

OFFICE OF HUMAN SERVICES POLICY

Advancing Equity by Incorporating Intersectionality in Research and Analysis

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This content was initially created to inform federal staff at the U.S. Department of Health and Human Services. In an effort to increase collaboration and share promising practices, the Office of the Assistant Secretary for Planning and Evaluation has made this tool available for both public and private partners. Potential audiences that may be interested in these materials include, but are not limited to, state and local governments, tribal governments, and other private or non-profit organizations focused on programs and policies relating to health and human services. Links and references to information from non-governmental organizations are provided for informational purposes and are not an HHS endorsement, recommendation, or preference for the non-governmental organizations.

Purpose

This tool is intended to support those who design, conduct, manage, fund, or oversee research and analysis, to help them advance equity by improving their understanding of why and how to examine intersectionality when conducting research and analysis. It highlights strategies for quantitative and qualitative research and reporting, including examples of how they can be used to inform intersectional analyses.²

Embedding an equity and intersectionality framework in research and analysis is an essential means to achieve the goal of advancing people's well-being through research, evaluation, and analysis activities. To do so, it is important to embed equity throughout all stages of research and analysis—starting with planning and design—and to consider intersectionality in both quantitative and qualitative analyses.

What is equity?

The consistent and systematic, fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of colors; members of religious minorities; lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *Definition adapted from Executive Order 13985*.

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² The Department of Health and Human Services Evaluation Policy. Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. Available at: <u>https://aspe.hhs.gov/reports/department-health-human-services-evaluation-policy.</u>

What do we mean by intersectionality?

Intersectionality means that people belong to more than one group and, consequently, may experience overlapping health and social inequities and have overlapping strengths and assets related to their group identities or membership (figure 1).ⁱ A person's identities are mutually influenced by each other and can reflect existing power structures among groups in society.ⁱⁱ

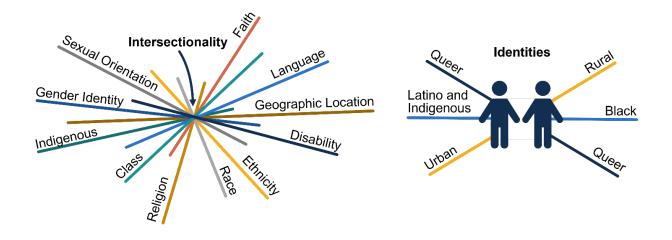


Figure 1. Visualizing intersectionality

An intersectional approach to research acknowledges that people who share one or more group identities can have different experiences, without presuming their experiences. It critically examines differences in social class, status, and privilege that inevitably vary both within and between groups.

Consider intersections between identities such as:

- Black, Hispanic, American Indian or Indigenous or Native American, Alaska Native, Asian American and Pacific Islander, and other persons of color
- Members of religious minority groups
- Lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI+) persons
- Persons living with disabilities
- Persons living in rural areas
- Persons adversely affected by poverty or persistent inequality

For more information on intersectionality and its application in research, please consider the following resources:

- A paper highlighting the need for public health to embrace intersectionality and the conceptual and methodological challenges of intersectionality research: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7750585/</u>
- A paper describing the history and central tenets of intersectionality as well as some theoretical and methodological challenges and benefits of intersectionality: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3477987/</u>
- A National Academies of Medicine perspective discussing the promise of intersectionality as a lens for studying social determinants of health, reducing health disparities, and promoting health equity and social justice: <u>https://nam.edu/health-inequities-socialdeterminants-and-intersectionality/</u>

Planning research and analyses with an intersectional framework

Intersectional approaches to research can illuminate how different groups that may have experienced different opportunities and barriers because of the various aspects of their identity (such as ethnicity and sexual identity) experience different outcomes. Ideally, research on

intersectionality centers the voices and experiences of people who face the greatest risk of marginalization. Another benefit of applying an intersectional framework is a deeper understanding of the contextual factors driving inequities.ⁱⁱⁱ

Researchers may have their own perspective and bias in relation to the social or political context of a study topic, and in relation to the people who are directly impacted by or have experiences with that topic. Researchers seek to generate objective evidence that is informed by expertise and data, but all research is inherently subjective. It reflects the perspectives of those doing the analysis—individuals who do not necessarily reflect, understand, or represent the experiences and conditions of the people and groups the research is meant to understand and affect. For example, researchers might consider:

All people have intersectional lived experience.

Some people are impacted by one or more social, health, public health, or other issues, and their insights can inform and improve research designed to address these issues.

Lived experience is a valuable form of knowledge based on someone's perspectives, personal identities, and history, beyond their professional or educational experience.

Engaging people with lived experience not only as research participants but also as contributors and co-developers of the research design, data collection, analysis, and reporting processes. From conception to dissemination, it is best practice to use approaches such as participatory action research (PAR), community-based participatory research (CBPR), and culturally responsive evaluation (CRE), which allow researchers to collaborate meaningfully with individuals with lived experience. It is important to include people with lived experience directly on the research team if possible (for example, as part of the team designing or implementing the research, or part of an advisory group). It is also important to try to engage a diverse population with diverse perspectives, so researchers can use an intersectionality framework in deciding which different people with lived

experience to engage. Overrecruiting from populations experiencing the greatest disparities helps ensure researchers will hear different viewpoints.

Developing research questions and data collection plans that address intersectionality. Whenever feasible, it is important to consider intersectionality from the outset of a study and incorporate it into research questions, the data collection plan, and analytic approaches. Ask for input—including from people with lived experience—to identify the relevant groups and research questions that will best inform how and why programs, policies, or topics of interest have different impacts on some groups. When it is not feasible to examine intersectionality, note it as a study limitation and goal for future research.

Use quantitative and qualitative data sources that are likely to include people with intersecting identities who are most likely to be affected by the policy, program, or issue being studied. For example, a study on mental health care usage among Black transgender adults will exclude unhoused people if it uses a data source with an address-based sampling approach. Considerations for addressing intersectionality in quantitative and qualitative analyses will be addressed more in-depth in the following sections of this guide.

Design research studies with a focus on equity and intersectionality. For example, we might ask research questions such as:

How can state agencies focusing on developmental disabilities increase outreach to families of Black children with disabilities? Does a policy of expanded telehealth access shrink or widen inequities among individuals experiencing poverty in rural communities?

How can rural health clinics better meet the needs of transgender youth? **For more information** on engaging people with lived experience and communities that will be impacted by your research, please consider the following resources:

- A paper covering some of the key concepts associated with participatory action research: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2566051/</u>
- An interpretive synthesis of participatory action research studies that engage older adults: <u>https://pubmed.ncbi.nlm.nih.gov/31264680/</u>
- A white paper unpacking intersectional approaches to data collection and use to promote equity across the data value chain and ensure that data systems are inclusive: <u>https://www.data4sdgs.org/sites/default/files/file_uploads/JN_1286_IDC_KP_WhitePaper_24pp_A4.pdf</u>
- A brief identifying methods and emerging strategies for engaging people with lived experience in federal research, programming, and policymaking: <u>https://aspe.hhs.gov/reports/lived-experience-brief</u>
- A framework describing the integration of contributions from community-based participatory research (CBPR) and Health Impact Assessments (HIA) evaluation frameworks to guide efforts to evaluate partnership effectiveness in addressing health inequities: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6077092/</u>

Considerations for addressing intersectionality in quantitative analyses

Quantitative analysis is an essential approach to research on intersectionality because it can reveal advantages and disparities that may be rooted in historical power imbalances and implicit biases. Although there are no statistical methods specifically designed for analysis in intersectional research, researchers can use standard statistical models to estimate outcomes of interest or construct models that address intersectionality.

Quantitative analysis might go beyond examining the effect of a single factor or aspect of a person's identity (such as race) to highlighting how two or more factors (such as race and gender) interact to produce an outcome.^{iv} For example, in regression models, researchers can use interaction terms to probe how the effect of an intervention differs for Asian American and Black LGBTQI+ adults. Multivariable regression techniques for intersectional analysis enable a researcher to quantify the combined effect of multiple intersecting group identities on specific outcomes while simultaneously accounting for other factors.

The choice of measures and models can reveal the health outcomes of different programs, policies, or topics on different groups and affect how results are interpreted. (For more information, see the guide titled "Advancing Equity through Quantitative Analysis" at <u>aspe.hhs.gov/equity-tools</u>.)

Some considerations for selecting groups with intersecting identities

Before starting an analysis, it is important to determine the intersecting groups to study in relation to the research objective.^v For example, when applying quantitative methods to the study of inequitable access to COVID-19 vaccines, researchers may have to decide if they want to investigate differences by race/ethnicity and rural residence or by race/ethnicity, rural residence, and disability status.

Decisions about which groups to select will be influenced by several factors, including:

- Which intersections are of most interest or relevance given the study's context.
- Whether and how information on them is collected and measured in available data through existing variables, and how they are categorized. Decisions on which intersecting groups to use in research are typically informed by theory or prior research and by policy or program implications. (For example, intersecting groups that are too narrowly defined might not lead to insights that inform program improvement or policy action.)
- Sample size considerations for subgroups with intersecting identities (for example, does a data set have a large enough sample of the groups with intersecting identities of interest?).

Selecting measures of disparity

There are a number of common measures for estimating disparities in outcomes across subgroups of individuals with intersecting demographic and social identities.

To examine differences across groups with specific **intersecting identities**, **risk ratios**, **odds ratios**, **and comparisons of means and medians** can be useful. Researchers can use these statistics to directly identify differences across groups of individuals with multiple intersecting characteristics. However, keep in mind that risk ratios and comparisons of means and medians typically compare across one dimension or characteristic. Multivariate regression may be better for quantifying multiple levels of differences.

Next, we demonstrate calculations for two measures—risk ratios and odds ratios—that are common in equity research. They are especially helpful to examine disparities within and between subgroups with intersecting identities.

Risk ratio

The <u>risk ratio (RR)</u> is the likelihood of an outcome in a population of focus (such as Mexican American adults with developmental disabilities) relative to a comparison population (such as Black adults with developmental disabilities). Results can be used to inform how to prioritize and tailor resources to assess the likelihood of an outcome across groups with varying intersecting identities.

Example: Consider the likelihood of COVID-19 infection in a group that was at particularly high risk because its members lived in congregate housing: adults with developmental disabilities. We will compare the outcomes of Mexican American adults with developmental disabilities to those of Black adults with developmental disabilities.

Percentage of Mexican American adults with developmental disabilities with COVID-19 infection

 $Risk ratio(RR) = \frac{Will COVID Ty injection}{Percentage of Black}$ adults with developmental disabilities with COVID-19 infection

Advantage: Can be used to determine a group's relative risk of disparity for an outcome (that is, compared with a peer group).

Disadvantage: Requires selection of reference group, which can convey judgment or bias. Select the reference group intentionally, without defaulting to the reference groups commonly used in the past.

RR = 1: No difference in COVID-19 risk between groups; RR > 1: COVID-19 risk among Mexican American adults with developmental disabilities greater than among Black adults with developmental disabilities; RR < 1: COVID-19 risk among Mexican American adults with developmental disabilities lower than among Black adults with developmental disabilities.

Odds ratio

<u>Odds ratios (OR)</u> are used to compare the relative odds of an event occurring in two population groups and can be particularly valuable when considering subgroups with intersecting identities. For each group, the odds are defined as the chance an event occurs divided by the chance it does not occur.

Example: Continuing with our COVID-19 example, what is the likelihood of COVID-19 infection among Mexican American adults with developmental disabilities relative to Black adults with developmental disabilities?

| Odds ratio(OR)= | Number of Mexican American adults with developmental disabilities with COVID-19 infection | Number of Black adults with developmental disabilities with COVID-19 infection |
|-----------------|--|---|
| | Number of Mexican American adults with developmental | Number of Black adults with developmental disabilities without COVID-19 infection |

Advantage: Unlike relative risk, odds ratios can be used to examine disparate outcomes among groups with intersecting identities in case-control studies (that is, studies that retrospectively compare individuals with a rare condition or outcome to those without one). Relative risk estimation is problematic in the case where the outcome of interest is rare in intersecting groups under study.

Disadvantage: When the outcome of interest is common for groups with intersecting identities that are under study, the odds ratio overestimates the relative risk. Further, if the outcome is low in one intersecting group and not in the other, there is heterogeneity in the odds ratio that can be interpreted as an artificial disparity between two groups.¹ For example, in examining racial inequities in pain levels by sickle cell status among young adults, using the odds ratio could show artificial differences given the high prevalence of pain among young adults with sickle cell and low levels of pain among young adults without sickle cell.

OR = 1: No difference in odds of COVID-19 infection between groups; OR > 1: Odds of COVID-19 infection among Mexican American adults with developmental disabilities; OR < 1: Odds of COVID-19 infection among Mexican American adults with developmental disabilities; OR < 1: Odds of COVID-19 infection among Mexican American adults with developmental disabilities lower than among Black adults with developmental disabilities.

Please note that a composition index (a measure that combines two or more factors to form a single quantitative variable) such as the <u>Social Vulnerability Index</u> is often used to measure disparities and disproportionalities. To measure a disparity, the composition index compares the proportion of a group with the same characteristics, such as demographics or health outcomes, to their representation within a specific population. However, this index is **not** appropriate for comparing disparities and disproportionalities **between** subgroups, such as those defined by intersecting identities.

For example, using a composition index to calculate the rate of fetal alcohol syndrome among Native Americans living on a reservation might suggest a low or high incidence rate within one geographic community, compared to another geographic community. It cannot tell us whether that incidence rate is low or high relative to other demographic groups with intersecting identities.

Modeling intersectionality in regression equations

A change in an outcome is not always a direct result of an intervention. When examining the impact a program or topic has on different groups of people, it is good practice to control for confounding factors, which are underlying drivers of the outcome of interest that are also associated with the program, to ensure we are not over- or underestimating the effect of the program or topic. However, it is **important to be careful about overcontrolling** because controlling for some underlying drivers of outcomes can dilute real differences between groups. For example, when examining the intersectional effect of race and poverty on lead poisoning in childhood, researchers may want to carefully consider the implications of controlling for county of residence, as county of residence can be correlated with poverty. Therefore, controlling for county of residence dilutes the real effect of poverty in the model results.

Researchers use regressions and statistical tests to generate estimates of the impact of policies, programs, or other interventions on outcomes in different intersecting groups. There is a variety of approaches to specifying regression equations to generate separate estimates of program or topic impacts for multiple groups.

- The most common approach is to allow for differences across subgroups with intersecting identities in regressions by including interaction terms for policy or program variables with group identity variables and/or interaction terms for multiple group identities. For example, regression models examining the differential impact of smoking on lung cancer by race and gender would include an interaction term for race and gender, and one for race, gender, and smoking status. However, using interaction terms requires specifying a reference group, which may lead to elevating the experiences of one intersecting group over others (For more information on reference group selection, see the guide titled Advancing Equity through Quantitative Analysis at https://aspe.hhs.gov/equity-tools.).
- An alternative approach is to include all subgroups of interest in the regression, using variables separately representing each group with intersecting social and/or demographic characteristics (as shown in the box below).
 - Although mathematically identical to traditional specifications with interactions, this approach does not require a reference group and models each intersecting group distinctly, thereby acknowledging that each intersecting group has its own experience.
 - This identifies each subgroup on its own and provides coefficient estimates for each.

Example of using mutually exclusive indicator variables to estimate subgroup impacts of smoking on lung cancer

In a regression analysis with population data, you could include indicator variables for each subgroup of race/ethnicity by gender and smoking status:

 $lung \ cancer_{i} = \begin{cases} \beta_{1} \times femaleChineseSmoker_{i} + \beta_{2} \times femaleChineseNonsmoker_{i} + \\ \beta_{3} \times femaleWhiteSmoker_{i} + \beta_{4} \times femaleWhiteNonsmoker_{i} + \\ \beta_{5} \times maleChineseSmoker_{i} + \beta_{6} \times maleChineseNonsmoker_{i} + \\ \beta_{7} \times maleWhiteSmoker_{i} + \beta_{8} \times maleWhiteNonsmokeri + X_{i}\gamma + \varepsilon_{i} \end{cases}$

In the equation, each indicator variable (for example, *femaleChineseSmoker*) is 1 if an individual falls within the race/ethnicity, gender, and smoking status category and 0 otherwise. The coefficient on each term captures the likelihood of getting a lung cancer diagnosis if a person is in that specific group (for example, β_1 estimates the probability of a female Chinese smoker being diagnosed with lung cancer).

The term X is a set of additional individual-level control variables that could impact a person's likelihood of getting lung cancer, such as age, region of residence, or comorbidities.

Other methods for modeling intersectionality^{vi}

There are many other quantitative methods that researchers can use to examine policy, program, and intervention outcomes and study their implications for a variety of groups with overlapping identities. Some common approaches are:

- Multilevel modeling. Multilevel models account for variation within and between intersecting groups. This allows researchers to characterize identifying characteristics more effectively by allowing the effect of independent variables (such as race and social class) to vary by individuals or groups with intersecting identities. For example, multilevel models can be used to examine quality-of-life outcomes among patients with metastatic cancer by race/ethnicity, socioeconomic status, and age across hospital racial composition.
- Structural equation modeling. Structural equation models bring together several multivariate techniques so a researcher can simultaneously estimate pathways and relationships between multiple independent variables and multiple outcomes. They give a researcher flexibility in measuring complex interrelationships between predictors and outcomes among individuals with different intersecting identities. A researcher can use structural equation models to understand the drivers of inequities between subgroups with intersecting identities. For example, does racism explain why Black women are prescribed opioids for acute pain at lower rates than their White counterparts?
- Latent profile methods, including latent variable and latent class models. Latent profile analysis is a clustering method used to place individuals in groups based on their similarities across multiple demographic and social identities or experiences. Researchers can use latent profile methods to find out whether and how different patterns of experiences predict different outcomes. For example, they can help a researcher identify subgroups of patients of color with cancer in rural settings who are most susceptible to financial risk from having to pay for cancer care.

For more information on the application of intersectionality in quantitative research, please consider the following resources:

- A paper discussing the application of intersectionality in quantitative studies from 1989 to mid-2020, evaluating the integration of theoretical frameworks in these studies, and identifying innovative methods that could be applied to health research: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8095182/</u>
- A paper highlighting literature on intersectional stigma (convergence of multiple stigmatized identities within a person or group), identifying gaps in existing methods for studying intersectional stigma, and providing examples of promising analytic approaches: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6376691/</u>
- A systematic review of health disparities research studies applying an intersectional lens and providing recommendations to improve integration of intersectionality into quantitative studies: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8119321/</u>

Considerations for addressing intersectionality in qualitative analyses

Engaging people with different overlapping identities can inform the design, implementation, and evaluation of policies, programs, and practices. Qualitative data can help us understand the experiences, barriers, and assets of groups with various intersecting identities and help us understand the root causes of the disparities and inequities revealed by research.

Whereas quantitative data can tell us about the prevalence of outcomes, qualitative data can be used to corroborate or refute quantitative results, place the results in a context, and explain the factors that could be at play under the quantitative findings. It can help ensure the researcher obtains varied perspectives from a diverse group of individuals. Consequently, qualitative data can strengthen the inferences that can be drawn from quantitative data.

When seeking to develop a better understanding of how and why experiences and outcomes may vary among groups with different intersecting identities, we can also use qualitative data if there are inadequate quantitative data on outcomes for these groups. Examples of helpful qualitative data collection methods follow:

- Interviews are an effective way to develop a more detailed and nuanced understanding of the experiences and perspectives of individuals with various intersecting identities. For example, individual in-depth interviews will likely work better than focus groups for understanding the experience of a particular individual with a given set of intersecting identities, because the interviewer can dig into the context for those experiences and perspectives, such as systemic barriers to accessing the resources necessary to achieve the individual's goals. One-on-one interviews offer the added benefit of often being more effective than focus groups for studying sensitive topics such as sexuality or the experiences of individuals who are excluded from a community group because of their other group identities.
- Focus groups can also teach us about the different experiences or viewpoints of individuals. They help the researcher to better understand the range of experiences and opinions by observing a dialogue between individuals with different intersecting identities. For example, a focus group with parents in suburban Chicago will reveal the range of opinions on community mental health services for children held by the different intersecting groups, including groups defined by race/ethnicity, disability, and sexual orientation. This

dynamic may not be captured in one-on-one interviews. When planning focus groups, consider the composition of the individual group as the mix of participants with different intersecting identities may influence the group dynamics and information collected. Does the research question or design warrant groups comprised of people with similar social and demographic characteristics or people with a range of characteristics?

- On the one hand, homogenous groups may create a safe space for more in-depth and nuanced discussions that may not be possible if people with more diverse perspectives join the group. Participants in such groups may feel emboldened to share their experiences based on prodding from others with similar experiences.
- Conversely, having groups of people with different intersecting identities may allow for a more robust expression of perspectives that would not be possible without such dynamic interplay among the groups (or such divergent thought expression).

Helpful strategies for conducting either type of qualitative data collection follow:

- Ensure interviewers and facilitators are prepared appropriately for the interviews and focus groups. They should be well skilled in the methods used, use trauma-informed approaches,^{vii} and be culturally responsive.^{viii}
- Include open-ended questions in interview and focus group guides, qualitative surveys, and other data collection materials because they allow respondents to describe their experiences in their own words. They are particularly helpful when interviewing a mix of people with multiple group identities because they allow the researcher to gather different pieces of information from these different people that narrower questions focused on a particular identity might have missed. Probes after initial responses can explore experiences across intersecting identities.
- Engage people with varied viewpoints who are not project team staff and those with lived experience in the entire research process to provide diverse perspectives.
 - They can help **structure research questions and planned analyses** by unpacking which intersecting identities may be particularly relevant and where people with different identities may experience a program, policy, or issue differently.
 - They can help to **review or even co-create discussion guides**. They may be particularly helpful in thinking about how individuals with different, intersecting identities might interpret or react to certain questions. For mixed-method research, participants can weigh in on **key variables to examine and factors to consider when developing regression specifications** for quantitative analyses of various groups with intersecting identities.
 - They can **contextualize and help interpret findings** through an intersectional lens and provide significant input on effective **strategies for communicating results** to the affected populations.

Pilot the questions with different intersecting groups of interest before using them with research participants. Interviewers may also want to ensure that data collection and other research instruments are easy for participants to understand and are accessible. **Caution:** One person's views do not represent the entire community. There is considerable diversity of beliefs and perspectives even within subgroups.

- When identifying and recruiting participants, consult with community groups and partner organizations that are likely to have knowledge about people with intersecting identities of importance to the research and know how to reach them (such as working with LGBTQI+-serving organizations to reach transgender young adults). The researcher can work with them to go where the population of focus is (such as community or senior centers, schools, online groups, etc.).
- Compensate both research participants and members of the research team with lived experience for their time and expertise. Compensation helps increase the chance that a diverse set of individuals with diverse perspectives can participate.
- Use strategic sampling methods. For qualitative research focused on understanding the experiences of groups with different intersecting identities, probability sampling methods (for recruiting large representative samples) may not be the best strategy. Instead, researchers might consider methods such as purposive sampling (selective sampling of knowledgeable individuals), quota sampling (nonrandom representative sampling for certain subgroups), and snowball sampling (recruiting through referrals by enrolled participants).
- Use an intersectional framework to analyze qualitative data. Organize collected data by group identities to search for themes; reorganize data by other group identities to identify any additional patterns.
 - Engage communities with intersecting identities of interest when analyzing and interpreting the data to help identify key takeaways and recommendations.
 - Acknowledge the limitations of the data and the analysis. Qualitative data are always unlikely to represent the experiences of people with all possible intersecting identities.
- Disseminate findings to a wide audience that includes community members and people with lived experience. Different products tailored to research, policy, and community audiences—including those with different intersecting identities—acknowledge shared ownership of the research, an important feature of research in service of equity.

Additional considerations for researching intersectionality

- Conduct intersectional analyses with a strength-based approach. When measuring disparities across groups with intersecting identities, consider their unique strengths and use explorative analysis in both quantitative and qualitative efforts to collect this information.
- Allow enough time for genuine engagement. Engaging community members takes time, and it is important it be done in earnest with a desire to truly listen to and incorporate the perspectives of people with lived experiences.
- Recognize each person's unique perspective. It is important not to assume one person represents the perspectives of diverse members of their community.
- Acknowledge the value of community participation. Value and properly, equitably compensate community members for their expertise and contributions at the same rate used for other experts valued for their professional or educational experience.

For more information on the application of intersectionality in qualitative research, please consider the following resources:

A paper reviewing challenges that researchers may experience in conducting research using intersectional approaches and offering suggestions for overcoming challenges: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7363589/</u>

Resource providing an example of incorporating intersectionality into research design using qualitative interviews: <u>https://www.tandfonline.com/doi/abs/10.1080/13645579.2016.1268361</u>

Insights into conducting qualitative interviews using intersectionality as a data generation tool and including a case study:

https://journals.sagepub.com/doi/full/10.1177/16094069211064672

A set of tools on equitably engaging people with lived experience and other diverse partners: <u>aspe.hhs.gov/equity-tools</u>

Putting it all together

This guide highlights the value of incorporating intersectionality into quantitative and qualitative research and provides some strategies for doing so. For both types of research methods, **it is important to incorporate an intersectionality framework at the outset of study design and to engage people with lived experiences as co-developers throughout the study process.** Although quantitative and qualitative approaches each individually provide important information on the experiences of groups with intersecting identities, using only one approach may not convey a complete picture of those experiences.

Quantitative data are best for showing the magnitude and prevalence of outcomes across groups and revealing disparities, but they do not explain the reasons for those observations or their root causes. They also miss the nuances of individual experiences and beliefs. Qualitative data can give a rich context to some quantitative data, but usually provide nuance for the experiences of only a subset of groups with intersecting identities at one time. Triangulating findings from both quantitative and qualitative data sources or using a mixed-method approach to probe the experiences of diverse groups of individuals with intersecting identities can help complete the picture.

- Triangulation entails using more than one data source to corroborate findings and is an effective tool for summarizing the impact of a policy or program or topic on outcomes for a wide range of groups with different intersecting demographic and social characteristics.
- A mixed-method approach entails using both quantitative and qualitative data collection in the same study (either simultaneously or sequentially) to examine outcomes of different groups with intersecting identities and provide context for those outcomes.

Although it is not always possible to use multiple data sources in the same study, the strength of research findings on intersectionality should be viewed in large part as a function of the number of data sources used. Reliance on a wide array of sources helps create a particularly clear picture of the experiences of different groups with intersecting identities.

Additional resources

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