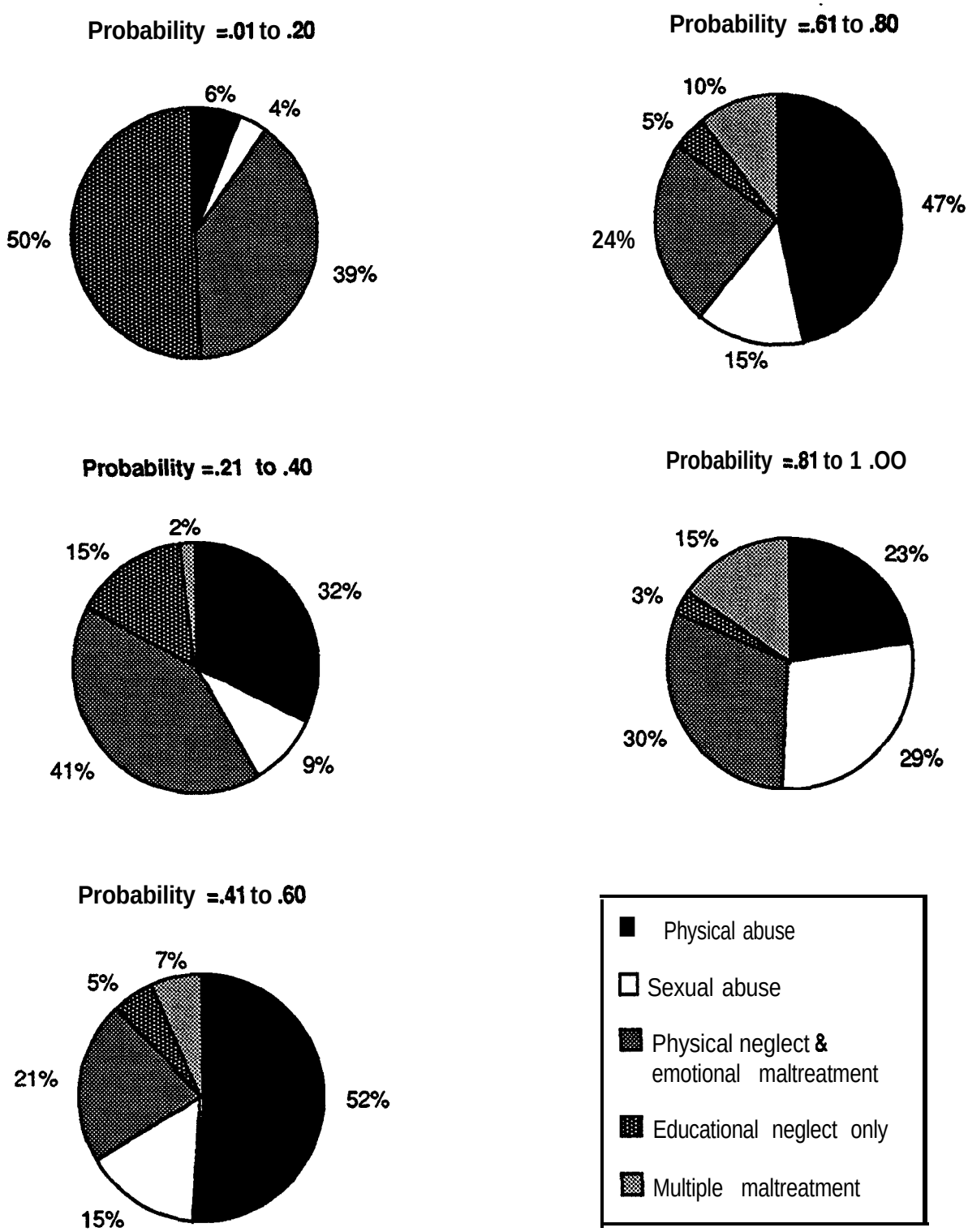
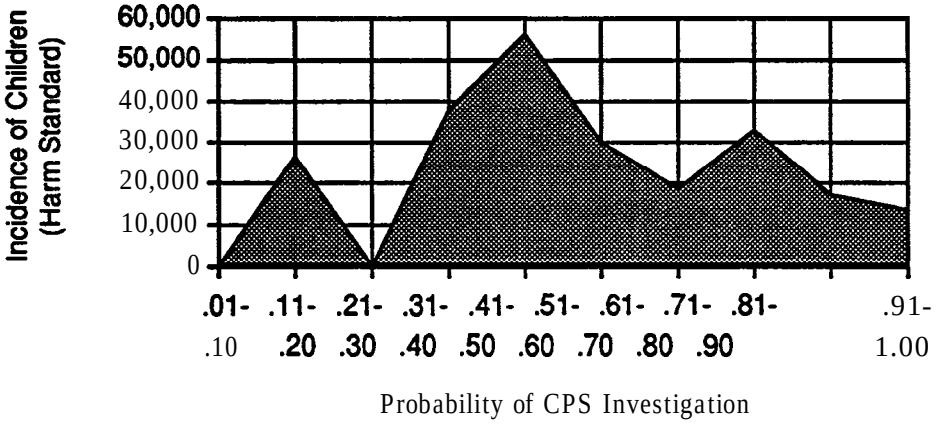


Figure 4-3. Incidence of Children in Different Maltreatment Categories By the Probability of CPS Investigation

Physically Abused



Sexually Abused

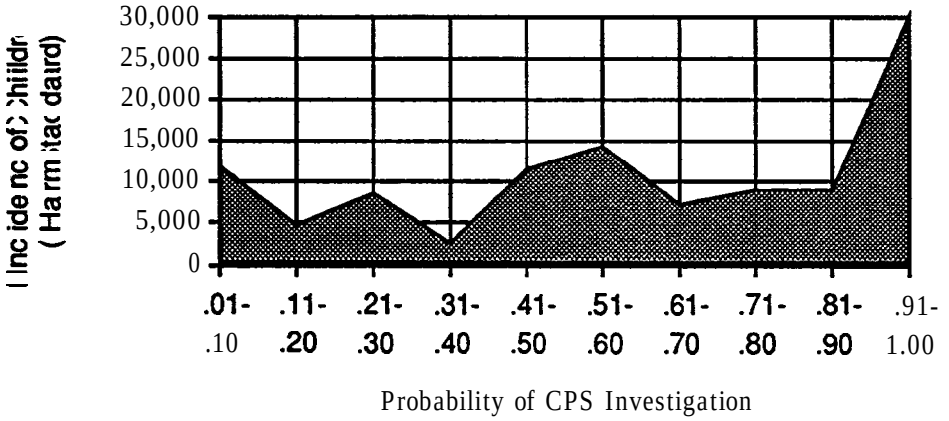
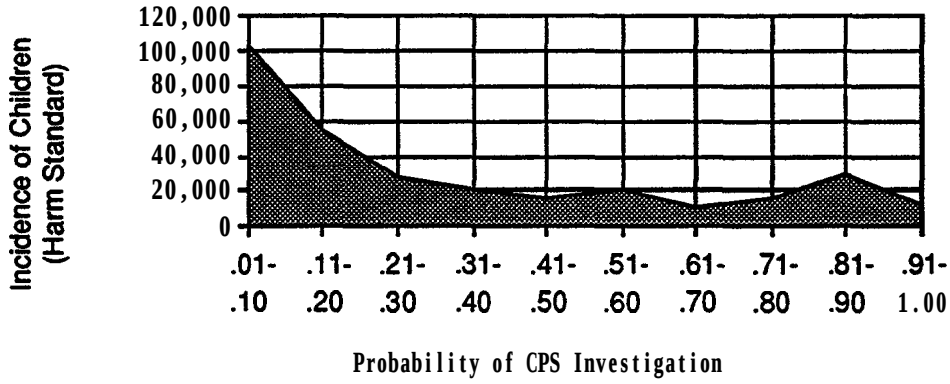
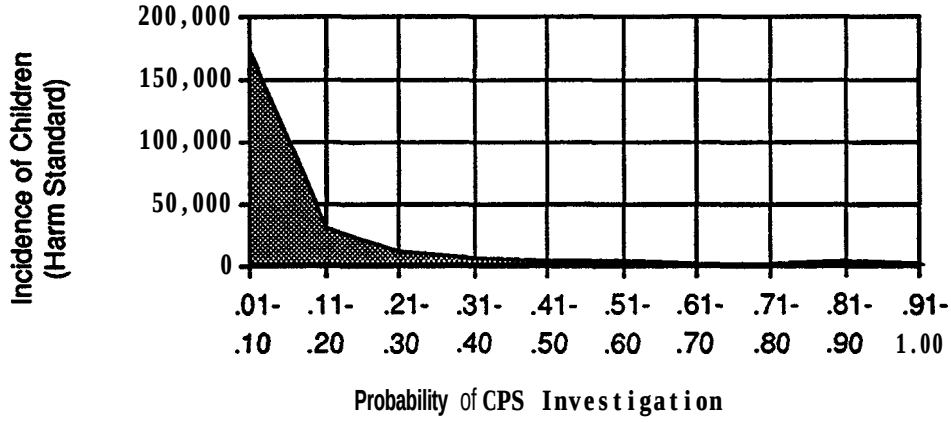


Figure 4-3. (Continued)

Physically Neglected and/or Emotionally Maltreated



Educationally Neglected Only



Multiply Maltreated

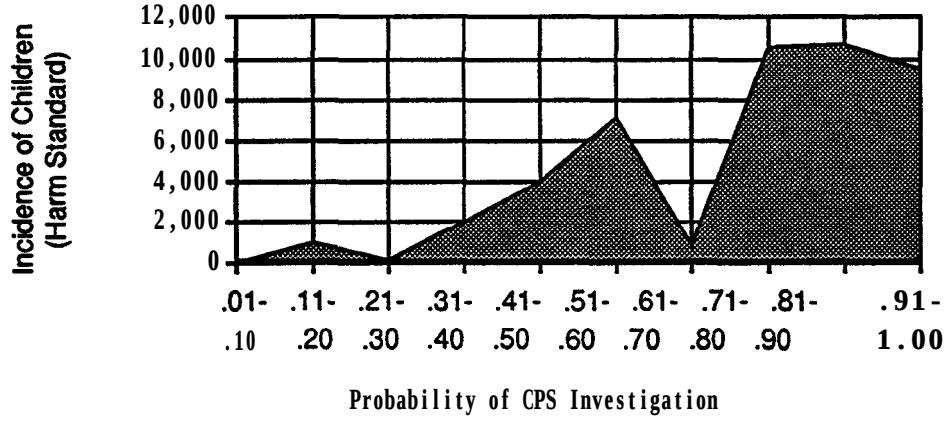


Table 4-2. Distribution of Children in Each Maltreatment Category According to Model-Based Probability of CPS Investigation.

Likelihood	Physically abused		Sexually abused		Physically neglected & emotionally maltreated		Educationally neglected only		Multiply-maltreated	
	Estimated number[a]	Cum. Percent	Estimated number[a]	Cum. Percent	Estimated number[a]	Cum. Percent	Estimated number[a]	Cum. Percent	Estimated number[a]	Cum. Percent
.01-.10	0	0%	12,000	11%	103,000	34% 51%	173,000	72%	0	0%
.11-.20	26,000	11%	4,000	15%	55,000		31,000	85%	1,000	2%
.21-.30	0	11%	9,000	23%	27,000	60%	11,000	90%	0	2%
.31-.40	38,000	28%	2,000	25%	20,000	67%	7,000	93%	2,000	7%
.41-.50	56,000	52%	11,000	36%	16,000	72%	4,000	94%	4,000	15%
.51-.60	30,000	65%	14,000	49%	20,000	78%	5,000	%%	7,000	31%
.61-.70	18,000	73%	7,000	56%	10,000	82%	3,000	97%	1,000	32%
.71-.80	33,000	87%	9,000	64%	16,000	87%	2,000	98%	10,000	55%
.81-.90	17,000	94%	9,000	72%	28,000	%%	4,000	100%	11,000	79%
.91-1.00	13,000	100%	30,000	100%	12,000	100%	0	100%	10,000	100%
Total	231,000		107,000		308,000		240,000		46,000	

[a] Rounded to the nearest 1,000.

groups who are multiply-maltreated and those sexually abused. The findings for the multiply-maltreated children should he regarded with extreme caution because these figures were not derived from the data directly (i.e., as Chapter 2 explained, there were too few multiple maltreatment cases to build a separate logistic model for those cases). Instead, the probabilities of CPS investigation for these children were extrapolated from the other logistic models by assuming that a multiply-maltreated child would have a likelihood of investigation that depended on each type of maltreatment involved.[7] Understanding this liiitation, the median probability of CPS investigation of multiply-maltmated children was in the 0.71-0.80 range, meaning that about half of the children were projected to have even greater probabilities of CPS awareness. The 75th percentile occurred in the high probability range of 0.81-0.90, and more than 20 percent of the children (or 100 minus 79) had probabilities of CPS awareness in the 0.91-1.00 range. None of the remaining distributions that are given in Table 4-2 are subject to the limitation described for the multiply-maltreated children. That is, for all other categories, the likelihoods of CPS investigation were calculated directly from the applicable logistic model, and no assumptions about how information should be combined were needed. Among these simple categories, sexual abuse is the one with the fewest unserved/underserved children. The 75th percentile for the sexually abused children was even higher, in the range of 0.91- 1.00, but the median was slightly lower, in the 0.61-0.70 range. Slightly higher proportions and total numbers of physically abused children would be considered relatively unserved/underserved by CPS on the basis of their likelihood of receiving CPS investigations. More than half of all physically abused children (52 percent) had probabilities of CPS investigation of 0.50 or less. Specifically, the median for physically abused children was between 0.41 and 0.50, and the 75th percentile occurred in the 0.71-0.80 range. Children who were physically neglected and/or emotionally maltreated are next-to-last in this hierarchy, with the next-highest numbers and percentages being unserved or underserved by CPS. More than half of all physically neglected/emotionally maltreated children had probabilities of 0.20 or less, and 75 percent of them had probabilities of CPS awareness in the 0.51-0.60 range or below. Finally, the highest numbers and proportions of unserved/underserved maltreated children were those who were only educationally neglected. Not only are those children fairly numerous overall, but nearly three-fourths (72 percent) had probabilities of CPS awareness of 0.10 or less, and 90 percent had probabilities below 0.30.[8]

The distributions shown in Table 4-2 can be treated in the same manner as the overall distribution presented in Table 4-1. That is, in using this table, it is possible to generate estimates of the total incidence of unserved/underserved children for any of the probability levels given For example, if

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[7] The technical details concerning how the multiple maltreatment probabilities were developed are given in Appendix C.

[8] Again, CPS agencies are not required by Federal law to investigate educational neglect

one requires that sexually abused children have a greater than 90 percent chance of CPS investigation in order to be considered adequately served by CPS, then the table shows that one will conclude that 77 1,000 sexually abused children are unserved/underserved by CPS (or 72 percent of the total of 107,100). In addition, because the Table 4-2 categories are mutually exclusive and sum to the totals given earlier in Table 4- 1, readers can develop subtotals to meet their own interests and needs. For instance, if one considers children with a 50 percent or less chance of receiving CPS investigation to be underserved, but also regards educational neglect as outside the appropriate domain of CPS efforts, then one can sum the totals in the first 5 rows of Table 4-2 for all categories except educational neglect, and derive the estimated total of 386,000 as the incidence of children who are unserved/underserved by CPS.

4.1.2 Characteristic-Based Definition of Children Unlikely to Receive CPS Investigation

The above presentation couches the incidence estimates solely on the basis of the rather abstract definition of "likelihood" or "probability" of CPS investigation, as predicted by the logistic models developed to account for the NIS-2 data on that subject_ While the children's characteristics were certainly considered in assigning them the appropriate likelihood scores, there was no explicit reference to the characteristics of the children who are less likely to come to the attention of CPS. An alternative approach to using the same logistic models to define the groups who are unserved/underserved by CPS is to refer directly to the children who have the characteristics that were found to be associated with lower probabilities of CPS investigation. That alternative is the approach adopted in this section. Table 4-3 presents 29 subgroups of children, identified within each of the four major maltreatment categories by their characteristics or combinations of characteristics, as the children with especially low probabilities of receiving CPS attention. Children who were multiply-maltreated are included in the totals for all types of maltreatment that were applicable to them. The subgroups listed in this table are *not* mutually exclusive, so the totals cannot be meaningfully added.[9]

The most numerous subgroup of children with characteristics or combinations of characteristics that are important predictors of low likelihoods of CPS investigation was the set of children who were physically abused, who were *not* in father-only households, but who lived instead with both parents or with their mothers only; an estimated total of 260,000 children are maltreated annually and 104,000 of these children are not investigated by CPS. Second most numerous among the

[9] Attempts to add the subtotals together will doubly count some children and thus produce erroneous estimates.

Table 4-3. Incidence of Children Unlikely to Receive CPS Investigation, Defined By Their Chararacteristics

Category of Children	All Maltreated[a]	Investigated by CPS	Not Investigated by CPS
Physically abused children who:			
are older males (age 12+) with fatal, serious, or inferred injury	2,000	0	2,000
are younger females (12 or less) with moderate injury	59,000	34,000	25,000
are older Blacks (i.e., age 14 or more);	26,000	7,000	19,000
are younger non-Blacks (i.e., ages 0 through 11);	108,000	77,000	31,000
are recognized by day care, mental health, or social services	20,000	13,000	7,000
have no other victims suspected	222,000	124,000	98,000
are not in father-only households	260,000	156,000	104,000
have known number of children in the household	249,000	144,000	105,000
Sexually abused children who:			
are Black or Hispanic age 8 years or older	26,000	9,000	17,000
have no other victims suspected	84,000	42,000	42,000
had evidence of actual harm and not just inferred harm	61,000	49,000	12,000
were abused by in-home perpetrators	65,000	39,000	26,000
Physically neglected/emotionally maltreated children who:			
are males aged 7 or older	112,000	28,000	84,000
are females ages 0 through 5	32,000	23,000	9,000
are Hispanic or "other" races	53,000	15,000	38,000
are from families with income below $15,000 per year	186,000	77,000	109,000
were recognized by schools or by daycare, social services or mental health services	31,000	10,000	21,000
have no other victims suspected and were not recognized by daycare, social services or mental health services	249,000	74,000	175,000
were physically injured	35,000	15,000	20,000
were fatally or seriously injured	122,000	40,000	82,000
had perpetrator who was not a parent or parent/substitute	24,000	8,000	16,000
were maltreated by more than one perpetrator	107,000	28,000	78,000
Educationally Neglected children who:			
were White, ages 5 through 13	84,000	15,000	69,000
were non-White, ages 15 through 17	29,000	0	29,000
had other victims and were ages 5 through 8	28,000	9,000	19,000
did not have other victims and were ages 10 through 17	148,000	13,000	134,000
were in mother-only households and aged 5 through 15	64,000	5,000	59,000
were in households with more than one child	97,000	15,000	82,000
were recognized by daycare, social services, or mental health services	23,000	1,000	23,000

[a] All estimated n's are rounded to the nearest 1,000.

identified subgroups who were especially unlikely to receive CPS attention were physically abused children where the number of children in the household was known (an estimated 249,000 children were estimated overall, 105,000 of whom are not investigated). The third-ranking group in terms of absolute numbers were children who were physically neglected or emotionally maltreated, where other victims were *not* suspected and who were *not* recognized by day care, social services or mental health services; an estimated 249,000 children in all had this combination of characteristics, and 175,000 of them failed to receive CPS investigation of their Harm Standard maltreatment. Fourth in order of overall size was the group of children who had been physically abused in households where no other victims were suspected; these totalled an estimated 222,000, and CPS had not investigated 98,000 of the group. Fifth-ranked in sheer numbers were physically neglected or emotionally maltreated children from families with incomes below $15,000 per year (an estimated 186,000 overall, of whom 109,000 were not investigated). Children who were only educationally neglected, ages 10 through 17, with no other suspected victims in their households, were the next most-prevalent grouping; among the total of 148,000, an estimated 134,000 nationwide were not investigated by CPS. Seventh-ranked in numbers were physically neglected or emotionally maltreated children who were fatally or seriously injured; there were 122,000 such children in all, and 82,000 of them had not received the official attention of CPS. Also among the top ten groups unlikely to receive CPS investigation were males, aged 7 or older who were physically neglected or emotionally maltreated. There were an estimated 112,000 such children, 84,000 of whom had not had their maltreatment investigated by CPS. The ninth-ranked group of children by this definition were physically abused non-Blacks who were younger (i.e., ages 0 through 11); of an estimated 108,000 such children, 31,000 had not been investigated by CPS. Tenth-ranked of these subsets were children who had been physically neglected or emotionally maltreated by more than one perpetrator, these totalled 107,000 nationwide, and CPS had failed to investigate 78,000 of them.

Clearly, substantial gains in the numbers of countable children who are investigated by CPS could be achieved by targeting relatively few subgroups, particularly among children who are physically abused and those physically neglected and/or emotionally maltreated. For example, by targeting children who were suspected to be physically neglected and/or emotionally maltreated and who came from families with incomes under $15,000 per year, one could direct CPS attention to an additional 109,000 children who are currently not investigated by CPS but who meet the Hann Standard criteria for countability.

4.2 Incidence of Children Excluded From CPS by Definition

In the State Survey component of this High Risk Study, several groups of children were identified as potentially unserved/underserved insofar as they were frequently excluded by CPS mission statements and limitations on the types of maltreatment defined to be within CPS jurisdiction. Incidence estimates pertaining to three of these groups could be derived from the MS-2 incidence database. These are presented in Table 44.

Table 4-4. Incidence Children Identified as Unserved/Underserved on the Basis of Agency-Defined Limitations on CPS Jurisdiction.

Category of Children	Estimated total[10]	Investigated by CPS	Not Investigated by CPS
Educationally neglected	285,000	42,000	243,000
Emotionally maltreated	191,000	78,000	112,000
Endangered but not harmed	493,000	324,000	170,000

First, of all the types of maltreatment, educational neglect was the one most often categorically excluded from CPS purview. Thirty-six of the 51 State Survey respondents excluded educational neglect, either entirely or in many cases. Fifteen did not define it as being within CPS purview at all, and 21 others placed limitations on their involvement, such as by excluding simple truancy altogether, by including educational neglect only if it occurred in conjunction with other maltreatment, or by imposing other special requirements (e.g., only for younger children, only as a last resort., only after school officials have acted, etc.). Thus, it appeared that the majority of States provide limited or no CPS attention to educational neglect per se. The incidence estimates in Table 4-4 reveal that at issue are the more than one-quarter million children who are educationally neglected in the course of a year. The estimates given in this table include all the children who experienced the maltreatment in question, even those who also experienced other types of maltreatment. If one considers only those children who were not maltreated in any other way, then the estimated annual incidence would still be quite sizeable, involving 240,000 educationally neglected children. Of all educationally neglected children, the vast majority fail to receive any CPS investigation (243,000). Again, this holds true even when one considers only that sector of children who did not experience any other type of maltreatment in

[10] Rounded to the nearest 100.

conjunction with their educational neglect (an estimated 200,000 uninvestigated in that group). Clearly, CPS agencies are *not* serving educationally neglected children. Whether or not they should even attempt to do so is a question that has been increasingly answered in the negative, as witness&d by the State Survey respondents. It should also be reiterated that States are not required by Federal law or regulation to include educational neglect within the definition of neglect within CPS purview. Given that States must focus limited CPS resources on the types of maltreatment they are mandated to address, it is mt surprising to find that educational neglect is excluded from CPS purview or is given only limited CPS attention. Nevertheless, the question does remain as to who then carries the responsibility for providing services to these children This is an arena in which responsibility has been shifting in recent years and, in many communities, the school systems have not had the resources to deal with the service vacuum created by the curtailment of CPS services to this sector. Because the educationally neglected children are increasingly likely to fall in the niche between service systems, they may be more likely to be unserved/underserved than children who are maltreated in other ways.

Children who are emotionally abused or neglected were also identified in the State Survey as a category of children that may be unserved/underserved relative to other maltreated children. To begin with, these children are not always specifically defined to be within the scope of CPS purview. Moreover, even when emotional maltreatment is technically included in the agency's defined purview, it is typically not treated as a separate specified category. As a result, it may only be accorded attention when it occurs in conjunction with other maltreatment. Finally, State Survey respondents also reported that emotional maltreatment is generally more difficult to substantiate. Taken together, these considerations converge on the implication that emotionally maltreated children will be unserved/underserved or by CPS relative to children who are maltreated in other ways. Table 4-4 provides the estimated incidence figures for these children; those who fit the Harm Standard are estimated to total 191,000 nationwide on the basis of the NIS-2 incidence information. The vast majority of these children (an estimated 112,000) do not receive CPS attention.

According to the State Survey findings, children who were considered to be at risk of harm are typically not accorded the same priority status as those who have already experienced demonstrable harm from abuse or neglect. It appeared that CPS emphasizes already-injured or already-abused/neglected children over those at risk of harm or at risk of being maltreated. As a result, those children who are at risk may be relatively unlikely to receive CPS attention and services, at least until their circumstances women to the point that they are actually harmed or maltreated. An estimate of the incidence of these children was extracted from the MS-2 data on the basis of those children who had failed to meet the Harm Standard criterion (which largely required that demonstrable harm to the child have already occurred), but nevertheless did meet the Endangerment Standard. (See Chapter 1

discussion.) Nearly a half million children fit this circumstance (an estimated 493,000), and 170,000 of these had not been investigated by CPS.

4.3 Incidence of Children Whose Risk May Be Inadequately Indexed in CPS Risk Assessment Methods

At the conclusion of Chapter 3, it was observed that there are several respects in which the predictors of risk in the general population do not correspond to the markers of risk that are in use within CPS in a number of States. Those conclusions were based on risk factor analyses that took multiple factors into account simultaneously. Table 4-5 provides estimates of the numbers of children in the high vs. low risk subgroups, using each factor that was identified as predictive of risk in the analyses. In addition, the table also indicates the incidence rate of maltreatment per 1,000 children in each subgroup in the general population.

The first column gives the overall incidence of maltreated children in the group who fit the Harm Standard criteria as well as the incidence rates that these totals represent. The six remaining columns in the table provide finer breakdowns of the totals shown in the first column, showing the subtotals for each of the six different maltreatment categories that were explored in the risk analyses. These maltreatment categories are mutually exclusive, and their totals sum to the first column total of all maltreated children. The discussion in this section will consider the incidence and incidence rates of these different subgroups in their order of appearance in this table.

Children from single parent families were generally assigned greater risk in CPS risk assessment, and Table 4-5 does indicate that these children experience maltreatment at noticeably higher rates than children in two-parent families both overall and in the areas of physical abuse, sexual abuse, physical neglect, and educational neglect. It should be emphasized, however, that this reflects the pattern seen when *only* family structure is considered. The risk analyses that were presented earlier indicated that this pattern did not hold up when family income was simultaneously taken into account. In fact, when family income was also used as a predictor of risk, then it was the children in two-parent families who were at greater risk of physical abuse, educational neglect, and multiple maltreatment. To the extent that this type of interaction in risk prediction is ignored in the assignment of risk levels by CPS agencies, children in two-parent households who experience these types of maltreatment will be underserved relative to their actual risk of maltreatment. These categories sum to a total incidence of 338,000 children.

Table 4-5. **Incidence** of Harm Standard Maltreatment for Speclfled Subgroups of **Children** and Categorles of Maltreatment-Estimated **National Totals**[a] and Rates per 1,000.

Category of Children		All Harm Standard Maltreatment	Physical abuse	Sexual abuse	Emotional Maltreatment	Physical Neglect	Educational Neglect only	Multiple Maltreatment
In single parent families	Total	330,000	83,000	40,000	36,000	64,000	90,000	16,000
	Rate per 1,000	22.10	5.58	2.69	2.41	4.33	6.06	1.04
In two parent families	Total	602,000	148,000	67,000	110,000	87,000	150,000	41,000
	Rate per 1,000	13.03	3.20	1.45	2.37	1.88	3.24	0.89
In rural areas	Total	179,000	56,000	26,000	30,000	25,000	35,000	7,000
	Rate per 1.000	10.40	3.28	1.49	1.72	1.45	2.05	0.40
In urban & suburban areas	Total	752,000	174,000	81,000	116,000	126,000	205,000	49,000
	Rate per 1,000	16.47	3.82	1.78	2.54	2.77	4.48	1.08
In low Income households	Total	626,000	131,000	72,000	90,000	120,000	176,000	37,000
	Rate per 1,000	39.51	8.26	4.53	5.70	7.56	11.13	2.33
In mlddle & upper Income households	Total	305,000	100,000	35,000	55,000	32,000	63,000	20,000
	Rate per 1.000	6.49	2.13	0.75	1.17	0.67	1.35	0.41
In large famllles (4+ children)	Total	195,000	49,000	22,000	27,000	28,000	56,000	12,000
	Rate per 1,000	20.50	5.18	2.35	2.84	2.93	5.89	1.31
In 1-3 child famllles	Total	736,000	182,000	85,000	118,000	124,000	184,000	44,000
	Rate per 1,000	13.79	3.40	1.59	2.22	2.32	3.45	0.82

[a] Rounded to the nearest 1.000.

Table 4-5. **(continued)**

Category 01 Children		All Maltreatment	Physical abuse	Sexual abuse	Emotional Maltreatment	Physical Neglect	Educational Neglect only	Multiple Maltreatment
O-2 years old	Total	56,000	16,000	2,000	3,000	30,000	0[b]	4,000
	Rate per 1,000	5.13	1.51	0.23	0.28	2.73	0.00	0.38
3-5 years old	Total	97,000	37,000	18,000	7,000	15,000	9,000	11,000
	Rate per 1,000	8.98	3.44	1.68	0.67	1.40	0.80	0.99
6-8 years old	Total	135,000	38,000	16,000	15,000	14,000	47,000	6,000
	Rate per 1,000	13.07	3.68	1.50	1.43	1.38	4.55	0.53
9-11 years old	Total	132,000	34,000	20,000	20,000	17,000	33,000	8,000
	Rate per 1,000	13.36	3.45	2.04	2.03	1.71	3.33	0.79
12-14 years old	Total	226,000	53,000	24,000	ss,ooo	16,000	66,000	11,000
	Rates per 1,000	22.58	5.30	2.41	5.52	1.66	6.56	1.13
15-17 years old	Total	285,000	52,000	27,000	45,000	59,000	86,000	17,000
	Rate per 1,000	26.06	4.75	2.44	4.13	5.38	7.83	1.54
White	Total	574,000	128,000	76,000	93,000	79,000	159,000	38,000
	Rate per 1,000	12.85	2.86	1.71	2.09	1.78	3.56	0.85
Racial minorities	Total	254,000	61,000	17,000	43,000	56,000	66,000	11,000
	Rate per 1,000	21.78	5.24	1.46	3.67	4.84	5.62	0.95
Ethnic minorities	Total	103,000	42,000	14,000	9,000	16,000	15,000	7,000
	Rate per 1,000	15.75	6.40	2.13	1.42	2.39	2.32	1.08

[b] This maltreatment not defined for this age category.

The family's geographic location was included in scoring risk by 23 of 44 responding States, and the risk factor analyses had shown that children were at greater risk in urban than in rural counties for physical neglect, educational neglect, and multiple maltreatment when other important predictors of risk are simultaneously taken into account. The Table 4-5 figures reveal the differences in overall incidence and in incidence rates for children who live in the more urban *vs.* rural counties for these maltreatment types. There is a combined total of 380,000 children living in urban and suburban counties who are physically neglected, educationally neglected, or multiply maltreated.

Family income was found to be the most important predictor of risk of maltreatment in all categories, taking all other important predictors into account. Use of family income in risk assessment was reported by 32 of 44 responding States in the State Survey. Table 4-5 displays the incidence estimates for the different income groups included in the NIS-2 data. The figures show that not only are the per capita incidence rates (per 1,000 children) far higher among children in low income households, but the overall totals of sheer numbers of maltreated children are also far higher for those in low income families than for those in families with incomes above $15,000 per year. These differences hold across all the different maltreatment categories.

Family size was found to be related to risk of physical abuse and of educational neglect in the risk factor analyses. When other important predictors were taken into account, only children were at greater risk than those who lived in multiple-child households. The figures given in Table 4-5, however, show that when no other predictors are considered and family size differences are the only factor examined, children in households with four or more children show somewhat elevated levels of risk compared to those in households with fewer children.

Risk in all categories of maltreatment was found to increase with increasing age, but the risk analyses also showed that the effect of age was modified by interactions with other factors in five of the six maltreatment categories, depending also on features such as the family structure, race/ethnicity, and/or the child's sex. Age was also the factor most often used in CPS risk assessment among all six factors under consideration. The figures given in Table 4-5 reveal that the overall estimated totals of Harm Standard children generally increase with age, as do the per capita rates across the different age categories. However, differences in the age patterns across maltreatment types are also evident. Physical abuse shows the same trend as the figures for all maltreated children, but the age-related increments occur predominantly for children in the lowest and highest age categories. For sexual abuse, the numbers of maltreated children evidence a clear increment after age 2, but increases after that are not dramatic. Totals of children who are emotionally maltreated and the per capita rates for this category

both exhibit clear increases up through age 14. Physical neglect evidences a curvilinear relationship with age, appearing more commonly among children in the lowest and highest age categories and showing relatively little differences across the age span between 3 to 14 years. Numbers and incidence rates of educationally neglected children reveal general increases with age, with a slight dip in the 9 to 11 year category. Finally, multiple maltreatment appears to occur somewhat more often to children in the 3 to 5 year range and above age 14 as indexed both by incidence numbers and rates per 1,000 children.

Race/ethnicity was used in risk assessment in only 9 of the 44 States who responded to the State Survey, but the risk analyses determined it to be an important predictor of risk, either alone or in conjunction with age, in five of the six maltreatment categories. Table 4-5 indicates that racial minorities had higher per capita rates of maltreatment, although their numbers in the Harm Standard are fewer than the numbers of Whites. It should be borne in mind, however, that race/ethnicity interacted with age in determining risk of maltreatment in three of the five categories where it was related to risk

The discussion here has repeatedly noted that the risk analyses found interactions among different risk factors to be important in detennining the risk of maltreatment in a number of instances, yet we have noted that the current state-of-the-art of risk assessment does not provide for such complex modifications of risk level on the basis of special combinations of characteristics. As readers peruse the per capita rates given in Table 4-5, it should also be borne in mind that, while the distinctions among the subgroups in this table are made solely on the basis of a single factor, the risk factor analyses also revealed that different patterns emerged when the other important predictors of risk of maltreatment were taken into account and multiple factors were used in concert with each other to determine children's relative degrees of risk. For purposes of this report, there is no simple way to gauge the numbers of children who may be underserved as a result of this inattention to interactions among risk factors or as an outgrowth of the fact that extant risk assessment instruments assign risk scores more in accord with the simple subgroup differences than in correspondence with the differences that hold when multiple predictors are simultaneously used to index degree of risk.

4.4 Incidence of Children Perceived to Need Special CPS Efforts

As part of the State Survey, respondents were provided a list of 24 categories of children that might present special challenges to CPS agencies because of the difficulty in reaching and/or serving the children in those groups. Respondents were asked to indicate whether they perceived **a need for special efforts (policies, programs, practices)** to overcome the barriers to serving the children in each listed category, and to report whether or not any such effort had yet been implemented in their State.

The NIS-2 database was capable of providing estimates of the incidence of children who met the Harm Standard for 13 of the categories in the list. Besides providing incidence estimates regarding a number of potentially underserved sectors, it will be of interest to examine the correspondence between the perceived need for special efforts relative to the actual total numbers of maltreated children in each category and the incidence in each category of children who are not investigated by CPS. As will be seen, there is some overlap in the tidings given here and those presented in the previous section, where incidence *rates* per 1,000 children in the population were presented for the same subgroups of children and the discussion focused on the correspondence between factors actually predictive of risk of maltreatment and the indicators of risk in use in CPS.

Table 4-6 provides the incidence estimates for a number of the subgroups of children whose need for special efforts was rated by State Survey respondents. This table is formatted in the same manner as Table 4-6, except that, instead of incidence rate information, the investigated and non-investigated subtotals are provided. At the outset, it is important to reflect on the fact that the numbers given in Table 4-6 must derive, at least in part, from the influences of the different factors that were found to predict children's risk for the different types of maltreatment. (See the previous section, as well as the findings given in Chapter 3.) Moreover, the variations in the numbers of uninvestigated children will depend not only on those differential risk levels, but additionally on the various factors that were associated with the likelihood of CPS investigation, as was detailed earlier in this report. (See Chapter 2.) Since the patterns concerning the overall incidence totals have already been discussed, the presentation in this section focuses on the patterns concerning the estimated numbers of maltreated children in each category who remain uninvestigated by CPS.

Children from single parent families were regarded as requiring special CPS efforts by CPS specialists in 33 of the 45 responding States--25 respondents perceived them to be in need of such efforts and they were reported actually to he the focus of special efforts in another 8 States. While these perceptions and foci do reflect the differences in incidence rates in these subgroups, at least when no other factor predictive of risk is considered, as discussed above and in Chapter 3, the figures that are given in Table 4-6 convey that maltreated children in two-parent families are considerably more numerous (602,000 overall, compared to 330,000 in single-parent families) and that, except in the category of sexual abuse, greater numbers of two-parent children fail to receive CPS investigation (350,000 vs. 173,000 children from single parent families). This pattern holds for all types of maltreatment except sexual abuse, where the numbers of uninvestigated children appear comparable across the different family structure categories.

Table 4-6. Incidence of Harm Standard Children[a] Perceived to Need Special CPS Efforts, by the Identified Subgroup Characteristics, Maltreatment Categories, and CPS Investigation.

Category of Children		Ail Maltreatment	Physical abuse	Sexual abuse	Emotional Maltreatment	Physical Neglect	Educational Neglect only	Multiple Maltreatment
In single parent families	Total	330,000	83,000	40,000	36,000	64,000	90,000	16,000[b]
	Investigated	157,000	56,000	25,000	23.000	29,000	15,000	9,000
	Not Investigated	173,000	27,000	15.000	13,000	35,000	75,000	6,000
In two parent families	Total	602,000	148,000	67,000	110,000	87,000	150,000	41,000
	Investigated	252.000	95,ooo	53,000	36.000	28,000	25,000	15,ooo
	Not Investigated	350,000	53,000	14,000	73,000	59,ooo	125,000	26,000
In rural areas	Total	179,000	57,000	26,000	30,000	25,000	35,000	7,000
	Investigated	97,000	40,000	21,000	13.000	12,000	7,000	3.000
	Not Investigated	82.000	16,000	4,000	17,000	13,000	28,000	4.000
In urban & suburban areas	Total	752,000	174,000	81,000	116,000	126,000	205,000	49,000
	Investigated	312.000	111,000	56.000	46,000	45,ooo	33,000	21,000
	Not Investigated	440,000	64,000	25,000	70.000	81,000	172.000	28,000
In low income households	Total	626,000	131,000	72,000	90,000	120,000	176,000	37,000
	Investigated	266,000	86,000	43,000	35,000	53,ooo	35,ooo	15,ooo
	Not Investigated	360,000	45,000	29,000	56.000	67.000	141,000	22,000
In middle & upper income households	Total	305,000	100,000	35,000	55,000	32,000	63,000	20,000
	Investigated	143,000	65,000	35,000	24.000	5,000	4,000	10,000
	Not Investigated	162,000	35,ooo	0[c]	31.000	27.000	59,000	10,000
In large families (4+ children)	Total	195,000	49,000	22,000	27,000	28,000	56,000	12,000
	Investigated	82,000	29,000	16,000	18.000	6,000	10,000	2.000
	Not Investigated	113,000	21,000	6,000	9,000	22,000	46,000	10,000
In l-3 child families	Total	736,000	182,000	85,000	118,000	124,000	183,900	44,000
	Investigated	327.000	122,000	61.000	41,000	51,ooo	29,300	22,000
	Not Investigated	410,000	59,ooo	23,000	78,000	72,000	154,600	22,000

[a] Rounded to the nearest 1,000.
[b] Investigated and uninvestigated subtotals may sometimes not exactly sum to the total shown due to rounding error.
[c] Them was no evidence in the NIS-2 data of uninvestigated children in this category.

Table 4-6. (continued)

Category of Children		All Maltreatment	Physical abuse	Sexual abuse	Emotional Maltreatment	Physical Neglect	Educational Neglect only	Multiple Maltreatment
O-2 years old	Total	56,000	16,000	2,000	3,000	30,000	0[d]	4,000
	Investigated	40,000	10,000	2,000	5,000	21,000	0	1,000
	Not Investigated	16,000	6,000	1.000	0[e]	8,000	0	3.000
3-5 years old	Total	97,000	37,000	18,000	7,000	15,000	9,000	11,000
	Investigated	61,000	24,000	11,000	6,000	10,000	2,000	6.000
	Not Investigated	37,000	13,000	7,000	1,000	5,000	7,000	4,000
6 to 8 years old	Total	135,000	38,000	16,000	15,000	14,000	47,000	6,000
	Investigated	73,000	31,000	13,000	11,000	6,000	11,000	2,000
	Not Investigated	62,000	7,000	2.000	4,000	8,000	36,000	4,000
9-11 years old	Total	132,000	34,000	20,000	20,000	17,000	33,000	8,000
	Investigated	72,000	27,000	15,000	7,000	8,000	9,000	6.000
	Not Investigated	60,000	7,000	5,000	13,000	10,000	24,000	2,000
12-14 years old	Total	226,000	53,000	24,000	55,000	16,000	66,000	11,000
	Investigated	86,000	28,000	21,000	17,000	3,000	14,000	3.000
	Not Investigated	140,000	25,000	3,000	38,000	13,000	52,000	8.000
15 to 17 years old	Total	285,000	52,000	27,000	45,000	59,000	86,000	17,000
	Investigated	78.000	30,000	15,000	14,000	9,000	4,000	6.000
	Not Investigated	207,000	22,000	11,000	31,000	50,000	81,000	11,000
White	Total	574,000	128,000	76,000	93,000	79,000	159,000	38,000
	Investigated	251,000	84,000	61.000	40,000	27,000	20,000	19,000
	Not Investigated	323,000	44,000	15,000	54.000	52,000	139,000	19,000
Racial minorities	Total	254,000	61,000	17,000	43,000	56,000	66,000	11,000
	Investigated	114,000	45,000	13,000	13.000	25,000	17,000	1,000
	Not Investigated	140,000	16,000	4,000	29,000	32.000	48,000	10,000
Ethnic minorities	Total	103,000	42,000	14,000	9,000	16,000	15,000	7,000
	Investigated	43,000	22,000	3,000	6,000	5,000	2,000	4,000
	Not Investigated	60,000	20,000	10,000	4,000	10,000	13,000	3,000

[d] This maltreatment not defined for this age category.

[e] Them was no evidence of uninvestigated children in this category NIS-2 database.

Another category of children perceived as presenting special challenges to CPS were children who resided in rural areas or those who lived at some distance from services. Altogether, respondents from 35 States indicated in some way that these children warranted special efforts to overcome barriers to providing them services; 23 of the survey participants rated this group as having a need for such special efforts, and another 12 reported on the actual existence of such efforts in their States. The information most relevant to this issue in the NIS data concerned the metropolitan status of the county in which maltreated children resided. Table 4-6 reveals that far fewer children who were countable under the Harm Standard live in rural counties (179,000 overall) than in urban and suburban counties (an estimated total of 752,000 children), a pattern which holds across all maltreatment categories. Additionally, much greater numbers of children in urban and suburban counties fail to receive CPS investigation of their maltreatment; 440,000 children were uninvestigated in urban/suburban areas, whereas 179,000 were uninvestigated in rural areas. This pattern of substantially greater uninvestigated numbers in urban and suburban areas was also true across the different categories of maltreatment in the table.

Children in families with low incomes were regarded as needing special CPS efforts by 25 State Survey respondents-- 18 of whom simply indicated they perceived that such a need existed and an additional 7 reported that special efforts targeting this sector were actually in place in their States. The incidence figures in Table 4-6 reiterate the Table 4-5 findings which strongly bear out the disproportionate numbers of maltmated children in low income families. In addition, the subtotals show that there are more uninvestigated maltreated children in the low income group, both overall and in all categories of maltreatment. Specifically, CPS did not investigate the maltreatment of 360,000 countable children who reside in families with annual incomes below $15,000. The number of uninvestigated children living in families with greater annual incomes was less than half that figure (162,000 not investigated by CPS).

Very few of the State Survey respondents regarded family size as a factor that marked children who needed special efforts. Only six said they believed that special efforts on behalf of children from large families would be warranted, and only one additional respondent reported the existence of such special efforts. Table 4-6 in fact shows far greater numbers of children from smaller families who fail to receive CPS investigation--an estimated total of 410,000 children from families with one to three children.

Moderate numbers of State Survey participants rated children as in need of special efforts on the basis of their age group membership and/or reported that special efforts focusing on specific age

categories had been implemented in their States. Twenty-eight CPS specialists indicated that special efforts were required for children ages 0 to 4 years, with 17 of these reporting that such efforts were actually ongoing in their States. At the other extreme of the age distribution, 24 respondents noted that specially targeted efforts for children ages 15 to 18 were needed, and 16 of these were in States where efforts of this sort had actually been implemented. The preteens and early adolescents were next in perceived need for special efforts; 23 respondents supported such need among children 10 to 14 years old, and 13 of these referred to special efforts that had actually been implemented. The age group least perceived to require special CPS efforts were children ages 5 to 9 years, with 19 survey respondents acknowledging a need among these children and only 6 reporting actual efforts that were directed toward this age group. Thus, both perceptions and allocation of actual resources have targeted the two extremes of the age distribution, and the least emphasis has been placed on children in middle childhood, or the early school years.

As can be seen in Table 4-6, the NIS analysis file did not permit incidence estimates for age ranges exactly corresponding to those rated in the State Survey. Nevertheless, the classification given clearly indicates the general age trends in the incidence of children meeting the Harm Standard who remain in need of CPS services. The overall estimated totals of uninvestigated children who were countable under the Harm Standard increase with age, but there are also considerable differences across the subtypes of maltreatment. As mentioned above, the patterns seen here in totals of uninvestigated children must reflect the influences of the different age interactions that were discovered in connection with the likelihood of maltreated children receiving CPS investigation. (See Chapter 2 fmdings.) Despite these complications, which must undoubtedly underlie some of the fluctuations evident with the different subgroups, it is nevertheless noteworthy that the greatest numbers of uninvestigated children invariably occur among those in the oldest age groups, whether among those in the 15- to 17-year-old group or among those in the combined age groups from age 12 and above. In fact, the two oldest age brackets account for nearly two-thirds of all the uninvestigated children meeting the Harm Standard, and for the majority of all uninvestigated in all categories except sexual abuse, where they account for just under half (49 percent).

Racial minorities were believed to warrant special CPS efforts by 32 of the study participants, and actually implemented special efforts were more commonly reported for these children (by 23 State CPS specialists) than for any other subgroup listed in Table 4-6. Table 4-6 indicates that White children predominated among all sectors of uninvestigated children who were countable under the Harm Standard.

4.5 Overview of Findings Concerning the Identity and Incidence of Unserved or Underserved Children

Using the NIS-2 database, national estimates were generated for a number of different "unserved/underserved" groups, who were identified as such by five alternative methods. Two methods of identifying unserved/underserved groups derived solely from the NIS-2 Reanalysis information; two methods derived solely from the State Survey information; and the remaining method identified unserved/underserved groups on the basis of information from both components taken together.[11]

The first two ways in which potentially unserved/underserved groups were identified were through the NIS-2 Reanalysis component findings concerning the characteristics of children, families, and maltteatment that ate related to the likelihood that CPS will investigate a child's maltreatment.

First, the discovered connections between the likelihood of CPS investigation and the different characteristics of the children, their families, and their maltreatment were applied to the actual characteristics (and combinations of characteristics) of all maltreated children in order to determine the numbers of children whose characteristics placed them at each level of probability of receiving CPS attention. Taking this approach, if one considers maltreated children to be underserved if they have no more than an even chance (50-50) of being investigated by CPS, then a total of 612,000 children meeting the Harm Standard would be considered. These included the following additive subgroups:

- 120,000 physically abused[12] children (or 52 percent of all those physically abused);

  38,000 sexually abused[12] children (36 percent of all sexually abused);

- 221,000 children who were physically neglected or emotionally maltreated[12] (72 percent of that group);

- 7,000 children who were multiply maltreated, having experienced combiitions of these different types of maltreatment[12] (15 percent of all multiply-maltreated children); and

- 226,000 children who only experienced educational neglect.

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[11] Note that this discussion omits reference to those groups that were identified as "unserved/underserved" according to yet another approach: on the basis of the perceived nonfit between their service needs and service availability in the State Survey component. These are excluded because the NIS-2 data could not provide incidence information concerning these groups.

[12] With or without educational neglect as well.

Second, the findings concerning the factors that predict CPS investigation were used to define specific subgroups of maltreated children whose characteristics (and combinations of characteristics) identified them as being less likely to receive CPS investigative attention. Adopting this approach to defining the sectors, the ten largest (overlapping and nonadditive) groups of unserved/underserved children are

- 260,000 physically abused children, *not* in father-only households, but living instead with both parents or with mothers only; 103,800 are not investigated by CPS;
- 249,000 physically abused children where the number of children in the household was known; 105,000 are not investigated;
- 249,000 physically neglected or emotionally maltreated children in households where other victims were *not* suspected, *not* recognized by day care, social services, or mental health staff; 175,000 are not investigated;
- 222,000 physically abused children in households where no other victims were suspected; 98,000 are not investigated:
- 186,000 physically neglected or emotionally maltreated children from families with incomes below $15,000 per year; 109,000 are not investigated;
- 148,000 children who were only educationally neglected, ages 10 through 17, with no other suspected victims in their households; 134,000 are not investigated;
- 122,000 physically neglected or emotionally maltreated children who were fatally or seriously injured; 82,000 are not investigated;
- 112,000 males, aged 7 or older, who were physically neglected or emotionally maltreated; 84,000 are not investigated;
- 108,000 physically abused non-Blacks ages 0 through 11; 31,000 are not investigated; and
- 107,000 children who were physically neglected or emotionally maltreated by more than one perpetrator, 78,000 are not investigated.

The third and fourth ways in which potentially unserved/underserved groups were identified were through the State Survey, by examining categorical exclusions of sectors of children from CPS's mission or focus and by obtaining CPS specialists' perceptions of groups who are in need of special CPS efforts.

Third, CPS agency mission statements and definitions were examined in the State Survey for specific indications concerning the groups that are the principal focus of CPS efforts, which can be

included at all, and which are typically or always excluded from CPS. The following (overlapping and nonadditive) groups were classified as unserved or underserved because CPS mission statements and definitions typically or always excluded them from CPS:

- all 285,000 educationally neglected children,[13] 243,000 of whom were not investigated;
- all 191,000 emotionally maltreated children, 112,000 of whom were not investigated; and
- all 493,000 children who were endangered but not harmed, [14]170,000 of whom were not investigated.

Fourth, specific groups were rank-ordered according to the degree to which State Survey respondents identified them as having unmet needs for special CPS efforts. The following groups were identified as unserved or underserved children on the basis of State CPS specialists' perceptions about the children who are in need of special CPS efforts due to the difficulty in reaching and/or serving them:

- maltreated children in low income families (626,000 overall);
- maltreated children of preschool age (153,000 children), those 15 and older (285,000 children), and preteens and early adolescents (358,000)--a total of 796,000 children in these three categories;
- maltreated children in single patent households (330,000 overall);
- maltreated children of minority races (254,000 overall); and
- maltmated children in rural areas (179,000 children).

The fifth and final way in which unserved/underserved groups were identified was by a method that integrated the findings from both components of the High Risk Study. Specifically, the factors empirically found in the NIS-2 reanalysis to predict risk of the occurrence of abuse or neglect were compared to the factors used in CPS risk assessment as identified by respondents in the State Survey, and subgroups of children whose actual risk may be inadequately or inaccurately assessed by current risk assessment approaches were identified as being potentially underserved On this basis, the following (overlapping and nonadditive) groups were considered to be potentially underserved:

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[13] Regardless of whether other maltreatment had also occurred.

[14] i.e., they met the criteria of the NIS Endangerment Standard but failed to meet the Harm Standard

- maltreated children in urban and suburban counties (752,000 overall), especially those who were physically neglected, multiply-maltreated, or only educationally neglected (a subtotal of 38 1,000 of these children);
- maltreated children in low income families (626,000 overall);
- maltreated children in two-parent families (602,000 overall), especially those who were physically abused, multiply-maltreated, or only educationally neglected (338,000 of the children);
- maltreated White children (574,000 overall), especially those who are multiply-maltreated or only educationally neglected (197,000 children).
- maltreated older children, ages 12 and over (5 11,000 overall); and
- maltreated only children (228,000 overall), particularly those who were physically abused or educationally neglected (126,000 children).

5. Summary and Conclusions

The principal achievements of the NIS-2 reanalysis effort were new findings in four major areas:

(1) Seven child and family demographic characteristics were found to be empirically related to the risk of occurrence of abuse or neglect;

(2) Thirteen characteristics of children, families, and maltreatment were determined to predict the likelihood that CPS will investigate a child's maltreatment;

(3) The empirically-identified risk factors for abuse or neglect (as found in the NIS-2) were compared to the indicators of "high risk" that are used in CPS agencies (as reported in the High Risk State Survey) and points of non-correspondence were identified: and

(4) Estimates of the national incidence of maltreated children were provided for groups identified in the High Risk study as "unserved" or as "underserved" by five alternative methods.

This concluding chapter highlights the principal findings in each of these areas and discusses their implications.

5.1 Characteristics of Children and Families Related to the Risk of Occurrence of Abuse or Neglect

All seven characteristics that were examined were found to relate to risk of abuse or neglect in some way, but the specific factors that predicted risk and the nature of their relation to risk depended on the type of maltreatment at issue and often on the circumstances of other important predictive factors as well. That is, there were numerous conditions where interactions among the important predictors were found, meaning that one could not say what the effect on risk of one factor would be without simultaneously taking another factor into account. Table 5-l provides a synopsis of the risk analysis findings.

Several key aspects of these findings should be noted. The first is the impressively strong effect of family income that emerged in connection with virtually every maltreatment category.

Table 5-1. Synopsis of the Factors That Predict Risk of Abuse or Neglect.

FACTOR	ROLE AS PREDICTOR OF RISK		
	Predictive Strength	**Nature of Relation to Risk**	**Qualifications**
Family Income	Most important predictor ofriskforall maltreatment type	Chiklren in low income families (incomes under $15,000 per year) were at muchhigherriskinall categories of abuse and neglect	Noneexamined
Child's Age	Played a role in all maltreatment types; usually second in strength after income	Children'sriskgenerally increased with age	Interactions occurred in five of six types (Le., for all except emotional maltreatment); the appearance and strength of the relation between age and risk depended on family structure, child's race/ethnicity, and/or child's sex
Family Structure	Important in predicting risk for five of six maltreaunent types (i.e., for all except emotional maltreatment)	In three categories (physical abuse, educational neglect, multiple maltreatment), children in two-parent families were at greater risk, once family income was taken into account	Interactions occurred, where the relation between family suucmre and risk depended on the child's age,intheareasof physical abuse, sexual abuse, physical neglect, and educational neglect
Child's Race/Ethnicity	Important in five of six maltreatment types (not a risk factor for physical neglect when other impoltantpredictorsare taken into account)	No one racial/ethnic group was consistently at higher risk across the categories	The relation to risk depended on the child3 age in three categories; those interactions occurred for physical abuse, sexual abuse, and multiple maltreatment
County Metropolitan Status	Urban/rural nature of the county predicted risk of physical neglect, educational neglect, and multiple maltreatment	Children were at greater riskinurbanthaninrural counties	Noneexamined
Family Size	Number of children in family was predictor of risk for physical abuse and educational neglect	When other important predictors were taken into account, only children were at greater risk than those in multiple-child households	None examined
Child's Sex	Predicted risk of sexual abuse, physical neglect, and multiple maltreatment	Females were at greater risk	Interacted with age in predicting risk of physica neglect

Compared to children whose families had incomes of $30,000 per year or more, children from families with incomes below $15,000 per year were found to have:

- 21 times greater risk of physical abuse,
- more than 24 times greater risk of sexual abuse,
- between 20 and 162 times greater risk of physical neglect,
- more than 13 times greater risk of emotional maltreatment,
- 16 times greater risk of multiple maltreatment, and
- between 78 and 97 times greater risk of educational neglect.

It is theoretically possible that these findings derive from biases in the information provided by the NIS-2 sentinels, either because of their differential contacts with lower income families or because of their stereotypical beliefs about the connection between income and child maltreatment. However, there are a several reasons why these remarkably strong effects of family income are unlikely to be simply and solely due to distortions of this sort. First, the majority of children recognized in the NIS-2 were encountered by sentinels who were likely to see children and families at all income levels; so in the first place it is difficult to discount these findings as deriving entirely from differential observation of lower income families. Second, if these results were simply an artifact of differential observation of lower income families, then that would mean that there are really more than twice the number of maltreated children in the nation who have already experienced hann or injury from abuse or neglect than the numbers the NIS-2 data have indicated. That is, if children from middle and upper income families really experience abuse and neglect at the same rates as those from the lower income families, then there would have to be approximately an *additional 1,105,400 maltreated children in* middle and upper income families who have remained hidden to the NIS-2 observers. Although this is theoretically possible, it would appear to be rather unlikely. Third and finally, although it is reasonable to suppose that these findings express some degree of distortion from stereotypical biases by the NIS-2 sentinels concerning the relationship between maltreatment and income, the sheer magnitude of the income differences seen here makes it difficult to discount them solely on this basis. Moreover, the operation of stereotypical biases is typically quite small when observers are familiar with the persons they are describing, and the majority of children recognized by NIS-2 observers were encountered by sentinels in schools (teachers, school nurses, counselors, etc.), who should have considerable familiarity with the children they submitted to the NIS. These considerations lead to the conclusion that the income differences in risk of abuse and neglect that have emerged in the NIS-2 Reanalysis probably largely reflect real risk differences among children in the different income sectors of the population

After family income, the child's age ranked a distant second in strength as predictive of risk of abuse and/or neglect. Age did play some role in connection with risk of all categories of

maltreatment, and wherever age did influence risk of maltreatment, it was the older children who were at greater risk. However, it is important to recognize that age-related differences in risk were nearly always qualified in some way, such that they only appeared in specific subgroups or were stronger for some subsets of children than for others. The specific qualifications involved are summarized in the last column of Table 5-1. The characteristics that defined the subgroups who showed differential age patterns varied across the different maltreatment categories, but they included family structure, child's race/ethnicity, and child's sex.

Two of the characteristics that were examined, family structure and child's race/ethnicity, were found to be predictors of risk in nearly all categories of maltreatment, but the specific family structures and races/ethnicities whose risk was greater varied from one type of maltreatment to another. In addition, the effects that did emerge were often qualified by the child's age as well, meaning that they only appeared at certain ages or were stronger in some age brackets than in others.

The remaining three factors, county metropolitan status, family size, and child's sex, had more limited relationships to risk, serving as predictors in three or fewer of the six maltreatment categories studied. Nevertheless, all three showed very consistent patterns in the nature of their relationship to risk, with children in urban areas, only children, and females being at greater risk than their counterparts.

One of the most important advantages of the findings concerning predictors of risk for child abuse and neglect that are presented here is their nationally-representative character and, hence, their generalizability. Previous research on risk factors of child abuse and neglect was based largely on observations of nonrepresentative samples, which were identified only among the clientele who use different services (including CPS) and which typically had very limited geographical scope. In contrast, the NIS data provide nationally-representative estimates of totals and of relationships among their different characteristics and experiences.

It should be emphasized that the multi-factor logistic models predicting risk of maltreatment accounted for only 8 to 20 percent of the variance in the occurrence of abuse and neglect This probably stems from the fact that many other characteristics of children and their family circumstances are important determinants of the risk of abuse and neglect beyond the few demographic characteristics that could be examined in this study due to the limitations of the NIS-2 information.

5.2 Characteristics of Children, Families, and Maltreatment Related to the Likelihood of CPS Investigating Abuse or Neglect

Fifteen characteristics were considered as possible predictors of CPS investigation, and 13 of these were found to play some role in that capacity. The factors which were found to predict CPS investigation are listed in Table 5-2, which summarizes their effects, in approximate order of the extensiveness of their influence. Only the rural/urban character of the county and the perpetrator's sex failed to evidence any influence on the likelihood that CPS would investigate a situation of maltmatment. Again, it is evident that the majority of the characteristics that were examined were found to play some important role as predictors, but the specific nature of their relation to CPS investigation generally depended on the type of maltreatment at issue and was often qualified by interactions among the important predictors.

There are several aspects of this set of findings that are noteworthy. First, a comparison of Table 5-l and Table 5-2 regarding the factors they list in common reveals that in virtually no instance did a given factor have the same impact on both the risk of occurrence of abuse and neglect and on the likelihood of CPS investigating maltreatment. This finding has important implications regarding the nature of the information obtained through the NIS methodology. If the same factors had operated in the same way in predicting both outcomes--occurrence and CPS investigation--then one would suspect that both CPS-investigated cases and NE-observed cases were subject to the same types of biases and selection factors and, therefore, could have systematically excluded the same types of cases from scrutiny. The fact that the same factors operate in quite different ways in the two contexts means that the NIS does substantively obtain information about child abuse and neglect beyond that which becomes officially known to CPS agencies.

Second, in some specific instances, a given factor actually yields opposite predictions in the two contexts--and this signals special vulnerabilities for some subgroups of children. The most evident example of this involves family income. As emphasized above, children in low income families (those with incomes below $15,000 per year) were especially likely to experience abuse or neglect. In addition, however, Table 5-2 indicates that children from low income families are in double jeopardy at least in one category of maltreatment--they are not only more likely to experience physical neglect and/or emotional neglect than other children; they are also less likely to have this maltreatment investigated by CPS. A similar "double whammy" effect occurs for children in two-parent households in connection with physical abuse. Children who live with two parents were found to be at greater risk of experiencing physical abuse when their other characteristics were taken into account, but they were actually less likely to have their physical abuse investigated by CPS, as summarized in Table 5-2.

Table 5-2. Synopsis of the Factors That Predict CPS Investigation of Abuse or Neglect.

FACTOR[a]	ROLE AS PREDICTOR OF CPS INVESTIGATION		
	Predictive Strength	Relation to CPS Investigation	Qualifications
Child's Age	Important for all categories of maltreatment	Age differences varied across types of maltreatment and subgroups of children	Necessary in every category of maltreatment; predictive strength and nature of relationship to age depended on race/ethnicity, sex, and/or family structure
Child's Race/Ethnicity	Important for all categories of maltreatment	Varied with type of maltreatment; no single group was consistently less likely to be investigated	Depended on age in three categories (all except physical neglect & emotional maltreatment); minorities more likely to be investigated at younger ages, but less likely at older ages
Other Suspected Victims	Important for all categories of maltreatment	Less likely when no other victims were suspected	Depended on recognition source for physical neglect and/or emotional maltreatment; depended on age for educational neglect
Recognition Source	Predicted CPS investigation in three categories (all except sexual abuse)	More likely if child was recognized by law enforcement or medical services; less likely if recognized by day care, mental health, or social services. Effect of recognition by schools varied with type of maltreatment, but less likely with physical neglect & emotional maltreatment	Depended on presence of other victims when maltreatment was physical neglect and/or emotional maltreatment
Severity of Harm	Predicted CPS investigation in three categories (all except educational neglect)	Varied with type of maltreatment; no severity level was consistently less or more likely to be investigated	Depended on sex for physical abuse (only affected CPS investigation for females)
Family Structure	Predicted CPS investigation of physical abuse and educational neglect	Mother-only less likely than father-only; effect of both parents varied with type of maltreatment, but less likely for physical abuse	Depended on age when maltreatment was educational neglect
Family Size	Predicted CPS investigation of physical abuse and educational neglect	Varied with type of maltreatment; no group was consistently less likely to be investigated	None examined
Child's Sex	Predicted CPS investigation of physical abuse and physical neglect & emotional maltreatment	Varied with type of maltreatment; neither sex was consistently less likely to be investigated	Depended on age in both maltreatment categories; for physical abuse, depended also on severity of harm
Perpetrator Location	Only predicted CPS investigation of sexual abuse	Less likely if perpetrator is in child's home	None examined
Perpetrator Relationship	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when parents & parent/substitutes were not directly perpetrators	None examined
Number of Perpetrators	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when more than one perpetrator was involved	Noneexamined
Family Income	Only important for physically neglected or emotionally abused children	Children in families with incomes under $15,000 per year were less likely to be investigated	None examined
Nfature of Harm	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when only emotional, psychological, or mental injury had occurred	None examined

[a] County metropolitan status and perpetrator's sex had no effect on CPS awareness of any type of maltreatment.

Third, it is important to reiterate a point made at the outset of this report--that the NIS information concerning CPS investigation only speaks to the end-result of a number-of processes, and does not reveal any details concerning these processes themselves. That is, when the likelihood of CPS investigation for a given group is seen to be low, this might be due to low likelihood of referral by potential reporters to CPS, due to low likelihood that CPS will accept the case for investigation after it has been reported, or due to some combination of both dynamics. Having uncovered a number of systematic predictors of the likelihood of CPS awareness, the next logical question must be whether these reflect reporting biases, CPS screening biases, or both.

Fourth, in a related vein, the NIS-2 database provided information about only 15 factors, and was limited to general demographics concerning the child and the family, and to only a few key features regarding the circumstances of maltreatment. The same point noted above in relation to risk factors bears mention here in connection with CPS investigation. Although the models here accounted for slightly more of the variance of interest (i.e., between 16 and 34 percent of the variance in CPS investigation), there are probably numerous other factors, beyond those examined here, that determine whether CPS investigates a given child (e.g., CPS workload, number of caseworkers available on the day of the report, etc.). Additional research is needed to examine the role of other potentially important predictors.

Fifth, the last column in Table 5-2, entitled "qualifications," indicates a number of instances in which a predictor was somewhat differently related to the likeliiood of CPS investigation when the category of physical neglect was involved. In some measure, tbis may have derived from the way in which repeated or duplicated reports concerning ongoing or chronic neglect tend to be handled in CPS agencies. In the NIS-2 data, CPS investigation meant that the case was received and accepted for investigation during the three-month study data period, and it was not possible to determine whether the children had been investigated by CPS at some point in the past. At the same time, physical neglect may be more likely to be reported to CPS agencies on multiple occasions over time, and the CPS agencies, in turn, may systematically handle repeated reports of physical neglect differently. In some CPS agencies, when a case has already been investigated and substantiated, it is then labelled as an ongoing or chronic case and *not* reinvestigated again when subsequent reports are received. This type of differential treatment of physical neglect cases may have contributed to the fmding in the NIS-2 data of differential patterns of characteristics associated with the likelihood of CPS investigation of physical neglect cases.

Sixth, both Table 5- 1 and Table 5-2, taken together, indicate the presence of a substantial number of interactions among important predictors, regardless of the outcome being examined. This can

be seen in the numerous entries in the last column in both tables. In fact, such effects emerged in all categories where the analyses explicitly tested for their presence. The implication of this is that simplistic, single-factor approaches to predicting occurrence of abuse or neglect or the likelihood of CPS investigation will necessarily be incorrect, because they will fall to address the complexity of these events and their multiple determinants and modifiers. To be effective, policies and programs will need to acknowledge this complexity explicitly by taking multiple factors into account simultaneously rather than focusing on single issues or factors individually, and administrators and policy makers will need to build mechanisms for obtaining the multi-factor information base they will require to design and monitor these more complex policies and programs adequately.

Seventh, although the patterns examined at the outset of Chapter 2 ate not summarized in Table 5-2, they have important implications which should be acknowledged here. Sentinels in public schools recognized more than half (54 percent) of all maltreated children who were countable under the Harm Standard, but CPS had investigated the maltreatment of only about one-fourth of these children (26 percent). Taken together, these facts mean that a large sector of the uninvestigated countable children are known to sentinels in public schools. In fact, school personnel recognized 49 percent of uninvestigated sexually abused children, 59 percent of uninvestigated children who had been physically harmed by physical abuse or neglect, and 81 percent of uninvestigated children who had been emotionally harmed by physical or emotional abuse or neglect. Clearly, substantial impact on the overall rates of CPS investigation could be made simply by targeting children who are recognized by school staff. In fact, if all countable children recognized at schools were to receive CPS investigation, then even if there were no other improvements in CPS investigation rates, the overall rate would increase from 44 percent to 84 percent.

5.3 Correspondence Between Empirically-Identified Risk Factors for Abuse or Neglect and Indicators of "High Risk" Used in CPS Risk Assessment

For a number of the factors that emerged as important indicators of the risk of maltreatment occurrence, their use in CPS risk assessment did not appear to correspond to what was found here concerning their relative importance or the nature of their relationship to risk of abuse or neglect. Discrepancies occurred in relation to every factor that was examined in the risk assessment analyses. specifically:

- Despite the fact that low family income emerged as a compellingly strong predictor of the occurrence of maltreatment. this factor was included in the risk assessment instruments in

only about three-fourths of the States according to responses to the High Risk State Survey.

- Age was found to be a strong predictor of risk, with increases in risk of Harm Standard maltreatment paralleling increases in age. Although it is very commonly included in risk assessment instruments, its application did not follow these risk factor findings. Instead, risk assessment instruments generally assign younger children higher risk scores.

- Family structure was revealed to be a relatively important predictor of risk and, in connection with physical abuse and educational neglect, children in both parent families were found to be at greater risk. However, fewer than half of the States were found to include family structure explicitly in CPS risk assessment, and when it was included it generally allocated higher risk scores to children from single-patent families.

- Race/ethnicity was also a relatively important predictor of risk in all areas except physical neglect, but its effects were not simple, It frequently served to modify the effect of age on risk, and vice versa. Only about one-fifth of the States include race/ethnicity in risk assessment instruments.

- Geographical area was predictive of children's risk in three categories of maltreatment. Fewer than half the States used that factor in risk assessment instruments.

- Family size was related to risk of physical abuse and of educational neglect, with children who were only children being at greater risk than others in both categories. Fewer than half of the States included this factor in risk assessment instruments, and those that do so regard children in large families to be the ones at greater risk

- Children's sex predicted their risk of sexual abuse, physical neglect, and multiple maltreatment, with females being at higher risk in each cases. Less than one-third of the States used the child's sex in CPS risk assessment.

Depending on how the risk assessment methodology is actually employed in CPS, the above discrepancies suggest that the attention allocated to certain groups of children may be inadequate or misdirected in some CPS agencies. In addition, the discussion above emphasized the pervasiveness of interactions among risk factors, which qualified or importantly altered the effects of one factor on the basis of other factors. This, too, marked another important departure of these findings from the way in which risk factors are actually applied in CPS risk assessment. Risk assessment systems typically treat different characteristics as separate and independent contributors to risk scores, and do not tailor the scores to allocate risk differently for specific combinations of characteristics (which is what was actually required in order to generate children's predicted likelihood of maltreatment on the basis of the final risk factor models developed in the NIS-2 Reanalysis).

As was mentioned in Chapter 3 and documented in the State Survey Report, there has been little (if any) empirical grounding for the risk indicators applied in existing risk assessment instruments and the methods by which those indicators are used to assign specific risk levels to children and/or their families. At the time of the High Risk State Survey interviews, only seven States had conducted

research of any sort on risk assessment, and only five of those States had done research concerning the predictive ability of risk assessment within CPS. The results reported here underscore the need for additional research on this subject, and for the results of relevant research to be incorporated in the risk assessment systems that are in place.

It has been noted that the risk factors identified in this study were found to distinguish maltreated children from nonmaltreated children in the general population, and that these may not be the best indicators to distinguish maltmated from nonmaltreated children among the set of children who are reported to CPS. At the same time, however, the risk factor findings from the NIS-2 Reanalysis are nationally-representative, and were derived from logistic models that took a number of important risk predictors' into account, facts which suggest that (in the absence of contrary evidence) they should be generalizable to the set of children who are reported to CPS.

Nevertheless, the interest that governed the risk analyses in this study (which was to predict the risk of occurrence of Harm Standard maltreatment within the general population), may be quite different from the interest within CPS--which may instead lie in predicting the risk of serious injury occurring,[2] in predicting the risk of recurrence of maltreatment after an initial episode, in predicting the likelihood that a family or child would benefit from specific services, or as an aid in case planning. Each of these interests was expressed by some sector of the State Survey respondents, and they point up the further need for far greater clarity concerning what type of risk the indicators used in CPS risk assessment are supposed to be indexing.

5.4 Estimates of the National Incidence of Maltreated Children Identified as Unserved or Underserved by Five Alternative Methods

Five approaches were taken to identify children who were unserved by CPS or who have been underserved by CPS relative to other groups. Table 5-3 provides the estimated national incidence of each of these underserved/unserved groups, as well as the estimated number of children in each category whose maltreatment was not investigated by CPS.

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[1] Among the seven factors that were examined.

[2] This interest would correspond to the focus on younger children as the higher risk sector.

Table 5-3. Estimated National Incidence of Groups Identified as Unserved or Underserved by Five Approaches.

Category of Children	investigated'	Not investigated	All maltreated
Children with a 50 percent chance or less of receiving CPS investigation, among those who were:			
physically abused	55,000	65,000	120,000
Sexually abused	12,000	26.000	38,000
Physically neglected or emotionally maltreated	46,000	174.000	22 1,000
Multiply-maltreated	3,000	4,000	7,000
Only educationally neglected	27,500	198,500	226,000
Total	144,000	468,000	612,000
Categories of countable children who are unlikely to receive CPS investigation:			
Physically abused children living with both parents or with mothers only	156,000	104,000	260,000
Physically abused children with known number of children in the household	144,000	105.000	249,000
Physically neglected or emotionally maltreated children with no other suspected victims, *not* recognized by daycare, social services or mental health staff	74,000	175,000	249,000
Physically abused children in households where no other victims were suspected	124,000	98,000	222,000
Physically neglected or emotionally maltreated children from families with incomes below $15.000 per year	77,000	109,000	186,000
Children who were only educationally neglected, ages 10 through 17, with no other suspected victims in their households	13,000	134,000	148,000
Physically neglected or emotionally maltreated children who were fatally or seriously injured	40,000	82,000	122,000
Physically neglected or emotionally maltreated males, aged 7 or older	28,000	84,000	112,000
Physically abused non-Blacks ages 0 through 11	77,000	31,000	108,000
Children who were physically neglected or emotionally maltreated by more than one perpetrator	28,000	78,000	107,000
Children recognized by sentinels in public schools	131,000	376,000	507,000

[a] All estimated n's are rounded to the nearest 1,000.

Table 5-3. (continued)

Category of Children	nvestigated[a]	Not investigated	All maltreated
Children excluded from CPS by definition or CPS mission:			
Educationally neglected children	42,000	243,000	285,000
Emotionally maltreated children	79,000	112,000	191,000
Children endangered but not yet harmed by abuse or neglect	324,000	170,000	493,000
Children perceived to need special CPS efforts to reach and/or serve:			
Maltreated children in low income families	266,000	360,000	626,000
Maltreated children who are preschool age[b]	100,000	53,000	153,000
15 years and older	78,000	207,000	285,000
preteens and early adolescents[c]	157,000	200,000	358,000
Maltreated children in single parent households	157,000	173,000	330,000
Maltreated children of minority races	114,000	140,000	254,000
Maltreated children in rural areas	97,000	82,000	179,000
Children whose actual risk of maltreatment may be inaccurately assessed by CPS:			
Maltreated children in urban and suburban counties	312,009	440,000	752,000
especially those physically neglected, multiply-maltreated, or only educationally neglected	99,000	282,000	380,000
Maltreated children in low income families	266,000	360,000	626,000
Maltreated children in both parent families	252,000	350,000	602,000
especially those who were physically abused, multiply-maltreated, or only educationally neglected	135,000	203,000	338,000
Maltreated White children	251,000	323,000	574,000
especially those who are multiply-maltreated or only educationally neglected	39,000	159,000	197.000
Maltreated older children, ages 12 and over	164,000	347,000	511,000
Maltreated only children	130,000	98,000	228,000
particularly those who were physically abused or educationally neglected	74,000	52,000	126,000

[a] All estimated n's are rounded to the nearest 1,000.

[b] Defined as age 0-4 in the State Survey; estimates based on ages O-5 in the NIS data.

[c] Defined as 10-14 in the States Survey; estimates based on ages 9-14 in the NIS data.

The first two sections in Table 5-3 provide estimates of children who are defined as unserved or underserved because they are unlikely to receive CPS investigation. The first section gives the number of children who were predicted to have a 50 percent chance or less of receiving a CPS investigation, categorized by the type of maltreatment they had experienced. As explained in Chapter 4, an estimation of the likelihood that CPS would investigate a given child was made on the basis of the various characteristics and circumstances of each child, using the final logistic models that predicted the probability of CPS investigation (as reported in Chapter 2). The rows in this section reflect mutually exclusive categories, so their sum total is also given. More than one-half million children (612,000) were countable by NIS-2 Harm Standard criteria but had relatively low likelihoods of being investigated by CPS. In fact, only about 23 percent of these children (468,000) actually received CPS investigation. The maltreatment categories with the largest numbers of children with less than an even chance of being investigated were those who were only educationally neglected and those who were physically neglected and/or emotionally maltreated. Those categories included 198,000 and 174,000 uninvestigated children, respectively.

In the second section of Table 5-3, children who are relatively unlikely to receive CPS investigation are classified by their characteristics. Except for the last row in this section, the categories were again fonned by relying on the logistic models that predicted the probability of CPS investigation That is, the categories of children whose characteristics, according to the models, predicted them to be less likely to receive investigation are identified, and the total number of children having that combination of characteristics is shown in the table. The last row was not an outgrowth of the logistic models, but was included because of an important pattern that was observed in the overall presentation at the outset of Chapter 2. There, sentinels in public schools were found to be the predominant recognition source of uninvestigated countable children, so the estimated numbers of children who are recognized by public school personnel are given. This last category of children stands out as the largest of all in this section, including more than one-half million children (507,000), of whom the majority (376,000, or 74 percent) were not investigated by CPS.

The third section in Table 5-3 gives estimates for children who were defined as unserved or underserved on the basis of findings from the State Survey concerning categories of maltreated children who are excluded from CPS by definition or by CPS mission statement. Children who are educationally neglected were often entirely excluded from CPS purview, and those who were emotionally abused or neglected or who were considered to be at risk of harm, but not yet injured, were not always defined to be within the scope of CPS purview and typically not accorded the same priority status as other maltreated children. The largest category overall is the last, with nearly one-half million

children estimated to have been endangered but not yet harmed by abuse or neglect.[3] Thirty-four percent of these children, or about 170,000 in all, were not investigated by CPS at all. Educationally neglected children also comprised a fairly sizable category, with 285,000 in all, of whom CPS had not investigated the vast majority (243,000, or 85 percent).

The fourth section of Table 5-3 gives estimates for categories of children that are considered unserved or underserved because respondents in the High Risk State Survey identified them as requiring special efforts to reach and/or serve. By far the largest subgroup here are countable children in low income families, who totalled an estimated 626,000 nationwide, of whom the majority (360,000, or 57 percent) were not investigated.

Finally, the last section of the table lists categories of children who may he underserved by CPS because their actual risk of experiencing abuse or neglect may not be accurately indexed by some of the risk assessment systems that are currently in use. Children in urban and suburban counties lead the list, totalling more than three-fourths of a million countable children. Note that some of the subgroups in this section are also defined as unserved or underserved by other approaches (e.g., those in low income families, and adolescents and older teenagers>.

5.5 Implications of the Findings

There are several areas in which the study findings clearly point to important issues on which current approaches need to be clarified or reconsidered, and to questions that need to be answered in order to guide future policy and services for abused and neglected children and their families.

First, a number of the study findings indicate the need to better address the coordination **of services across different systems, especially between human services and income support services, between child protection and education, and between child protection and juvenile justice.**

Human Services and Income Support Services. The finding concerning the strength of family income as a risk factor for all categories of abuse and neglect suggests that the separation of income support services and human services may be a bureaucratic fiction that is not in the

[3] These were children who were countable according to the Endangerment Standard, but not according to the Harm Standard.

best interests of the children who are at risk of abuse or neglect. Income support services include AFDC, Food Stamps, WIC, housing subsidies, job training, and other employment and economic survival services. Exploration of methods by which income support and human services can be coordinated and better integrated with each other would be useful. When a family is reported for abuse or neglect and found to have an income dramatically below that needed for adequate functioning, then their treatment plan needs to include explicitly strategies geared toward enhancing their economic resources. Special demonstration projects could be funded to assess the relative workability and effectiveness of different approaches in this regard. These conclusions are consistent with the recent report of the U.S. Advisory Board on Child Abuse and Neglect, which recommended that the Federal government take measures to insure "the development of linkages with other service providers and community resources to ensure that children and families are receiving coordinated, integrated services."[4]

Child Protection and Education. Interestingly, the need for more effective coordination between child protective services and the education system emerged as an important implication of the High Risk Study findings both in the State Survey component and in the NIS-2 Reanalysis component, and it too was emphasized among the recommendations of the U.S. Advisory Board on Child Abuse and Neglect.[5] The findings in this report underscored the importance of school personnel as sources of recognition of countable abused and neglected children, and particularly of the sector who are not investigated by CPS agencies. Mandated reporters at schools recognized more than half (54 percent) of the children who were countable under the Harm Standard, and nearly three-quarters (72 percent) of those who had not been investigated by CPS. A substantially larger proportion of countable abused and neglected children would be investigated by CPS if better linkages could be forged between CPS agencies and the local community schools. Moreover, some of the policy implications of the reported findings may extend beyond the CPS arena.

Child Protection and Juvenile Justice. Adolescents were found to be at greater risk of abuse or neglect than younger children, yet the older children were generally less likely to be investigated by CPS, particularly among males and among minorities. Special attention should be given to examining the extent to which existing policies and priorities in child protective services may

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[4] The U.S. Advisory Board on Child Abuse and Neglect. *Creating Caring Communities: Blueprint for an Effective Federal Policy on Child Abuse and Neglect. Second Report.* Administration for Children and Families, U.S. Department of Health and Human Services, September 15, 1991. Recommendation D-2, p. 71.

[5] "The Federal Government should take all necessary measures to ensure that the nation's elementary and secondary schools, both public and private, participate more effectively in the prevention, identification, and treatment of child abuse and neglect." The U.S. Advisory Board on Child Abuse and Neglect *op. cit.* Recommendation D-4a, p. *85.*

inadvertently enlarge the scope of other problems, such as the sixes of the runaway and delinquent youth populations. For example, to the extent that CPS differentially fails to serve certain sectors of adolescent youth adequately, such as males and minorities (as found here), then CPS policies and piiorities may be partially responsible for their disproportionate representation in these other populations of troubled youth

Second, greater consensus is needed concerning the categories of children and families who should come within the purview of CPS. The findings reported here document that the reality is that substantial numbers of abused and neglected children are not investigated by CPS. The High Risk Study has also indicated what specific subgroups are especially unlikely to be investigated by CPS. But no research concerning who is *or* is *not investigated can* directly answer the policy question regarding who *should* be. Specific attention in this regard needs to be devoted to better defining CPS purview in connection with children who are emotionally maltreated, to deciding how to insure that some community agency assumes clear responsibility for those who are educationally neglected, and to defining the appropriate role of CPS in connection with those who are endangered but not yet harmed. In addition, the role of CPS in the maltreatment of adolescents and older teenagers, particular males, should be clarified. Resolutions to these issues are needed in order to decide the direction to take in light of the findings reported here. For example, the findings indicated that older males are less likely to receive CPS attention. This might be due to any of a number of factors (e.g., they may deny the abuse, they may hit back, they may present with other problems--such as truancy, runaway behaviors, other status offenses--which are dealt with by labelling them as offenders rather than victims). Depending on the configurations of circumstances that are defined to be within CPS purview, the policy implications of the current findings may include some very specific action strategies, such as enhanced training of workers not to have biases against viewing violence toward male teenagers as abuse--even if they hit back. Likewise, the findings reported can be used to identify particular subgroups who should be targeted for additional attention if they are defined to be appropriately within the scope of CPS. Note that decisions about the defined scope of CPS will have ramifications for the coordination of services across different systems, which was discussed above. That is, there will need to be a clearer consensus about what public sector agencies, if any, will be responsible for the welfare of those uninvestigated abused and neglected children who are considered to be outside of the proper scope of CPS jurisdiction but who yet have outstanding needs.

Third, substantial further work in the area of CPS risk assessment is needed in order to achieve three purposes: (1) to elaborate the risk assessment systems themselves so that they better reflect the complex and interactive relationships among the factors that predict risk; (2) to clarify the goals of using risk assessment in

the CPS **context; and (3) to provide for more extensive ongoing feedback concerning the effectiveness of risk assessment systems that can help to shape their further evolution.**

Elaboration Beyond Simple Matrix Approaches to Risk Assessment. The fact that interactive effects emerged as very important in the predictive models implies that simple matrix approaches to risk assessment will probably not survive in the long run. Instead, risk assessment models which require some analysis of the input information beyond the simple addition of individual scores, despite their greater complexity, may better fit with reality insofar as they are better able to incorporate interactions among the different factors. The NIS-2 Reanalysis findings certainly suggest that the state-of-the-art in risk assessment would be appreciably advanced by the development of interactive risk assessment models.

Goals of CPS Risk Assessment. The findings from the High Risk Study NIS-2 Reanalysis emphasize the need for a better articulation of the goals of the risk assessment methods that are used in CPS. The results reported in this study indicate considerable gaps between the predictors of risk found to apply in the general population and the markers of risk in use within CPS. Depending on what the goals of CPS risk assessment are, these gaps could be appropriate. That is, given differences in the roles of risk factors in the two contexts (general population and CPS), one might reasonably expect that different risk factors would be applicable (or that the same risk factor would not operate in the same way). In the analyses reported here, the interest was in the risk of maltreatment occurring in the first place. In the risk assessment applications used in CPS, however, the concern is sometimes to distinguish those cases where substantiated maltreatment is likely to have occurred from others, sometimes to determine the risk of reoccurrence in cases where maltreatment has already been substantiated, and other times to apply the information obtained through the "risk assessment" system as a tool for case planning. These are very different purposes, and will likely require somewhat different approaches if they are to be effectively achieved. Without clearer articulation of the goals that risk assessment in CPS is to achieve, it is not possible to determine the optimal form and content of the risk assessment systems that should be used, nor to know what evidence (as discussed below) would be most relevant to deciding whether the systems are effectively achieving their goals.

Empirical Grounding of Risk Assessment Systems. The High Risk Study findings emphasize the need for better, more careful scrutiny of the effectiveness of the risk assessment methods that are used in CPS. The general view has always been that the risk assessment models were dynamic, not static, and that as information accumulated, the models would need revision Despite this, the State Survey component indicated that although the CPS use of risk assessment instruments has

mushroomed in recent years, there has been very little empirical justification of the factors they contain and the methods by which those factors are combined. At the same time, the results of the NIS-2 Reanalysis component show that there is a considerable gap between the predictors of risk in the general population and the markers of risk in use within CPS. Taken together, these circumstances underscore the need for concerted efforts to fill the need for empirical evidence on the success of risk assessment approaches.

Fourth, apart from the research need delineated immediately above, there are several other areas where additional research is needed: (1) to determine the specific nature of the barriers to CPS investigation of children who should be investigated; (2) to identify additional important predictors of risk of abuse and neglect; and (3) to formulate more effective approaches to the organization and management of CPS agency activities.

Barriers to CPS Investigation of Abused and Neglected Children. Even in categories that would be universally recognized as within the scope of CPS (such as sexual abuse and physical abuse), many countable children were not investigated by CPS. Further study is needed in order to determine what factors account for the relatively low rates of CPS investigation for some of the abused or neglected children who were countable. It is important to at least determine whether the failure to investigate these children stemmed from the fact that they were not ever reported or was due to CPS screening them out so that corrective strategies can be planned. For example, CPS investigation is especially unlikely for Black teenagers. Is it due to institutional racism on the part of CPS (i.e., screening), due to discriminating reporting patterns on the part of the sentinels, or a function of both processes? Also, there is a wide variation across recognition sources in the percentages of children who receive CPS investigation, which suggests that barriers to CPS investigation may differentially affect the different agency sources. As noted above, this especially applied to school sources, because these contributed the greatest number of Harm Standard children to the study and the children they recognized were particularly unlikely to be investigated by CPS. The NIS-2 database cannot differentiate between barriers to reporting and screening biases, yet each of these possibilities has important social policy implications so the exact nature of the barriers to CPS investigation need to be delineated.

Consider, for example, the reporting side of the picture. Teachers may need better training in reporting skills (e.g., giving the appropriate details to CPS to trigger an investigation). Many teachers may not regard their role as including what they consider to be "social work" functions. As a result, interventions may be needed to combat this type of institutional belief system in order to increase the probability that they will report cases to CPS. The special gatekeeper role that school principals play in

this context may need to be addressed more directly,[6] with special focus on the factors that make them reluctant to submit suspected cases to CPS (e.g., fear that the school would incur legal problems). Alternatively, on the screening side of the issue, the fact that CPS investigation occurs disproportionately for children recognized by different agency sources may indicate the need for worker training to combat biases. Such biases may stem from not valuing infoxmation from school reporters to the same degree as information from law enforcement or medical service personnel. This might also be buttressed by subtle gender biases, to the extent that school reporters might tend to be female while law enforcement reporters may tend to be males.' The special contribution played by self-protective motives in this context should also be explored; that is, CPS agencies and caseworkers may perceive that failures to investigate children reported by law enforcement or medical services will have more serious legal consequences than failures to investigate children reported by school personnel. The role played by caseload demands also needs to be considered. That is, are large caseloads pressuring systems to divert cases outright or exclude borderline cases even when there is some evidence of abuse? The existing data show only that certain subgroups of abused and neglected children are not having their maltreatment investigated by CPS. Given that these subgroups are deemed to be properly within the scope of CPS (as noted above), the factors that are primarily responsible for non-investigation of different groups need to be identified before specific recommendations to correct the problem can be formulated.

Risk Factors That Predict Abuse and Neglect. The risk predictors that were examined here were all demographic observables and were generally not outstanding in their ability to account statistically for the occurrence of maltreatment. Future research should examine the role of other potentially important predictors so as to improve the predictive capability of the models as well as to incorporate factors that may be more amenable to clinical intervention. The level of unaccounted variance should be emphasized as a policy issue. As other important predictors are incorporated into the predictive models, this could even change the apparent importance of the factors reported here.

Management Approaches to CPS Services. The one aspect of the child protective services arena that has received no attention in the field is that of agency structure and management. The research in this report has focused on what the children and their families are like and how their characteristics relate to their risk of abuse or neglect and their likelihood of being investigated. The State

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[6] A number of the school sentinels in the MS-2 informally identified this factor as a primary barrier to getting CPS attention for the children they recognized as abused or neglected.

[7] Some information pertaining to the possible influences of sentinel characteristics is to be obtained in the next national incidence study on child abuse and neglect (NIS-3), which is in the planning stages at the time of this writing.

Survey report focused on agency policies and practices and considered workers' training and resources and agency uses of risk assessment. But, to date, scant research attention has been paid to devising model approaches to how CPS agencies should be structured and run Different management models need to be pilot-tested and evaluated. Issues in that arena need to be isolated and examined. For instance, who is hired in the CPS agencies and how are the agencies staffed? How should caseload sizes be determined? What skills are needed for which tasks and what is the most efficient way of insuring tbat they are available in the agency and deployed appropriately? Given that model approaches are developed, then what management training, tools, or methods are needed to achieve optimal CPS agency structure and function within these approaches? Admittedly, it is difficult to address the question of what would be optimal in the face of the fact that "the nation's entire child protection system is operating under a terrible crisis. All parts of the system are understaffed, underpaid, undertrained, and often underqualified."* Nevertheless, without a clear vision of what resources and skills would be needed in order to appropriately fulfill the agency's functions, policy makers and planners will not be aware of the exact direction to take nor will they have a realistic idea of the distance that needs to be traversed.

[8] **The U.S. Advisory Board on Child Abuse and Neglect. *op. cit.* Remnmendation E-2, p. 117.**

APPENDIX A

METHODOLOGY FOR IDENTIFYING PREDICTORS OF CPS INVESTIGATION

Appendix A

METHODOLOGY FOR IDENTIFYING PREDICTORS OF CPS INVESTIGATION

Several preparatory steps were needed in order to provide an analysis file that could be appropriately used to identify the different factors that differentiate CPS-investigated children from those not investigated by CPS. First, certain children had to be excluded from these analyses. Second, for the special purpose of this study, the original NIS-2 weights were given a slightly different structure, termed "C-weights," which permitted us to conduct the needed analyses. Once these preparatory steps were accomplished, the logistic analyses proceeded. This appendix describes the key activities involved in each of these stages, and also provides the detailed findings from the logistic analyses themselves.

Restricting the Data to Appropriate Cases

As discussed in Chapter 2, certain children had to be omitted from the NIS-2 database in order to avoid distortions in the findings. Specifically, children were excluded if they were recognized by sources who could *only* reveal CPS-investigated children to the study. In order to avoid distortions from this source, the full Harm Standard countable database in the NIS-2, which consists of 2,235 children, was reduced to an analysis file of 1,980 children which excluded those who had been recognized by CPS-only reporters. While most of the excluded children were those recognized by CPS-only reporters, this analysis file also excluded a few children who had unknown information concerning sex, age, and the presence of other victims in the household

The Development of C Weights

In large CPS agencies, data forms had been obtained for only a sample of the eligible cases. In those cases, it was not possible to detect all the duplication in the population. This had led to the assignment of two weights to these cases in the original NIS-2 database. The weight referred to as TB_WGT was designed to be used whenever estimates concerning the overall total of maltreated are of interest. The weight TA_WGT was designed to be used only for the estimates based on the cases reported by the CPS.

The estimates concerning numbers of children not known to CPS were originally obtained by subtraction. However, in order to use the logistic regression technique to carry out analyses on the proportion of cases known to CPS we had to construct a single weight, which we termed a "C weight," for each case. This weight had to be positive-for all cases.

The C weights (TC_WGT) for the kth case in the ith adjustment cell was computed as:

$$TC_WGT_{ik} = TA_WGT_{ik} \quad \text{if } k \varepsilon S_1$$

$$TC_WGT_{ik} = TA_WGT_{ik} \times \frac{\sum_{j \varepsilon S} TB_WGT_{ij} - \sum_{j \varepsilon S_1} TA_WGT_{ij}}{\sum_{j \varepsilon S_0} TB_WGT_{ij}} \quad \text{if } k \varepsilon S_0$$

where j refers to the cases; and S_1 refers to the set of all cases known to CPS, and S_0 to the set of all cases not known to CPS, and S refers to the set of all cases (i.e. $S = S_0 \cup S_1$).

We wanted the C weights to reflect properly the variation in the proportion of cases known to CPS by PSU and reporting source. Therefore, we attempted to construct them by each PSU and reporting source combination. However, in some cases it was necessary to combine the PSUs or the reporting sources in order to insure a positive C weight. A different collapsing scheme was developed for the cases countable by Harm criterion than the ones countable by endangerment criterion alone. When a negative weight resulted for a cell, we combined PSUs first within, then, only if necessary, across metropolitan classes (e.g., major urban, other urban, and rural). If a negative weight still persisted we combined PSUs across the reporting sources. Table A-l presents the collapsed reporting sources and PSUs for the cases countable by Harm criterion. We were successful in attempting to avoid combining rural and urban PSUs, and in only a few cases (as indicated in the Table A-l) we had to collapse PSUs from major urban and other urban categories. Table A-2 presents the collapsed reporting sources and PSUs for the cases countable by endangerment but not Harm standard. More extensive collapsing had to be applied for these cases.

TABLE A-l. THE COLLAPSED REPORTING SOURCES AND PSUs FOR CASES COUNTABLE BY HARM STANDARD

Reporting Sources	PSUs
Probation/Courts	Maricopa, AZ; Harris, TX
Probation/Courts	Kern CA, Sacramento, CA[1]
Probation/Courts	Marion, IN, Shelby, TN[1]
Police/Sheriff	Los Angeles, CA; Sacramento, CA, Cook, IL; Marion, IN, Bergen, NJ; New York, NY; Warren, OH; Montgomery, PA, Harris, TX; Maricopa, AZ
Public Health; Hospital2	Maricopa, AZ; Los Angeles, CA, Cook, IL; Marion, IN, Bergen, NJ; New York, NY; Warren, OH, Montgomery, PA; Harris, TX
School	Sacramento, CA, Marion, IN
School	Kern, CA, Palm Beach, FL, Jefferson, KY; Monroe, NY; Shelby, TN
Day Care Centers	Maricopa, AZ; Los Angeles, CA
Day Care Centers	Palm Beach, FL; Shelby, TN
Mental Health	Maricopa, AZ; Los Angeles, CA, Sacramento, CA, Marion, IN, Plymouth, IA, Carver, MN; Bergen, NJ; Harris, TX
Mental Health	Kern, CA, Jefferson, KY; Monroe, NY; Shelby, TN; Wood, WV
Social Services	Fairfield, CT; Cook, IL; Warren, OH, New York, NY[1]

[1]Counties are combined across the major urban and other urban categories.
[2]Public health and hospitals were combined also for all other PSUs.

TABLE A-2. THE COLLAPSED REPORTING SOURCES AND PSUs FOR CASES COUNTABLE BY ENDANGERMENT STANDARD ONLY

Reporting Sources	PSUs
Probation/Court; Police, Sheriff; Public Health; Hospital	Maricopa, AZ; Kern, CA, Los Angeles, CA, Sacramento, CA, Fairfield, CT; Palm Beach, FL, Cook, IL, Marion, IN; Jefferson, KY, Plymouth, MA; Carver, MN; Bergen, NJ; Monroe, NY; New York, NY; Warren, OH; Washington; OH; Montgomery, PA; Shelby, TN, Harris, TX; Travis, TX; Wood, WV
Day care Centers	Jefferson, KY; Monroe, NY
Social Services	Kern, CA, Palm Beach, FL, Monroe, NY
Social Services	Maricopa, AZ; Sacramento, CA; Cook, IL, Bergen, NJ; New York, NY; Harris, TX

Finally, we constructed 95 adjustment cells for the Harm standard cases and 56 for the Endangerment standard only cases. We did not construct C weights for the following three reporting sources: DSS/Welfare Department, other professional agencies, and all other sources (REPSOURC 12, 13, and 14). These were the cases excluded from the C-weight database during the first preliminary step, described above.

Development of C Replicate Weights. For A (or B) weights 28 replicates had been developed in order to apply special analytic procedures which accurately calculate the variance in multi-stage sampling designs. For further details on this issue, see the ***Report on Data Processing and*** Analysis.[3] In order to apply logistic regression software that would accurately estimate the variance in these data into account,4 it was necessary to conduct some subsetting of the original replicates. The subsetting was achieved by deleting at random one of the replicate from each group of 4. The 21 replicates retained were those

[3]Further information about the data processing and weighting can be found in: Sedlak, A. J., McFarland, J., & Rust, K. Study *of the National* ***Incidence and Prevalence of Child Abuse and Neglect: Report on Data Processing and Analysis.*** Technical Report, National Center on Child Abuse and Neglect, DHHS, Washington, DC 20201 (1987).
[4]Flyer, P., and and Mohadjer, L. (1989). ***The WESLOG Procedure.*** Unpublished Westat document.

corresponding to the original replicates numbered 1, 2, 4, 5, 6, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, and 27. Thus, 21 replicate weights were constructed corresponding to the full sample C weight.

Logistic Analyses to Predict CPS Awareness

Using this special-purpose database then, logistic models were developed in order to identify the factors that predicted the likelihood of CPS investigating children who had experienced the Harm Standard maltreatment. Early analyses were conducted on the entire special-purpose database, but because these revealed strong differences across the different maltreatment types in terms of the overall likelihood of CPS investigation and in terms of the factors that systematically related to this likelihood, the bulk of the analytic efforts focussed separately on the different categories of maltreatment. That is, the special-purpose database was further subdivided into five separate files, reflecting the five categories of maltreatment described in detail in Chapter 2: physically abused children (with or without educational neglect), sexually abused children (with or without educational neglect), physically neglected and/or emotionally maltreated children (with or without educational neglect), multiply-maltreated children, and children whose only countable Harm Standard maltreatment had been educational neglect.

Four parallel series of logistic analyses were conducted, each examining CPS awareness in one of these groups of children. The group of multiply-maltreated children was not examined separately, because there were too few children in this group to support the development of detailed, multi-factor logistic models. Instead, we included the multiple-maltreatment children at the very end, after developing the final logistic models for each of the maltreatment categories, to see whether each applicable model model appeared to account for the likelihood of CPS awareness of these children.

In developing the logistic models, we first conducted single-factor logistic analyses for each of the four maltreatment groups, exploring the overall effects on the likelihood of CPS awareness of nearly any characteristic that could be derived from the NIS-2 information. Specifically, we systematically examined the following characteristics in relation to each maltreatment category: child's sex, child's age, child's race/ethnicity, family income, family structure, number of other children in the household, presence of other suspected victims in the household, county metropolitan status, source that

recognized the child as maltreated, nature and severity of harm from the maltreatment, relation between the child and the perpetrator, perpetrator's location relative to the child (in home vs. not), perpetrator's sex, and number of perpetrators involved in the maltreatment.

The results of the four series of single-factor logistic models are given in Tables A-3 through A-6, at the conclusion of this appendix.

Approach to Logistic Model-building. The logistic regression analyses were conducted using the specialized SAS procedure PROC **WESLOG.**[5] **Models were fitted** sequentially to arrive at the best fitting model in each case. In general, **stepwise** forwards procedures were utilized, this being necessary because of limitations on the number of degrees of freedom available for the analysis. The total number of degrees of freedom available is approximated by, and very likely no greater than, the number of replicates available, in this case 21. The jackknife replication procedure was used, this being the appropriate method when utilizing replicate weights derived from those in the NIS-2 database.

Regardless of whether or not there was any overall relation between CPS awareness and the child's age, **race/ethnicity,** or sex, we explored the possibility that the effects of age on the likelihood of CPS investigation might depend on the child's race or ethnic group (or vice versa), as well as the possibility that impact of the child's age might depend on the child's gender (or vice versa). These reflect possible ***interactions*** among these different factors. For those characteristics that evidenced an overall relationship to the likelihood of CPS investigation, we also determined whether those particular factors were involved in other possible interactions. In searching for the predictors of CPS awareness in this manner, we took into account a number of indicators, including the t-value associated with the parameter in question, the degree to which the model VAF (variance accounted for) was observably increased when the parameter was included and the overall fit of the model as given by the model F-value and we considered the remaining factors to have noteworthy relationships to CPS awareness, given that there was some observable gain in percentage of variance accounted for by the model when the characteristic was included.

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[5] *Ibid.*

Changes in model fit were assessed using a combined consideration of the marginal statistical significance of individual model terms, the estimated size of the effect of those terms as reflected by the parameter estimates (specifically, we excluded any characteristic or factor for which the associated t-value fell below a value of 1.00 unless that factor was involved in an interaction which met this criterion), the adjusted proportion of total likelihood attributed to model fit (analogous to the adjusted-R2 statistic in multiple regression, see Harrell[6]), and the overall statistical significance of the model fit. Caution was used in interpreting the test statistics for the significance of the overall model for those models involving quite a number of terms, due to the probable lack of sufficient denominator degrees of freedom for reliable inference. (See Korn and Graubard for a discussion of this issue.[7])

Once we had identified the factors and possible interactions that, in their own right, appeared to be related to CPS awareness, we proceeded to build more complex multi-factor logistic models. That is, our general approach was to increase the complexity of the logistic model gradually by adding each of the apparently-important factors (and interactions) together in the same model until all were eventually included together. In actual practice, however, because of a need for preliminary findings at a relatively early stage of these analyses, the approach actually conformed to a two-stage version of this process. That is, the characteristics that were explored as potential predictors of CPS awareness were examined in this way in two "batches." In the first series of analyses, we considered child's age and race, county metropolitan status, family income, and recognition source as potential predictors of CPS awareness, and built multi-factor models that involved those characteristics. In the second series of analyses, we examined family structure, child's ethnicity and sex, the number of children in the household, the nature and severity of the harm that had occurred, and various features concerning the perpetrator(s) (i.e., number, sex, relation to the child, and typical location relative to the child). Model-building findings can differ dramatically depending on the sequence with which different predictors are added to a model, so the final models we arrived at here may be shaped in some measure by the fact that we explored adding this second set of features later, when they were necessarily assessed in the context of the preliminary multi-factor models (which included interaction terms).

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[6]Harrell, F. E. (1986). *The* LOGIST Procedure. Chapter 23 in *SUGI Supplemental Library User's Guide. Version 5 Edition.* SAS *Institute:* Cary, *NC.*

[7]Korn, E. L., and Graubard, B. I. (1990). Simultaneous Testing of Regression Coefficients with Complex Survey Data: Use of Bonferroni t Statistics. *The American Statistician,* Vol. 44, No. 4, pp 270 -276.

This strategy determined whether each of the apparently-important factors still had a noteworthy effect on CPS awareness when the effects of the other apparently-important factors were taken into account. Factors were eliminated from the larger model whenever their importance waned and dropped below the t=1.00 standard in the context of another factor (or interaction), i.e., when taking that other factor (or interaction) into account. In this manner, we successively built increasingly more complex logistic models to account for CPS awareness of children in each maltreatment group, and the resulting final model includes all those factors and interactions that continued to meet the standard when taking the effect of each of the other included factors into account.

The final multiple-factor models are given in Tables A-7 through A-10, at the conclusion of this appendix. Once each of the final models had been identified, two additional steps were taken, successively incorporating additional sectors of previously omitted data in testing the model in question. That is, the parameters and significance statistics are reported for each final model under three conditions:

(1) In Section A of each table: using the data that had formed the basis of the analyses during the model-building process (i.e., excluding cases where the child's race/ethnicity was unknown);

(2) In Section B of each table: adding in the cases where the child's race/ethnicity was unknown; and

(3) In Section C of each table: adding in the cases of multiple maltreatment which involved the type of abuse or neglect in the category in question.

Notice that Section C does not exist in the Educational Neglect table, because that category was defined to be Educational Neglect *only* (i.e., multiple maltreatment was excluded by definition).

Parameters and significance statistics are generally very similar in Sections A and B of the tables, reflecting the fact that the child's race/ethnicity had been unknown in relatively few cases and these cases made little difference to the model parameters and their fit. The A-section models, being the end-result of the model-building activities, were given as the final multi-factor models in Chapters 2 and 3 of this report Given the high degree of similarity of the Section A and Section B models, however, there is no discernable difference in the patterns they describe, so whether A-section or B-section models are used

to generate the model predictions appeared to be essentially immaterial. In practice, the B-section models were used for this purpose here (in Chapters 2 and 3 of this report), because those models were applicable to slightly more of the study cases (i.e., including those with unknown race/ethnicity).

However, the relation between the parameters and goodness of fit statistics reported in Section C and those in Sections A and B depends on the nature of maltreatment under consideration. For physical abuse and sexual abuse, adding in multiple maltreatment cases makes some relatively modest change to the model fit parameters and statistics. In the case of physical abuse, for instance, the final model accounted for 15.6 percent of the variance, when unknown race/ethnicity cases were added, the VAF was 15.5 percent, and when multiple maltreatment cases were also included, the model acccounted for 14.3 percent of the variance in the CPS investigation categories. The fmal model for sexual abuse accounted for 33.8 percent of the variance, and this shifted to 34.5 percent when unknown race/ethnicity cases were added in. When multiple maltreatment cases that involved sexual abuse were also included, the model VAF remained very similar--at 34.2 percent. In contrast, there was a noteable drop in VAF by the model for physical neglect/emotional maltreatment when multiple maltreatment cases were included: The basic final model accounted for 33.2 percent of the variance in the CPS awareness data; with unknown race/ethnicity cases included, it accounted for 33.0 percent of the variance. But when multiple maltreatment cases were also subsumed, the model fit dropped considerably--to only 24.8 percent VAF and to a non-significant F-value. This indicates that the variables that predicted CPS awareness of physical neglect and/or emotional maltreatment did not operate in a similar manner to predict CPS awareness of the multiple maltreatment cases that involved this category of maltreatment. This might best be understood in the context of the findings from the State Survey component of this High Risk study, which revealed that cases of chronic neglect or emotional maltreatment were accorded a relatively low priority for investigation compared to cases of physical and/or sexual abuse. That is, the findings here are consistent with the conclusion that CPS investigation of the multiple maltreatment cases that involved physical neglect (and emotional maltreatment) was actually determined by the other maltreatment that had occurred in conjunction with those lower-priority forms (i.e., by the concomitant sexual abuse or the concomitant physical abuse), rather than by the physical neglect/emotional maltreatment component of the child's circumstance.

TABLE A-3. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING PHYSICALLY ABUSED CHILDREN

Model	Parameter Estimate	Parameter t-value		Model $R^2 \times 100$	Model F-value	df
SEX						
Intercept=Males	0.456	1.48				
Females	-0.574	-1.860	x	1.5%	3.456	1,21
INCOME						
Intercept=<$15,000	0.356	1.22				
$15,000+	-0.353	-0.820		0.6%	0.728	2,20
Unknown	-0.423	-0.920				
FAMILY STRUCTURE						
Intercept=Both parents	0.112	0.350				
Mother-only	-0.147	-0.290		1.0%	0.573	3.19
Father-only	1.037	1.200	x			
Unknown	0.390	0.720				
NO. OF CHILDREN						
In-child	-0.233	-0.680				
2-3 children	0.415	1.260	x	5.1%	1.863	3,19
4+ children	0.035	0.080				
Unknown	2.269	2.180	*			
OTHER VICTIMS						
Intercept=None	-0.094	-0.280				
other victims	1.559	2.420	*	5.3%	5.869	1,21
METROPOLITAN STATUS						
Intercept=Large MSA[8]	-0.075	-0.140				
Other MSA	0.399	0.650		0.9%	0.367	2,20
Non-MSA	0.486	0.880				
RACE						
Intercept=White	0.161	0.460				
Non-white	-0.026	-0.070		0.0%	0.004	1,21
ETHNICITY						
Intercept=White	0.249	0.910				
Black	-0.206	-0.480		0.5%	0.174	3,19
Hispanic	-0.377	-0.550				
Other races	0.180	0.270				

*Metropolitan statistical area with population of 1,000,000 or more.

Table A-3 (continued)

Model	Parameter Estimate	Parameter t-value	Model $R^2 \times 100$	Model F-value	df
AGE					
Intercept=<1 year old	0.722	1.630			
Age in years	-0.057	-1.110	1.4%	1.224	1,21
RECOGNITIONSOURCE					
Intercept=Law enforcement	0.376	0.700			
Hospital/Publ.Hlth	0.307	0.440	1.2%	0.884	3,19
Schools	-0.203	-0.240			
Day care, Mntl Hlth, & Soc. serv.	-0.697	-0.950			
SEVERITY					
Intercept=Fatal	4.644	1.130			
Serious	-3.767	-0.910	0.5%	2.537	2,20
Moderate	-4.531	-1.160 x			
RACE AND AGE					
Intercept=White, <1 yr	0.759	1.960			
Non-white	-0.104	-0.080	1.4%	0.433	3,19
Age in years	-0.060	-0.990			
Black x Age	0.008	0.070			
SEX AND AGE					
Intercept=Males, <1 yr	1.412	4.310			
Females	-1.426	-1.680 x	3.2%	2.266	3,19
Age in years	-0.103	-2.410 *			
Age x Females	0.094	1.440 x			
NATURE					
Intercept=Phys. injury	0.122	0.350			
Physical condition	3.077	0.110	0.1%	0.093	3,19
Educational harm	-7.324	-0.490			
Ment./Emot. injury	0.169	0.320			
PERPETRATOR RELATION					
Intercept=Natural parent	0.121	0.270			
Parent substitute	0.257	0.480	0.7%	0.651	3,19
Other&rive	-0.303	-0.220			
Otherperson	-0.755	-1.250 x			
PERPETRATOR SEX					
Intercept=Female only	-0.007	-0.020			
Male only	0.335	0.830	0.7%	0.339	2,20
Both	-0.242	-0.160			

Table A-3 Continued.

Model	Parameter Estimate	Parameter t-value		Model R^2 x 100	Model F-value	df
PERPETRATOR LOCATION						
Intercept=in home	0.140	0.390				
Out of home	-0.543	-1.490	x	1.5%	2.159	2,20
Unknown	1.069	1.540	x			
NO. OF PERPETRATORS						
Intercept=one	0.184	0.670				
Two or more	-0.422	-0.280		0.2%	0.076	1,21

TABLE A-4. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING SEXUALLY ABUSED CHILDREN

Model	Parameter Estimate	Parameter t-value	Model R^2 x 100	Model F-value	df
SEX					
Intercept=Males	-0.188	-0.12			
Females	0.780	0.50	1.8%	0.252	1,21
INCOME					
Intercept=<$15,000	0.08 1	0.14			
$15,000+	0.964	1.81 x	3.2%	1.579	2,20
Unknown	0.629	0.68			
FAMILY STRUCTURE					
Intercept=Both parents	0.640	1.12			
Mother-only	-0.532	-0.48	1.1%	0.159	3,19
Father-only	-0.213	-0.03			
Unknown	-0.525	-0.46			
NO. OF CHILDREN					
Intercept=One child	0.667	1.61			
2-3 children	-0.269	-0.35	0.6%	0.072	3,19
4+ children	-0.526	-0.48			
Unknown	0.197	0.21			
OTHER VICTIMS					
Intercept=None	-0.046	-0.10			
Other victims	2.986	3.13 *	15.2%	9.796	1,21
METROPOLITAN STATUS					
Intercept=Large MSA9	0.454	0.38			
Other MSA	-0.352	-0.28	2.0%	0.640	2,20
Non-MSA	0.629	0.45			
RACE					
Intercept=White	0.397	0.87			
Non-white	0.119	0.23	0.0%	0.053	1,21
ETHNICITY					
Intercept=White	0.656	1.31			
Black	-0.784	-1.03 x	11.0%	4.828	3,19
Hispanic	-2.38 1	-2.32 *			
Other races	4.788	3.58 *			

[9]Metropolitan statistical area with population of 1 ,OOO,OOO or more.

Table A-4 continued.

Model	Parameter Estimate	Parameter t-value	Model R^2 x 100	Model F-value	df
AGE					
Intercept=<1 year old	0.669	0.55			
Age in years	-0.023	-0.18	0.2%	0.033	1,21
RECOGNITION SOURCE					
Intercept=Law Enforcement	1.028	2.55			
Hospital/Publ.Hlth	0.497	0.66	5.6%	0.506	3,19
Schools	-1.093	-0.85			
Day care, Mntl Hlth, & Soc. Serv.	-1.000	-0.97			
SEVERITY					
Intercept=Serious	0.646	0.70			
Moderate	0.126	0.11	1.8%	1.493	2,20
Inferred	-0.527	-0.55			
RACE AND AGE					
Intercept=White, <1 yr	0.043	0.03			
Non-white	3.365	1.27 x	4.0%	1.779	3,19
Age in years	0.034	0.25			
Black x Age	-0.289	-1.58 x			
SEX AND AGE					
Intercept=Males cl yr.	2.871	1.02			
Females	-2.730	-0.92	6.0%	0.360	3,19
Age in years	-0.262	-0.71			
Age x Females	0.306	0.88			
NATURE					
Intercept=Phys. injury	0.372	0.27			
Physical condition	1.710	0.90	0.9%	0.480	3,19
Educationalharm	0.155	0.09			
Ment./Emot. injury	0.011	0.01			
PERPETRATOR RELATION					
Intercept=Natural Parent	0.536	0.50			
Parent substitute	-0.060	-0.05	5.5%	1.371	3,19
Other relative	-1.358	-1.30 x			
Otherperson	0.345	0.43			

Table A-4 continued.

Model	Parameter Estimate	Parameter t-value		Model R^2 x 100	Model F-value	df
PERPETRATOR SEX						
Intercept=Female sex	-0.644	-0.53				
Male only	1.236	1.07	x	2.7%	0.459	3,19
Both	-8.558	-0.54				
Unknown	0.432	0.46				
PERPETRATOR LOCATION						
Intercept=in home	0.053	0.09				
Out of home	0.872	1.59	x	3.0%	1.407	2,20
Unknown	0.184	0.29				
NO. OF PERPETRATORS						
Intercept=One	0.465	1.11				
Two or more	0.603	0.31		0.1%	0.094	1,21

TABLE A-5. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING PHYSICALLY NEGLECTED AND/OR EMOTIONALLY MALTREATED CHILDREN

Model	Parameter Estimate	Parameter t-value	Model R^2 x 100	Model F-value	df
SEX					
Intercept=Males	-1.035	-2.81			
Females	0.194	0.45	0.2%	0.206	1,21
INCOME					
Intercept=<$15,000	-0.947	-2.79			
$15,000+	-0.184	-0.46	7.0%	0.571	2,20
Unknown	0.383	1.06 x			
FAMILY STRUCTURE					
Intercept=Both parents	-1.232	-3.97			
Mother-only	0.593	1.46 x	2.0%	1.384	3,19
Father-only	0.770	0.71			
Unknown	0.782	1.48 x			
NO. OF CHILDREN					
Intercept=One child	-1.191	-2.53			
2-3 children	0.162	0.60	1.3%	0.730	3,19
4+ children	0.547	1.38 x			
Unknown	1.037	1.36 x			
OTHER VICTIMS					
Intercept=None	-1.224	-3.61			
other victims	1.427	4.01 *	5.9%	16.057	1,21
METROPOLITAN STATUS					
Intercept=Large MSA[10]	-1.010	-1.81 x			
Other MSA	0.215	0.29	0.3%	0.098	2,20
Non-MSA	0.295	0.45			
RACE					
Intercept=White	-0.935	-2.21			
Non-white	0.068	0.13	0.0%	0.018	1,21
ETHNICITY					
Intercept=White	-0.880	-2.28			
Black	0.194	0.28	1.2%	0.973	3,19
Hispanic	-0.504	-0.88			
Other races	-0.800	-1.52 x			

[10]Metropolitan statistical area with population of 1,000,000 or more.

Table A-S continued.

Model	Parameter Estimate	Parameter t-value	Model R^2 x 100	Model F-value	df
AGE					
Intercept=<1 year old	0.573	1.35			
Age in years	-0.139	-2.48 *	8.7%	6.151	1,21
RECOGNITION SOURCE					
Intercept=Law enforcement	0.432	1.42			
Hospital/Publ.Hlth	0.256	0.45	17.5%	4.637	3,19
Schools	-2.253	-3.35 *			
Day care, Mntl Hlth, & Soc. Serv.	-1.308	-1.74 x			
SEVERITY					
Intercept=Fatal	2.226	1.48			
Serious	-3.497	-2.35 *	3.3%	3.595	3,19
Moderate	-3.274	-2.47 *			
Inferred	-2.360	-1.48 x			
RACE AND AGE					
Intercept=White, cl yr	0.190	0.36			
Non-white	0.995	1.24 x	9.7%	2.176	3,19
Age in years	-0.102	-1.36 x			
Nonwhite x Age	-0.100	-1.00 x			
SEX AND AGE					
Intercept=Males, <1 yr	1.120	2.46			
Females	-0.821	-1.31 x	10.8%	4.695	3,19
Age in years	-0.225	-3.78 *			
Age x Females	0.127	1.66 x			
NATURE					
Intercept=Phys. injury	0.032	0.06			
Physical condition	-0.844	-1.27 x	1.1%	0.836	3,19
Edllcatiollalharm	-0.796	-0.44			
Ment./Emot. injury	-1.088	-1.60 x			
PERPETRATOR RELATION					
Intercept=Natural parent	-0.811	-2.59			
Parent substitute	-0.221	-0.51	1.9%	2.071	3,19
Other relative	-3.359	-2.56 *			
Other person	-1.318	-0.81			

Table A-5 continued.

Model	Parameter Estimate	Parameter t-value	Model R^2 x 100	Model F-value	df
PERPETRATOR SEX					
Intercept=Female only	-0.449	-1.35			
Male only	-0.608	-1.34 x	4.6%	3.872	2,20
Both	-1.313	-2.83 *			
PERPETRATOR LOCATION					
Intercept=in home	-0.855	-2.79			
Out of home	-1.046	-1.18 x	1.0%	1.044	2,20
Unknown	-0.955	-0.77			
NO. OF PERPETRATORS					
Intercept=One	-0.646	-1.95			
Two or more	-1.140	-2.80 *	3.8%	7.817	1,21

TABLE A-6. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING EDUCATIONALLY NEGLECTED CHILDREN

Model	Parameter Estimate	Parameter t-value	Model R^2 x 100	Model F-value	df
SEX					
Intercept=Males	-1.798	-3.990			
Females	-0.587	-1.360 x	1.2%	1.852	1,21
INCOME					
Intercept=<$15,000	-1.729	-3.220			
$15,000+	-1.240	-1.420 x	2.6%	1.113	2,20
Unknown	-0.487	-0.710			
FAMILY STRUCTURE					
Intercept=Both parents	-1.986	-3.330			
Mother-only	-1.186	-1.000 x	5.4%	0.583	3,19
Father-only	-0.706	-0.060			
Unknown	0.793	0.840			
NO. OF CHILDREN					
In-child	-1.862	-4.670			
2-3 children	-0.657	-1.260 x	3.4%	0.650	3,19
4+ children	0.698	0.560			
Unknown	-0.354	-0.510			
OTHER VICTIMS					
Intercept=None	-2.453	-6.440			
Other victims	1.592	1.520 x	7.2%	2.311	1,21
METROPOLITAN STATUS					
Intercept=Large MSA[11]	-2.178	-3.360			
Other MSA	0.243	0.140	0.3%	0.083	2,20
Non-MSA	0.383	0.420			
RACE					
Intercept=White	-2.343	-4.810			
Non-white	0.872	1.170 x	2.5%	1.363	1,21
ETHNICITY					
Intercept=White	-2.466	-4.540			
Black	1.005	1.220 x	3.3%	1.097	3,19
Hispanic	0.857	1.300 x			
Other races	0.908	1.460 x			

[11]Metropolitan statistical area with population of 1,000,000 or more.

Table A-6 continued.

Model	Parameter Estimate	Parameter t-value		Model R^2 x 100	Model F-value	df
AGE						
Intercept=<1 year old	-0.450	-0.260				
Age in years	-0.134	-1.040	x	3.5%	1.085	1,21
RECOGNITION SOURCE						
Intercept=Law enforcement	-1.308	-1.840				
Hospital/Publ.Hlth	-1.525	-0.150		2.0%	0.762	3,19
Schools	-0.709	-0.790				
Day care, Mntl Hlth, & Soc. Serv.	-2.138	-1.580	x			
SEVERITY						
Intercept=Serious	-0.637	-0.880				
Moderate	-1.450	-1.780	x	1.1%	3.151	1,21
RACE AND AGE						
Intercept=White, <1 yr						
Non-white	3.640	1.910	x	9.2%	1.142	3.19
Age in years	-0.045	-0.380				
Black x Age	-0.232	-1.780	x			
SEX AND AGE						
Intercept=Males, <1 yr	-0.311	-0.150				
Females	-0.704	-0.420		4.1%	0.451	3,19
Age in years	-0.132	-0.880				
Age x Females	0.023	0.180				
PERPETRATOR RELATION						
Intercept=Natural parent	-2.090	-5.080				
Parent substitute	0.432	0.260		0.3%	0.070	1,21
PERPETRATOR SEX						
Intercept=Female only	-1.944	-4.400				
Male only	-1.150	-0.100		0.6%	0.048	2,20
Both	-0.178	-0.230				
NO. OF PERPETRATORS						
Intercept=One	2.000	-4.370				
Two or more	-0.123	-0.160		0.0%	0.026	1,21

TABLE A-7. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING PHYSICALLY ABUSED CHILDREN

A. Unknown Race/ethnicity excluded; Multiple maltreatment excluded
Sample N=566: CPS investigated = 176; not investigated = 390

Parameter	Parameter Estimate	Standard Error	t
Intercept	0.54694	1.22191	0.45
Females	1.02494	1.71373	0.60
Ageinyears	-0.09691	0.06135	-1.58
other victims	1.49131	0.6995 1	2.13
Day care, Mentl Hlth, Soc.Serv.	-0.65325	0.38181	-1.71
Father-only	1.39672	0.97274	1.44
Moderate injury	0.27275	0.94594	0.29
Age x Females	0.09006	0.09043	1.00
Moderate injury x Females	-2.23485	1.35600	-1.65
Unknown no. of children	1.69043	1.10224	1.53
Blacks	1.81430	1.52303	1.19
Age x Blacks	-0.13587	0.13397	-1.01
Model R^2 Value	0.156		
Model F-value	4.658 ** (p<.01)		
Model df	11,11		

Table A-7 continued.

B. Unknown Race/ethnicity included; Multiple maltreatment excluded
Sample N=576: CPS investigated = 183; not investigated = 393

Parameter	Parameter Estimate	Standard Error	t
Intercept	0.42944	1.18024	0.36
Females	0.96380	1.56707	0.62
Age	-0.08049	0.06033	-1.33
Other Victims	1.44096	0.70813	2.03
Day care, Mentl Hlth, Soc.Serv.	-0.72139	0.37488	-1.92
Father-only	1.12426	0.83500	1.35
Moderate injury	0.37722	0.90407	0.42
Age x Females	0.09945	0.08341	1.19
Moderate injury x Females	-2.41463	1.32037	-1.83
Unknown no. of children	1.67490	1.11831	1.50
Blacks	1.96477	1.57223	1.25
Age x Blacks	-0.15644	0.13893	-1.13
Model R^2 Value	0.1548		
Model F-value	3.722 * (p<.05)		
Model df	11,11		

C. Unknown Race/ethnicity included; Multiple maltreatment included
Sample N=678: CPS investigated = 208; not investigated = 470

Parameter	Parameter Estimate	Standard Error	t
Intercept	0.90797	0.67851	1.34
Females	-0.71928	1.22607	-0.59
Age	-0.10944	0.06167	-1.77
Other Victims	1.16290	0.671%	1.73
Day care, Mentl Hlth, Soc.Serv.	-0.75309	0.38150	-1.97
Father-only	1.27712	0.70573	1.81
Moderate injury	0.14578	0.44798	0.33
Age x Females	0.10095	0.08607	1.17
Moderate injury x Females	-0.72747	1.21329	-0.60
Unknown no. of children	1.95389	1.09605	1.78
Blacks	1.45257	1.25442	1.16
Age x Blacks	-0.12176	0.10835	-1.12
Model R^2 Value	0.1431		
Model F-value	4.167		
Model df	11.11		

TABLE A-S. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING SEXUALLY ABUSED CHILDREN

A. Unknown Race/ethnicity excluded; Multiple maltreatment excluded
Sample N=400: CPS investigated = 95; not investigated = 305

Parameter	Parameter Estimate	Standard Error	t
Intercept	-0.86616	1.44803	-0.60
Blacks	3.41557	2.17346	1.57
Hispanics	3.58584	3.31614	1.08
Age in years	0.10273	0.07750	1.33
Other Victims	2.64119	1.02214	2.58
Age x Blacks	-0.41414	0.16733	-2.48
Age x Hispanics	-0.5437 1	0.28033	-1.94
Inferred harm	-0.75907	0.643 10	-1.18
Perpetrator out of home	1.21235	0.82084	1.48
Model R^2 Value	0.3379		
Model F-value	3.255 * (p<.05)		
Model df	8,14		

B. Unknown Race/ethnicity included; Multiple maltreatment excluded
Sample N=405: CPS investigated = 100; not investigated = 305

Parameter	Parameter Estimate	Standard Error	t
Intercept	-0.80078	1.45272	-0.55
Blacks	3.32427	2.20347	1.51
Hispanics	3.63856	3.37381	1.08
Age in years	0.11157	0.08105	1.38
Other Victims	2.74816	1.06374	2.58
Age x Blacks	-0.41537	0.17065	-2.43
Age x Hispanics	-0.55586	0.28535	-1.95
Inferred harm	-0.86272	0.66037	-1.31
Perpetrator out of home	1.15790	0.82073	1.41
Model R^2 Value	0.3446		
Model F-value	3.441 * (p<.05)		
Model df	8,14		

Table A-8 continued.

C. Unknown Race/ethnicity included; Multiple maltreatment included
Sample N=440: CPS investigated = 113; not investigated = 327

Parameter	Parameter Estimate	Standard Error	t
Intercept	-0.65623	1.21923	-0.54
Blacks	2.50120	1.42970	1.75
Hispanics	3.12224	2.54934	1.22
Age in years	0.08397	0.07469	1.12
Other Victims	3.63357	1.29639	2.80
Age x Blacks	-0.34939	0.10482	-333
Age x Hispanics	-0.4253 1	0.245 12	-1.74
Inferred harm	-0.81287	0.56520	-1.44
Perpetrator out of home	0.98647	0.75713	1.30
Model R^2 Value	0.34 19		
Model F-value	3.49 * (p<.05)		
Model df	8,14		

TABLE A-9. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING PHYSICALLY NEGLECTED AND/OR EMOTIONALLY MALTREATED CHILDREN

A. Unknown Race/ethnicity excluded; Multiple maltreatment excluded
Sample N=638: CPS investigated = 114; not investigated = 524

Parameter	Parameter Estimate	Standard Error	t
Intercept	2.33891	1.18642	1.97
Blacks & Hispanics	-0.74401	0.36710	-2.03
Age in years	-0.14978	0.09574	-1.56
Other Victims	1.21102	0.42485	2.85
Schools	-2.52250	0.64698	-3.90
Day care, Mentl Hlth, Soc.Serv.	-1.30416	0.72687	-1.79
Other Victims x Day care, Mentl Hlth, soc.serv.	-1.51287	1.36189	-1.11
Two or more perpetrators	-1.10077	0.43882	-2.51
Non-parental perpetrators	-2.22199	1.78813	-1.24
Moderate & Inferred injury	0.84510	0.56258	1.50
Females	-0.87595	0.80184	-1.09
Age x Females	0.14912	0.07929	1.88
Income $15,000+	0.86772	0.51135	1.70
Income Unknown	0.4128 1	0.40434	1.02
Physical condition/impairment	-1.13349	0.79942	-1.42
Moderate & Inferred injury	-1.45517	0.97255	-1.50
Model R^2 Value	0.3324		
Model F-value	3.431 m (p<.10)		
Model df	15,7		

Table A-9 continued

B. Unknown Race/ethnicity included; Multiple maltreatment excluded
Sample N=647: CPS investigated = 119; not investigated = 528

Parameter	Parameter Estimate	Standard Error	t
Intercept	2.31099	1.16446	1.98
Blacks & Hispanics	-0.80839	0.33993	-2.38
Age in years	-0.14087	0.08983	-1.57
Other Victims	1.19104	0.39735	3.00
Schools	-2.56327	0.66009	-3.88
Day care, Mentl Hlth, Soc.Serv.	-1.09844	0.66116	-1.66
Other Victims x Day care, Mentl Hlth, Soc.Serv.	-0.91061	1.37592	-0.66
Two or more perpetrators	-0.98750	0.37696	-2.62
Non-parental perpetrator	-2.32457	1.85731	-1.25
Moderate & Inferred injury	0.96269	0.54441	1.77
Females	-0.87304	0.77035	-1.13
Age x Females	0.14047	0.07943	1.77
Income $15,000+	0.70936	0.46654	1.52
Income Unknown	0.32442	0.37876	0.86
Physical condition/impairment	-1.13510	0.774 11	-1.47
Moderate and Inferred injury	-1.45610	0.91525	-1.59
Model R^2 Value	0.3295		
Model F-value	3.819 * (p<.05)		
Model df	15,7		

Table A-9 continued,

C. Unknown Race/ethnicity included; Multiple maltreatment included
Sample N=767: CPS investigated = 144; not investigated = 623

Parameter	Parameter Estimate	Standard Error	t
Intercept	1.83913	0.76888	2.39
Blacks &Hispanics	-0.47247	0.42613	-1.11
Age in years	-0.19937	0.08942	-2.23
Other Victims	0.93456	0.36467	2.56
Schools	-2.03860	0.61341	-3.32
Day care, Mentl Hlth, Soc.Serv.	-1.51439	0.78508	-1.93
Other Victims x Day care, Mentl Hlth, Soc.Serv.	-0.58793	0.95071	-0.62
Two or more perpetrators	-0.62732	0.47557	-1.32
Non-parental perpetrators	-0.73232	1.19175	-0.61
Moderate & Inferred injury	0.65763	0.38641	1.70
Females	-1.39574	0.70477	-1.98
Age x Females	0.16551	0.07547	2.19
Income $15,000+	0.53112	0.45355	1.17
Income Unknown	-0.01097	0.45199	-0.02
Physical condition/impairment	-0.17595	0.57274	-0.31
Moderate & Inferred injury	-0.00958	0.18243	-0.01
Model R^2 Value	0.2478		
Model F-value	2.313 n.s.		
Model df	15,7		

TABLE A-10. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE LIKELIHOOD OF CPS INVESTIGATING EDUCATIONALLY NEGLECTED CHILDREN

A, Unknown Race/ethnicity excluded
Sample N=217: CPS investigated = 32; not investigated = 185

Parameter	Parameter Estimate	Standard Error	t
Intercept	1.05378	2.03043	0.52
Nonwhites	5.82370	4.00162	1.46
Age	-0.22908	0.16888	-136
Other Victims	-4.51240	3.51514	-1.28
Mother-only	-9.10670	6.28673	-1.45
Day care, Soc. Serv., Mntl Hlth	-3.91944	2.52258	-1.55
Age x Other Victims	0.49891	0.31464	1.59
Age x Non-white	-0.4 1680	028 149	-1.48
Age x Mother-only	0.57862	0.46228	1.25
2 to 3 children	-0.91805	0.64221	-1.43
Model R^2 Value	0.3113		
Model F-value	0.848	n.s.	
Model df	9,12		

B. Unknown Race/ethnicity included
Sample N=224: CPS investigated = 33; not investigated = 191

Parameter	Parameter Estimate	Standard Error	t
Intercept	1.64900	2.08526	0.79
Nonwhites	5.55608	4.02929	1.38
Age	-0.26458	0.16977	-1.56
Other Victims	-5.00936	3.66948	-1.37
Mother-only	-9.38763	6.36209	-1.48
Day care, Soc. Serv., Mntl Mth	-4.11405	2.63509	-1.56
Age x Other Victims	0.53498	0.32007	1.67
Age x Non-white	-0.40089	0.28382	-1.41
Age x Mother-only	0.59509	0.46465	1.28
2 to 3 children	~1.0678053	0.62492392	-1.71
Model R^2 Value	0.3065		
Model F-value	0.902	n.s.	
Model df	9,12		

APPENDIX B

LOGISTIC ANALYSES TO IDENTIFY FACTORS RELATED TO THE INCIDENCE OF MALTREATMENT

Appendix B

LOGISTIC ANALYSES TO IDENTIFY FACTORS RELATED TO THE INCIDENCE OF MALTREATMENT

1. Derivation of File for Analyzing Factors Related to Incidence

The NIS-2 database consists of records for children for whom data were collected using the NIS-2 study. Not all of these children were maltreated, but a substantial proportion were, and those children in the database who are not classified as being maltreated are in no way representative of the general population of children not maltreated during the study reference period. The records on the database each have a weight, used to project the data on maltreated children to the population of maltreated children. Each record also has a set of 28 replicate weights, to be utilized for estimating the sampling errors associated with population estimates using the weighted data. Details on the sample weights and replicate weights, and how to utilize them, are covered in the Report on Data Processing and Analysis for the NIS-2 study.[1] Note that in that report, two distinct sets of weights, known as A weights and B weights, and their corresponding associated replicate weights, are referred to. Throughout the discussion that follows reference is only to the B weights, and not the A weights. This is because the analyses of factors related to the incidence of maltreatment consider the full population of maltreated children represented on the database (and not just those known to CPS agencies), and the B weights and corresponding replicate weights are the appropriate ones for such analyses.

In order to analyze factors associated with the incidence of maltreatment, in addition to having data on maltreated children, it is necessary to characterize the non-maltreated population with respect to the factors to be analyzed As noted above, this is not possible using the NIS-2 database alone. The procedure we have used to overcome this obstacle is to obtain information from the U.S. Current Population Survey (CPS) for March 1986 and March 1987. The remainder of this section describes how a dataset was derived from the CPS data that could be used in the planned analyses, and the methods used to obtain approximate estimates of sampling error for the analyses of factors associated with maltreatment.

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[1] Sedlak, AJ., McFarland, J., & Rust, K. (1987). ***Study of the National Incidence and Prevalence of Child Abuse and Neglect: Report on Data Processing and Analysis.*** Technical Report, National Center on Child Abuse and Neglect, DHHS, Washington, DC 20201.

2. Identification of Common Variables

The first step was to identify what variables were available from CPS that were defined consistently with variables in the NIS-2 database. The CPS March supplement contains data on a number of characteristics of sampled children, and there were seven variables in common between the March CPS supplement and the NIS-2 database. Each of these variables was categorized and Table 1 lists the variables and their final categories. (This was necessary for the next stages of the analysis.)

Table 1. Variables and categories used in analysis of factors associated with maltreatment

Variable	Categories
1. Age	1. 0 - 2 years 2. 3 - 5 3. 6 - 8 4. 9 - 11 5. 12 - 14 6. 15 - 17
2. Race	1. White, not Hispanic 2. Black, not Hispanic 3. Hispanic 4. other
3. Sex	1. Male 2. Female
4. Family Income	1. Under $15,000 2. $15,000 - $29,999 3. $30,000 or more
5. Family Structure	1. Both parents 2. Mother only 3. Father only 4. Neither parent
6. Family Size	1. One Child 2. 2 or 3 children 3. 4 or more children
7. County Metropolitan status	1. Metropolitan Statistical Area (MSA) of 1,000,000 or more in population 2. Other MSA 3. Non-MSA

3. Choice of CPS Datasets

As the NIS-2 reference period was in the fall of 1986, and the relevant CPS supplement is conducted in March of each year, it was decided to utilize the-data from the March 1986 and March 1987 CPS supplements, weighted equally. As well as stmddling the NIS-2 reference period, the use of two samples combined increased the reliability of estimates obtained from the CPS data

4. Method of Incorporating CPS Data into the Analyses

The seven variables defined above, when fully cross-classified, give a table with 5,184 cells. From each of the CPS files, cell estimates from each cell were tabulated, using the survey weights, to give an estimate of the size of the U.S. population in each cell. The 1986 and 1987 estimates were then aggregated, and the resulting value in each cell was halved to give an estimate for each cell in the table for the U.S. population for fall 1986.

Analogously, estimates for each of the 5,184 cells were obtained from the NIS-2 database. These estimates reflect only the population of children represented by the NIS-2 data, that is the maltreated population plus some small subset of the remainder of the population. These two components of the NIS-2 data could be distinguished (those maltreated from those not). Thus from the NIS-2 data, estimates can be obtained of the size of the maltreated population in each cell, while the CPS data give estimates of the size of the total population in each cell.

For six of the seven variables involved (the exception being county metropolitan status) there were a few cases of missing data in the NIS-2 database. (This was not the case for the CPS data, which had no missing values for these variables.) Values for the missing cases were imputed by randomly assigning values, using the distribution of values from cases not missing data (unweighted). Imputation for each was undertaken independently. The degree of missing data was small for each variable, but the imputation was utilized to avoid losing from the analysis the small but significant number of cases with missing data for at least one of these six variables.

Obviously with so many cells, the reliability of many cell estimates from either of these sources, and NIS-2 in particular, is very low. The analyses undertaken,

however, utilized a multivariate modeling approach (through the technique of logistic regression) rather than analyzing individual cells. Thus reliable estimates at the cell level are not necessary, but rather what is needed are unbiased and reliable estimates when the cells are aggregated to form one and two way marginal totals.

For each cell, an estimate of the size of the population not represented by the NIS-2 database (all members of which unrepresented population were not maltreated during the reference period) can be obtained by subtracting the NIS-2 estimate from the CPS-based estimate. This was done for each of the 5,184 cells. A data record was created corresponding to each cell. The record contained seven variables identifying the cell and a weight variable, given as the cell estimate. Finally the record was given a value for a variable identifying maltreatment type, this value indicating "no maltreatment." Each record on the NIS-2 database was also subset to these nine variables, the weight variable being given by the sample weight (B weight), and the maltreatment type variable indicating the type of maltreatment (including a portion of the records for which this type was "no maltreatment"). This final expanded NIS-2 dataset could then be utilized to analyze which of the seven characteristics listed in Table 1 was associated with maltreatment, both overall and for specific maltreatment types, and both singly and jointly. The final component needed was an appropriate set of replicate weights so that standard errors of the regression parameters and significance tests of the models developed could be undertaken appropriately.

5. Replicate Weight Development

For those records from the NIS-2 database itself, a subset of 21 of the original 28 replicate weights was retained. The same subset was retained for each record, and the subsetting was achieved by deleting at random one of the replicate weights from each group of 4. In the event, the replicate weights retained were those corresponding to the replicate weights numbered 1, 2, 4, 5, 6, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26 and 27. This subsetting was required for appropriate convenient utilization of the replicated logistic regression procedure PROC WESLOG (Flyer and Mohadjer, 1989), which was employed for the analyses. Had the software been somewhat more general, all 28 replicate weights from the NIS-2 database could have been utilized.

A corresponding set of replicate weights for each of the supplementary data records was developed as follows. Using each of the 21 replicate weights in turn, the full seven-way crossclassification was estimated from the NIS-2 database. For the supplementary record corresponding to a given cell, each of the 21 replicate weights was given in turn by subtracting the cell estimate from the NIS-2 data, derived using the corresponding replicate weights, from the CPS-based cell estimate. At this stage a check was made that no derived full sample or replicate weights were negative, and those records for which all 22 weights were zero were dropped from the file. Of the 5,184 records derived from the cell estimates discussed above, 3,798 were retained, with the remaining 1,386 having only zero-weights. These records were combined with the subset of NIS-2 records corresponding to children meeting the 'harm' standard There were 2,235 such records, giving a total file for analysis of 6,033 records.

6. Utilization of the Data in Logistic Regression Analyses

Each of the records utilized in the logistic regression analysis had a total of 30 variables: one to identify type of maltreatment (including "no malueatment"), seven corresponding to the factors to be analyzed for their individual and joint associations with maltreatment, one estimation (full-sample) weight, and 21 replicate weights.

This procedure for the creation of "dummy" records corresponding to cells of the full seven-way classification table, having an estimate of the size of the population not represented by NIS-2, together with the 21 associated replicate weights, meant that valid analyses could be undertaken of the relationship to maltreatment of the seven factors analyzed. The replication procedure used means that the analyses will reflect appropriately the sampling errors associated with using the NIS-2 database in these analyses. This is an important feature because the nature of the sample design used in NIS-2 is such that, had the NIS-2 data been treated as coming from a simple random sample, the resulting tests of significance would have severely overstated the statistical significance of the results. This phenomenon is referred to as the m&specification effect,* and in general is particularly severe for NIS-2 as compared to other sample surveys.

*Skinner, C. J. (1989). Domain Means, Regression and Multivariate Analysis. Ch. 3 in Analysis of Complex Surveys, Skinner, C. J., Holt, D., and Smith, T. M. F. (eds). Wiley: New York.

The replication scheme does ignore one source of sampling error, which is thus not reflected in the significance tests and confidence intervals derived from the logistic regression analyses. This is the variability of the CPS-based estimates. This component of variance is much smaller than that contributed by the NIS-2 data, especially as estimates from two different CPS surveys have been averaged It would have been very difficult to have reflected this component of variance appropriately, and the effort was judged not to be worthwhile. Thus the CPS-based estimates have been treated as though they are subject to no sampling error.

7. Procedures for Model Fitting

As with the model fitting described in Appendix A, the model fitting in connection with risk of occurrence employed specialized SAS procedure PROC WESLOG.[3] Models were fitted sequentially to arrive at the best fitting model in each case. Also parallelling that earlier-described approach, a stepwise forwards strategy was used, again because of the limitations on the number of degrees of freedom available for the analysis (see Appendix A), and the jackknife replication procedure was used. The strategy was to fit single-factor models for each of the variables that could be assessed, and then to explore specific interaction terms among those variables, when the single-factor models indicated that the variable in question was an important one.

The interactions systematically assessed under these circumstances were race x age, sex x age, and family structure x age. Finally, multi-factor model building was approached by simultaneously including the model all the terms that had demonstrated significant or marginal associations with risk of the maltreatment in question in the single factor and simple interaction model tests, and to eliminate terms whose parameter t-values fell below 1.00 in the context of other important predictors.

Also conforming to our general approach throughout the High Risk Reanalyses of NIS-2, changes in model fit were assessed using a combined consideration of the marginal statistical significance of individual model terms, the estimated size of the effect of those terms as reflected by the parameter estimates, the adjusted proportion of total likelihood attributed to model fit (analogous to the adjusted-R^2 statistic in multiple

[3] Flyer, P., and Mohadjer, L. (1989). *The WESLOG Procedure.* Unpublished Westat document

regression, see Harrell[4]), and the overall statistical significance of the model fit. Caution was used in interpreting the test statistics for the significance of the overall model for those models involving quite a number of terms, due to the probable lack of sufficient denominator degrees of freedom for reliable inference. (See Kom and Graubard for a discussion of this issue.[5])

[4]Harrell, F. E. (1986). The LOGIST Procedure. Chapter 23 in *SUGI Supplemental Library User's Guide. Version 5 Edition.* SAS Institute: Cary, NC.

[5]Korn, E. L., and Graubard, B. I. (1990). Simultaneous Testing of Regression Coefficients with Complex *Survey* Data: Use of Bonferroni t Statistics. *The American Statistician,* Vol. 44, No. 4, pp 270 -276.

TABLE B-l. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE OCCURRENCE OF PHYSICAL ABUSE

Model	Parameter Estimate	Parameter t-value	Model R2	Model F-value	df
SEX					
Intercept=Males	-5.67	-56.62			
Females	0.15	0.94	0.0%	0.876	1,21
AGE CLASSES					
intercept=0-2 yr olds	-6.485	-26.60			
3-5 year olds	0.83	2.56 *	0.9%	5.809	5,17
6-8 year olds	0.9	3.39 *			
9-11 year olds	0.84	2.96 *			
12-14 year olds	1.27	4.3 *			
15-17 year olds	1.16	3.86 *			
RACE					
Intercept=Whites	-5.84	-55.24			
Blacks	0.71	2.14 *	1.0%	6.325	3,19
Hispanics	0.81	4.06 *			
Other races	0.03	0.05			
INCOME					
Intercept=<$15,000	4.75	-64.49			
$15,000-29,999	-0.63	4.3 *	6.2%	29.774	2,20
$30,000+	-2.65	7.79 *			
METROPOLI- TAN STATUS					
Intercept=Large MSA[6]	-5.54	-18.11			
Other MSA	-0.03	0.04	0.0%	0.061	2,20
Non-MSA	-0.17	0.34			
NUMBER OFCHILDREN					
Intercept=One child	-5.43	-34.49			
2 or 3 children	-0.33	2.54 *	0.4%	6.522	2,20
4+ childreil	0.196	0.93			
FAMILY STRUCTURE					
Intercept=both parents	-5.73	-54.55			
Mother only	0.44	2.37 *	0.4%	3.959	3,19
Father only	0.62	1.45 x			

[6]Metropolitan statistical area with population of l,OOO,OOO or more.

Table B- 1 continued.

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
RACE X AGE						
Intercept=White O-2 yrs	-6.27	-38.48				
Blacks	-0.024	-0.05		1.8%	7.064	5,17
Hispanics	0.399	1.21	x			
Age-categories (linear)	0.118	2.7	*			
Blacks x Age	0.18	1.45	x			
Hispanics x Age	0.11	1.08	x			
FAMILY STRUCTURE X AGE						
Intercept=Both parents, 0-2 yrs	-6.516	-28.02				
Single parents	0.905	2.21	*	1.0%	5.803	3,19
Age-categories (linear)	0.211	3.23	*			
Single parents x Age	-0.12	-1.05	x			

TABLE B-2. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE OCCURRENCE OF SEXUAL ABUSE

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
SEX						
Intercept=males	-7.09	- 16.75				
Females	1.17	2.57	*	2.0%	6.622	1,21
AGE CLASSES						
intercept=0-2 year olds	-8.38	-25.55				
3-5 year olds	2.01	4.21	*	1.9%	14.217	5,17
6-8 year olds	1.9	8.24	*			
9-11 year olds	2.21	5.56	*			
12-14 year olds	2.38	6.68	*			
15-17 year olds	2.4	3.29	*			
RACE						
Intercept=Whites	-6.36	-36.98				
Blacks	-0.06	-0.21		0.1%	0.59 1	3,19
Hispanics	0.23	0.54				
Other races	-0.64	-1.11	x			
INCOME						
Intercept=<$15,000	-5.35	-26.76				
$15,000-29,999	-1.13	4.36	*	6.8%	46.866	220
$30,000+	-2.84	8.32	*			
METROPOLITAN STATUS						
Intercept=Large MSA[7]	-6.41	- 16.33				
Other MSA	0.23	0.33		0.1%	0.109	2,20
Non-MSA	-0.08	0.14				
NUMBER OF CHILDREN						
Intercept=One child	-6.50	-22.30				
2 or 3 children	0.1	0.28		0.2%	0.539	220
4+ children	0.48	0.92				
FAMILY STRUCTURE						
Intercept=both parents	-6.52	-31.40				
Mother only	0.43	1.1	x	0.5%	1.281	2,20
Father only	1.06	1.55	x			

[7]Metropolitan statistical area with population of 1,000,000 or more.

Table B-2 continued.

Model	Parameter Estimate	Parameter t-value		Model R^2	Model F-value	df
RACE X AGE						
Intercept-White, Black, Hisp., O-2 yrs.	-7.307	-16.05				
Other races	1.269	1.57	x	1.3%	1.949	3,19
Age categories	0.252	2.38	*			
Other races x Age	-0.568	-2.41	*			
SEX X AGE						
Intercept=Males	-8.520	-10.63				
Females	1.818	2.55	*	3.2%	17.766	3,19
Age categories	0.358	1.32	x			
Females x Age	-0.15	-0.6				
FAMILY STRUCTURE X AGE						
Intercept=Both parents, o-2 year olds	-7.114	-14.69				
Mother only	-0.382	-0.46		1.8%	1.395	5,17
Father only	-0.699	-0.52				
Age categories	0.163	1.76	x			
Mother only x Age	0.182	0.79				
Father only x Age	0.362	1.03	x			

TABLE B-3. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE OCCURRENCE OF EMOTIONAL MALTREATMENT

Model	Parameter Estimate	Parameter t-value		Model R^2	Model F-value	df
SEX						
Intercept=Males	-6.11	-24.23				
Females	0.11	0.65		0.0%	0.428	1,21
AGE CLASSES						
In-2 year olds	-8.16	-22.64				
3-5 year olds	0.86	2.21	*	4.8%	12.242	5,17
6-8 year olds	1.68	3.65	*			
9-11 yearolds	1.98	4.39	*			
12-14 year olds	2.99	6.32	*			
15-17 year olds	2.7	6.09	*			
RACE						
Intercept=Whites	-6.15	-26.17				
Blacks	0.1	0.19		1.6%	5.559	3,19
Hispanics	-0.38	1.48	x			
Other races	1.53	3.38	*			
INCOME						
Intercept=<$15,000	-5.12	-19.59				
$15,000-29,999	-1	4.16	*	5.6%	21.849	2,20
$30,000+	-2.37	5.84	*			
METROPOLITAN STATUS						
Intercept=Large MSA	-5.87	-16.92				
Other MSA	-0.22	0.26		0.3%	0.319	220
Non-MSA	-0.48	0.82				
NUMBER OF CHILDREN						
Intercept=One child	-6.11	-16.66				
2 or 3 children	0.02	0.06		0.1%	0.529	2,20
4+ children	0.27	1.01	x			
FAMILY STRUCTURE						
Intercept=Both parents	-6.03	-29.63				
Mother only	-0.16	0.47		0.1%	0.14	2,20
Father only	0.37	0.37				

Table B-3 continued.

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
RACE X AGE						
Intercept=White, Black, or Hispanic o-2 year olds	-8.141	-22.49				
3-5 year olds	0.878	2.19	*	6.6%	5.697	9.13
6-8 year olds	1.233	2.65	*			
9-11 yearolds	1.706	3.6	*			
12-17 year olds	2.748	6	*			
Other races	-0.809	-0.08				
Other races x 3-5 yr olds	-11.131	-0.61				
Other races x 6-8 yr olds	3.46	0.35				
Other races x 9-11 yrolds	3.002	0.3				
Other races x 12-17 yr old	2.022	0.2				

TABLE B-4. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE OCCURRENCE OF PHYSICAL NEGLECT

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
SEX						
Intercept=Males	-6.19	-26.16				
Females	0.34	1.17	x	0.2%	1.366	121
AGE CLASSES						
Intercept=0-2 year olds	-5.89	-32.80				
3-5 yearolds	-0.66	2.61	*	2.2%	1.911	5,17
6-8 yearolds	-0.67	2.1	*			
9-11 yearolds	-0.46	1.7	x			
12-14 year olds	-0.48	0.69				
15-17 year olds	0.7	0.7				
RACE						
Intercept=Whites	-6.32	-19.93				
Blacks	1.18	1.73	x	2.0%	4.569	3,19
Hispanics	0.3	0.67				
Other races	-0.56	0.96				
INCOME						
Intercept=<$15,000	-4.84	-18.19				
$15,000-29,999	-1.58	2.95	*	11.2%	25.7	2,20
$30,000+	-4.49	6.75	*			
METROPOLITAN STATUS						
Intercept=Large MSA[8]	-5.56	-11.87				
Other MSA	-0.97	1.5	x	1.6%	1.452	2,20
Non-MSA	-0.96	1.57	x			
NUMBER OF CHILDREN						
Intercept=One child	-5.80	- 16.33				
2 or 3 children	-0.35	2.09	*	0.2%	3.91	2,20
4+ children	-0.006	0.02				
FAMILY STRUCTURE						
Intercept=both parents	-6.26	-21.38				
Mother only	0.53	2.91	*	1.5%	18.238	2,20
Father only	1.71	5.95	*			

[8]Metropolitan statistical area with population of 1 ,OOO,OOO or more.

Table B-4 continued.

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
RACE! X AGE						
Intercept=Whites	-6.127	-26.54				
Blacks	1.024	2.85		4.7%	2.43	7,15
3-8 year olds	-0.516	-1.83				
9-14 year olds	-0.3 14	-0.064				
15-17 year olds	0.337	0.3				
Blacks x 3-8 year olds	-0.576	-1.45				
Blacks x 9-14 yr olds	-0.606	-0.83				
Blacks x 15-17 yr old	0.864	0.53				
FAMILY STRUCTURE X AGE						
Intercept=Both parents	-6.292	-25.82				
Mother only	1.173	3.75	*	3.9%	4.667	11,11
Father only	0.822	1.6	x			
3-8 year olds	-0.596	-1.98	*			
9-14 year olds	-0.241	-0.63				
15-17 year olds	0.94	1.15	x			
Mother only x 3-8 year olds	-0.589	-1.9	x			
Mother only x 9-14 year olds	-0.803	-2.9	*			
Mother only x 15-17 year olds	-1.027	-1.73	x			
Father only x 3-8 year olds	1.489	2.7	*			
Father only x 9-14 year olds	0.507	0.88				
Father only x 15-17 year olds	0.74	1.23	x			
SEX X AGE						
Intercept=Male O-2 yrs	-5.815	-30.22				
3-8 yr olds	-0.570	-2.16	*	3.0%	1.641	7,15
9-14 yr olds	-0.702	-2.59	*			
15-17 yr olds	-0.050	-0.05				
Females	-0.168	-0.59				
Females x 3-8 yrs	-0.234	-0.52				
Females x 9-14 yrs	0.462	0.63				
Females x 15-17 yrs	1.259	1.15	x			

TABLE B-5. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE OCCURRENCE OF EDUCATIONAL NEGLECT

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
SEX						
Intercept=Males	-5.50	-20.97				
Females	-0.11	0.46		0.0%	0.211	1,21
AGE CLASSES						
Intercept=3-5 yr olds	-7.81	-7.62				
6-8 year olds	2.44	3.71	*	5.2%	4.366	4,18
9-11 year olds	2.13	2.61	*			
12-14 year olds	2.81	2.65	*			
15-17 year olds	2.99	2.64	*			
RACE						
Intercept=Whites	-5.62	-17.03				
Blacks	0.64	1.89	x	1.0%	3.109	3,19
Hispanics	-0.42	1.49	x			
Other races	-1.4	1.4	x			
INCOME						
Intercept=<$15,000	-4.45	-14.64				
$15,000-29,999	-1.34	4.33	*	10.0%	11.757	2,20
$30,000+	-3.64	3.54	*			
METROPOLITAN STATUS						
Intercept=Large MSA[9]	-5.35	-11.34				
Other MSA	-0.09	0.11		0.7%	0.624	2,20
Non-MSA	-0.83	1.13	x			
NUMBER OF CHILDREN						
Intercept=One child	-5.36	-14.55				
2 or 3 children	-0.42	1.93	x	0.6%	3.692	2,20
4+ children	0.25	0.99				
FAMILY STRUCTURE						
Intercept=Both parents	-5.72	-23.83				
Mother only	0.52	2.37	*	0.5%	2.801	2,20
Father only	0.51	0.7				

[9]Metropolitan statistical area with population of l,OOO,OOO or more.

Table B-5 continued.

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
RACE X AGE						
Intercept=Whites & Blacks	-5.424	-13.19				
Hispanics	-0.659	-0.8		1.2%	13.462	5,17
otherraces	-3.633	-5.57	*			
12-17 year olds	0.581	1.14	x			
Hispanics x 12-17 year olds	0.269	0.28				
Other races x 12-17 year olds	2.19	1.11	x			
FAMILY STRUCTURE X AGE						
Intercept=Both parents	-5.776	-9.90				
Single parents	1.103	1.89	x	2.8%	4.244	7,15
9-11 year olds	-0.736	-1.14	x			
12-14 year olds	0.482	0.76				
15-17 year olds	1.048	1.38	x			
Single parents x 9-11 year olds	0.755	0.83				
Single parents x 12-14 year olds	-0.225	-0.29				
Single parents x 15-17 year olds	-1.56	-2.33	*			

TABLE B-6. SINGLE-FACTOR LOGISTIC MODELS TO PREDICT THE OCCURRENCE OF MULTIPLE MALTREATMENT

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
SEX						
Intercept=Males	-7.35	-32.45				
Females	0.62	1.73	x	0.6%	2.998	1,21
AGE CLASSES						
In-2 year olds	-7.86	-8.91				
3-5 year olds	0.95	0.97		1.2%	0.389	5,17
6-8 year olds	0.33	0.28				
9-11 year olds	0.74	0.94				
12-14 year olds	1.1	1.01	x			
15-17 year olds	1.41	1.26	x			
RACE						
Intercept=Whites	-7.05	- 17.88				
Blacks	0.26	0.58		0.2%	1.05	3,19
Hispanics	0.24	0.55				
Other races	-0.99	1.3	x			
INCOME						
Intercept=<$15,000	-6.02	-20.71				
$15,000-29,999	-1.25	3.32	*	5.2%	18.276	2,20
$30,000+	-2.29	4.6	*			
METROPOLITAN STATUS						
Intercept=Large MSA[10]	-6.63	-12.64				
Other MSA	-0.49	0.64		1.1%	0.654	2,20
Non-MSA	-1.17	1.12	x			
NUMBER OF CHILDREN						
Intercept=One child	-7.25	-20.25				
2 or 3 children	0.22	0.41		0.3%	0.282	2,20
4+ children	0.64	0.77				
FAMILY STRUCTURE						
Intercept=both parents	-7.01	-24.18				
Mother only	0.13	0.68		0.2%	1.133	2,20
Father only	-1.34	1.24	x			

[10]Metropolitan statistical area with population of 1,000,000 or more.

Table B-6 continued.

Model	Parameter Estimate	Parameter t-value		Model R2	Model F-value	df
RACE X AGE						
Intercept=White 0-2 yrs	-7.976	-11.83				
Black & Hispanic	0.432	0.66		1.2%	3.003	5,17
Other races	1.9	2.34	*			
Age categories	0.241	1.62	x			
Blacks & Hispanics x Age	-0.039	-0.31				
Other races x Age	-1.02	3.5	*			
SEX X AGE						
Intercept=Males 0-2 yrs	-7.586	-15.55				
Females	-0.355	-0.3		1.7%	1.433	3,19
Age categories	0.067	0.43				
Females x Age	0.243	0.86				
FAMILY STRUCTURE X AGE						
Intercept=Both parents & mother only O-2 yrs	-7.805	-15.02				
Father only	-2.062	-3.59		1.0%	16.877	3,19
Age categories	0.218	1.6				
Father only x Age	0.135	0.46				

TABLE B-7. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE OCCURRENCE OF PHYSICAL ABUSE

Sample N=4,462: Maltreated = 664; not maltreated = 3,798

Parameter	Parameter Estimate	Standard Error	t
Intercept	-5.23856	0.24446	-21.43
Age categories	0.24421	0.05964	4.09
Black or Hispanic	-0.37504	033847	-1.11
Income $15,000-29,999	-0.75037	0.17782	4 2 2
Income $30,000+	-2.89336	035403	-8.17
2 to 3 children	-0.37216	0.13320	-2.79
4 or more children	-0.25048	023660	-1.06
Single parents	0.31873	0.47223	0.67
Black/Hispanic x Age	0.16690	0.08494	1.96
Single parent x Age	-0.20806	0.11789	-1.76

Model R^2 Value	0.0819	
Model F-value	22.579	** (p<.005)
Modeldf	9,13	

TABLE B-8. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE OCCURRENCE OF SEXUAL ABUSE

Sample N=4,244: Maltreated = 446; not maltreated = 3,798

Parameter	Parameter Estimate	Standard Error	t
Intercept	-6.76845	0.55612	-12.17
Female	1.21550	0.44713	2.72
Age categories	0.28048	0.09367	2.99
"Other" races	1.11882	0.74929	1.49
Income $15,000-29,999	-1.42888	0.27154	-5.26
Income $30,000+	-3.28111	0.48041	-6.83
Mother-only	-1.30187	0.90353	-1.44
Father-only	-1.39673	1.47 143	-0.95
"Other" races x Age	-0.57852	0.22383	-2.58
Mother-only x Age	0.13012	0.24021	0.54
Father-only x Age	0.42413	0.37698	1.13
Model R^2 Value	0.1195		
Model F-value	48.439 ** (p<.005)		
Model df	10,12		

TABLE B-9. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE OCCURRENCE OF EMOTIONAL MALTREATMENT

Sample N=4,072: Maltreated = 274; not maltreated = 3,798

Parameter	Parameter Estimate	Standard Error	t
Intercept	-7.40889	028364	-26.12
Age categories	0.53820	0.06675	8.06
"Other" races	1.49757	0.44176	3.39
Income $15,000-29,999	-1.02085	0.24138	4.23
Income $30,000+	-2.55762	0.40004	-639
Model R2 Value	0.1201		
Model F-value	24.778 ** (p<.005)		
Modeldf	4,18		

TABLE B-10. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE OCCURRENCE OF PHYSICAL NEGLECT

Sample N=4,228: Maltreated = 430; not maltreated = 3,798

Parameter	Parameter Estimate	Standard Error	t
Intercept	-4.14428	0.31439	-13.18
3-8 year olds	-0.39700	030375	-1.31
9-14 year olds	0.19562	0.39185	0.50
15-17 year olds	0.83387	1.44755	0.58
Income $15,000-29,999	-1.89876	0.53523	-3.55
Income $30,000+	-5.24725	0.76863	-6.83
Other MSA & NonMSA	-1.31109	0.60260	-2.18
Mother-only	-0.01197	0.32084	-0.04
Father-only	0.15599	0.51590	0.30
Mother-only x 3-8 yr olds	-0.78401	0.32204	-2.43
Mother-only x 9-14 yr olds	-1.12620	0.38301	-2.94
Mother-only x 15-17 yr olds	-1.45642	0.61984	-2.35
Father-only x 3-8 yr olds	1.54030	0.57096	2.70
Father-only x 9- 14 yr olds	0.42254	0.59439	0.71
Father-only x 15-17 yr olds	0.85520	0.63232	1.35
Females	-0.06718	0.27 112	-0.25
Females x 15-17 yr olds	1.32303	1.31023	1.01

Model R^2 Value	0.202
Model F-value	7.483 * (p<.025)
Model df	16,6

TABLE B-11. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE OCCURRENCE OF EDUCATIONAL NEGLECT

Sample N=2,791: Maltreated = 247; not maltreated = 2,544
(omits lower ages)

Parameter	Parameter Estimate	Standard Error	t
Intercept	-3.40916	0.79979	-4.26
9-11 year olds	-0.7 1875	0.65961	-1.09
12-14 year olds	0.57907	0.64590	0.90
15-17 year olds	1.18165	0.77790	1.52
Hispanic	-1.27429	0.28229	4.51
"Other" races	-2.15894	1.63740	-1.32
Income $15,000-29,999	-1.53964	0.29540	-521
Income $30,000+	-4.34692	1.00078	-4.34
Non-MSA	-1.26482	0.72016	-1.76
2-3 children	-0.35559	020226	-1.76
4 or more children	-0.18371	0.15131	-121
Single parents	-0.23430	0.63455	-0.37
Single parents x 9-11 yrolds	0.80254	0.92189	0.87
Single par's x 12-14 yr olds	-0.20929	0.80326	-026
Single par's x 15-17 yr olds	-1.51455	0.69083	-2.19

Model R^2 Value	0.1738
Model F-value	27.222 ** (p<.005)
Model df	14,8

TABLE B-12. FINAL MULTI-FACTOR LOGISTIC MODEL TO PREDICT THE OCCURRENCE OF MULTIPLE MALTREATMENT

Sample N=3,962: Maltreated = 164; not maltreated = 3,798

Parameter	Parameter Estimate	Standard Error	t
Intercept	-6.50494	0.80309	-8.10
Females	0.61677	0.36161	1.71
Age categories	0.29579	0.14352	2.04
Blacks & Hispanics	-0.70775	0.56428	-1.25
"Other" races	1.64811	0.75281	2.19
Income $15,000-29,999	-1.41213	0.4223 1	-3.34
Income $30,000+	-2.79076	0.55340	-5.04
Other MSA & Non-MSA	-1.11120	0.76603	-1.45
Father-only	-1.52179	1.05472	-1.44
"Other" races x Age	-1.10573	0.30125	-3.67

Model R^2 Value	0.0954
Model F-value	9.623 ** (p<.005)
Modeldf	9,13

APPENDIX C

PROCEDURES FOR GENERATING PROBABILITIES FROM FINAL LOGISTIC MODELS

Appendix C

PROCEDURES FOR GENERATING PROBABILITIES FROM FINAL LOGISTIC MODELS

1. Derivation of Predicted Probabilities for Specific Subgroups from a Given Logistic Model

Given a logistic model, the method of using the model parameters to derive probabilities for specific subgroups of children defined according to their specific combinations of characteristics is as follows. Assume that the model in question involves m parameters or characteristics, that Bi is the model coefficient for characteristic i, and that Xi functions as the selector for the characteristic in question. That is:

$$X_i = \begin{cases} 1 \text{ if the characteristic is selected} \\ 0 \text{ otherwise} \end{cases}$$

Then:

$$y = \sum_{i=0}^{m} B_i X_i = B_0 + \sum_{i=1}^{m} (B_i X_i)$$

Thus, each parameter coefficient is multiplied by its selector and the products are summed across all parameters in the model. The rightmost expression above indicates that the parameter for the intercept is always selected. When a parameter Bi is associated with an interaction term, then the value of Xi is automatically given as the product of the Xi values for the individual factors that are involved in the interaction.

The value y is the logit, and it can be transformed into a probability value as follows:

$$z = \exp(y)$$

and

$$p = \frac{z}{1+z}$$

An example will illustrate the approach. Consider the procedure used to derive the probability of sexual abuse for a 15-year-old White female living with both parents in a family with income under $15,000 per year. The final logistic model had eleven parameters, including the intercept and three interaction terms. These are listed in the first column of Table C- 1, and their model coefficients are given in the second column.[1]

TABLE C-l. Example Calculation of Predicted Probability of Experiencing Sexual Abuse.[2]

Parameter	Coefficient (B_i)	Selector Value (X_i)	Product (B_iX_i)
Intercept	-6.7684532	1	-6.7684532
Female	1.21549644	1	1.21549644
Age categories	0.28047894	6	1.68287364
"Other" races	1.11882039	0	0
Income $15,000-29,999	-1.4288813	0	0
Income $30,000+	-3.2811098	0	0
Mother-only	-1.3018666	0	0
Father-only	-1.3967322	0	0
"Other" races x Age category	-0.5785221	0	0
Mother-only x Age category	0.13012239	0	0
Father-only x Age category	0.42413086	0	0
		Logit	-3.8700831
		Probability	0.02043052

The third column in Table C-l specifies the value that must be assigned to the selector factor in order to describe the type of child of interest. Note that the intercept is automatically selected (i.e., assigned a value of 1). The characteristic "female" is also selected via a value of 1 in this column. In order to specify that the child is 15 years old, Age category #6 is used[3] Because the child is to be specified as White, the parameter for "other" race/ethnicity is not selected Note that because that is the only race/ethnic&y parameter in the model, the decision against selecting it will make the resulting probability

[1]Note that this is the model that appears in Appendix B. Table B-8.

[2]For a White, Black, or Hispanic female, 15 to 17 years old, living with both parents, in a family with income under $15,000 per year.

[3]In order to correspond to the Census information, it was necessary to use age categories in the risk factor models that appear in Appendix B. These were: #1=0 to 2 years, #2=3 to 5 years, #3=6 to 8 years, #4=9 to 11 years, #5=12 to 14 years, and #6=15 to 17 years. Note that in Appendix A the models involve the simple value of in years, rather than the age categories.

applicable to any White, Black, or Hispanic child who fits the other specified characteristics. In order to select families with incomes under $15,000 per year, it is only necessary to avoid selecting any of the alternative income parameters. Hence the selector factors for these are assigned a value of zero. Finally, the selector factors for the remaining terms, which are all interaction terms, were automatically calculated by multiplying the selector terms for their component factors. That is, for "Other" races X Age category, the zero for "Other" races was multiplied by the 6 for the age category and the interaction term was assigned the product, which was zero. Similarly for the Mother-only X Age category and Father-only X Age category interactions. Since the selector factor for the Mother-only parameter was zero, the product of its multiplication with the age category was necessarily zero; the selector factor for the Father-only parameter was likewise zero, so its product with the age category selector term is zero as well. The last column in Table C-l shows the product derived by multplying the coefficient for the parameter by the value of the selector factor within each row. By summing the products in the last column one calculates the value of the logit. The probability itself is then derived from the logit according to the last two formulae given above.

All of the graphs and tables that indicate predicted probabilities in Chapters 2, 3, 4 or 5 were developed using these procedures. Also, by following these procedures, readers who have a specific interest in certain subgroups of children can use any of the logistic models given in Appendices A and B to derive the predicted probabilities for any of those subgroups. When doing so, however, it is always necessary to specify the subgroup completely in terms of the parameters in the model, by giving values to the selector factors for all the model parameters. For example, in the calculation given above, the probability could only be derived by specifying the child's sex, age category, family structure, and family income.

2. Derivation of Predicted Probabilities for CPS Investigation of Multiple Maltreatment Cases

These were derived for a given child from all the applicable logistic **models,** assuming independence of being investigated on the basis of each of the applicable categories of maltreatment. It was possible for up to three categories of maltreatment to be applicable to a given multiply-maltreated child: physical abuse, sexual abuse, and physical neglect/emotional maltreatment. The child was assigned a probability of receiving CPS investigation on the basis of his/her characteristics, using each applicable model. For instance, a child who had been both physically abused and sexually abused was assigned a probability of CPS investigation using the final logistic model predicting CPS investigation of physical abuse, and another probability of CPS investigation on the basis of the final logistic model predicting CPS investigation of sexual abuse. Then, all the applicable independent probabilities for a given multiply-maltreated child were combined as follows:

$$P_i^* = 1 - \prod_{j=1}^{3} (1-P_{ji})$$

where:

Pli = Probability of physical abuse (using the final logistic model for physical abuse)

P_{2i} = Probability of sexual abuse (using the final logistic model for sexual abuse)

P_{3i} = Probability of physical neglect/emotional maltreatment (using the final logistic model for physical neglect/emotional maltreatment).

3627

A REPORT ON HIGH RISK CHILD ABUSE AND NEGLECT GROUPS

National Center on Child Abuse and Neglect
Administration on Children, Youth and Families
Administration for Children and Families
Department of Health and Human Services
Washington, D.C.

TABLE OF CONTENTS

Section		Page
	Executive Summary	ii
1.	Introduction	1
	1.1 Legislative Background	1
	1.2 Design of the Study of High Risk Child Abuse and Neglect Groups	1
2.	Groups Which Are Underserved or Unserved by Child Abuse and Neglect Programs	6
	2.1 Children Excluded from Child Protective Services (CPS) or Inconsistently Served Because of CPS Definitions	6
	2.2 Children and Families Who Need Services That Are Unavailable or Inaccessible	9
	2.3 Groups Perceived to Need Special Efforts in Order to be Reached and/or Served	14
	2.4 Children Recognized as Maltreated But Not Investigated by CPS	18
	2.5 Children Whose Risk of Maltreatment May Not Be Recognized by Child Protective Services	25
3.	Incidence of Child Abuse and Neglect Among Unserved/Underserved Groups	35
	3.1 Children Excluded from Child Protective Services (CPS) or Inconsistently Served Because of CPS Definitions	35
	3.2 Children and Families Who Need Services That Are Unavailable or Inaccessible	36
	3.3 Groups Perceived to Need Special Efforts in Order to be Reached and/or Served	37
	3.4 Children Recognized as Maltreated But Not Investigated by CPS	39
	3.5 Children Whose Risk of Maltreatment May Not Be Recognized By Child Protective Services	43
4.	Conclusions and Recommendations	44
	Appendices (Bound Separately)	
	A State Survey Report	
	B NIS-2 Reanalysis Report	

EXECUTIVE SUMMARY

Background

This report presents the key findings of the Study of High Risk Child Abuse and Neglect Groups (High Risk Study). This study, sponsored by the National Center on Child Abuse and Neglect (NCCAN) and conducted under contract by Westat, Inc., addresses the requirement in Public Law (P.L.) 100-294 (Section 105), the Child Abuse Prevention, Adoption and Family Services Act of 1988, that mandated a study to identify groups which have been underserved or unserved by child abuse and neglect programs and to estimate the incidence of child abuse and neglect among such groups.

The study involved two principal components: (1) a survey of Child Protective Services (CPS) specialists in all 50 States and the District of Columbia during the Summer and Fall of 1990, and (2) reanalyses of the data from the second Study of National Incidence and Prevalence of Child Abuse and Neglect (commonly referred to as the NIS-2, data for which were collected in 1986). In the State Survey component, potentially "unserved/underserved" groups were identified in a number of different ways. First, CPS agency mission statements and definitions indicated which groups were typically or always excluded from CPS. Second, the types of service needs that are unmet or inadequately met by existing resources were identified. Third, survey respondents identified specific groups as having unmet needs for special CPS efforts. Fourth, the survey also considered the methods and uses of risk assessment in CPS. Finally, the State Survey also attempted to obtain information from the States pertinent to the incidence of handicapping conditions resulting from severe child abuse and neglect.

CPS agencies can only deal with those abused and neglected children they know about, so the State Survey component focused on questions of who is unserved/underserved within that context. The NIS-2 Reanalysis component went beyond that perspective, and addressed the issue of who are "unserved/underserved" by identifying the characteristics of children identified in the NIS-2 study as abused or neglected who are not investigated by CPS. In addition, the NIS-2 Reanalysis component included the definitions and indicators of "high risk" that are used within CPS agencies in relation to the children who are reported. These definitions and indicators are compared with indicators of risk of abuse or neglect that are identified using the broader perspective provided in the NIS-2 data. Also, the NIS-2 data offered the only available database for estimating the incidence of child abuse and neglect among different groups of children; therefore, the NIS-2 reanalyses provided incidence estimates for all the groups identified as unserved or underserved.

The next section reports the key study findings in relation to each approach for defining "unserved"/"underserved" groups. The final section summarizes the implications and recommendations identified by the study Advisory Panel, a panel of child abuse and neglect experts advising Westat on this study.

Key Findings

(1) Some Children Are Excluded from Child Protective Services (CPS) and Others May Be Inconsistently Served Because of CPS Definitions of Maltreatment or Risk of Maltreatment

- Educational neglect is often categorically excluded from CPS purview; the majority of States provide limited or no CPS attention to educational neglect per se. Responsibiity for educationally neglected children has been shifting toward the school systems, but the school systems have not had the resources to adequately deal with the service vacuum created by the curtailment of CPS services to this sector. An estimated 285,000 children are educationally neglected each year, of which 243,000 are not investigated by CPS.

- Children who are considered to be at risk of harm, but not yet actually harmed, are not generally accorded the same priority status as those who have already evidenced harm from abuse or neglect, so the at-risk group are less likely to receive official CPS attention, at least until their circumstances worsen to the point that they are actually harmed or maltreated. An estimated 493,000 children are placed at risk of harm each year by the actions or inactions of their caretakers, of whom an estimated 170,000 are not investigated by CPS.

- Voluntary (self-)referrals were reported as less likely to be accepted for CPS attention than were involuntary referrals. However, no incidence estimates could be made for voluntary referrals.

- The relatively high variability of CPS definitions concerning emotional abuse and neglect and the greater difficulty in substantiating such allegations mean that children who are emotionally abused or neglected may be inconsistently served by CPS. An estimated 191,000 children experience demonstrable harm from emotional maltreatment each year, of whom 112,000 fail to receive investigation by CPS agencies.

(2) Children and Families Need Services that are Unavailable or Inaccessible in Many States

- Children and families with any and all types of service needs are unserved/underserved in many communities throughout the nation because the needed services are geographically inaccessible or there are other barriers or limitations on their availability.

- The services that were considered as "barrier-free" tended to be crisis-oriented (e.g., crisis intervention, medical services), whereas services that address chronic or more long-term problems and aim to have a more long-standing impact on the family unit (e.g., home-

based/family preservation services, parent education) were much less widely available. The most readily available services were case management and crisis intervention, available statewide and without barriers or limitations in 25 and 21 States, respectively.

- CPS agencies have failed to keep pace with the needs of several of the "crisis categories" of maltreated children who have created drams on the service delivery system in the past few years. Only five States reported ready availability of substance abuse evaluation, substance abuse treatment for parents, and sex offender treatment for perpetrators who were parents, guardians, or other caretakers.

(3) Some Children Perceived to Need Special Efforts in Order to be Reached and/or Served Do Not Receive Services

- Children most often perceived by CPS specialists as needing special efforts to be reached and/or served, with no indication that any such efforts had been made on their behalf, were child victims of psychological maltreatment, children with intellectually limited caretakers, and those with psychiatrically impaired caretakers.

- Also relatively high on the list of children with unmet needs for special efforts were children from low-income households, children from single-parent families, children from rural areas, children who live in dangerous neighborhoods, and migrant or homeless children.

- Incidence estimates could be made for only one of these potentially unserved or underserved groups--children from low-income households. An estimated 626,000 children from low-income households (i.e., 37.5 per 1,000 children living in low-income households) experience demonstrable harm from abuse or neglect each year, with 360,000 of these not investigated by CPS.

(4) Certain Children Are Recognized as Maltreated by Community Professionals, But Are Not Investigated by CPS

- Children recognized as abused or neglected by mandated reporters in public schools are especially unlikely to be investigated by CPS. Sentinels in public schools recognize by far the greatest number of maltreated children (an estimated 507,000 children), which is more than half (54 percent) of all children in the nation who experienced demonstrable harm from maltreatment in 1986. Only 26 percent of these children were investigated by CPS. The result of these two dynamics is that school personnel recognized 72 percent of the estimated 523,000 children who experienced demonstrable harm from abuse or neglect yet were *not* investigated by CPS.

- Thirteen different characteristics were found to predict the likelihood of CPS investigating an abused or neglected child. These included the child's age, sex, race/ethnicity, the presence of other suspected victims, the source who recognized the child as maltreated, the severity of harm, the nature of harm, the number of perpetrators, their relation to the child, their location relative to the child, the family structure, family size, and family income.

137 what factors were not predictive?

- Taking all the factors that predict the likelihood of CPS investigation into account, an estimated 612,000 abused or neglected children each year have no more than a 50-50 chance of having their maltreatment investigated by CPS.

- Among children who experienced demonstrable harm from physical abuse in 1986, the largest uninvestigated subgroups are

  - those who live in mother-only households or in households with two parent figures present (260,000 in these circumstances, of whom 105,000 are not investigated by CPS);

  - those in households where a community professional recognized the child as maltreated and knew the number of children in the household (249,000 in all, of whom 105,000 were not investigated by CPS); and

  - those in households where there were no other suspected victims (a total of 222,000, of whom 98,000 did not receive CPS investigation).

- Among children who experienced harm from sexual abuse in 1986, the largest uninvestigated subgroups are

  - those in households with no other suspected victims (84,000 in all, of whom 42,000 were not investigated by CPS);

  - those who exhibited evidence of actual harm, not just inferred harm (61,000 overall, of whom 12,000 had not been investigated); and

  - those who were abused by in-home perpetrators (65,000 overall, with 26,000 of these not having been investigated).

- The proportions of children who were investigated by CPS and the factors that predicted the likelihood of CPS investigation were very similar for children who were physically neglected and those who were emotionally maltreated. For this reason, these groups were combined in all major analyses of CPS investigation patterns.

- Among children who experienced demonstrable harm from physical neglect and/or emotional maltreatment in 1986, the largest uninvestigated subgroups are

  - those in households where there are no other suspected victims who were recognized as maltreated by mandated reporters in law enforcement, medical services, or education (249,000 total, 175,000 of whom were not investigated);

  - those from families with income below $15,000 per year (186,000 in ah, of whom 109,000 were not investigated); and

  - those who had been fatally or seriously injured (122,000 overall, with 82,000 of these not investigated).

- Among children who experienced demonstrable harm from educational neglect in 1986, the largest uninvestigated subgroups are those between the ages of 10 and 17 who did not have other suspected victims in their households (148,000 total, with 134,000 of these not investigated by CPS).

DRUGS?

(5) CPS Risk Assessment Methods May Not Accurately Index Actual Risk of Maltreatment for Certain Children

- **Family** income had an extremely strong effect on the risk of virtually every category of abuse and neglect. Compared to children whose families had incomes of $30,000 per year or more, children from families with incomes below **$15,000** per year had:
  - mom than 13 times greater risk of emotional maltreatment,
  - 16 times greater risk of multiple maltreatment,
  - 21 tunes greater risk of physical abuse,
  - **more** than 24 times greater risk of sexual abuse,
  - between 78 and 97 times greater risk of educational neglect, and
  - between **20 and 162 times** greater risk of physical neglect,

  Despite this, only about three-fourths of the States include family income as a factor in risk assessment instruments. Maltreated children **from** low-income families number an estimated 626,000 per year, of whom 360,000 are not investigated by **CPS.**

- Age was found to be a **strong** empirical predictor of risk, with increases in risk of maltreatment paralleling increases in age. Although very commonly included in risk assessment instruments, age was generally used in a way that assigned higher risk scores to the younger children. There are an estimated 511,000 children aged 12 and over who experience demonstrable harm from maltreatment each year, of whom 347,000 are not **investigated by CPS.**

- **Family structure was a relatively** important predictor of risk, and children in **two-parent families were found to** be at greater risk of physical abuse and educational neglect. However, fewer than half of the States reportedly included family structure **in CPS risk** assessment, and those that did so generally allocated higher risk scores to children **from** single-parent families. Two-parent families are involved in an estimated **602,000** cases of child maltreatment each year, of which 350,000 do not come under **CPS** investigation.

- **Race/ethnicity** was also a relatively important predictor of risk in all areas except physical neglect, and it frequently served to modify the effect of age on risk, and vice versa. Nevertheless, only about one-fifth of the States include **race/ethnicity** in risk assessment instruments.

- The metropolitan status of **the** county was predictive of children's risk in three categories of **maltreatment,** yet fewer than half the States used that factor in risk assessment instruments. Children were at greater risk in urban and suburban counties, and maltreated children in those locations numbered an estimated 752,000 in 1986, of which 440,000 were not investigated.

- Family size was related to risk of physical abuse and of educational neglect, with children who were only-children being at greater risk than others in both categories. Fewer than half the States included this factor in risk assessment instruments, and those that do so regard children in large families to be the ones at greater risk Only-children who experience demonstrable harm from maltreatment number an estimated 228,000 **children** per year and **98,000** of these are not investigated.

- Children's sex predicted their risk of sexual abuse, physical neglect, and multiple maltreatment, with females being at higher risk in each case. **Less** than one-third of the States used the child's sex in **CPS** risk assessment.

- There has been little (if any) empirical grounding for the risk indicators applied in existing risk assessment instruments and the methods by which those indicators are used to assign specific risk levels to children and/or their families. According to interviews with State CPS specialists, only seven States had conducted research of any sort on risk assessment as of the Summer of 1990, and only five of those States were reported to have done research concerning the predictive ability of risk assessment within CPS.

Implications and Recommendations

- Given the findings concerning the importance of school personnel in recognizing abuse and neglect, the importance of family income as a risk factor for abuse and neglect, and the particular vulnerability of teenagers (who are at greater risk of abuse and neglect yet less likely to receive CPS investigation), there is a clear need to better coordinate services across different service delivery systems, especially between human services and income support services, between child protection and education, and between child protection and juvenile justice.

- Greater consensus is needed on the role of CPS within the larger child welfare system and on the categories of children and families that appropriately come within the purview of CPS.

- Certain subgroups are clearly being underserved under any definition of the appropriate scope of CPS, and additional efforts to better serve these subgroups within CPS are needed. These include: children in low-income families, children in two-parent households, children and families in need of services that address chronic or more long-term problems and aim to have a more long-standing impact on the family unit_

- Concerted efforts are needed to improve services to several of the "crisis categories" of children and families who have been increasingly overburdening the service delivery system in the past few years Specifically, services should be more widely available to those in need of substance abuse evaluation, substance abuse treatment, and sex offender treatment.

- Substantial further work in the area of CPS risk assessment is needed in order to achieve three purposes:

  (1) to elaborate the risk assessment systems themselves so that they better reflect the complex and interactive relationships among the factors that predict risk;

  (2) to clarify the different goals for which risk assessment can be used in the CPS context, and to identify and/or refine risk assessment instruments that are specifically tailored to meet these different goals; and

  (3) to provide for more extensive ongoing feedback concerning the effectiveness of risk assessment systems that can help to shape their further evolution.

- Additional research is also needed to achieve three other objectives:

  (I) to determine the specific nature of the barriers to CPS investigation of children whose cases should be investigated;

  (2) to identify additional important predictors of risk of abuse and neglect; and

  (3) to formulate more effective approaches to the organization and management of CPS agency activities.

Jerry,
looks interesting. My 2¢ worth.
Kyne

Qs

- was the analysis really predictive or was it correlative?
- Should CPS really pay more attn to include in risk assess) factors such as family income ~~which~~ ~~(this report~~?
- Are underserved grps a function of CPS triaging? What are the implications of bumping some grps up? Will this affect other svcs?
- Should other svc. agcts be given resp. for some areas (like e.g. neglect?)
- Should CPS focus on early abused & neglected, or should it broaden its mandate to include prevention & support?

1. Introduction

This report presents the key findings of a study, the Study of High Risk Child Abuse and Neglect Groups (High Risk Study), which was designed to identify groups which have been underserved or unserved by child abuse and neglect programs and to estimate the incidence of child abuse and neglect among such groups. These objectives were research mandates in Public Law (P.L.) 100-294 (Section 105(a)). More detailed reports of the findings of the two components of this study are provided in the attached appendices--A, State Survey Report, and B. NIS-2 Reanalysis Report

1.1 Legislative Background

In 1988, Congress passed the Child Abuse Prevention, Adoption, and Family Services Act of 1988 (P.L. 100-294). One specific research requirement included in this Act reflected concern about the numbers of abused and neglected children who are not adequately served by their local Child Protective Services (CPS) agencies and stipulated that the National Center on Child Abuse and Neglect (NCCAN) conduct a study which would:

- Identify groups which have been historically underserved or unserved by programs relating to child abuse and neglect (Section 105(a)), and
- Report the incidence of child abuse and neglect among children who are members of such groups (Sec. 105 (b)).

In addition, NCCAN was required by the Act to study several other areas, including the incidence of children who have developed handicapping conditions as a result of child abuse or neglect and the relationship between alcohol abuse and child abuse and neglect.

12 Design of the Study of High Risk Child Abuse and Neglect Groups

In order to identify groups which have been historically underserved or unserved by programs relating to child abuse and neglect and to determine the incidence of child abuse and neglect among children who are members of such groups, the National Center on Child Abuse and Neglect (NCCAN) contracted with Westat, Inc., to conduct a Study of High Risk Child Abuse and Neglect

Groups (termed "High Risk Study" hereafter).[1] The High Risk Study involved two principal components with complementary and related objectives: (1) a survey of Child Protective Services (CPS) specialists in all 50 States and the District of Columbia, and (2) a reanalysis of the data from the second Study of National Incidence and Prevalence of Child Abuse and Neglect (commonly referred to as the NIS-2). This section of the report briefly summarizes the design and methodology of each of these two components: the State Survey component and the NIS-2 Reanalysis component. More detailed accounts of the study methodology, data collection and analysis procedures, and findings within each component can be found in the attached appendices--A. State Survey Report, and B. NIS-2 Reanalysis Report

State Survey. The State Survey component sought to identify the definitions of "high risk" and the uses of risk assessment used by Child Protective Services (CPS) agencies, and to determine what groups are unserved or underserved under CPS agency practices. In the State Survey component, potentially "unserved/underserved" groups were identified in a number of different ways. First, a review of CPS agency mission statements and definitions indicated certain types of maltreatment and risk groups which were typically or always excluded from CPS. Second, the survey identified those children and families who were unlikely to have their needs addressed because of the unavailability of relevant services. Third, survey respondents pointed out specific groups who needed special efforts in order for CPS to reach and serve them, and also noted whether their States had made any special efforts of this type. Fourth, the survey also considered the uses of risk assessment, the characteristics that serve to differentiate high from low risk cases, and the implications of different risk assessment findings for subsequent services allocated to a child or family.

The State Survey was conducted by telephone primarily in July and August of 1990. It involved interviews with individuals identified as experts in CPS policies and procedures by the Directors of the 51 State child welfare agencies. Somewhat less than half of them were also State Liaison Officers for Child Abuse and Neglect at the time of their interviews. The interviews covered a range of topics on CPS policies, procedures and services. They focused on CPS organization and functions, CPS mission statements and eligibility requirements for services, budgetary information, services and barriers to service delivery, risk and risk assessment procedures, and numbers of abused and neglected children. The interviews were conducted by Westat senior staff members and consultants expert in CPS policies and procedures. Most CPS specialists were cooperative, eager to discuss the issues, and interested in learning about how their State compared with other States. By October of 1990, a 100 percent response rate was achieved.

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[1] Health and Human Services Contract No. 105-89-1739.

The State Survey offers unique and timely findings. Moreover, the fact that this survey achieved a 100 percent participation rate means that it provides a comprehensive picture of CPS policies, procedures and services throughout the U.S. Its prinicipal limitation is that the findings derive primarily from the State specialists' knowledge and perceptions, and these respondents did have somewhat different levels of knowledge and periods of service in child protective services. At the same time, however, every effort was made to ensure the accuracy of the information provided. Respondents were provided with a copy of the interview in advance and given ample opportunity to prepare for the interview (such as obtaining any supplemental information they needed). The interviews themselves generally required several appointments, and respondents had the opportunity to verify anything about which they were unsure.

NIS-2 Reanalysis. The NIS-2 Reanalysis component focused on identifying the characteristics of children and families that are empirically related to the risk that abuse or neglect serious enough to fit the Hann Standard and be recognized by community professionals. The Harm Standard narrowed the focus to those children who had already been harmed by abuse or neglect, and it excluded children who may have been endangered, but had not been harmed.[2] The NIS-2 Reanalysis component addressed the issue of which children are "unserved/underserved" in two ways: first, by identifying the characteristics of children defined as abused or neglected'in the MS-2 who are not investigated by CPS; and, second, by determining whether the factors that are actually related to risk of abuse or neglect (in the NIS-2 data) correspond to the definitions and indicators of "high risk" that are used in CPS agencies. Finally, the NIS-2 data offered the only available database for estimating the incidence of child abuse and neglect among different groups of children, so this goal of the High Risk study could only be addressed through the NIS-2 Reanalysis component. Thus, a key facet of the findings in this component are estimates of the national incidence of maltreated children for the various groups identified as "unserved" or as "underserved" in either the State Survey or the NIS-2 Reanalysis.

The NIS-2 went beyond cases of child maltreatment that come to the attention of the official Child Protective Services system and attempted to assess the overall national incidence of children who are recognized as maltreated by community professionals. Data about abused and neglected children were gathered both from CPS and from community professionals at non-CPS agencies who served as "sentinels" by remaining on the lookout for child maltreatment cases during the study data period (from September 7 to December 6, 1986). Non-CPS participants included professional staff who were likely to come into contact with maltreated children in public schools, day

[2] All endangered and harmed children were included under the Endangerment Standard in the NIS-2.

care centers, short-stay general and children's hospitals, municipal police departments, voluntary social services agencies, mental health agencies, county juvenile probation and public health departments, and county sheriff or State police divisions with jurisdiction over any unincorporated geographical areas not served by municipal law enforcement.

The NIS-2 database has several key strengths that make it particularly suitable for the purposes of the High Risk study. First, it provides the only available information concerning children who are recognized as abused or neglected by a professional but who are *not investigated by CPS, so* it is capable of addressing the issue of who is unserved/underserved from a unique vantage point Second, the patterns and relationships it provides should be *nationally representative* ones, since they were derived from a random sample of counties (and agencies) that was designed to represent the nation. Third, the annualized case weights available in the NIS-2 database also provide the sole basis for generating estimates of total numbers of different groups of children in the nation who are abused or neglected during the course of a year, thereby making it possible to answer questions concerning the incidence of abuse or neglect among children who are members of unserved/underserved groups. Fourth, because of the use of standardized definitions in the NIS-2, findings that are derived from analyses of the database can have clear, unambiguous meanings and implications.

For the High Risk study, three major categories of reanalysis of the NIS-2 data were pursued, each paralleling one of the question areas described above. To begin with, the NIS-2 Reanalysis component defined "unserved or underserved" in terms of whether or not CPS investigated cases where children experienced abuse or neglect that qualified under the Harm Standard definitions. Using the NIS-2 data, it was possible to estimate what percentage of children was officially known to CPS (i.e., investigated by CPS) out of those who were counted as abused or neglected in the study. Then, analyses were conducted for different categories of maltreatment, in order to identify the factors that predicted the likelihood of CPS investigating children who had experienced the type of maltreatment in question. Pursing another line of inquiry, maltreated children in the NIS-2 database were compared with children in the general population, using a recent Census survey sample of general population children for comparison. This series of analyses focused on identifying the factors that were important predictors of the likelihood of a child being maltreated as opposed to simply being a member of the general (nonmaltreated) child population in the United States. Finally, using the various alternative definitions of the "unserved/underserved" groups that were identified in both the State Survey and the NIS-2 Reanalysis component of this High Risk study, the NIS-2 database was used to generate national estimates of the total number of children in the group in question who experienced maltreatment in the course of a year. The analyses employed the more restrictive "Harm Standard" for maltreatment (i.e., they addressed only children who had already experienced demonstrable harm from child abuse or

neglect, as against all the children who met the "Endangerment Standard," which also included those who were only endangered, though not yet harmed, by the actions or inactions of their caretakers). Section 3 of this report presents the various maltreated groups that were identified as unserved/underserved, and provides the numerical estimates of their national incidence.

The information in the NIS-2 does have several limitations, which should be borne in mind. Although the NIS-2 data do go beyond the abuse and neglect that comes to CPS attention, they still do not reflect the total scope of the abuse and neglect problem in the U.S. Short of posting a credible sentinel who is guaranteed to report everything that occurs in every household, it is not possible to definitively gauge the full extent of abuse and neglect. This limitation has two key implications: on the one hand, it means that estimated totals of abused or neglected children derived from the NIS-2 data must be regarded as *minimum* estimates of the true incidence of abuse and neglect and, on the other hand, it also means that the patterns that emerge in the NIS-2 data may not hold true for the still-hidden sectors of abused or neglected children. Another limitation concerns the fact that CPS investigation or noninvestigation of a maltreated child does not adequately index the actual receipt of services by that child or by the child's family. That is, some of the children who are not investigated by CPS may nevertheless receive adequate services while, at the same time, not all children investigated by CPS receive services. It should also be recognized that the NIS-2 information does not indicate the reason why CPS did not investigate the uninvestigated children A given child may not have been investigated by CPS because no one reported the child to CPS in the first place or because, although CPS did receive a report on the child, the case was screened-out or referred elsewhere without any CPS investigation. For this reason, we do not use the term reporting rate but instead refer only to "CPS investigation" of the children.[3] Nevertheless, this ambiguity concerning the reasons for non-investigation by CPS means that policy recommendations based on the fmdings must be drawn rather broadly, with implications both for mandated reporters and for CPS screening practices, since noninvestigation may stem from either or both of these sources.

[3] Elsewhere, discussions have referred to "CPS awareness" of the children, or to children who were "officially known to CPS."

2. Groups Which Are Underserved or Unserved by Child Abuse and Neglect Programs

This section describes groups of children who were identified as abused or neglected and defined as unserved or underserved by Child Protective Services (CPS) according to five different criteria:

(1) those groups which were indicated by the State Survey to be typically excluded from CPS on the basis of CPS agency mission statements or definitions, or which may be inconsistently served because of variability in CPS definitions;

(2) those groups who were nominated by State Survey respondents as being underserved or unserved on the basis of their need for services that are less available or unavailable;

(3) those groups identified as having unmet needs for special CPS efforts by State Survey respondents;

(4) those groups identified in the NIS-2 Reanalysis as unlikely to have their abuse or neglect investigated by CPS; and

(5) those groups whose true risk of abuse or neglect (as indexed in the NIS-2 data) may not be accurately assessed by the indicators of "high risk" that are used in CPS agencies.

2.1 Children Excluded from Child Protective Services (CPS) or Inconsistently Served Because of CPS Definitions

In the State Survey component of this High Risk study, several groups of children were identified as potentially unserved/underserved insofar as they were frequently excluded by CPS mission statements and limitations on the types of maltreatment defined to be within CPS jurisdiction. Agency mission statements and definitions of maltreatment coming within CPS jurisdiction may not present the entire picture of how services are allocated. It is reasonable to expect, however, that they bear some systematic relationship to the broad patterns of how children and families are screened into CPS investigations (vs. out) and how those who are screened-in are prioritized for services.

One of the most striking aspects of the State Survey findings was the clear indication that, of all the types of maltreatment, educational neglect is most often categorically excluded from CPS purview. Thirty-six of the 51 survey respondents said that their States excluded educational neglect either entirely or in many cases. Fifteen did not define it as within CPS purview at all, and 21 others placed limitations on their involvement, such as by excluding simple truancy altogether, by including educational neglect only if it occurs in conjunction with other maltreatment, or by imposing other special

requirements (e.g., only for younger children, only as a last resort, only after school officials have acted, etc.). Two States narrowed CPS involvement with educational neglect since 1985: one distinguished between simple truancy and educational neglect; the other dropped the category of educational neglect altogether. Thus, it appears that the majority of States provide limited or no CPS attention to educational neglect per se. However, it should be noted that such limited attention or inattention to educational neglect should not be viewed as an improper response by CPS agencies, in the context of existing Federal law and regulations.[4]

In and of itself, the fact that CPS generally excludes educationally neglected children does not necessarily imply that these children go without services. The responsibility for dealing with the educationally neglected children shifts to the school system in communities where CPS excludes them by definition. Moreover, an excellent case can be made that these children should not be served by CPS, but that the school systems should provide the resources to meet their needs. The point here, however, is that this is an arena in which responsibility has been shifting in recent years and that, in many communities, the school systems may not have had the resources to adequately deal with the service vacuum created by the curtaihnent of CPS services to this sector. As a result of the fact that they fall in a niche between service systems, children who are educationally neglected may be more likely to be unserved/underserved than children who are maltreated in other ways.

Children who are deemed to be at risk of harm are not generally accorded the same priority status as those who have already evidenced harm from abuse or neglect. At most, 16 States included the concept of risk in defining the primary mission of their CPS agency (according to the responses of 14 State CPS specialists and the contents of 2 States' written mission statements). It would thus appear that, in most States, CPS emphasizes already-injured or already-abused/neglected children over those at risk of harm or at risk of being maltreated. Children who are at risk, then, may be relatively unliiely to receive official CPS attention and services--at least until their circumstances worsen to the point that they are actually harmed or maltreated. Even among children who are deemed to be at risk, one sees that the system emphasizes the current crisis at the expense of long-term detrimental conditions: risk of imminent harm is more often cited in the agency's primary purpose than is risk of *cumulative* harm. At the same time, it is likely to be these latter cases that make up a large sector of the agency's re-referrals and their needs are typically not as extensive as those of families and children whose circumstances have

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[4]That is, States an not required by Federal law or regulations to specify deprivation of education within their State statutes' definition of neglect. The Federal statute and regulation define "child abuse and neglect" as the *physical or mental injury, sexual abuse or exploitation, negligent treatment or maltreatment of a child" and the State is permitted to use different language as long as the definition in the State law is the same in substantce as the Federal defmition.

been left to develop to the point of crisis. More timely interventions with the non-crisis cases might, in the long run, be less costly, both in terms of agency resources and in human terms as well.

Voluntary referrals were less likely to be accepted for CPS attention than were referrals by mandated reporters. Often these are the non-crisis cases as well, so the foregoing discussion would appear to apply equally here. However, voluntary referrals are also the cases that may be more manageable--in terms of client cooperation and in terms of the achievability of goals. It is ironical that these would be among the first to be excluded in an effort to deal with unmanageable caseloads. By excluding the voluntary cases, the remaining cases are necessarily those that may be more difficult to address--ones where it is more difficult to accomplish real change in the timeframe available.

Children who are emotionally abused or neglected may be unserved or underserved, since these children are not always specifically defined to be within the scope of CPS purview. Moreover, even when emotional maltreatment is technically included within the agency's defined purview of "mental injury" as required by Federal law and regulation, it is typically not treated as a separate specified category. At the same time, assessment of emotional malteatment continues to evolve with limited consensus. As a result, emotional maltreatment may only be accorded CPS attention when it occurs in conjunction with other maltreatment. Finally, survey respondents also reported that emotional maltreatment is generally more difficult to substantiate. Taken together, these facts all converge on the implication that emotionally maltreated children will be unserved or underserved by CPS relative to children who are maltreated in other ways.

States' definitions of neglect were more variable than their definitions of abuse, and subject to more qualifications and limitations. Consider physical neglect and medical neglect--both defined as within CPS purview by all 51 survey respondents. Physical neglect that stems solely from the parent's lack of financial resources was often excluded by CPS definitions. Such cases may be referred to other child welfare services or general public assistance.[5] Also in this connection, all but one State excluded parental failure to secure child immunizations from what they defined to be medical neglect; and nearly all States made exemptions from findings of medical neglect due to religious practice.[6] Because of their unique circumstances, such exempted children would be unlikely to receive CPS services.

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[5] This would be the recommended practice. However. the study did not determine whether such referrals are. in fact, reliably made in these cases.

[6] States are not required to make a finding of neglect in these cases, so long as there is no harm or threatened hum to the child's health or welfare. (Title 45 Section 1340.2(d)(2)(ii) of the Code of Federal regulations implementing tbe Child Abuse Prevention and Treatment Act.)

The patterns of responses to questions concerning homeless children, parental unavailability, and non-abuse/neglect-related referrals revealed possibly more about the relationships between CPS agencies and their encompassing child welfare agencies than they did about these specific groups of clients per se. Responses expressed the conflict between the mission/scope of CPS and the mission/scope of child welfare, in general. Whereas CPS agencies focus on the protection of children who have been or who are in danger of being abused or neglected, the larger child welfare agencies focus on the broader group of children and their families who are in need of family preservation or support services. Responses concerning homelessness, parental unavailability, and non-abuse/neglect-related referrals were bifurcated in ways that indicated that respondents, as a group, were attempting to consider (conflicting) CPS-mandates and larger child welfare agency goals simultaneously. Kamerman and Kahn' recently conducted a in-depth study of 25 sites (including State systems, counties, and voluntary agencies), during which they also observed the structural underpinnings of this internal tension. In summarizing their findings, they underscored what this structural organization of CPS as the primary gatekeeper implies concerning who is likely to be unserved/underserved in the context of the larger child welfare agency:

> Child Protective Services (CPS) (covering physical abuse, sexual abuse, and neglect reports, investigations, assessments, and resultant actions) have emerged as the dominant public child and family service, in effect "driving" the public agency and often taking over child welfare entirely. A repeated theme in state after state, county after county, is that the social service system has become so constricted that children can gain access to help only if they have been abused *or* severely neglected, are found delinquent, or run away. Doorways for "less serious" or differently defined problems are closed. Many communities cannot serve "voluntary" cases. Even for accepted cases, the needed help may not be forthcoming, or if it is, may not be adequate.

It should also be emphasized that the lack of coordination between CPS and some alternative child welfare intake mechanism, as well as the severe curtaihuent of the latter, leaves children and families in another unfilled service niche--this one within the child welfare system itself. Only eight States reported having developed special training projects for their workers in an attempt to address these problems.

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[7] Kamerman, Sheila B., & Kahn, Alfred J. (June. 1989). Social Services *for Children, Youth and Families in the VS.* The Annie E. Casey Foundation.

22 Children and Families Who Need Services That Are Unavailable or Inaccessible

As another way of ascertaining groups of children and families who might be unserved or underserved by CPS agencies, State CPS specialists were asked to indicate which services were currently available in their States for children, for parents and families, and for perpetrators who are parents, guardians, or caretakers. They were asked to note to what extent the services in question are available for cases involving both abuse and neglect, how widely available the services were throughout the State, and any other existing barriers and/or limitations to the availability of each of these services. Responses are summarized in Tables 1 and 2.

Table 1 reports the number of State specialists that responded to the question who indicated availability of the service for both abuse and neglect, just abuse, or neither abuse nor neglect. The second column in Table 2 gives the number of State specialists who reported no barriers or limitations of any kind on the availabiity or accessibility of the service. The third column indicates the number who noted that there were limits on the geographic availability of the service, and that it was not available throughout the State. The fourth column gives the number of State specialists who reported various other limitations and barriers for the service. These other limitations or barriers included factors such as eligibility requirements limiting availability of the service (e.g., income restrictions, restrictions of the service only to certain types of cases, and any legal barriers that might apply), resource limitations apart from those reflected in the uneven distribution of the service across different locales (e.g., funding constraints, waiting lists, or limitations on the numbers of slots or numbers of service providers), problems inherent in the nature of the service itself (e.g., available services may not be well-suited to the specific needs of the clients or may not be sufficiently specialized), language barriers, barriers related to lack of transportation or other limitations on the physical accessibility of the service to the client population, and any other barriers to delivery of the service in question. Finally, the fifth column in Table 2 reports the total number of State specialists who had responded to the specific question.

Overall, across all three categories--services for children, services for parents and/or family, and services for perpetrators--the great majority of State CPS specialists indicated that services were available for both abuse and neglect cases. This probably means that few or no policy or legal restrictions specifically excluded the provision of services to both types of cases. Instead, real barriers to availability were apparent in the actual distribution of services and other limitations on service accessibility, as indicated in Table 2.

Table 1. Availability and Accessibility of Selected Services for Cases Involving Abuse and Neglect, Just Abuse, or Neither, for Clients Entering the Child Welfare System-Through CPS (Numbers of State CPS Specialists-Reporting)

Service	Availability for...			Number of States Responding
	Both Abuse and Neglect	Abuse Only	Neither	
FOR CHILDREN:				
Medical Services	49	--	--	49
Day Care (All Types)	48	--	2	50
Mental Health Evaluation	50	--	--	50
Counseling	49	--	1	50
School Coordination	40	--	9	49
FOR PARENTS/FAMILY:				
Crisis Intervention	48	--	2	50
Case Management	47	1	2	50
Homemakers	44	--	4	48
Home-Based/Family Preservation Services	47	--	2	49
Mental Health Evaluation	49	--	1	50
Substance Abuse Evaluation	48	--	2	50
Counseling--Individual	49	--	1	50
Counseling--Family	49	--	1	50
Counseling--Group	49	--	1	50
Substance Abuse Treatment	47	1	1	49
Parent Education	49	1	--	50
Basic Needs (e.g., Food, Clothing, Shelter)	44	--	6	50
Employment Services	38	1	11	50
Medical Services	41	1	8	50
FOR PERPETRATORS:[a]				
Mental Health Evaluation	45	1	4	50
Sex Offender Evaluation	--	42	6	48
Sex Offender Treatment	--	39	11	50

[a] Within the CPS context, perpetrators are limited to parents, guardians, and other caretakers.

Table 2. Geographical Barriers to Availability or Other Limitations on Accessibility of Selected Services for Clients Entering the Child Welfare System Through CPS (Numbers of State CPS **Specialists** Reporting)

Service	No Barriers	Barriers		Number of States Responding
		Less than Statewide Availability	Only Accessibility Barriers or Limitations	
FOR CHILDREN:				
Medical Services	15	14	33	47
Day Care (All Types)	6	18	25	43
Mental Health Evaluation	8	16	32	48
Counseling	8	15	31	46
School Coordination	8	12	25	37
FOR PARENTS/FAMILY:				
Crisis Intervention	21	8	38	46
Case Management	25	4	41	45
Homemakers	6	18	20	38
Home-Based/Family Preservation Services	7	27	20	47
Mental Health Evaluation	9	12	35	47
Substance Abuse Evaluation	3	21	24	45
Counseling--Individual	14	16	30	46
Counseling--Family	13	17	29	46
Counseling--Group	11	19	27	46
Substance Abuse Treatment	2	30	16	46
Parent Education	6	30	18	48
Basic Needs (e.g., Food, Clothing, Shelter)	10	15	29	44
Employment Services	9	16	21	37
Medical Services	7	17	22	39
FOR **PERPETRATORS:**[a]				
Mental Health Evaluation	13	18	25	43
Sex Offender Evaluation	6	29	12	41
Sex Offender Treatment	3	27	8	35

[a] Within the CPS context, perpetrators are limited to parents, guardians, and other caretakers.

The across-the-board importance of geographic restrictions on the availability of services to children, to parents and families, and to perpetrators, is suggested by the number of States where them was less than statewide availability of a service, as indicated in Table 2. Only four services were reported to be geographically available statewide by 70 percent or mom of the CPS specialists: case management services to parents and families, crisis intervention services to parents and families, mental health evaluation for parents, and medical services to children. Altogether, 13 of the total of 22 service categories in the table were reported to be available statewide by between 50 percent to 70 percent of the CPS specialists (day care for children, mental health evaluation for children, counseling for children, school coordination, homemakers for parents/families, substance abuse evaluation for parents, counseling of all types for parents and families, basic needs, employment services, medical services for parents/families, and mental health evaluation for the family members or caretakers who perpetrated the abuse or neglect). The remaining five service categories were reported as available statewide by fewer than 50 percent of the specialists. These were: home-based/family preservation services, substance abuse treatment for patents/families, parent education, sex offender evaluation, and sex offender treatment. The most frequent comments that CPS specialists offered with respect to geographic availability indicated that services were least likely to be available in rural areas or other geographically remote parts of their States.

Reported geographic availability of a service is only one aspect of service availability. Accessibility of services can also be conditioned by a variety of other barriers, as summarized in the fourth column of Table 2. The two other types of barriers most often cited were general resource limitations (lack of funding, waiting lists, too few service providers, etc.), and the existence of eligibility requirements or other legal or policy barriers.

The most striking section of Table 2 is the second column, which shows the number of CPS specialists who reported no existing barriers to availability of a given service. As can be seen, the numbers across all categories ranged from a low of two States (for substance abuse treatment for parents/families) to a high of 25 States (for case management services for parents and families). Those that stood out as of lowest overall reported availability, indicated as "barrier-free" by only two to three State specialists, were: substance abuse treatment for parents and families (2 States), substance abuse evaluation for parents and families (3 States), and treatment for family members or caretakers who perpetrated sexual abuse (3 States).

A second-order cluster consists of the eleven services that were said to be available with no associated barriers by six to nine of the CPS specialists. These were: parent education, homemakers,

day care, mental health evaluation for perpetrators, home-based family preservation services, medical services for parents and families, mental health evaluation for children, counseling for children, school coordination, mental health evaluation for parents and families, and employment services. The restricted availability of preventive and educational services is especially noteworthy in light of the shift reported by a number of States toward a more family-centered, prevention-oriented mission for CPS. For at least some States, then, actual service delivery had not kept pace with these reported changes in overall agency direction. In addition, educational and prevention-oriented services are designed to have a long-range impact on the functioning of the family unit, whereas several of the more generally available services are immediate or short-term and crisis-oriented in nature. Only eight specialists considered that there were no baniers associated with the availability of school coordination Most of these baniers pertained to the difficulties of building bridges to the school districts. Finally, it is also worth noting that counseling services to children were reported as "barrier-free" by fewer State specialists than were counseling services for parents/families.

Ten to 15 States were reported to have barrier-free availability for six categories of services, including basic services that aim to provide for the family's needs for food, clothing and shelter, group counseling, family counseling, individual counseling for patents/families, mental health evaluation for perpetrators, and medical services for children. Services that stood out overall as most "barrier-free" were case management (25 States) and crisis intervention (21 States).

Several points deserve emphasis here. First, it appears that the more commonly available services were more along the lines of "bandaid" interventions rather than services which might be expected to make a difference to children and their families over time. Second, the overall level of availability of all these services is really quite limited. Even the two most "barrier-free" services were reported as available without accompanying limitations by only about one-half of the responding State specialists. From this perspective, the picture is in fact quite striking: all but 2 of these 22 services were reported to be available without any barriers or limitations by 20 or fewer of the State specialists, and more than half were reported as available without barriers or restrictions by just 9 or fewer of the State specialists. The "big picture" was one of considerable limitations on availability of all these services.

23 Groups Perceived to Need Special Efforts to Be Reached and/or Served

To determine which specific groups of children CPS specialists regarded as most in need of special CPS efforts, as well as the extent to which CPS agencies had made any special efforts to reach and/or serve these groups, State Survey respondents were given a checklist containing 23 potentially

underserved categories of children. For each category, the CPS specialists were asked to indicate (1) whether any special efforts (policies, programs, practices) were being made or had been made in the previous five years to overcome barriers to serving these children; and (2) whether they thought there was a need for such an effort in their State.

Table 3 presents their responses for each of these categories of children, ranked according to the number of States in the second column, which reports the number of States in which there was a perceived need for special efforts for the category but that no such efforts were either in existence at the time of the interview or in place during the past five years. The third column reports the number of State specialists who indicated that one or more such special efforts was in place or had been in place during the last five years. The fourth column of Table 3 gives the number of State specialists claiming that they did not perceive any need for special efforts for the category in question. Finally, the fifth column indicates the number of State specialists who said either that they did not know whether there was a need or were uncertain as to whether a special effort had been or was being made for the particular category of children.

The greatest number of State specialists (27 States) reported an unaddressed need for special efforts for child victims of psychological maltreatment, followed by children with intellectually liited caretakers (26 States), and children with psychiatrically impaired caretakers (25 States). Very few specialists reported the existence of special efforts for these groups of children, while moderate numbers of CPS specialists considered that there was no need for any special efforts for these groups. In addition, for the latter two categories, as many or more State specialists indicated that they did not know whether there was a need for these efforts and/or whether any such efforts existed as reported the existence of such efforts. This was taken to imply that, in some States, awareness of the problems and needs of these children may have only been emerging at the time of the interview. It is noteworthy that these categories of children, who may be considered the most "underserved" of all, were those whose long-term psychological development could be expected to be most severely impaired in the absence of any service intervention.

Children from single parent families (25 States), rural children or those who lived at considerable distance from services (23 States), and children who lived in dangerous neighborhoods (21 States) were also reported by a relatively large number of CPS specialists as being both in need of special efforts and without any such efforts on their behalf. Moreover, with the partial exception of rural children, relatively few State specialists indicated the existence of special efforts for any of these categories. These were children whose chronic, if less intense, needs for services were not being

Table 3. Perceived Need for Special Efforts and Existence of Special Efforts for Selected Categories of Children (Number of States Reporting)

	Number of States Reporting:		
Categories of children	**Need and No Special** Efforts	**Special** Efforts Exist	**No** Need for Special Efforts
Based on Child Characteristics:			
Children O-4 Years Old	11	17	17
Children 5-9 Years Old	13	6	22
Children 10-14 Years Old	10	13	19
Children 15-18 Years Old	8	16	20
Handicapped Children	9	28	5
Racial Minority Children	9	23	11
Ethnic Minority Children	9	15	18
AIDS Babies	6	28	12
Based on Family Characteristics:			
Children w/Intellectually Limited Caretakers	26	3	14
Children w/psychiatrically Impaired Caretakers	25	3	13
Children w/Substance-Abusing Caretakers	17	21	8
Children w/Caretakers in Prison	12	7	24
Children From Large Families	6	1	32
Children From Single Parent Families	25	8	12
Children From High Income Families	6	0	33
Children From Middle Income Families	5	0	34
Children From Low Income Households	18	7	19
Homeless Children	19	15	10
Based on Maltreatment:			
Child Victims of Psychological Maltreatment	27	6	12
Chemically Dependent Newborns	9	32	5
Based on Community/Environment:			
Migrant Children or Children Who Move Frequently	19	8	16
Rural Children Who Live at a Distance From Services	23	12	9
Children Who Live in Dangerous Neighborhoods	21	4	20

addressed by the child welfare system. However, it should be noted that, while relatively few (9) specialists reported that they perceived no need for special efforts for rural children, 12 specialists indicated no need for any such efforts for children from single parent families, and 20 said that children living in dangerous neighborhoods did not need any special CPS efforts.

The next three categories of children where a need was perceived but no special efforts were underway also represented groups of children whose everyday life circumstances made them chronically vulnerable--migrant children or those who moved or changed households frequently (cited by 19 States), homeless children (19 States), and children from low income households (18 States). Although 15 States reported the existence of special efforts for homeless children, the numbers of specialists so indicating were smaller for migrant children (8 States) and for children from low income households (7 States). It should also be noted that 19 specialists reported no perceived need for special efforts for children from low income households and 16 did so for migrant children or those changing households frequently.

State specialists most frequently (32 States) indicated availability of special efforts for chemically dependent newborns. While 2 1 State specialists reported that special efforts were made for children with substance-abusing caretakers, 17 reported a need for such efforts but that no efforts were in place for this group of children. These findings fit with the fact that 37 State specialists also reported having witnessed an influx of CPS cases related to problems of parental substance abuse over the five year period previous to the interview.

The fact that so many specialists (17 to 22) reported no need for special efforts for children in each of the four age groups listed may mean that they perceive these groups are already adequately served. What may be more revealing is the lack of perceived need for children with caretakers in prison (24 specialists). Relatively high numbers of specialists also reported the existence of special efforts for AIDS babies (28 States), handicapped children (28 States), and racial minority children (23 States). A moderate number reported that they had made special efforts for ethnic minority children (15), while 18 indicated there was no need for special efforts for these children. No specialists reported special efforts for children from middle income families or for those from high income families, and only one did so for children from large families. The largest number of specialists felt that these latter three categories of children did not need special efforts (32 to 34 States).

Overall, one might consider that the categories of children who are most clearly underserved are those with the greatest number of States reporting a need and no special efforts on their behalf. However, it should also be noted that the number and scope of most reported special efforts was

quite limited, and therefore probably did not begin to exhaust the outstanding need for additional efforts. This point is reinforced when looking at the above responses in relation to those given in Table 2 (in Section 2.2, above) which indicated limited overall availability of a whole range of regular CPS services not necessarily targeted to specific subgroups of children. ln addition, Table 2 pointed to particular types of services that were woefully lacking (e.g., substance abuse and sex offender evaluation and treatment, home-based/family preservation services, parent education), only a few of which appear to correspond to special efforts reported above by a relatively high number of State specialists (most notably, efforts on behalf of chemically dependent newborns and substance-abusing caretakers). Finally, it is important to reiterate that the findings reported here do not speak to the sufficiency or effectiveness of the special efforts tried by the States on behalf of these categories of children.

2.4 Children Recognized as Maltreated But Not Investigated by CPS

A key approach used in the NIS-2 Reanalysis component to address the issue of which maltreated children are "unserved/underserved" was to consider the characteristics that differentiate maltreated children who are investigated by CPS from those who are not. The NIS design made it possible to discover which of all the countable children reported to the study were among those reported to and investigated by the local CPS agency in each community. Using this information, it was possible to estimate the numbers and percentages of children countable under the Harm Standard (i.e., already harmed by abuse or neglect) who were officially known to CPS (i.e., investigated by CPS). In 1980 (in the NE-l), 625,000 children were countable, of whom only 33 percent were investigated by CPS agencies. The percentage of Harm Standard children officially known to CPS did increase to 44 percent of the total of 931,000 estimated to have experienced Harm Standard maltreatment in 1986 (in the NIS-2), but that increase was not reliable enough across the counties to reflect a statistically significant national pattern [8]

Prior to the special analyses that were conducted, a preliminary examination of the sources of recognized children and of the percentage of cases investigated by CPS documented that school personnel are an especially important resource for identifying maltreated children in a community. At the same time, the children who are recognized as maltreated by school personnel are not likely to receive official attention from CPS. By their own observations, teachers, school nurses, and counselors at public schools recognized by far the greatest number of maltreated children (an estimated 507,400

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[8] Sedlak, AJ. *Technical Amendment to the Study Findings--National Incidence and Prevalence of Child Abuse and Neglect: 1988.* Technical Report, National Center on Child Abuse and Neglect. OHDS, DHHS, Washington, D.C. (1990).

children nationwide), and this reflected more than half (54 percent) of all maltreated children in the nation. At the same time, the percentage of children known to CPS was low for those recognized by schools (26 percent), compared to those recognized by medical services (69 percent), law enforcement (58 percent), and other study sources (33 percent). Taken together, these findings meant that a disproportionately large portion of the noninvestigated maltreated children were recognized by mandated reporters in public schools. Specifically, school personnel recognized 72 percent of the estimated 522,700 abused and neglected children who were *not* investigated by CPS. By contrast, other study sources (i.e., day care centers, social services, and mental health agencies) had recognized only 15 percent of the noninvestigated children, law enforcement agencies had recognized 10 percent, and medical services staff recognized only 4 percent. Thus, it was likely that an abused or neglected child would be known to mandated reporters in the public school system, but quite unlikely that he or she would be investigated by CPS.

Specialized analyses of the NIS-2 database identified the factors that were associated with CPS awareness of four, mutually-exclusive categories of abused or neglected children: those physically abused, those sexually abused, those physical neglected and/or emotionally maltreated, and those who were only educationally neglected. The first three categories included children who experienced these forms of maltreatment either ***alone*** or ***only in conjunction with educational neglect.*** Educational neglect was **essentially** ignored when it occurred in conjunction with any of these other forms of maltreatment because it would generally have been secondary or irrelevant to the other maltreatment in precipitating CPS investigation of the case. This assumption was shaped by the findings of the State Survey component of this High Risk study, described above. Early analyses showed that physical neglect and emotional maltreatment (whether emotional abuse or emotional neglect) had similar probabilities of CPS awareness and that the same factors appeared to predict the likelihood that CPS would investigate maltreatment in both of these categories. Taking these preliminary results together with the fact that there were insufficient numbers of emotionally maltreated children to warrant separate analysis, the decision was made to combine physical neglect with emotional maltreatment throughout the main series of analyses and all findings reported here pertain to this combined category. A fifth group of abused and neglected children, those who had been maltreated in multiple ways (i.e., had experienced combinations of the abuse and neglect categories represented among the first three groups of children), was formed, but there were too few children in this group to support separate analyses on this group. Instead, the multiply-maltreated children were considered at the conclusion of the study, in the context of the factors that were identified as predictors of CPS investigation for the other groups of children.

Fifteen characteristics were considered as possible predictors of CPS investigation, and 13 of these were found to play some role in that capacity. The factors which were found to predict CPS

investigation are listed in Table 4, which summarizes their effects, in approximate order of the extensiveness of their influence. Only the rural/urban character of the county and the perpetrator's sex failed to evidence any influence on the likelihood that CPS would investigate a situationof maltreatment.

Perhaps the most important aspect of this table is its complexity; the prevailing message appears to be that the factors that predict whether or not CPS knows about a maltreated child are complex--no one factor has consistent effects across the board, and those that do have an impact often work in concert with one another, modiig and qualifying each other's effects.

Child's age. Regardless of the type of maltreatment that was involved, the likelihood that children would have their maltreatment investigated by CPS was somehow dependent on their age. However, the exact nature of the relationship to age differed from one maltreatment form to another, and was modified by interactions with other factors as well. In three categories, the child's race/ethnicity affected the age relationship, with minority children showing decreasing likeliiood of CPS investigation at progressively older ages, with White children showing either increasing likelihood with age (in the case of sexual abuse and when only educational neglect was involved), or showing no age differences in the probability of CPS investigation (in the case of physical abuse). The child's sex affected the influence of age on CPS investigation in two maltreatment categories: physical abuse and physical neglect/emotional maltreatment. For both of these categories of maltreated children, males were progressively less likely to be investigated by CPS with increasing age, whereas the probability of females' maltreatment receiving CPS attention did not appear to vary with age.

Child's race/ethnicity. Child's race/ethnicity was an important predictor of CPS investigation regardless of the type of maltreatment that had occurred. Note, however, that the effects of race/ethnicity on the probability of CPS investigation depended on the child's age in three of the four maltreatment categories examined. In the case of physical abuse, sexual abuse, and educational neglect, Black children were more likely than White children to be known to CPS below certain ages and less likely to receive CPS attention at older ages. For children who had been physically neglected and/or emotionally maltreated, age did not appear to have any modiing impact on the effect of race/ethnicity. There, Hispanics and non-Black minority children (such as Asian, American Indian, etc.), were less likely than White or Black children to have their maltreatment investigated by CPS.

Other suspected victims. For all children, regardless of the type of maltreatment they had experienced, CPS investigation of their circumstances was more likely when there were other suspected victims than when they were the only suspected victims. However, in two cases, this effect was modified by the influence of other factors. For children who were physically neglected and/or

Table 4. Synopsis of the Factors That Predict CPS Investigation of Abuse or Neglect (NIS-2 Reanalysis Findings)

FACTOR"	ROLE AS PREDICTOR OF CPS INVESTIGATION		
	Appearance & Strength	Relation to CPS Investigation	Qualifications
Child's Age	Important for all categories of maltreatment	Age differences varied across types of maltreatment and subgroups of children	Necessary in every category of maltreatment; appearance and nature of relationship to age depended on race/ethnicity, sex, and/or family structure
Child's Race/Ethnicity	Important for all categories of maltreatment	Varied with type of maltreatment; no single group was consistently less likely to be investigated	Depended on age in three categories (all except physical neglect & emotional maltreatment); minorities more likely to be investigated at younger ages, but less likely at older ages
Other Suspected Victims	Important for all categories of maltreatment	Less likely when no other victims were suspected	Depended on recognition source for physical neglect & emotional maltreatment; depended on age for educational neglect
Recognition Source	Predicted CPS investigation in three categories (all except sexual abuse)	More likely if child was recognized by law enforcement or medical services; less likely if recognized by day care, mental health, or social services Effect of recognition by schools varied with type of maltreatment, but less likely with physical neglect & emotional maltreatment	Depended on presence of other victims when maltreatment was physical neglect & emotional maltreatment
Severity of Harm	Predicted CPS investigation in three categories (all except educational neglect)	Varied with type of maltreatment; no severity level was consistently less or more likely to be investigated	Depended on sex for physical abuse (only affected CPS investigation for females)
Family Structure	Predicted CPS investigation of physical abuse and educational neglect	Mother-only less likely than father-only; effect of both parents varied with type of maltreatment, but less likely for physical abuse	Depended on age when maltreatment was educational neglect
Family Size	Predicted CPS investigation of physical abuse and educational neglect	Varied with type of maltreatment; no group was consistently less likely to be investigated	None examined
Child's Sex	Predicted CPS investigation of physical abuse and physical neglect & emotional maltreatment	Varied with type of maltreatment; neither sex was consistently less likely to be investigated	Depended on age in both maltreatment categories; for physical abuse, depended also on severity of harm
Perpetrator Location	Only predicted CPS investigation of sexual abuse	Less likely if perpetrator is in child's home	None examined
Perpetrator Relationship	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when parents & parent/substitutes were not directly perpetrators	None examined
Number of Perpetrators	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when more than one perpetrator was involved	None examined
Family Income	Only important for physically neglected or emotionally abused children	Children in families with incomes under $15,000 per year were less likely to be investigated	None examined
Nature of Harm	Only predicted CPS investigation of physical neglect and emotional maltreatment	Less likely when only emotional, psychological, or mental injury had occurred	None examined

[a] County metropolitan status and perpetrator's sex had no effect on CPS awareness of any type of maltreatment.

emotionally maltreated, recognition source modified the effect and the presence of other victims made no difference for CPS investigation when the maltreatment had been recognized by mandated reporters in day care centers, social services agencies, or mental health clinics. For children who had only been educationally neglected, the impact of other victims was modified by age--the effect only appeared among children older than age 9-1/2.

Recognition source. For three categories of children--those physically abused, those physically neglected and/or emotionally maltreated, and those who were only educationally neglected- - recognition source played an important role in predicting the likelihood of CPS investigation. A similar pattern appeared in all three cases: children who had been recognized by sentinels in day care centers, voluntary social services agencies, or mental health clinics as being maltreated were less likely to receive CPS investigation of their maltreatment. As discussed earlier, it is not possible for us to determine whether CPS investigation did not occur because these sentinels were less likely to report the children to CPS or because CPS was less likely to accept the case for investigation when it was reported by sentinels in these agency categories. But, whatever the reason, the findings clearly indicate lower levels of CPS attention to children recognized by these sources. For children who were physically neglected and/or emotionally maltreated, there was also an interactive effect involving recognition source and the presence of other victims, in which the existence of other suspected victims in the household did not predict the likelihood of CPS investigation when the child was recognized as maltmated by sentinels in day care, social services, or mental health agencies.

Severity of harm. CPS awareness of abused and neglected children did systematically relate to severity of harm--but not in the manner one might expect. For physically neglected and emotionally maltreated children, the effect ran counter to conventional expectations, with CPS investigation predicted to be more likely for children who had been moderately harmed or for whom there was no explicit evidence of harm. Also, among children who were physically abused, the expected pattern held only for females.

Family structure. The probability that CPS would investigate a child's maltreatment depended on family structure for children who had been physically abused and for those who had been only educationally neglected. Here again, however, the actual nature of the relationship depended on which of these two types of maltreatment had been involved. Physically abused children were more likely to receive CPS investigation when they were living only with their father. Children who had been only educationally neglected were in fact less likely to be investigated by CPS if they lived only with their mother, but this was dependent on their age as well, and the effect of family structure was stronger at younger ages and disappeared for the older adolescents. It should also be observed that the initial,

simple analyses showed that family structure was related to the probability that CPS would investigate physical neglect/emotional maltreatment when family structure was the only factor under consideration. However, this relationship did not hold up when the effects of the other factors that were important predictors were also taken into account

Family size. This factor appeared to affect the probability of CPS investigation for two categories of children--those who had been physically abused, and those who had only been educationally neglected--but the nature of the relationship was different in the two circumstances. Physically abused children were more likely to be investigated by CPS if the number of other children in their households was not precisely known. This could reflect a concern about the possibility of there being additional, hidden victims in the situation. Children who had only been educationally neglected were more likely to have this maltreatment investigated by CPS if they were the only child in the household. The number of other household children initially appeared to be related to CPS investigation of physical neglect/emotional maltreatment, but that relationship disappeared when the other important predictors of CPS investigation were taken into account

Child's sex. Sex was related to the likelihood that a child would be investigated by CPS when he or she had been physically abused, or physically neglected, but not when the maltreatment that had occurred was sexual abuse or only educational neglect. In the next section, it will be seen that the child's sex was strongly related to the likelihood of sexual abuse occurring in the first place, so it is particularly interesting to observe here that the child's gender did not affect the likelihood that he or she would be known to CPS once sexual abuse had occurred (i.e., sexually abused girls were no more likely to be investigated by CPS than were sexually abused boys). Also, note that the child's sex did appear to be related to CPS investigation of educational neglect when it was the only factor that was considered, but not when the other important factors (such as age, race, number of other household children, etc.) were taken into account. It is also of interest that, in the two categories where the child's sex did predict the likelihood of CPS investigation-physical abuse and physical neglect/emotional maltreatment--the effect of sex depended on the child's age. Specifically, females were mom likely to be investigated by CPS, but only at older ages. Also, in the case of physical abuse, the impact of the chid's sex on CPS investigation was further qualified by an interaction with the severity of harm that had been experienced. The child's gender did not appear to play any role unless the injury involved was something other than moderate in its severity.

Perpetrator factors. Finally, it was found that perpetrator-related factors also had some influence on CPS awareness, but the different effects were not pervasive, and the influence of each appeared to be limited to a single category of maltreatment, as summarized in Table 4 and detailed

further in Appendix B. Furthermore, there was no evidence that the perpetrator's sex had any impact on CPS investigation.

Family **income. In the** next section, it will be seen that family income is a powerful predictor of the occurrence of all types of abuse or neglect. In connection with CPS investigation; however, this factor was a predictor only for children who had been physically neglected and/or emotionally maltreated. This certainly contradicts the popular belief that lower income families are simply more often reported to CPS, or simply more likely to be investigated by CPS once they are reported. For children who were physically abused, sexually abused, or only educationally neglected, those **from** lower income families were ***not*** any more likely to receive CPS investigation. Moreover, in the one category where CPS investigation did prove to be related to family income, the direction of the relationship was actually contrary to the popular view. Physically neglected and/or emotionally maltreated children were in fact less likely to receive CPS investigation if they were **from** lower income families. As suggested earlier, this may stem from the fact that poverty-related deprivation is not considered to be of concern to **CPS.** The **finding** reported here would imply that allegations involving physical neglect may simply be discounted on this basis prior to any CPS investigation.

Nature of harm. The specific nature of **harm** experienced by the child made a difference for the likeliiood of CPS investigation in only one category of maltreatment: among children who had been physically neglected and/or emotionally maltreated, **CPS** investigation was more likely when the child had been physically injured than when the child had been **harmed** in other ways (such as by some resultant physical condition or emotionally, psychologically, or educationally).

There **are several aspects** of this set of findings that axe noteworthy. First, it is important to reiterate a point made at the outset of this report-that the NIS information concerning CPS investigation only speaks to the end-result of a number of processes, and does not reveal any details concerning these processes themselves. That is, when the **likelihood** of CPS investigation for a given group is seen to be low, this might be due to a low likelihood of referral by potential reporters to CPS, due to a low likelihood that **CPS** will accept the case for investigation after it has been reported, or due to some combination of both dynamics. Having here uncovered a number of systematic predictors of the likelihood of CPS awareness, the next logical question must be whether these reflect reporting biases, CPS screening biases, or both.

Second, the findings indicate the presence of a substantial number of interactions among important predictors, regardless of the outcome being examined. This can be seen in the **numerous** entries in the last column, entitled "qualifications.'* Such effects emerged in nearly all **instances** where

the analyses explicitly tested for their presence. The implication of this is that simplistic, single-factor approaches to predicting the likelihood of CPS investigation will be incorrect, and will fail to address the complexity of these events and their multiple determinants and modifiers. To be effective, policies and programs will need to explicitly acknowledge this complexity by taking multiple factors into account simultaneously, rather than focusing on single issues or factors individually, and administrators and policymakers will need to build mechanisms for obtaining the multi-factor information base they will require to adequately design and monitor these more complex policies and programs.

Applying these findings to the specific question posed in the legislation, the children who are comparatively *unlikely* to be investigated by CPS can be identified as "unserved/underserved" by CPS. This yields the listing given in Table 5.

25 Children Whose Risk of Maltreatment May Not Be Recognized By Child Protective services

The final approach used in the High Risk Study to address the mandated issue of which maltreated children are "unserved/underserved" was to compare the factors that are actually related to the risk of abuse or neglect to the definitions and indicators of "high risk" used in CPS agencies. In pursuing this, the NIS-2 Reanalysis used the information in the NIS-2 database to identify the risk factors for abuse and neglect. To the extent that the NIS-2 provides a nationally representative sample of maltreated children, the risk factors identified in this database should be broadly generalizable. Then, given the set of empirically identified risk factors, these were compared to the factors used to assess risk within CPS.

Risk Factors for Abuse or Neglect. The effort to identify factors that predict the risk of abuse or neglect occurring focussed on finding characteristics that distinguished abused or neglected children from the general population of children. To accomplish this comparison, the NIS-2 maltreated children were compared to children in Census samples during the comparable time period. Given the limits of the information common to the two datasets, the NIS-2 and the Census samples, it was possible to assess the predictive value of seven characteristics. All seven of these characteristics were found to relate to risk of abuse or neglect in some way, but the specific factors that predicted risk and the nature of their relation to risk depended on the type of maltreatment at issue and often on the circumstances of other important predictive factors as well. That is, there were numerous conditions where interactions among the important predictors were found, meaning that one could not say what the

Table 5. Children Who Are Comparatively Unlikely to be Investigated by CPS

Physically abused children who,.

axe older males with fatal, serious, or inferred injury,
are younger females with moderate injury,
are Black aged 14 or older,
are non-Black aged 0 through 11,
are recognized by sentinels in day care, social services, or mental health agencies,
are *not* associated with other suspected victims,
are *not* in father-only households,
are in households where total number of household children is known

Sexually abused children who.,

are Black or Hispanic aged 8 or older,
are *not* associated with other suspected victims,
are associated with demonstrated harm and not just inferred harm,
were abused by in-home perpetrators.

Physically neglected and/or emotionally maltreated[a] children who.,

are males aged 7 or older,
are females aged 0 through 5,
are Hispanic or of "other" (i.e., non-Black minority) races,
are from families with incomes below $15,000 per year,
are recognized as maltreated by mandated reporters in schools or in day cam, social services, or mental health agencies,
are *not* associated with other suspected victims and are *not* recognized by sentinels in day cam, social services, or mental health agencies,
are physically injured,
are fatally or seriously injured,
are *not* maltreated by a patent or parent/substitute,
are maltreated by more than one perpetrator.

Only educationally neglected children who,

are White aged 5 through 13,
are non-White aged 15 through 17,
are associated with other suspected victims and are aged 5 through 8,
are *not* associated with other suspected victims and are aged 10 through 17,
are in mother-only households and are aged 5 through 15,
are in households with more than one child,
are recognized by sentinels in day cam, social services, or mental health agencies.

[a] These maltreatment categories displayed similar patterns and so were combined in all major analyses (see text).

effect on risk of one factor would be without simultaneously taking another factor into account. Table 6 provides a synopsis of the risk analysis findings.

Several key aspects of these findings should be noted. The first is the impressively strong effect of family income that emerged in connection with virtually every maltreatment category. Compared to children whose families had incomes of $30,000 per year or more, children from families with incomes below $15,000 per year had:

- more than 13 times greater risk of emotional maltreatment,
- 16 times greater risk of multiple maltreatment,
- 21 times greater risk of physical abuse,
- more than 24 times greater risk of sexual abuse,
- between 78 and 97 times greater risk of educational neglect, and
- between 20 and 162 times greater risk of physical neglect,

It is theoretically possible that these findings derive from biases in the information provided by the NIS-2 sentinels, either because they undercounted middle and upper-income children because of differential contact or because they overcounted lower-income children because of stereotypical beliefs about the connection between income and child maltreatment. However, there are a several reasons why these remarkably strong effects of family income are unlikely to be simply and solely due to distortions of this sort. First, the majority of children recognized in the NIS-2 were encountered by sentinels who were likely to see children and families at all income levels so, in the first place, it is difficult to discount these findings as deriving entirely from differential observation of lower income families. Second, if these results were simply an artifact of differential observation of lower income families, then that would mean that there are really more than twice the number of maltreated children in the nation who have already experienced harm or injury from abuse or neglect than the numbers the NIS-2 data have indicated. That is, if children from middle and upper income families really experience abuse and neglect at the same rates as those from the lower income families, then there would have to be approximately ***an additional 1,105,400 maltreated children*** in middle and upper income families who have already been harmed by abuse or neglect yet who have remained hidden to the NIS-2 observers. This is theoretically possible, but there is no evidence to support or refute this possibility. Third and finally, although it is reasonable to suppose that these findings express some degree of distortion from stereotypical biases by the MS-2 sentinels concerning the relationship between maltreatment and income, the sheer magnitude of the income differences seen here make it difficult to discount them solely on this basis. Moreover, the operation of stereotypical biases is typically quite small when observers are familiar with the persons they are describing. The majority of children recognized by NIS-2 observers were encountered by sentinels in schools (teachers, school nurses,

Table 6. Synopsis of the Factors that Predict Risk of Abuse or Neglect.

FACTOR	ROLE AS PREDICTOR OF RISK		
	Appearance & Strength	**Nature of Relation to Risk**	**Qualifications**
Family Income	Most important predictor of risk for all maltreatment types	Children in low income families (incomes under $15,000 per year) were at much higher risk in all categories of abuse and neglect	None examined
Child's Age	Played a role in all maltreatment types; usually second in strength after income	Children's risk generally increased with increasing age	Interactions occurred in five of six types (i.e., for all except emotional maltreatment); the appearance and strength of the relation between age and risk depended on family structure, child's race/ethnicity, and/or child's sex
Family Structure	Important in predicting risk for five of six maltreatment types (i.e., for all except emotional maltreatment)	In three categories (physical abuse, educational neglect, multiple maltreatment), children in both-parent families were at greater risk, once family income was taken into account	Interactions occurred, where the relation between family structure and risk depended on the child' age, in the areas of physical abuse, sexual abuse, physical neglect, and educational neglect
Child's **Race/Ethnicity**	Important in five of six maltreatment types (not a risk factor for physical neglect when other important predictors are taken into account)	No one racial/ethnic group was consistently at higher risk across the categories (e.g., for multiple maltreatment, Whites were at greater risk than other races/ethnicities	The relation to risk depended on the child's age in three categories; those interactions occurred for physical abuse, sexual abuse, and multiple maltreatment
County Metropolitan Status	Urban/rural nature of the county predicted risk of physical neglect, educational neglect, and multiple maltreatment	Children were at greater riskinurbanthaninrural counties	**None examined**
Family Size	Number of children in family was predictor of risk for physical abuse and educational neglect	When other important predictors were taken into account, only-children were at greater risk than those in multiple-child households	None examined
Child's **Sex**	Predicted risk of sexual abuse, physical neglect, and multiple maltreatment	Females were at greater risk	Interacted with age in predicting risk of physical neglect

counselors, etc.), who were likely to have been very familiar with the children they reported to the NIS. These considerations imply that the income differences in risk of abuse and neglect that emerged in the NIS-2 Reanalysis may primarily reflect real risk differences among children in the different income sectors of the population.

After family income, the child's age ranked a distant second in strength as predictive of risk of abuse and/or neglect. Age did play some role in connection with risk of all categories of maltreatment, and wherever age did influence risk of maltreatment, it was the older children who were at greater risk. However, it is important to recognize that age-related differences in risk were nearly always qualified in some way, such that they only appeared in specific subgroups or were stronger for some subsets of children than for others. The specific qualifications involved are summarized in the last column of the table. The characteristics that defined the subgroups who showed differential age patterns varied across the different maltreatment categories, but they included family structure, child's race/ethnicity, and child's sex. For example, the effect of age on the risk of physical abuse depended on race and family structure; older children were at greater risk, especially those who were Black or Hispanic and those in households with both parents present. The age-related changes in risk of sexual abuse also depended on race and family structure, but somewhat differently: older White, Black, and Hispanic children were at greater risk, but not other minority children, and the age effect occurred primarily for children who lived in father-only households. The age differences in risk of physical neglect depended on sex and family structure; older females were at greater risk as were children in father-only families. The risk of educational neglect (by itself) was related to age, but only for children who lived in both-parent households. Older White, Black and Hispanic children were also at greater risk of experiencing multiple maltreatment, while other older minority children were not.

Two of the other characteristics that were examined, family structure and child's race/ethnic@, were also found to be predictors of risk in nearly all categories of maltreatment, but the specific family structures and races/ethnicities whose risk was greater varied from one form of maltreatment to another. In addition, the effects that did emerge were often qualified by the child's age as well, meaning that they only appeared at certain ages or were stronger in some age brackets than in others. The specific interaction patterns can be described in different ways. For instance, consider the way family structure affected risk in different categories. Risk both of physical abuse and of educational neglect was affected by family structure, but the effect depended on age: children in two parent families were at greater risk above certain ages. Sexual abuse risk and the risk of physical neglect also varied with family structure in conjunction with age, but the children in father-only families were at greater risk at older ages. As Table 6 also emphasizes, race/ethnicity differences in risk of maltreatment did not consistently identify any one group as more vulnerable than others. For physical abuse, the

race/ethnicity differences were qualified by the child's age, with Black and Hispanic children at greater risk than White or other minority children as age progressed. Sexual abuse risk was also affected by race/ethnicity in combination with age, but there it was the combined set of White, Black, and Hispanic children who were at greater risk than other minorities at older ages. For emotional neglect, other minorities were at greater risk than White, Black, or Hispanic children. When educational neglect was considered alone, White and Black children were found to be at greater risk than Hispanics or other minorities. Finally, the risk of multiple maltreatment also varied with race/ethnicity, but in conjunction with age: Whites were at greater risk than other race/ethnicities at older ages.

The remaining three factors, county metropolitan status, family size, and child's sex, had more delimited relationships to risk, serving as predictors in three or fewer of the six maltreatment categories studied. Nevertheless, all three showed very consistent patterns in the nature of their relationship to risk, with children in urban areas, only-children, and females being at greater risk than their counterparts.

Before leaving this summary of risk factors, it should be noted that the factors that predict the likelihood of CPS investigation and those that predict risk of occurrence of abuse or neglect are generally very different. In some specific instances, a given factor actually yields opposite predictions in the two contexts--and this signals special vulnerabilities for some subgroups of children. The most evident example of this involves family income. As emphasized here, children in low income families (those with incomes below $15,000 per year) were especially likely to experience abuse or neglect. Moreover, at least in one category of maltreatment, children from low income families are in double jeopardy--they are not only more likely to experience physical neglect and/or emotional neglect than other children, but they are also less likely to have this maltreatment investigated by CPS. A similar "double whammy" effect occurs for children in two-parent households in connection with physical abuse. Children who live with both parents were found to be at greater risk of experiencing physical abuse when their other characteristics were taken into account, but they were actually less likely to have their physical abuse investigated by CPS.

Relation Between Empirical Risk Factors and Factors Used in CPS Risk Assessment. In an attempt to more reliably and accurately identify children who am at highest risk of abuse and neglect, States throughout the country have been developing or adopting "risk assessment" tools which codify their definitions of high-risk children. These instruments were developed to enhance consistency of decision-making and to more effectively target available resources in child protective services. In the State Survey component of the High Risk Study, 35 States reported using a risk assessment system for child abuse and neglect; 13 indicated that they were developing such a system;

only three reported neither using nor developing a risk assessment system for suspected cases of child abuse or neglect. Forty-four States provided information regarding the factors that were included in the risk assessment instruments that were in use (or planned for use). The distribution of their responses is presented in Table 7.

In general, States were most likely to include clearly specified factors with direct bearing on the severity and immediacy of the situation, and least likely to include factors pertaining to the child's or family's demographic and socioeconomic characteristics. More specifically, 43 of the 44 States that responded indicated that they included parental drug addiction as a risk factor in their instrument. Forty-two States included parental alcoholism, parental emotional status, parental behavior problems, child's physical condition, and abuser's access to the child. Forty States took into account the child's age, severity of abuse, past history of abuse to the child in question and family's access to support systems. Overall, a lower number of States incorporated risk factors that reflected the family's neighborhood and community environment and socioeconomic status. Although 32 States took into account family financial and employment status, 26 included neighborhood or community characteristics, 25 included parental marital status, 23 included geographic location of the family, and 21 included family size and composition. At the bottom of the list were child's sex (14 States) and parents' demographic characteristics (9 States).

The general pattern in this listing is noteworthy. Features associated with family functioning, such as different parent problem factors (alcoholism, drug addiction, behavior problems, etc.) ranked high in terms of frequency of use, whereas more stable and general demographic features such as marital status, employment, family size, race/ethnicity and so forth were among the least-frequently included factors. Although the former could reasonably be presumed to signal real intrafamilial problems, this finding also suggests that, in failing to gather basic demographic information, many instruments do not collect data important to assessing the overall context in which the child and his/her family are functioning. That is, the focus is on the crisis of the moment rather than on the more stable and enduring features of the child's and family's situation. Thus, it appears that less emphasis is given to cases involving chronic, long-term problems as opposed to cases that had already reached serious or crisis proportions. Also note that this lack of attention to context may signal the potential for cultural and/or racial biases in the use of risk assessment tools, at least insofar as their application may not be sensitive to cultural differences in parent-child relationships, supervision patterns, and approaches to medical care.

Table 7. Risk Factors Included in Risk Assessment Instruments as Reported by States (n=44)

Factor(s)	Number of States
Parental drug addiction	43
Parental alcoholism..	42
Parental behavior problems	42
Parental emotional status	42
Child's physical condition	42
Abuser's access to child	42
Child's age	40
Severity of abuse	40
Past history of abuse to child in question	40
Family's access to support systems..	40
Housing conditions..	39
Past history of abuse in the family	39
Type of abuse	39
Parenting skills	39
Child's health status	38
Parental access to child	38
Parental coping skills	38
Child's behavior	37
Child's emotional status	37
Location of injury	36
Parental physical condition	34
Parental intellectual level	34
Family financial status	32
Parental health status	32
Parental employment status	32
Neighborhood/community characteristics	26
Parental marital status	25
Geographic location of family	23
Childs educational status	21
Family size/composition	21
Child's sex	14
Parental demographic characteristics (e.g., race, ethnicity)	9

For a number of the factors that emerged from this study as important indicators of the risk of maltreatment occurrence, their use in CPS risk assessment systems did not appear to correspond to what was found concerning the relative importance of these factors or the nature of their relationship to the risk of abuse or neglect. Discrepancies occurred in relation to every factor that had been examined in the risk assessment analyses. Specifically:

- Despite the fact that low family income emerged as a compellingly strong predictor of the occurrence of maltreatment, only about three-fourths of the States include family income as a factor in risk assessment instruments.

- Age was found to be a strong empirical predictor of risk, with increases in risk of maltreatment paralleling increases in age. Although age was commonly included in risk assessment instruments, its application did not follow these risk factor findings. Instead, risk assessment instruments generally assign younger children higher risk scores.

- Family structure was found to be a relatively important predictor of risk. In connection with physical abuse and educational neglect, children in two-parent families were found to be at greater risk. However, fewer than half of the States include family structure in CPS risk assessment and, when it was included, it generally allocated higher risk scores to children from single-patent families.

- Race/ethnic@ was also a relatively important predictor of risk in all areas except physical neglect, especially in that it frequently served to modify the effect of age on risk, and vice versa. Nevertheless, only about one-fifth of the States include race/ethnicity in risk assessment instruments.

- Metropolitan status of the county in which the family lived was predictive of children's risk in three categories of maltreatment. Fewer than half the States used this factor in risk assessment instruments.

- Family size was related to risk of physical abuse and of educational neglect, with children who were only children being at greater risk than others in both categories. Fewer than half the States include this factor in risk assessment instruments, and those that do so regard children in large families to be the ones at greater risk

- Children's sex predicted their risk of sexual abuse, physical neglect, and multiple maltreatment, with females being at higher risk in each case. Less than one-third of the States include the child's sex in CPS risk assessment.

Depending on how the risk assessment methodology is actually employed in CPS, the above discrepancies suggest that CPS attention to certain groups of children may be inadequate or misdirected. In addition, the pervasive interactions among risk factors qualify or importantly alter the effects of one factor on the basis of other factors. This, too, marked another important departure of these findings from the way in which risk factors are actually applied in CPS risk assessment. Risk assessment systems typically treat different characteristics as separate and independent contributors to risk scores, and do not tailor the scores to allocate risk differently for specific combinations of

characteristics (which is what was actually required in order to generate children's predicted likelihood of maltreatment on the basis of the final risk factor models developed in the NIS-2 Reanalysis).

The State Survey revealed that there has been little (if any) empirical grounding for the risk indicators applied in existing risk assessment instruments, and the methods by which those indicators are used to assign specific risk levels to children and/or their families. At the time of the High Risk Study State Survey interviews, only seven States had conducted research of any sort on risk assessment, and only five of those States had done research concerning the predictive ability of risk assessment within CPS. The results reported here underscore the need for additional research on this subject, and for the results of relevant research to be incorporated in the risk assessment systems that are in place.

It has been noted that the risk factors identified in this study were found to distinguish maltreated children from nonmaltreated children in the general population, and that these may not be the best indicators to distinguish maltreated from nonmaltreated children among the set of children who are reported to CPS. At the same time, however, the risk factor findings from the NIS-2 Reanalysis are nationally-representative, and were derived from analysis methods that simultaneously took all the important risk predictors[9] into account, facts which suggest that (in the absence of contrary evidence) they should be generalizable to the set of children who are reported to CPS.

Nevertheless, the interest that governed the risk analyses in this study (which was to predict the risk of occurrence of Harm Standard maltreatment within the general population), may be quite different from the interest within CPS--which may instead lie in predicting the risk of serious injury occurring,[10] in predicting the risk of recurrence of maltreatment after an initial episode, or in predicting the likelihood that a family or child would benefit from specific services. Each of these interests was expressed by some sector of the State Survey respondents, and they point up the further need for greater clarity concerning what type of risk the indicators used in CPS risk assessment systems are supposed to be indexing.

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[9] Among the seven factors that were examined.

[10] This interest would correspond to the focus on younger children as the higher risk sector.

3. Incidence of Child Abuse and Neglect Among Unserved/Underserved Groups

3.1 Children Excluded from Child Protective Services (CPS) or Inconsistently Served Because of CPS Definitions

As discussed in the previous section, State Survey results pinpointed a number of categories of maltreated children who may be unserved or underserved by CPS on the basis of CPS mission statements and/or because of the limited scope or high variability in the definitional requirements CPS imposes to delineate its purview. It was possible to use the NIS-2 database to derive incidence estimates pertaining to three of these groups: children who are educationally neglected, those who are emotionally maltreated, and those who have not yet been demonstrably harmed by maltreatment, but are deemed to be at risk of harm because of the abusive or neglectful actions of their caretakers. These estimates are presented in Table 8.

Table 8. Incidence of Children Identified as Unserved/Underserved on the Basis of CPS Definitional Limitations or Variability

Category of Children	Estimated Total[11]	Investigated by CPS	Not Investigated by CPS
Educationally neglected	285,000	42,000	243,000
Emotionally maltreated	191,000	78,000	112,000
Endangered but not harmed	493,000	324,000	170,000

The incidence estimates shown in this table reveal that one of the groups at issue are the more than one-quarter million children who are educationally neglected in the course of a year. These estimates include all children who experienced the maltreatment in question, even those who also experienced other types of maltreatment. If one considers only those children who were not maltreated in any other way, then the estimated annual incidence would still be quite sizeable, involving 240,000

[11] Rounded to the nearest 1,000.

educationally-neglected children Of all educationally neglected children, the vast majority fail to receive any CPS investigation (243,000). Again, this holds true even when one considers only that sector of children who did not experience any other type of maltreatment in conjunction with their educational neglect (an estimated 200,000 tminvestigated in that group). These findings clearly underscore the perceptions of the State Survey respondents that CPS agencies are *not* serving educationally neglected children.

Children who are emotionally abused or neglected were also identified in the State Survey as a category of children that may be underserved/unserved relative to other maltreated children because of the variability of CPS definitions in this arena, and because such allegations are more difficult to substantiate. Table 8 provides the estimated incidence figures for these children; those who fit the Harm Standard are estimated to total 191,000 nationwide, on the basis of the NIS-2 incidence information. The vast majority of these children (an estimated 112,000) do not receive CPS attention.

Finally, according to the State Survey findings, children who were considered to be at risk of harm are typically not accorded the same priority status as those who have already experienced demonstrable harm from abuse or neglect. An estimate of the incidence of these children was extracted from the NIS-2 database on the basis of those children who had failed to meet the Harm Standard criterion in that study (which largely required that demonstrable harm to the child have already occurred), but who nevertheless did meet the Endangerment criterion which was the alternative set of definitions applied in the NIS-2. Nearly one-half million children fit this circumstance (an estimated 493,000), and 170,000 had not been investigated by CPS.

32 Children and Families Who **Need** Services That Are Unavailable or Inaccessible

Although one strategy used in the High Risk Study was to identify potentially underserved or unserved children among the abused and neglected population as those who needed services which were unavailable or inaccessible, it was not possible to develop national incidence estimates for these groups using the NIS-2 database, or any other existing source. As discussed earlier in section 2.2, however, certain subgroups were identified as being seriously underserved/unserved by this approach Those most in need of unavailable services included children and families in need of substance abuse evaluation and/or treatment and persons for whom sex offender treatment is indicated. Other cases who were underserved or unserved because of the unavailability or inaccessibility of needed services were those considered to need parent education, homemakers, day care, mental health evaluation, home-based

family preservation services, medical services for parents and families, counseling, school coordination, employment services, and basic services to provide for the family's food, clothing and shelter.

33 Groups Perceived to Need Special Efforts in Order to Be Reached and/or Served

As described earlier in section 2.3, respondents in the State Survey were asked to indicate whether they perceived a need for special efforts (policies, programs, practices) to overcome the barriers to serving the children in a number of different categories, and to report whether or not any such effort had yet been implemented in their State. The NIS-2 database was capable of providing estimates of the incidence of Harm Standard children for 13 of the categories in the list, Besides providing incidence estimates regarding a number of potentially-underserved sectors, the NIS-2 database was used to examine the correspondence between the perceived need for special efforts relative to the actual total numbers of maltreated children in each category and the incidence in each category of children who axe not investigated by CPS.

Table 9 provides the incidence estimates for a number of the subgroups of children whose need for special efforts was rated by State Survey respondents and for whom 20 or more State specialists had indicated the existence of either an unfulfilled need or special efforts.

Table 9. Incidence Estimates for Subgroups Perceived to Require Special CPS Efforts to Be Reached and/or Served.

Category of Children	All Maltreated[a]	Not Investigated by CPS
Children in low income families	626,000	360,000
Children who are		
preschool age	153,000	53,000
preteens and early adolescents	358,000	200,000
15 years and older	285,000	207,000
Children in single-parent households	330,000	173,000
Children of minority races	254,000	140,000
Children who are ethnic minorities	103,000	60,000
Children in rural areas	179,000	82,000

[a] All estimated n's are rounded to the nearest 1,000.

Children from single-parent families were regarded as requiring special CPS efforts (whether that need was filled or not) by CPS specialists in 33 of the 45 responding States--25 respondents perceived them to be in need of such efforts and they were reported to actually be the focus of special efforts in another eight States. While these perceptions and foci do reflect the differences in incidence rates in these subgroups, at least when no other factor predictive of risk is considered, as discussed above, maltreated children in two-parent families are actually considerably more numerous (602,000 overall, compared to 330,000 in single-patent families) and, except in the category of sexual abuse, greater numbers of both-parent children fail to receive CPS investigation (350,000 vs. 173,000 children from single-parent families) This pattern holds for all types of maltreatment except sexual abuse, where the numbers of uninvestigated children appeared comparable across the different family stmcture categories.

Another category of children perceived as presenting special challenges to CPS were children who resided in rural areas, or those who lived at some distance from services. Altogether, respondents from 35 States indicated in some way that these children warranted special efforts to overcome barriers to providing them services; 23 of the survey participants rated this group as having a need for such special efforts; and another 12 reported on the actual existence of such efforts in their States. The information most relevant to this issue in the NIS data concerned the metropolitan status of the county in which maltreated children resided. Actually, far fewer maltreated children live in rural counties (179,000 overall, as indicated in Table 9) than in urban and suburban counties (an estimated 752,000 children), a pattern which holds across all maltreatment categories. Additionally, much greater numbers of children in urban and suburban counties fail to receive CPS investigation of their maltreatment (440,000 children were uninvestigated in urban/suburban areas, whereas 82,000 were uninvestigated in rural areas). This pattern of substantially greater uninvestigated numbers in urban and suburban areas was also true across the different categories of maltreatment.

Children in families with low incomes were regarded as needing special CPS efforts by 25 State Survey respondents--l8 of whom simply indicated that they perceived such a need existed and an additional seven reported that special efforts targeting this sector were actually in place in their States. In fact, there are more uninvestigated maltreated children in the low income group, both overall and in all categories of maltreatment. Specifically, CPS did not investigate the maltreatment of 360,000 Harm Standard children who reside in families with annual incomes below $15,000. The number of uninvestigated children living in families with greater annual incomes was less than half that figure (162,000 not investigated by CPS).

As described earlier, State Survey participants rated children as needing special efforts on the basis of their age group membership and/or reported that special efforts focusing on specific age categories had been implemented in their States. Estimates of the incidence of maltreated children according to age revealed two systematic patterns. First, the overall estimated totals of numbers of children who are abused or neglected generally increase with age. At the same time, older children were actually less likely to be investigated by CPS. As can be seen in Table 9, the two oldest age brackets account for nearly two-thirds of all the uninvestigated children, and for the majority of all uninvestigated cases in all categories except sexual abuse, where they account for just under half (49 percent).

Racial minorities were believed to warrant special CPS efforts by 32 of the study participants, and ethnic minorities were indicated to have fulfilled or unfulfilled needs for special efforts by 24 respondents. Table 9 indicates that racial minority children who were maltreated totalled 254,000 overall, with 140,000 uninvestigated, and that ethnic minority children numbered 103,000 of all maltreated children, of whom 60,000 were not investigated by CPS. White children, in fact, predominated in the numbers, however, totalling 574,000, with 323,000 of these cases not having been investigated.

3.4 Children Recognized as Maltreated But Not Investigated by CPS

Incidence estimates for children not likely to receive CPS investigation were developed using two separate approaches--a probability-based approach, and a characteristic-based approach. In the probability-based approach, the complete set of each child's characteristics were used to predict his or her probability of receiving a CPS investigation, and the total numbers of children whose combinations of characteristics predicted they had no more than an even chance of being investigated (i.e., a SO-SO chance or less) were estimated. In the characteristic-based approach, the specific characteristics (and combinations of characteristics) that were found to generally be associated with lower likelihoods of CPS investigation were used to define the subgroups likely to be unserved or underserved, and national estimates of the numbers of maltreated children who have those characteristics (or combinations of characteristics) were developed.

Probability-Based Definition of Children Unlikely to Receive CPS Investigation. Table 10 presents the total estimates for maltreated children in the nation who have no more than a 50-50 chance of being investigated by CPS, given the type of maltreatment they experienced and their specific combinations of characteristics they possess (such as sex, age, race/ethnicity, family structure, and so forth). Note that, across all maltreatment categories, more than 600,000 children fall into this category

among those who meet the NIS-2 Harm Standard (and have already been harmed or injured by abuse or neglect). The table indicates the way in which the group of children with no more than a SO-50 of CPS investigation are distributed across the different maltreatment categories.

Table 10. Estimated National Incidence of Children With a 50 Percent Chance or Less of Receiving CPS Investigation.

Category of Children	All Maltreated[a]	Not Investigated by CPS
Physically abused	120,000	65,000
Sexually abused	38,000	26,000
Physically neglected or emotionally maltreated	221,ooo	174,000
Multiply-maltreated	7,000	4,000
Only educationally neglected	226,000	198,000
Total	612,000	468,000

Characteristic-based Definition of Children Unlikely to Receive CPS Investigation. An alternative approach to using the same logistic models to define the groups who are unserved/underserved by CPS is to refer directly to children who have the characteristics that were found to be associated with lower probabilities of CPS investigation. Those groups were identified earlier in Table 5. Here, Table 11 provides the totals of maltreated in these groups as well as the numbers who were and were not investigated by CPS.

[a] All estimated n's are rounded to the nearest 1,000.

Table 11. Estimated National Incidence of Children with Characteristics That Make It Unlikely They Will Receive CPS Investigation.

Category of Children	All Maltreated[a]	Not Investigated by CPS
Physically abused children who:		
are older males with fatal, serious, or inferred injury	**2,000**	**2,000**
are younger females with moderate injury	**59,000**	**25,000**
are Black aged 14 or older	26,000	19,000
are non-Black aged 0 through 11	108,000	31,000
are recognized by sentinels in day care, mental health, or social services	20,000	7,000
are *not* associated with other suspected victims	222,000	98,000
are *not* in father-only households	260,000	104,000
are in households where total number of household children is known	249,000	105,000
Sexually abused children who:		
are Black or Hispanic aged 8 or older	26,000	17,000
are *not associated* with other suspected **victims**	**84,000**	**42,000**
are associated with demonstrated harm and not just inferred harm	61,000	12,000
were abused by in-home perpetrators	65,000	26,000
Physically neglected/emotionally maltreated children who:		
are males aged 7 or older	112,000	84,000
are females aged 0 through **5**	32,000	9,000
are Hispanic or of "other" (i.e., non-Black minority) races	53,000	38,000
are from families with incomes below $15,000 per year	186,000	109,000
were recognized by mandated repotters in schools or in day care, social services or mental health agencies	31,000	21,000
are *not* **associated** with other suspected victims and are *not* recognized by sentinels in day care, social services or mental health agencies	249,000	175,000
are physically injured	35,000	20,000
are fatally or seriously injured	122,000	82,000
are *not* maltreated by a parent or parent/substitute	24,000	16,000
are maltreated by more than one **perpetrator**	107,000	78,000

[a] All estimated n's are rounded to the nearest 1,000.

Table 11. (continued)

Educationally Neglected children who:		
are White aged 5 through 13	84,000	69,000
are non-White aged 15 through 17	29,000	29,000
are associated with other suspected victims and are aged 5 through 8	28,000	19,000
are *not* associated with other suspected victims and are aged 10 through 17	148,000	134,000
are in mother-only households and are aged 5 through 15	64,000	59,000
are in households with more than one child	97,000	82,000
are recognized by sentinels in day care, social services or mental health	23,000	23,000

The most numerous subgroup of children with characteristics or combinations of characteristics that are important predictors of low likelihoods of CPS investigation was the set of children who were physically abused, who were *not* in father-only households, but who lived instead with both parents or with their mothers-only; an estimated 260,000 such children are maltreated annually and 104,000 of these children are not investigated by CPS. The second most numerous among the identified subgroups who were especially unlikely to receive CPS attention were physically abused children where the number of children in the household was known (an estimated 249,000 children were estimated overall, 105,000 of whom are not investigated). The third-ranking group in terms of absolute numbers were children who were physically neglected or emotionally maltreated, where other victims were *not* suspected and who were *not* recognized by day care, social services or mental health; an estimated 249,000 children in all had this combination of characteristics, and 175,000 of them failed to receive CPS investigation of their Harm Standard maltreatment. Fourth in order of overall size was the group of children who had been physically abused in households where no other victims were suspected; these totalled an estimated 222,000 and CPS had not investigated 98,000 of the group. Fifth-ranked in sheer numbers were physically neglected or emotionally maltreated children from families with incomes below $15,000 per year (an estimated 186,000 overall, of whom 109,000 were not investigated). Children who were only educationally neglected, ages 10 through 17 with no other suspected victims in their households, were the next most-prevalent grouping; among the total of 148,000, an estimated 134,000 nationwide were not investigated by CPS. Seventh-ranked in numbers were physically neglected or emotionally maltreated children who were fatally or seriously injured; there were 122,000 such children in all, and 82,000 of them had not received the official attention of CPS. Also among the top ten groups unlikely to receive CPS investigation were males, aged 7 or older who were physically neglected or emotionally maltreated. There were an estimated 112,000 such children, 84,000 of whom had not had their maltreatment investigated by CPS. The ninth-ranked group of underserved children by this definition were physically abused non-Blacks who were younger (i.e., ages

0 through 11); of an estimated 108,000 such children, 31,000 had not been investigated by CPS. Tenth-ranked of these underserved subsets were children who had been physically neglected or emotionally maltreated by more than one perpetrator; these totalled 107,000 nationwide, and CPS had failed to investigate 78,000 of them.

Clearly, substantial gains in the numbers of Harm Standard children who are investigated by CPS could be achieved by targeting relatively few groups, particularly among children who am physically abused and those physically neglected and/or emotionally maltreated.

35 Children Whose Risk of Maltreatment May Not Be Recognized By Child Protective services

As described in Section 2.5, there was a considerable gap between the predictors of risk in the general population and the markers of risk that are in use within CPS. Table 12 provides incidence estimates for groups of children whose actual risk of experiencing abuse or neglect is not indexed or adequately emphasized by existing risk assessment practices in CPS across the U.S.

Table 12. Children Whose Actual Risk of Maltreatment May be Inadequately or Inaccurately Assessed by CPS

Category of Children	All Maltreated[a]	Not Investigated bv CPS
Maltreated children in urban and suburban counties	**752,000**	**440,000**
especially those physically neglected, multiply-maltreated, or only educationally neglected	380,000	282,000
Maltreated children in low income families	626,000	360,000
Maltreated children in both parent families	602,000	350,000
especially those who were physically abused, multiply-maltreated, or only educationally neglected	338,000	203,000
Maltreated White children	574,000	323,000
especially those who are multiply-maltreated or only educationally neglected	197,000	159,000
Maltreated older children, ages 12 and over	511,000	347,000
Maltreated only children	228,000	98,000
particularly those physically abused or educationally neglected	126,000	52,000

[a] All estimated n's are rounded to the nearest 1,000.

4. Conclusions and Recommendations

The High Risk Study consisted of two primary components, a survey of State CPS specialists and a series of reanalyses of the data from the second national incidence study, the NIS-2. The previous chapters reported on the various groups of maltreated children who were identified as being "unserved" or "underserved," and provided estimates of the national incidence of maltreated children in these "unserved" or "underserved" groups. This concluding chapter discusses the principal implications of the study findings, based on input from members of the study's Advisory Panel of national experts in risk assessment for child abuse and neglect.

First, there is a clear need to better address the coordination of services across **different systems, especially between human services and income support services, between child protection and education, and between child protection and juvenile justice.**

Human Services and Income Support Services. Family income emerged as having a very strong relation to risk of virtually every form of maltreatment. Although it is theoretically possible that this stemmed from biases in the information provided by the NIS-2 sentinels, it appeared reasonable to suppose that the remarkably strong effects of family income that were observed also derived from real socioeconomic differences in levels of risk. This suggests that the separation of income support services and human services may be a bureaucratic fiction that is not in the best interests of the children who are at risk of abuse or neglect. Income support services include AFDC, Food Stamps, WIC, housing subsidies, job training, and other employment and economic survival services. Exploration of methods by which income support and human services can be coordinated and better integrated with each other would be useful. When a family is reported for abuse or neglect and found to have an income dramatically below that needed for adequate functioning, then their treatment plan needs to explicitly include strategies geared toward enhancing their economic resources. Special demonstration projects could be funded to assess the relative workability and effectiveness of different approaches in this regard. These conclusions are consistent with the recent report of the U.S. Advisory Board on Child Abuse and Neglect, which recommended that the Federal government take measures to insure "the development of linkages with other service providers and community resources to ensure that children and families are receiving coordinated, integrated services."[12]

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[12] The U.S. Advisory Board cm Child Abuse and Neglect *Creating Caring Communities: Blueprint for An Effective Federal Policy on Child Abuse and Neglect. Second Report.* Administration for Children and Families, U.S. Department of Health and Human Services. September 15, 1991. Recommendation D-2, p. 71.

Child Protection and Education. The need for more effective coordination between child protective services and the education system emerged as an important implication of the High Risk Study findings both in the State Survey component and in the NIS-2 Reanalysis component.

In the NIS-2 Reanalysis, school personnel were found to be extremely important sources for identifying *all categories* of abused and neglected children, and particularly of those who are not investigated by CPS agencies. Mandated reporters at school recognized more than half (54 percent) of the children who were countable under the Harm Standard, and nearly three-quarters (72 percent) of those who had not been investigated by CPS. A substantially larger proportion of countable abused and neglected children would be investigated by CPS if better linkages could be forged between CPS agencies and the local community schools.

The need for better linkages between CPS and education was also emphasized in the State Survey, which revealed that the majority of States provide limited or no CPS attention to educational neglect per se. Thirty-six of the 51 survey respondents excluded educational neglect either entirely or in many cases. Fifteen did not define it as within CPS purview at ah, and 21 others placed limitations on their involvement, such as by excluding simple truancy altogether, by including educational neglect only if it occurs in conjunction with other maltreatment, or by imposing other special requirements (e.g., only for younger children, only as a last resort, only after school officials have acted, etc.). Educationally neglected children do not necessarily go without services because of their exclusion from CPS, and an excellent case can be made that these children actually should be served by the school system rather than by CPS. However, this is an arena in which responsibility has been shifting in recent years, and in many communities the school systems may not have had the resources to adequately deal with the service vacuum created by the curtailment of CPS services to this sector. As a result of the fact that they fall in the niche between service systems, children who are educationally neglected may be mote likely to be unserved/underserved than children who are maltreated in other ways.

Child Protection and Juvenile Justice. The NIS-2 Reanalysis showed that the child's age plays a role in connection with risk of all categories of maltreatment, with the older children being at the greater risk At the same time, the older children are generally less likely to be investigated by CPS, particularly males and minorities. Special attention should be given to examining the extent to which existing policies and priorities in child protective services may inadvertently enlarge the scope of other problems, such as to the sixes of the runaway, delinquent, and even criminal youth populations. For example, to the extent that CPS differentially fails to adequately serve certain sectors of adolescent youth,

such as males and minorities (as found here), then CPS policies and priorities may be partially responsible for the disproportionate representation in these other populations of troubled youth.

State Survey respondents also indicated that CPS may have difficulty in coordinating services with the police and with the juvenile court system. Specialists' comments indicated that the division of labor and responsibility between CPS (or the child welfare agency) and law enforcement agencies is, in fact, quite variable and not always clearcut. In many States, CPS operations are severely constrained by the court system, especially by the time it takes for cases to be put on the court docket. Indeed, experts have expressed concerns that pressure exists for CPS to become "an arm of the legal system." In philosophical terms, this may affect the relative weight given to a punishment-oriented versus a treatment-oriented perspective. More directly, however, it may mean that cases will essentially be prioritized for services more on the basis of what the legal system regards as winnable in court than on the basis of the children's actual service needs. One indication that these are matters of concern to CPS agencies is provided by relatively large number of States (12) reporting special projects related to inter-agency service coordination, as well as those reporting that they have conducted training in joint investigations (2 States) or developed training for police or prosecutors (3 States).

In addition to stimulating discussions and suggestions concerning these critical junctions and transfer points between service systems, the Federal government could sponsor the development of model inter-system coordination agreements. In addition, both Federal and State governments could fund research on the impact of selected model agreement arrangements on the magnitude and manageability of the CPS caseloads.

Second, greater consensus is needed on the role of CPS within the larger child welfare agency and on the categories of children and families who should come within the purview of CPS. The findings from the NIS-2 Reanalysis component documented that substantial numbers of abused and neglected children are not investigated by CPS, and identified specific subgroups who are especially unlikely to be investigated by CPS. At the same time, the State Survey revealed a considerable range across States in definitions of CPS mission and of the types of cases that fall within the CPS agency's jurisdiction. Overall, the study findings indicate that definitional issues are still far from resolved in this arena. Federal leadership would be extremely helpful in developing greater consensus on these issues and in developing more consistent use of terms and concepts.

As discussed above, those who are educationally neglected have increasingly been defined to be outside of CPS jurisdiction or concern, but there are still notable discrepancies across States in their policies on this issue, as well as ambiguity regarding the role of the education system in connection with

these children. Also mentioned in the discussion above was the relative inattention to maltreated adolescents and older teenagers, particularly minorities and males. The role of CPS in the maltreatment of these children should be clarified.

In addition, attention needs to be devoted to better defining the CPS purview in connection with children who are emotionally maltreated. In the State Survey, children who are emotionally abused or neglected were identified as being potentially unserved or underserved, since these children am not always defined to be within the purview of the CPS agency. Moreover, even when emotional maltreatment is technically included within the agency's defined purview, it is typically not treated as a separate specified category. As a result, it may only be accorded attention when it occurs in conjunction with other maltreatment. Also, survey respondents reported that emotional maltreatment is generally more difficult to substantiate. Interestingly, victims of psychological maltreatment were also among the categories of children who were most often perceived as being in need of special CPS efforts without any such efforts reportedly having been made on their behalf. Taken together, these facts converge on the implication that emotionally maltreated children are unserved or underserved by CPS relative to children who are maltreated in other ways. These are the children most likely to "fall between the cracks" and/or to fall outside (or only ambiguously within) the CPS agency's purview. Regrettably, they are also the children whose long-term developmental prospects bode least well in the absence of early intervention and treatment

Children who have been endangered but not yet harmed are not generally accorded the same priority status as those who have already evidenced harm from abuse or neglect. Such children may be relatively unlikely to receive official CPS attention and services--at least until their circumstances worsen to the point that they are actually harmed or maltreated. Children with intellectually limited caretakers and those with psychiatrically impaired caretakers were among the categories of children who were most often perceived as having a need for special efforts without reports of any such efforts reported to have been made on their behalf. At the same time, ambiguous or low priority status within CPS was reported for children whose parents are unavailable due to various reasons, as well as for homeless children, for voluntary referrals, and for non-abuse/neglect-related referrals.

State survey responses concerning these groups with low priority and/or ambiguous CPS status often revealed more about the unresolved relationships between CPS agencies and their encompassing child welfare agencies than they did about these specific groups of clients per se. That is, the conflict between the mission/scope of CPS and the mission/scope of child welfare, in general, was evident in that responses concerning endangered children, homelessness, parental unavailability, and non-abuse/neglect-related referrals indicated that the respondents, as a group, were attempting to

consider (conflicting) CPS mandates and larger child welfare agency goals, simultaneously. Whereas CPS agencies focus on the protection of children who have been abused or neglected (and sometimes also on those who axe in danger of being abused or neglected), the larger child welfare agencies focus on the broader group of children and their families who are in need of family preservation or support services. Despite these disparate aims, in the majority of agencies, CPS has become the principal intake mechanism for child welfare and, in that position, serves as gatekeeper regarding the cases that receive any child welfare agency attention. The consequence of this, according to Kamerman and Kahn, [13] is that "in state after state, county after county, . . .the social service system has become so constricted that children can gain access to help only if they have been abused or severely neglected, are found delinquent, or run away. Doorways for less serious' or differently defined problems are closed. Many communities cannot serve 'voluntary' cases."

Thus, the lack of coordination between CPS and some alternative child welfare intake mechanism, as well as the severe curtailment of the latter, leaves children and families in an unfilled service niche within the child welfare system itself. The High Risk Study findings underscore the need for better clarification of the role of CPS within the larger child welfare agency. In conjunction with that role clarification, there also needs to be enhanced coordination of services between CPS and the larger child welfare and social service systems concerning children and families which do not fall within the scope of CPS jurisdiction (e.g., cumulative harm cases, voluntary referrals, and/or families needing resources such as food, medical care, transportation, or housing to prevent serious deterioration of a child's situation).

Finally, initiatives axe critically needed that would redirect service orientation from the current reactive stance which focuses largely or even entirely on the most serious crisis cases to one that is considerably more proactive, and which gives greater emphasis to those cases where a temporary low-to-moderate investment of resources promises to be sufficient to prevent deterioration to a crisis status. State funding priorities need to be adjusted so that this shift in emphasis can be effected. At the same time, Federal funding should be channelled toward demonstration projects that shift emphasis in this direction, and these projects should be designed to provide the information and resource base necessary to attract more stable funding sources at the conclusion of the demonstration.

Third, certain subgroups are clearly being underserved under any definition of the appropriate scope of CPS, and additional efforts to better serve these subgroups within CPS are

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[13] Kamerman, Sheila B.. & Kahn. Alfred J. (June. 1989). Social Services for Children, *Youth and Families in the US.* The *Annie* E. Casey Foundation.

needed. Children in low income families (those with incomes below $15,000 per year) were especially likely to experience abuse or neglect. At the same time, when children from low-income families experience physical neglect and/or emotional neglect they are less likely than other children to have this maltreatment investigated by CPS. A similar special vulnerability applies to children in two-patent households in connection with physical abuse. Children who live with both parents were found to be at greater risk of experiencing physical abuse when their other characteristics were taken into account, but they were less likely to have their physical abuse investigated by CPS.

The State Survey indicated a very limited availability of nearly all categories of service. The most readily available service categories were case management and crisis intervention, while far fewer States reported adequate availability of services that meet direct needs (e.g., medical care) or those which promote more long-term changes (e.g., counseling). It was noteworthy that the services named as "barrier-free" by most States tended to be those that are more crisis-oriented (crisis intervention, medical services), whereas services that address chronic or more long-term problems and aim to have a more longstanding impact on the family unit (e.g., home-based/family preservation services, parent education) were much less widely available. Under the strain of scarce resources and increasing pressures on the system, CPS agencies appear to have taken a reactive rather than a proactive stance; they respond to immediate crises while failing to address underlying structural problems. Primary emphasis needs to be placed on ensuring the unrestricted availability of those services that help families to solve their problems and stay out of the CPS caseloads in the future, such as day care, in-home prevention services, and family preservation services.

Despite their comparative emphasis on crisis cases, however, CPS agencies have not kept pace with the needs of several of the "crisis categories" of children and families who have been ever more insistently overburdening the service delivery system in the past few years. Specifically, substance abuse evaluation and substance abuse treatment for parents and sex offender treatment for perpetrators were reported to have no barriers to their availability by fewer than *five* States. At the same time, this severe lack of readily-available services for substance abusing parents is at odds with what States reported about the influx of new types of cases in the past five years. Drug-exposed infants and substance-abusing parents topped the list of noteworthy new types of problems coming into CPS in the past five years, and were referenced by 37 States. Although a number of States reported having developed special efforts for substance abusing caretakers, such efforts were minimal in scope, and a closer examination of a subset of these services indicated that fewer than half had any treatment focus. Clearly, this is an arena where substantial changes in service needs have been observed, while the growth in those services has lagged far behind the rise in the problem itself. Some efforts are needed to

help services catch up with client needs in areas where the latter have shown considerable change in recent years.

Fourth, **substantial further work in the area of CPS risk assessment is needed in order to achieve three purposes: (1) to further develop the risk assessment systems themselves so that they better reflect the complex and interactive relationships among the factors that predict risk, (2) to clarify the goals of using risk assessment in the CPS context, and (3) to provide for more extensive ongoing feedback concerning the effectiveness of risk assessment systems that can help to shape their further evolution.**

Elaboration Beyond Simple Matrix Approaches to Risk Assessment. The NIS-2 Reanalysis indicated the presence of a substantial number of interactions among important predictors, regardless of whether the focus was on children's risk of maltreatment or on their likelihood of receiving CPS investigation. The implication of this is that simplistic, single factor approaches to predicting the occurrence of abuse or neglect or of the likelihood of CPS investigation will necessarily be incorrect, because they will fail to address the complexity of these events and their multiple, interacting determinants and modifiers. This in turn implies that simple matrix approaches to risk assessment will probably not survive in the long run. Instead, risk assessment models which require some analysis of the input information beyond a simple addition of individual scores, despite their greater complexity, may better fit with reality insofar as they are more able to incorporate interactions among the different factors. To be effective, policies and programs will need to explicitly acknowledge this complexity by taking multiple factors into account simultaneously, rather than focusing on single issues or factors individually, and administrators and policymakers will need to build mechanisms for obtaining the multi-factor information base they will require to adequately design and monitor these more complex policies and programs. The High Risk Study findings certainly suggest that the state of the art in risk assessment would be appreciably advanced by the development of interactive risk assessment models.

Goals of CPS Risk Assessment. The findings also emphasize the need for better articulation of the goals of the risk assessment methods that are used in CPS, because the results indicate considerable gaps between the predictors of risk found to apply in the general population and the markers of risk in use within CPS. In fact, discrepancies occurred in relation to every factor that was examined in the risk assessment analyses. For example, although age was found to be a strong predictor of risk, with older children being at increased risk of maltreatment, risk assessment instruments generally assign younger children higher risk scores. Family structure was found to be a relatively important predictor of risk and, in connection with physical abuse and educational neglect, children in two-parent families were found to be at greater risk when family income was taken into

account. However, fewer than half of the States explicitly included family structure in their CPS risk assessment, and those that did include it generally allocated higher risk scores to children from single-parent families. Family size was related to the risk of physical abuse and of educational neglect, with children who were only children being at greater risk than others in both categories. Fewer than half the States included this factor in risk assessment instruments, and those that did regarded children in large families to be the ones at greater risk. Also, despite the fact that low family income emerged as a compellingly strong predictor of the occurrence of maltreatment, this factor was not universally included in risk assessment instruments (three-fourths of the States used risk assessment systems that included this factor).

Depending on what the goals of CPS risk assessment are, these gaps could be appropriate. That is, given differences in the roles of risk factors in the two contexts (general population vs. CPS), one might reasonably expect that different risk factors would be applicable (or that the same risk factor would not operate in the same way). In the NIS-2 Reanalysis, the interest was in the risk of maltreatment occurring in the first place. In the risk assessment applications used in CPS, however, the concern is sometimes to distinguish those cases where substantiated maltreatment is likely to have occurred from others, sometimes to determine the risk of reoccurrence in cases where maltreatment has already been substantiated, and at other times to apply the information obtained through the "risk assessment" system as a tool for case planning. Each of these interests was expressed by some sector of State Survey respondents. These are very different purposes, and will likely require somewhat different approaches if they are to be effectively achieved. Without clearer articulation of the goals that risk assessment in CPS is to achieve, it is not possible to determine the optimal form and content of the risk assessment systems that should be used, nor to know what evidence (as discussed below) would be most relevant to deciding whether the systems are effectively achieving their goals.

Empirical Grounding of Risk Assessment Systems. The High Risk Study findings emphasize the need for more careful scrutiny of the effectiveness of the risk assessment methods that are used in CPS. The general view among researchers and practitioners in the field has always been that the risk assessment models were dynamic, not static, and that as information accumulated the models would need revision. Despite this, the State Survey component indicated that while CPS use of risk assessment instruments has mushroomed in recent years, there has been very little empirical justification of the factors they contain and the methods by which those factors are combined. At the time of the High Risk Study State Survey interviews, only seven States had conducted research of any sort on risk assessment, and only five of those States had done research concerning the predictive ability of risk assessment within CPS. At the same time, the MS-2 Reanalysis showed that there is a considerable gap between the predictors of risk in the general population and the markers of risk in use within CPS.

Taken together, these circumstances underscore the need for concerted efforts to fill the need for empirical evidence on the success of risk assessment approaches.

NCCAN should take a leadership role in helping to systematize risk assessment methodology, such as by

- establishing a minimum or "core" set of factors which should be included in all risk assessment instruments; and
- synthesizing the extant research knowledge concerning risk assessment and disseminating this information to States and interested local agencies.

NCCAN should support additional research designed to shape the development of risk assessment and should direct efforts toward stimulating more long-range information resources in this arena, such as by

- providing grants and/or technical assistance to the States for monitoring and evaluating ongoing risk assessment systems;
- providing grants and/or technical assistance for computerizing the data from risk assessment systems;
- permitting longer grant periods for the support given to these purposes; and
- funding long-term evaluations of selected risk assessment systems.

Finally, States and local agencies need to supply more intensive training in risk assessment. NCCAN should consider mechanisms that would provide stronger incentives for doing this.

Fifth, apart from the research needs delineated immediately above, there are several other areas where additional research is needed: (1) to determine the specific nature of the barriers to CPS investigation of children whose cases should be investigated; (2) to identify additional important predictors of risk of abuse and neglect; and (3) to formulate more effective approaches to the organization and management of CPS agency activities.

Barriers to CPS Investigation of Abused and Neglected Children. Even in categories that would be universally recognized as within the scope of CPS (such as sexual abuse and physical abuse), many countable children were not investigated by CPS. Further study is needed in order to determine what factors account for the relatively low rates of CPS investigation for some of the abused or neglected children who were countable. The NIS information concerning CPS investigation only

speaks to the end-result of a number of processes, and does not reveal any details concerning these processes themselves. That is, when the likelihood of CPS investigation for a given group is seen to be low, this might be due to a low likelihood of referral by potential reporters to CPS, due to a low likelihood that CPS will accept the case for investigation after it has been reported, or due to some combination of both dynamics. Having uncovered a number of systematic predictors of the likelihood of CPS awareness, the next logical question must be whether these reflect reporting biases, CPS screening biases, or both, so that corrective strategies can be planned. For example, CPS investigation is especially unlikely for Black teenagers. Is it due to institutional racism on the part of CPS (i.e., screening), due to discriminating reporting patterns on the part of the sentinels, or a function of both processes? Also, there is a wide variation across recognition sources in the percentages of children who receive CPS investigation, which suggests that barriers to CPS investigation may differentially affect the different agency sources. As noted above, this especially applied to school sources, because these identified the greatest number of abused and neglected children and the children they recognized were particularly unlikely to be investigated by CPS. Existing national data cannot differentiate between barriers to reporting and screening biases; yet each of these possibilities has important social policy implications, so the exact nature of the barriers to CPS investigation needs to be delineated.

Consider, for example, the reporting side of the picture. Teachers may need better training in reporting skills (e.g., giving the appropriate details to CPS to trigger an investigation). Many teachers may not regard their role as including what they consider to be "social work" functions, so interventions may be needed to combat this type of institutional belief system in order to increase the probability that they will report cases to CPS. The special gatekeeper role that school principals play in this context may need to be addressed more directly, [14] with special focus on the factors that make them reluctant to submit suspected cases to CPS (e.g., fear that the school would incur legal problems). Alternatively, on the screening side of the issue, the fact that CPS investigation occurs disproportionately for children recognized by different agency sources may indicate the need for worker training to combat biases. Such biases may stem from not valuing information from school reporters to the same degree as information from law enforcement or medical personnel. This might also be buttressed by subtle gender biases, to the extent that school reporters might tend to be female while law enforcement reporters may tend to be males. [15] The special contribution played by self-protective motives in this context should also be explored; that is, CPS agencies and caseworkers may perceive that failure to

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[14] A number of the school sentinels in the NIS-2 informally identified this factor as a primary barrier to getting CPS attention for the children they recognized as abused or neglected.

[15] Some information pertaining to the possible influences of sentinel characteristics is to be obtained in the next national incidence study on child abuse and neglect (NIS-3), which is in the planning stages at the time of this writing.

investigate children reported by law enforcement or medical services will have more serious legal consequences than failure to investigate children reported by school personnel. The role played by caseload demands also needs to be considered. That is, are large caseloads pressuring systems to divert cases outright or to exclude borderline cases even when there is some evidence of abuse? The existing data show only that certain subgroups of abused and neglected children are not having their maltreatment investigated by CPS. Given that these subgroups are deemed to be properly within the scope of CPS (as noted above), the factors that are primarily responsible for the non-investigation of different groups need to be identified before specific recommendations to correct the problem can be formulated.

Also in connection with the predictors of CPS investigation, further research is needed to examine the role of other potentially important predictors. The NIS-2 database provided information about only 15 factors, and was limited to general demographics concerning the child and the family, and to only a few key features regarding the circumstances of the maltreatment. Using this information, the NIS-2 reanalysis effort was able to account for between 16 and 34 percent of the variance in CPS investigation. There are probably numerous other factors, beyond those examined here, that determine whether CPS investigates a given child (e.g., CPS workload, number of caseworkers available on the day of the report, etc.). Additional research concerning the influence on CPS investigation of other factors, such as these, is needed. Moreover, it is a truism among those familiar with CPS operations that cases are substantiated (or nonsubstantiated) for a variety of reasons (such that substantiation itself cannot be used as an indicator of the validity of an allegation). Recognizing this, it will also be important to go beyond the simple question of what determines whether or not CPS will investigate various children in order to gain a better understanding of the full spectrum of influences on case determinations within CPS.

Risk Factors **That Predict Abuse and Neglect. The** risk predictors that were examined in the NIS-2 Reanalysis component were all demographic observables and were generally not outstanding in their ability to statistically account for the occurrence of maltreatment. Specifically, the multi-factor logistic models predicting risk of maltreatment accounted for only 8 to 20 percent of the variance in the occurrence of abuse and neglect. This probably stems from the fact that many other characteristics of children and their family circumstances are important determinants of the risk of abuse and neglect beyond the few demographic characteristics that could be examined in this study, due to the limitations of the NIS-2 information. Future research should examine the role of other potentially important predictors, so as to improve the predictive capability of the models as well as to incorporate factors that may be more amenable to clinical intervention.

Management Approaches to CPS Services. Most States reported that their CPS agencies were operating with seriously constrained resources. Fewer than half of the State Survey respondents said that their resources were generally sufficient to investigate all cases needing investigation. Moreover, even for States whose CPS specialists said that resources were generally adequate in this area, respondents voiced concerns about the scope, thoroughness, and timeliness of investigations. Yet the one aspect of the child protective services arena that has received very little attention in the field is that of agency structure and management. The MS-2 Reanalysis focused on what the children and their families are like and how this relates to their risk of abuse or neglect and their likelihood of being investigated. The State Survey report focused on agency policies and practices and considered workers' training and resources and agency uses of risk assessment. But, to date, scant research attention has been paid to devising model approaches to how CPS agencies should be structured and run.

Different management models need to be pilot-tested and evaluated. Issues in that arena need to be isolated and examined. For instance, who are hired by the CPS agencies and how are they staffed? The State Survey results indicated that the issue of worker training and retention needs more concerted attention. Staffing issues appeared to be one of the most important limits, with large majorities of States claiming that staff turnover, unfilled staff vacancies, and inadequacies in worker preparation and training imposed moderate to severe liiitations on the ability of CPS to deliver services. The field generally needs a better understanding of the confluence of factors that impact worker retention at all levels in the CPS system. But, in particular, the issue of worker training and retention also needs to be considered in connection with both the total number of cases in worker caseloads and the manageability of those cases. How should caseload sizes be determined? What skills are needed for which tasks and what is the most efficient way of insuring that they are available in the agency and deployed appropriately? Given that model approaches are developed, then what management training, tools, or methods are needed to achieve optimal CPS agency structure and optimal operation within these approaches? Admittedly, it is difficult to address the question of what would be optimal in the face of the fact that "the nation's entire child protection system is operating under a terrible crisis. All parts of the system are understaffed, underpaid, undertrained, and often underqualified."[16] Nevertheless, without a clear vision of what resources and skills would be needed in order to appropriately fulfill the agency's functions, policymakers and planners will not be aware of the exact direction to take nor will they have a realistic idea of the distance that needs to be traversed.

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[16] The U.S. Advisory Board on Child Abuse and Neglect. op. *cit.* Recommendation E-2. p. 117.