Intersectionality-informed Mixed Methods Research: A Primer

Daniel Grace, PhD





Author: Daniel Grace, PhD

Title: Intersectionality-informed Mixed Method Research: A Primer Publisher: The Institute for Intersectionality Research & Policy, SFU

Publish date: April 2014 ISBN: 978-0-86491-358-6

This publication was made possible in part through funding from the Public Health Agency of Canada (PHAC). The opinions expressed in this publication are those of the authors and do not necessarily reflect those of PHAC.

Cette publication a été rendue possible en partie avec le financement de l'Agence de la santé publique du Canada (ASPC). Les opinions exprimées dans cette publication sont celles de l'auteur et ne représentent pas nécessairement celles de l'ASPC.

Intersectionality-informed Mixed Methods Research: A Primer

Daniel Grace, PhD
London School of Hygiene & Tropical Medicine, UK,
Daniel, Grace@lshtm.ac.uk.

Introduction

Intersectionality researchers emphasize the need to consider complex interactions between *structures of power and oppression* and *interconnected aspects of individual and group identity and social location* (Crenshaw 1991; McCall 2005; Hankivsky 2011). This focus allows for richer understandings of inequity in the social world, while "providing a theoretical approach and mode of inquiry that can help to illuminate and interpret complex systems of power, penalty, and privilege" (Grace 2013: 161). For a simplified introduction to intersectionality, including key principles of intersectionality research, see the companion primer in this collection (Hankivsky 2014).

Many intersectionality researchers have noted the benefits and opportunities of engaging in mixed methods research while recognizing persistent challenges (Hankivsky 2012; Hankivsky & Grace 2014). Dubrow (2013) explains that the use of both qualitative and quantitative data is needed to "produce a full and complete portrait of intersectionality, and to test its main assumptions" (164). For example, while *quantitative data* is helpful in intersectionality research for producing generalizable results for larger population groups, *qualitative data* can provide complementary insights into institutional processes and people's subjective and context-dependent experiences in the everyday world (Dubrow 2013).

Although mixed methods research is not without its critics, for many researchers this form of inquiry offers important *pragmatic* opportunities to build upon the complementary strengths of qualitative and quantitative data to best answer research questions. This has led some researchers to call mixed methods research a third methodological paradigm (Tashakkori & Teddlie 2010; Johnson & Onwuegbuzie 2004). As Greene (2007) puts it, mixed methods research allows researchers to "compensate for inherent method weaknesses, capitalize on inherent method strengths, and offset inevitable method biases" (xiii).

That said, the relationship between mixed methods inquiry and intersectionality is in the relatively early stages of development. As the companion primers in this collection illustrate, intersectionality research has a long and rich research tradition (Hankivsky 2014) that has primarily had a strong *qualitative* focus to date (Hunting 2014), with a growing number of *quantitative* studies in recent years (Rouhani 2014). In this primer, a review of existing intersectionality-informed mixed methods research, with a focus on the fields of *mental health promotion and suicide prevention, intimate partner violence* and *boys' and men's health*, reveals an emerging but relatively limited area of scholarship to date. Key overall factors that inform the procedures for mixed methods research projects—*timing, weighting, mixing* and *theorizing* (Creswell 2003)—will be used to structure the discussion that follows.

After reviewing these key domains, this primer outlines a focused case study of mixed methods research related to gay men's health across the lifecourse in an effort to provide a more detailed account of longitudinal mixed methods data collection and analysis informed by intersectionality (Grace et al. 2014). Drawing on this study, a number of conceptual models are provided to help exemplify key methods themes reviewed, and map issues of mixed methods intersectionality research design and analysis.

Mixed Methods and Intersectionality

Mixed methods research is used in diverse disciplinary fields including, but not limited to psychology, health sciences, policy studies and sociology. According to Carcelli and Greene (1997), the mixing of qualitative and quantitative data in a research study is typically done for the following reasons:

- 1. to test the agreement of findings obtained from different measuring instruments;
- 2. to clarify and build on the results of one method with another methods; and
- 3. to demonstrate how the results from one method can impact subsequent methods or inferences drawn from the results (Harwell 2011: 151).

The studies cited within this primer illustrate multiple examples of these complementary rationales for conducting mixed methods research.

Creswell (2003) notes four overall factors that influence how the procedures for mixed methods projects are designed: *timing*, *weighting*, *mixing* and *theorizing*. These key issues not only provide insight into aspects to consider when designing a mixed methods study, but also foreground important themes and tensions to reflect upon when

reading, evaluating and using mixed methods research in policy analysis. Furthermore, each of these issues provides an opportunity to consider important questions related to conducting intersectionality-informed mixed methods research.

Timing

First, timing is an essential factor to consider in the study design of intersectionality-informed mixed methods research. In some cases mixed methods data may be collected sequentially, in phases over time. In other cases, it may be more manageable or useful to collect data at the same time, creating a concurrent study design (Creswell 2003). For example, Logie et al. (2012, 2013) conducted intersectional mixed methods research to examine the needs of diverse women living with HIV in Ontario. This research was sequential, with 2 main stages of data collection: 1. a qualitative stage of focus group interviews to examine the needs of women living with HIV in Ontario; and 2. a subsequent stage of quantitative research using cross-sectional surveys to examine issues of intersecting stigma and discrimination among African, Black and Caribbean communities of women living with HIV (Logie et al. 2012, 2013). In this example, earlier qualitative data was needed to inform subsequent quantitative data collection. In the in-depth example provided at the end of this primer, this issue of timing is further complicated with a longitudinal study design with multiple quantitative and qualitative points of data collection over time.

In short, many combinations for data collection exist, including other intersectionality-informed mixed methods research that starts with a quantitative phase of data collection followed by qualitative research. Given the complexity involved, numerous typologies or classification systems have been designed to aid mixed methods researchers in the development of their research strategies, including how to address this issue of sequencing (Creswell & Clark 2007; Clark & Creswell 2008). For an in-depth overview to this key method issue and visual models of different kinds of mixed method study designs, see Creswell (2003) and Harwell (2011) for a discussion of three sequential designs (explanatory, exploratory and transformative) and three concurrent designs (triangulation design, embedded/nested and transformative). In the focused case study on gay men's health discussed below, a working model that draws upon these typologies is provided.

The issue of *timing* has also been raised in relation to intersectionality researchers' consideration of the fluid and dynamic nature of individuals' lives and experiences over time. Within an intersectionality-based analysis it is essential to consider that "privileges and disadvantages, including intersecting identities and the processes that determine their value, change over time and place" (Hankivsky, Grace, Hunting et al. 2012: 37; see

Halco 2009). For example, in mixed methods intersectionality-informed research on student identities and experiences of racialization over the course of their educational trajectory, Harper (2011) notes the importance of collecting mixed method *longitudinal data*—that is, collecting mixed method data at *multiple time points* to account for complex changes, such as shifts in students' identities. A focus on shifts in the identities of youth has also been used to explore associations between bullying and suicide in quantitative intersectional analysis (LeVasseur et al. 2013; see Rouhani 2014 for an extended discussion of this quantitative case study).

Weighting

Second, the *weighting* or priority that is given to qualitative or quantitative data in a study is an important factor in the design and analysis of intersectionality-informed mixed methods research. Placing priority on the qualitative or quantitative data may occur in multiple ways in a program of mixed methods research (Creswell 2003). For example, one kind of data may be emphasized in the reporting of the data, with the other data playing a minor or backup role. In some cases, different outputs from a study may be weighted differently, with some mixed methods research findings displaying a quantitative emphasis, and others focused primarily on qualitative data.

It is important to note that the overall interests and priorities of the researcher and/or audience may inform how data is weighted (Creswell 2003). For example, a *deductive approach* to data may be primarily quantitative (e.g., *testing a theory regarding why some people commit suicide more than others or the extent to which some groups of persons experience higher rates of domestic violence or intimate partner violence*), whereas an *inductive approach* to the research may be primarily qualitative¹ (e.g., *generating themes based on interviews with people who have attempted suicide or who have the lived experience of being in an intimate partnership in which domestic violence has occurred). This review, drawing on Ono's (2013) qualitative work on the interpersonal violence experienced by women who are racial minorities, places emphasis on the importance of <i>reflexivity* when conducting research in that field.

Weber and Castellow (2012) argue that intersectionality-informed mixed methods researchers must consider the extent to which qualitative data is used to serve as a "'maidservant' to the more powerful quantitative master" (443). In this respect, when considering how to weigh different kinds of quantitative and qualitative data in mixed methods research, Bowleg's (2012) intersectionality research points to a larger ques-

¹ See Hunting (2014) for an extended discussion of the 'value added' of conducting inductive qualitative research in the area of interpersonal violence.

tion: what counts as data? For example, how do sources of data such as tacit knowledge and historical documents become integrated into an analysis (if at all), and how are these positioned in relation to other forms of qualitative and quantitative data?

Mixing

A third issue to consider when thinking about mixed methods intersectionality research concerns the *mixing* of the data, and more generally speaking, how research questions, disciplines, philosophies and varied interpretations are actually mixed in a study or program of research. From Creswell's (2003) perspective, two questions are important in this regard. The first is related to the previously discussed theme of *timing*: *When in a mixed methods study does a researcher mix the data?* For example, depending on the study, the mixing of qualitative and quantitative data might happen during one or more of the *data collection*, *analysis* and *interpretation* phases (Creswell 2003). Within the research literature, disagreement exists with respect to this important *when* question (Harwell 2011: 152). As we will see from examples below, mixed methods researchers continue to approach the *timing of their mixing* differently.

The second key question concerns the actual 'doing' of the mixing: *How are qualitative and quantitative data being mixed in the study?* Creswell (2003) explains:

Mixing means either that the qualitative and quantitative data are actually merged on one end of the continuum, kept separate on the other end of the continuum, or combined in some way between these two extremes (207-208).

Integration is a key challenge in mixed methods research (Brayman 2007) and is important to reflect upon for intersectionality researchers.

For Collins and Dressler (2008), mixing their qualitative and quantitative data related to domestic violence involved *merging* or *integrating* their data. This research sought to answer the following overarching research question: "Is there a shared foundation for talking about domestic violence that can link providers from different human service fields" (Collins & Dressler 2008: 362). The authors mixed their data at the *analysis* and *interpretation* stages. They argued that "without integration our research findings would be incomplete and could not adequately answer our research questions" (Collins & Dressler 2008: 384). Although intersectionality does not explicitly inform their study design or interpretation, through a detailed account of their use of *cultural domain analysis* the authors argue that their strategy of integration can advance both mixed methods research techniques as well as the field of domestic violence research.

Closer to the other end of the integration continuum noted above, other research in the field of domestic violence has analyzed both quantitative and qualitative data and is explicitly informed by intersectionality. For example, Thiara, Hague and Mullender (2011) argue that an intersectional analysis provides an important framework for looking at and understanding crosscutting issues for disabled women affected by domestic violence, including social attitudes, marginality within the domestic violence and disability movements, and responses from service providers (759).

Thiara et al.'s work was a partnership between Women's Aid (a United Kingdom domestic violence organization) and two feminist research centres in Bristol and Warwick. Their research focused on violence against women. In order to understand the extent to which data was mixed in the study, it is important to note the multiple sources of qualitative and quantitative data collected and analyzed. These sources included:

- an initial focus group with disabled women to inform the design of the research tools and overall conduct of the research;
- interviews with key professionals and activists in women's and disability organizations;
- consultation with abused disabled women;
- a national survey of Women's Aid and other domestic violence organizations;
- a national survey of disabled people's organizations;
- in-depth interviews with 30 abused disabled women aged 20-70 years; and
- a literature review and a background analysis of policy and legislation (Thiara et al. 2011: 760).

This research did not seek to *quantify* the qualitative data, but rather integrated or mixed multiple forms of data though the process of analysis and interpretation. As such, this intersectionality informed mixed methods research is closer to the kinds of analysis that policy actors would conduct when weighing multiple kinds of quantitative and qualitative evidence within a policy analysis. By mixing these diverse kinds of data in the analysis stage, the research team sought "further understanding of the needs of abused disabled women, to investigate the scope of existing provision, and identify gaps within both domestic violence and disability services" (Thiara et al. 2011: 760).

Theorizing

Drawing on Creswell's work on mixed methods (Creswell 2003), a fourth issue for intersectionality-informed mixed methods research concerns *theorizing* and the extent to which an overall study design is informed by a larger theoretical perspective. To date, mixed methods research has been informed by diverse theoretical perspectives, either alone or in combination. Advocates of mixed methods research have underscored the importance of theory integration within the process of study design and analysis in order to optimally answer research questions and address issues of health and inequity.

For example, in Kral et al.'s (2012) review of the need for mixed methods research to inform the field of suicide prevention, they explain that "mixed methods research will expand knowledge on suicide by integrating theory-based variables and subjectivity as objects of inquiry" (236).

In his work on intersectionality and mixed methods research, Perry (2009) explains that "[I]ike all mixed methods research, the effectiveness of one's analysis is highly contingent upon the meticulous and nuanced ideas that inform the research design" (241). As the primers in this collection exemplify, intersectionality has a long, complex and highly theorized research tradition focused on complex issues of power, social structure, inequity, and social justice. Thus, for the purposes of this discussion, it is essential to consider the following question when conducting or using intersectionality-informed mixed methods research: *In what ways is the mixed methods study informed by the theoretical underpinnings or principles of intersectionality?* In some cases intersectionality informs a mixed methods study design in ways that may not be explicit in published literature (Hankivsky & Grace 2014).

Case Study: Mixed Methods Health Research with Gay Men

Although some of the key ways that intersectionality has informed mixed methods research to date have been exemplified in the discussion above, the following case study provides a focused opportunity to map a longitudinal mixed methods study with gay men in order to highlight issues in study design and theoretical integration. Like the work of Clarke and McCall (2013), this section draws upon the intersectional research experience of the author (Grace et al. 2014) in an extended case example, allowing for the identification of "the point[s] at which an intersectional framework comes into focus, something that is usually not visible from the published record" (Clarke and McCall 2013: 351).

HIV research has been identified as a key field of emerging intersectionality-informed mixed method research (Hankivsky & Grace 2004). A related field or subsection of this literature explicitly focuses on the diverse health issues of gay and bisexual men across the lifecourse, including, but not limited to HIV. One interesting example of mixed methods research in this field is work by Haile (2009), who uses qualitative and quantitative data to explore complex questions of social stigma and HIV among "Black MSM" (men who have sex with men) in the United States. It is worth noting that the use of this epidemiological category "MSM" has been challenged by critical social scientists and intersectionality researchers alike:

Thinking about how we use categories of most-at-risk population (MARPs) in policy strategies—e.g., what groups like "gay," "MSM," or "Black MSM" may reveal and/or erase—is important in this field of inquiry. The policy effects of so-called behavior or epidemiological categories, such as MSM and WSW (women who have sex with women), must also be considered. Young and Meyer (2005) discuss how the use of categories can lead to the erasure of sexual minorities, arguing that the "purportedly neutral terms" of MSM and WSW are highly problematic insofar as "they obscure social dimensions of sexuality; undermine the self-labeling of lesbian, gay, and bisexual people; and do not sufficiently describe variations in sexual behavior" (1144) (Grace 2013: 162-163).

Just as the *mixing* of quantitative and qualitative data is a concern for mixed methods researchers, intersectionality scholars have long focused on the *mixing of interdependent identities* (e.g., the challenge of simultaneously considering multiple, indivisible social locations, such as the experiences of young, gay, White males of low socioeconomic status living in rural communities). The need to consider "intersecting categories" is a

key principle within quantitative, qualitative and mixed method intersectional analysis (Hankivsky et al. 2012: 35).

Turning now to a focused example of research of relevance in the field of *boys' and men's health*, the Canadian Institutes of Health Research (CIHR) Team in the Study of Acute HIV Infection in Gay Men conducted two related research cohorts: one with a group of gay men who received acute or recent HIV diagnosis, and one with a group of HIV-negative gay men. This latter research, which sought to gain a rich understanding of gay men's sex lives, sexual health knowledge, and understandings of HIV prevention strategies is the focus of the discussion below. The CIHR Study Team describe their intersectionality-informed mixed methods research as "a pragmatic paradigm that allows for the combination of quantitative and qualitative research methods into a single study or research cohort" (Grace et al. 2012: 1). They explain that this mode of inquiry allows their multidisciplinary team to engage in the qualitative discovery of patterns *inductively*, the testing of quantitatively-driven hypotheses *deductively*, and the uncovering of best possible explanations for complex phenomena *abductively* (Grace et al. 2012; see Creswell 2003; Greene 2007).

It is important to note that the research team was composed of a diverse group of people with different disciplinary backgrounds, research experiences, and familiarity with intersectionality research. A number of meetings and journal club talks were organized to present an introductory overview of intersectionality so that team members could discuss emerging literature in this area and reflect on the theoretical implications of intersectionality for the study. Many team members also participated in intersectionality reading groups and presentations hosted by the Institute for Intersectionality Research and Policy, Simon Fraser University, providing further opportunities for methodological and theoretical reflection. The research team's analysis is consistent with calls that have been made to integrate intersectionality, along with other theories, such as the lifecourse perspective, social ecology perspective, and minority stress model, into research and policy strategies that address the diverse needs of lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities (Institute of Medicine 2011; Grace 2013).

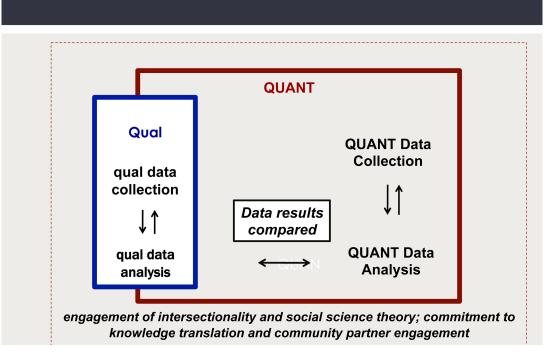
Reflecting on an area of this larger program of HIV research conducted by the CIHR Study Team is an opportunity for *reflexive* engagement with the implementation of mixed methods research, and with the extent to which key aspects of the study design and analysis were informed by intersectionality. This model is not presented as an ideal type, but rather as an exploratory case study to highlight key themes previously reviewed using intersectionality-informed research, including issues of *timing*, *weighting*, *mixing*, and the *integration of theory*.

Data Collection and Measurement

Mixed methods researchers often underscore the importance of using models to map out one's study design (Creswell 2003). The *working model* presented below underscores the extent to which this CIHR study cohort of HIV-negative gay men used a *concurrent embedded design* (e.g., qualitative research was partially embedded or nested in a larger quantitative study) with the *concurrent triangulation of data* (e.g., comparing qualitative and quantitative results to inform both the process of analysis and subsequent study instruments) (Creswell 2003). At the bottom of the model, we can see that the study maintains important aspects of what is called a *concurrent transformative approach* (e.g., the engagement in social science theory and intersectionality as well as the allied commitments to working with community partners and policy actors to help support the needs of gay men across the lifecourse).

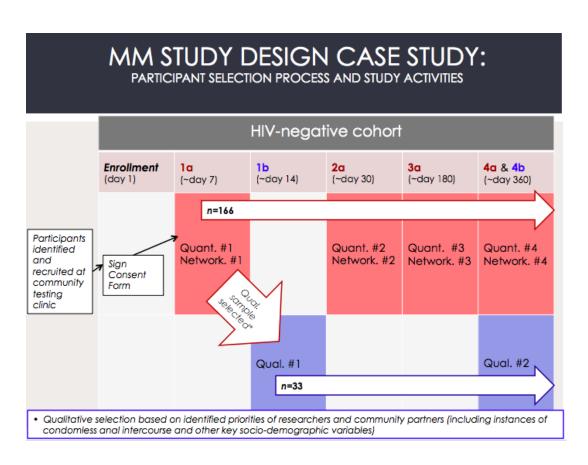
MM STUDY DESIGN CASE STUDY:

MAPPING THE RELATIONSHIP BETWEEN QUANTITATIVE AND QUALITATIVE DATA



Mapping one's study design in this way has multiple advantages, including making explicit the extent to which one's design is aligned with one or more existing models in the mixed methods literature (Creswell 2003; Harwell 2011), and helping to clarify whether intersectionality is part of the *transformative* design of a study (see Hankivsky et al. 2012 for a review of *descriptive* and *transformative* questions that are part of an Intersectionality-Based Policy Analysis).

The researchers in this CIHR Study recruited participants through Health Initiative for Men's (HIM's) Sexual Health Centre. All men who presented for HIV testing at HIM's Sexual Health Centre were invited to participate if they met study selection criteria, including self-disclosing that they have or have had sex with men (includes gay, bisexual, transgendered and other men who have sex with men) at the time of their recent HIV test (see Grace et al. 2014 for full details on study inclusion criteria). Those agreeing to participate in the study were asked to complete four online self-administered questionnaires. All participants were also asked to complete four brief interviews to capture quantitative sexual networking data. The figure below provides a simplified model of the key mixed methods data components of the study (see Grace et al. 2014).



The CIHR Study Team conducted two in-depth qualitative interviews for a subset of participants (n=33). With their community partners, the Team decided to select participants into the qualitative component of the study based on a set of HIV risk-based and socio-demographic criteria. All participants had to have had at least one instance of condomless anal sex in their last 5 encounters. This decision for inclusion in the *qualitative* component was informed by results from baseline *quantitative* data. A focus on this quantitative behavioural marker came from conversations with the Study's community partners, and also derived from the interest of the team as a whole in ensuring that the

qualitative sample should ideally capture a diverse group of men across the lifecourse (e.g., younger and older men at diverse axes of oppression and privilege) who may be at varying degrees of risk of becoming infected with HIV and other STIs.

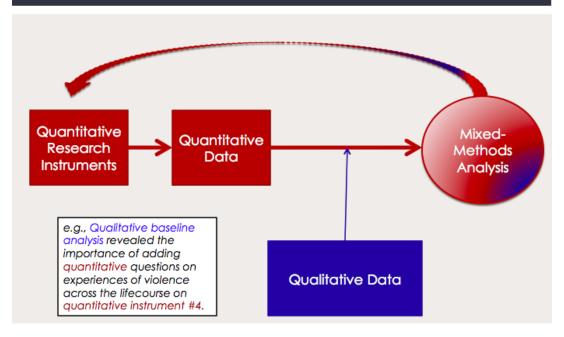
The approach to participant enrollment in the qualitative component of the study was *explicitly informed by intersectionality,* as the team wanted to recruit a maximally diverse sample of participants who had experiences of recent condomless sex and who occupied complex, intersecting social positions, including by age, ethnicity, sexual identity and experience in diverse social and sexual networks. However, even with this explicit desire, it is important to note limitations of this study, including those related to the diversity of participants who were ultimately enrolled. For example, the location of study recruitment is an important factor to consider. This sample was drawn from a single clinical site focused on gay men's health in Vancouver and may not be representative of some gay men in the area (e.g., men who do not regularly test for HIV). Further, because the vast majority of men in this sample identity as gay, the sample is also not representative of men who have sex with men but are non-gay identified (for full participant demographics as well as study limitations of sample recruitment, see Grace et al. 2014).

Analysis and Interpretation

In an effort to consider the relationships between quantitative and qualitative data for different analyses, some conceptual models were created and discussed (Grace et al. 2012). These models are not mutually exclusive, but rather part of an exploratory exercise conducted as a Study Team. MM Type A is an example of a quantitatively driven analysis in which qualitative data was used to help explain or augment a largely quantitative analysis. In this study, qualitative data was used to inform subsequent quantitative research instruments. For example, after the review of qualitative baseline interviews the Study Team decided that quantitative questions on men's experiences of violence across the lifecourse should be collected for the entire sample during subsequent quantitative interviews. Although the Study Team had previously expressed interest in quantitatively exploring violence, the qualitative discovery of different forms of violence (e.g., sexual abuse, anti-gay violence) experienced by some participants at different points in their lives solidified the need to collect complementary quantitative data. This is an important example of how looking at the differential experiences of participants qualitatively can inform further refinement to quantitative data collection instruments. As such, here we see how the intersectional analysis and interpretation of data has important implications for subsequent data collection and measurement. This issue also underscores how key policy domains (e.g., boys' and men's health and intimate partner violence) may be interconnected and can have significant connections in both research and policy responses.

MM ANALYSIS: TYPE A

QUALITATIVE DATA IS USED TO HELP EXPLAIN/AUGMENT LARGELY QUANTITATIVE ANALYSIS AND/OR TO INFORM FUTURE QUANTITATIVE RESEARCH INSTRUMENTS

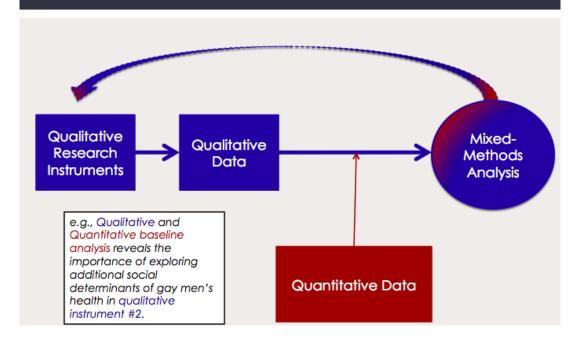


In an inverse example, MM Type B, quantitative data may be used to help augment or provide background to a qualitative analysis and/or to inform future qualitative research instruments. For the CIHR Study Team, the analysis of both baseline qualitative and quantitative data revealed the importance of exploring additional intersecting social determinants of gay men's health in participants' subsequent qualitative interviews. During follow-up interviews, men were asked to discuss issues related to their social, sexual, physical, and mental health. In an ongoing analysis informed by intersectionality from this interview data, the Study Team is exploring participants' narratives of their "social health" as an entry point for understanding the everyday social and sexual relations of participants, including potential ways to support their broad health needs in and beyond their sexual health (for a review of qualitative coding techniques informed by intersectionality, see Hunting 2014).

Men's narratives from this analysis help to make visible some of the complex, intersecting determinants of their social, sexual, physical, and mental health. This analysis reveals strengths and resiliencies for many participants as well as current challenges experienced by some gay men across these interconnected domains. This contextual understanding of men's intersectional identities and experiences has important implications for gay men's health research and programming. This intersectional focus on both resilience and "social health" relates to a separate intersectionality-informed analysis being

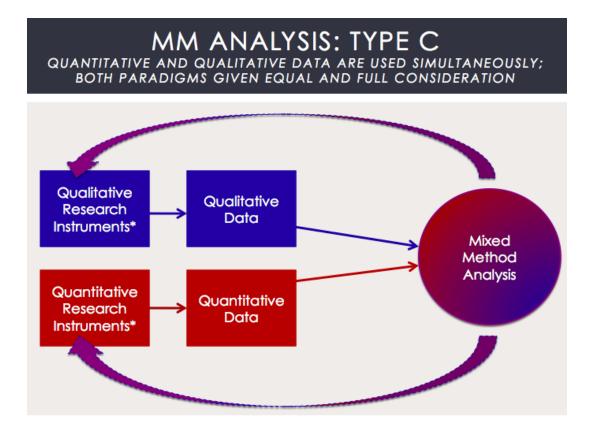
conducted in British Columbia, which addresses social inclusion/exclusion experienced by people with challenges related to their mental health and/or substance use (Hunting, Grace & Hankivsky 2014).

MM ANALYSIS: TYPE B QUANTITATIVE DATA IS USED TO AUGMENT/ PROVIDE BACKGROUND TO A QUALITATIVE ANALYSIS AND/OR TO INFORM FUTURE QUALITATIVE RESEARCH INSTRUMENTS



It is worth noting that to date the majority of the outputs from this study that have used intersectionality to inform data analysis are qualitatively-driven research papers. For a review of the limitations when conducting intersectionality-informed quantitative analysis, see Rouhani (2014), who provides a focused review of key quantitative literature (LeVasseur 2013; Barnshaw, J. and Letukas, L. 2010). The CIHR Study Team also considered the extent to which forthcoming publications could follow a third approach to mixed method analysis (MM Type C), where neither quantitative nor qualitative data took primacy.

In addition to publishing peer-reviewed journal articles from this analysis, the CIHR Study Team has been committed to other forms of knowledge translation, including the publication of simplified fact sheets and reports that can be used by diverse research audiences (see www.acutehivstudy.com). This focus on knowledge translation is consistent with the commitment of intersectionality scholars to ensure their research informs



policy and practice in the everyday world (Hankivsky et al. 2012). In addition to using the qualitative study data to complement the quantitative data, the narratives of gay men participants have also been used to help augment epidemiological analysis that was completed for a forthcoming Public Health Officer's (PHO) Report (2014) on the state of the HIV epidemic for gay and bisexual men in British Columbia. The quotations used in the quantitatively driven PHO Report help to contextualize the men's descriptions of experiences with complex issues related to HIV, which quantitative data alone cannot capture. For example, excerpts highlight the importance of considering intersecting factors such as age, HIV status, geography, ethnicity, and experiences of social inclusion and exclusion. This PHO Report is an important example of how researchers and policy analysts may draw on multiple kinds of data, including quantitative, qualitative and mixed methods intersectionality-informed research in their analysis of complex policy questions and responses.

Conclusion

This review of key tenets of, and tensions in mixed methods research is not an attempt to create a *prescription* for how to conduct intersectionality-informed mixed methods research, but rather an effort to identify some key questions and issues around *timing*, *weighting*, *mixing* and *theorizing* across the lifecycle of intersectionality research. The field of intersectionality-informed mixed methods is emerging, with important examples across the interrelated fields of *mental health promotion and suicide prevention*, *intimate partner violence* and *boys' and men's health*. The examples reviewed in this primer illustrate the possibility for the mixing of qualitative and quantitative data in multiple ways within this emerging research paradigm. The discussion also underscores the potential offered by drawing on qualitative, quantitative and/or mixed methods intersectionality research when conducting an analysis of complex policy questions.

Acknowledgments

The author would like to acknowledge the support of the Institute for Intersectionality, Research and Policy. The author also wishes to thank the CIHR Team in the Study of Acute HIV Infection in Gay Men for permission to include conceptual models from this research as an exploratory case study.

References

Barnshaw, J., Letukas, L. (2010). "The low down on the down low: Origins, risk identification and intervention". *Health Sociology Review.* 19(4): 478-490.

Bowleg, L. (2012). "The Problem with the Phrase Women and Minorities: Intersectionality - An Important Theoretical Framework for Public Health". *American Journal of Public Health*, 102(7): 1267-1273.

Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research* 1(1), 8-22.

Clarke, A.Y. and McCall, L. (2013). "Intersectionality and Social Explanation in Social Science Research". *Du Bois Review: Social Science Research on Race*, 10: 349-363.

Collins, C. C., & Dressler, W. W. (2008). Cultural Consensus and Cultural Diversity: A Mixed Methods Investigation of Human Service Providers' Models of Domestic Violence. *Journal Of Mixed Methods Research*, 2(4), 362-387.

Crenshaw, K.W. (1991). "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Colour." *Stanford Law Review* 43(6): 1241–1299.

Creswell, J.W. (2003). Research design: qualitative, quantitative, and mixed method approaches. Second Edition. Thousand Oaks, CA: Sage Publications.

Creswell, J.W. and Plano Clark, V.L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Dubrow, J. (2013). "Why Should We Account for Intersectionality in Quantitative Analysis of Survey Data?" In *Intersectionality und Kritik*. Wiesbaden: Springer Fachmedien: 161-177.

Grace, D. (2013). "Intersectional Analysis at the Medico-Legal Borderland: HIV Testing Innovations and the Criminalization of HIV Non-disclosure" In *Situating Intersectionality: Politics, Policy, and Power,* Ed. Wilson, A.R., Palgrave Macmillan: 157-187.

Grace, D. et al. (2012). Data collection and analysis as a text-mediated work process: HIV research with gay and bisexual men. Qualitative Health Research Conference.

Grace, D., Chown, S., Jollimore, J., Parry, R., Kwag, M., Steinberg, M., Trussler, T., Rekart, M., Gilbert, M. (2014). "HIV-negative gay men's accounts of using context-dependent seroadaptive strategies". *Culture, Health and Sexuality*, 16(3), 316-330.

Greene, J. C. (2007). Mixed methods in social inquiry. New York: Wiley.

Greene, J. C. and Caracelli, V. J. (1997). Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. San Francisco: Jossey-Bass.

Haile, F. G. (2009). Social stigma and HIV/AIDS in Black MSM. Dissertation. The University of Michigan.

Halko W. (2009). "The time and context-contingent nature of intersectionality and interlocking oppressions". *Affilia*, 24(1), 44-55.

Hankivsky, O. (2011). *Health Inequities in Canada: Intersectional Frameworks and Practices* (Vancouver, BC: University of British Columbia Press).

Hankivsky, O. (2012). "Women's health, men's health, and gender and health: Implications of intersectionality". *Social Science & Medicine*, 74(11), 1712-1720.

Hankivsky, O. (2014). "Intersectionality 101: A Primer". Institute on Intersectionality, Research and Policy, Simon Fraser University. (*This collection*).

Hankivsky, O. and Grace, D. (2014). "Understanding and Emphasizing Difference and Intersectionality in Mixed and Multimethods Research". In *The Oxford Handbook of Mixed and Multimethods Research*. Hesse-Biber, S.N. and Johnson, R.B., Eds. Oxford University Press. (*In Press*).

Hankivsky, O., Grace, D., Hunting, G., Ferlatte, O., Clark, N., Fridkin, A., Giesbrecht, M., and Rudrum, S. (2012). "An Intersectionality-Based Policy Analysis Framework". *An Intersectionality-Based Policy Analysis Framework*. Simon Fraser University.

Harper, C. E. (2011). "Identity, Intersectionality, and Mixed-Methods Approaches". In K.A. Griffin and S.D. Museus (eds.), *Using Mixed-Methods Approaches to Study Intersectionality in Higher Education: New Directions for Institutional Research.* San Francisco: Jossey-Bass: 103-115.

Harwell, M.R. (2011). "Research Design in Qualitative/Quantitative/Mixed Methods". In *The SAGE Handbook* for Research in Education: Pursuing Ideas as the Keystone of Exemplary Inquiry, edited by Clifton F. Conrad and Ronald C. Serlin: 147-163.

Hunting, G. (2014). "Qualitative Intesectionality-Informed Research: A Primer". Institute on Intersectionality, Research and Policy, Simon Fraser University. (*This collection*).

Hunting, G., Grace, D. and Hankivsky, O. (2014). "Taking Action on Stigma and Social Inclusion: Using Intersectionality to Transform Current Approaches to Mental Health and Substance Use". (Working Paper, Institute on Intersectionality, Research and Policy).

Institute of Medicine. (2011). The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding. Report Brief.

Johnson, R. B. and Onwuegbuzie, A. J. (2004). "Mixed methods research: A research paradigm whose time has come". *Educational Researcher*, 33, 14-26.

Kral, M. J., Links, P. S., & Bergmans, Y. (2012). "Suicide studies and the need for mixed methods research". *Journal Of Mixed Methods Research*, *6*(3), 236-249.

LeVasseur, M.T., Kelvin, E.A. & Grosskopf, N.A. (2013). "Intersecting identities and the association between bullying and suicide attempt among New York city youths: results from the 2009 New York city youth risk behavior survey". *Am J Public Health*. 103(6):1082-9.

Logie, C., James, L., Tharao, W. & Loutfy, M.R. (2012). "Opportunities, ethical challenges, and lessons learned from working with peer research assistants in a multi-method HIV community-based research study in Ontario, Canada". Journal of Empirical Research on Human Research Ethics, 7(4), 10-19.

Logie, C., James, L., Tharao, W. & Loutfy, M.R. (2013). "Associations between HIV-related stigma, racial discrimination, gender discrimination, and depression among HIV-positive African, Caribbean and black women in Ontario, Canada". *AIDS Patient Care and STDs*, 27(2): 114-122.

McCall, L. (2005). "The Complexity of Intersectionality." Signs 30(3): 1771-1800.

Ono, E. (2013). "Violence Against Racially Minoritized Women: Implications for Social Work". *Affilia: Journal Of Women & Social Work*, 28(4), 458-467.

Perry, G. K. (2009). "Exploring Occupational Stereotyping in the New Economy: The Intersectional Tradition Meets Mixed Methods Research". In Berger and Guidroz (eds.), *The Intersectional Approach: Transforming the Academy through Race, Class and Gender.* North Carolina: University of North Carolina Press: 229-45.

Plano Clark, V.L. and Creswell, J.W. (2008). The mixed methods reader. Thousand Oaks, CA: Sage.

Rouhani, S. (2014). "Qualitative Intesectionality-Informed Research: A Primer". Institute on Intersectionality, Research and Policy, Simon Fraser University. (*This collection*).

Tashakkori, A. and Teddlie, C. (2010). SAGE Handbook of Mixed Methods in Social & Behavioral Research. Second Edition. Thousand Oaks, CA: Sage.

Thiara, R. K., Hague, G., & Mullender, A. (2011). Losing out on both counts: disabled women and domestic violence. *Disability & Society*, *26*(6), 757-771.

Weber, L., and Castellow, J. (2012). 'Feminist Research and Activism to Promote Health Equity'. In Sharlene Hesse-Biber, (ed.) *Handbook of Feminist Research: Theory and Praxis*. Second Edition. Thousand Oaks, CA: Sage Publications: 434-454.