In-Person versus Online Focus Group Discussions:
A Comparative Analysis of Data Quality

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INTRODUCTION

Conducting focus groups online has become an increasingly popular method for collecting qualitative data. Advances in technology and the popularity of the Internet have enabled researchers to adapt the previously established in-person focus group methods for use in an online environment, taking on different modes of operation, including asynchronous or synchronous groups (Stewart and Williams 2005). Although there is a great deal of interest in online focus group methods, relatively little attention has been given to the quality of data generated by these methods in comparison to the traditional in-person focus group, especially with respect to the ability to solicit thick data. Most of the research comparing online and in-person focus group discussions (FGDs) has been derived from market research and has focused nearly exclusively on cost and efficiency rather than on data quality. Moreover, the majority of studies report asynchronous groups. Thus, as online focus groups become more prevalent, it is imperative to understand the quality of their data in relation to conventional focus groups.

This study aims to address this research gap and to contribute to the debate surrounding the value of online research. Moreover, it will provide results of an empirical comparison of the quality of data obtained from in-person FGDs versus synchronous online FGDs using both a sensitive topic and a hard-to-reach population.

BACKGROUND

The focus group has become a well-established, valuable, mainstream qualitative research tool spanning across multiple fields of study (Hennink 2013; Kitzinger 1994; Liamputtong 2011; Murgado-Armenteros, et al. 2012; O'Connor and Madge 2003; Schneider, et al. 2002). Primarily recognized for their utility in gaining insight into people's experiences, beliefs, and reactions to a particular topic, Guest, et al. 2012; Kitzinger 1995; McCarthy and Perreault 1991; Morgan 1996) focus groups allow researchers to capture rich qualitative data that would otherwise be challenging to capture with conventional quantive surveys and questionnaires (Kitzinger 1994; Nicholas, et al. 2010). However, while focus groups have been cited as a rigorous research method (Kitzinger 1995; Liamputtong 2011; Mann and Stewart 2000), researchers have long emphasized the limitations of focus groups that can shape and affect the quality of data collected. In addition to the hefty costs associated with transcription and compensation for participants, participation is also limted to those within proximal distance of the discussion site (Nicholas, et al. 2010; Schneider, et al. 2002). Furthermore, focus groups, particularly in-person groups have drawn criticism for the lack of participant confidentiality, as all participants in the FGD are aware that their

discussion counterparts are also research participants. Thus, participants may not feel their anonymity is sufficiently protected (Nicholas, et al. 2010). This may further be exacerbated by environmental barriers, such as the engineered environment and the presence of recording instruments that may hamper the participants from actively participating or from speaking openly on a given topic Liamputtong (2011).

With the advancement of technology, however, researchers have been able to adapt in-person FGDs to the online environment, and overcome some of the limitations of traditional in-person groups (Fox, et al. 2007). Since their integration into academic social research in the late 1990s (Murray 1997), the online method has developed into a research medium giving rise to different modalities of conducting online data collection. Originally developed as asynchronous, message/forum board discussions, the online focus group has evolved into other forms including the "chat room-" (synchronous) based and the "video-"based focus groups, allowing researchers to interface with populations (i.e., remote) that may be difficult to reach via traditional offline approaches (O'Connor and Madge 2003). Secondly, chat-room based discussions occur in cyberspace by people seated at their keyboards and monitors in a familiar environment (e.g., home or workplace) rather than face-to-face by people seated around the same table. (Schneider, et al. 2002; Smith, et al. 2009). This has afforded researchers the opportunity to not only save on costs for both the research and for the participant, such as on transcription costs and the unnecessary need to travel (Hennink 2013; O'Connor and Madge 2003; Rezabek 2000; Walker 2013; Watson, et al. 2006), thereby providing a much cheaper alternative to conducting research with individuals

who are unable or unwilling to engage in conventional face-to-face groups (Fox, et al. 2007; Mann and Stewart 2000). Thirdly, research suggests that the nature of the Internet offers increased participant anonymity compared to in-person FGDs, thus increasing the potential for participants to exchange comments about sensitive behaviors more comfortably and openly (Nicholas, et al. 2010; Schneider, et al. 2002; Stewart and Williams 2005; Watson, et al. 2006). The use of online focus groups, particularly message board/forum, asynchronous groups, has been well reported across multiple fields, however the impact on data quality of online focus groups, particularly synchronous groups, has received less attention as few accounts of empirical research exist. Work which has been published pays more attention to the advantages and benefits of online FGDs, with very little emphasis on data quality compared to in-person FGDs, while using a sensitive topic.

Focus Group Discussions using a Sensitive Topic

Focus group methods have gained a reputation for facilitating data collection about sensitive topics (Kitzinger 1994; Krueger 1988). Researchers have claimed that a topic is 'sensitive' when it can be "threatening to subjects" (Dickson-Swift, et al. 2009). Lee and Renzetti (1990) define "threatening" topics as one that discusses (1) private experiences, (2) socially unacceptable behaviors, (3) power or coercion, and/or (4) sacred beliefs. Issues surrounding sexuality, in particular, are commonly perceived by researchers to be sensitive topics, together with those of stigmatized behaviors, including eating disorders, suicide, alcohol abuse, and domestic violence (Hyde, et al.

2005; Mann and Stewart 2000; Massey and Clapper 1995; Oliveira 2011). Additional ethical consideration is necessarily given to research exploring sensitive topics, as even mention of these topics could cause distress, (i.e., shame, guilt) (Lee and Renzetti 1990) or could be "damaging to subjects or place them at risk of criminal or civil prosecution" (California State University 2013). For many of these reasons, early researchers (Holland, et al. 1994; Stanley 1995) have believed that in-person focus groups should be reserved for non-sensitive or non-embarrassing topics and information on sensitive topics should be collected in either individual interviews or questionnaires (Barbour and Kitzinger 1999). However, many researchers have since contested this belief, instead stressing that interpersonal dynamics within the group might enable participants to gain mutual comfort and reassurance (Kaplowitz 2000; Wilkinson 2004). Nonetheless, we know very little about how well online focus group methods perform in terms of data quality while using sensitive topics, particularly when compared to more conventional offline settings. In their multi-national Young People and Health Risk project examining young men and women's perceptions on alcohol, smoking, and sex, Mann and Stewart (2000) conducted both in-person and online FGD methods to elicit data from the same individuals. In particular, the study found that the male participants disclosed accounts of one-night stands and getting drunk more candidly in the online groups compared to the in-person method. However, while the topics of alcohol and sex may be defined as a sensitive topic among a population of young men, the results of the study focused on the level of participant openness and disclosure and not on data quality of in-person and online FGD methods. Moreover, the population in question was a broader sample of

individuals. To address the need for more empirical comparison studies of the in-person and online FGDs, this paper will compare the quality of data obtained from online and in-person FGDs using a sensitive topic of intimate partner violence among a marginalized population of men who have sex with men (MSM).

Intimate Partner Violence

In order to examine the impact of online methods on a sensitive topic, we developed a FGD guide centered on intimate partner violence (IPV). Often referred to as "domestic violence," IPV is generally defined as a form of interpersonal violence occurring between spouses or other intimate partners and encompasses multiple domains of violent behavior (e.g., physical, sexual, psychological, financial). IPV is understood to be prevalent in all communities, cutting across demographic lines and geographic borders, and emerging evidence indicates that its health effects are universal (World Health Organization 2002). However, despite a recent increase in IPV research, the existing literature has focused nearly exclusively on IPV that occurs in male-female relationships (Finneran and Stephenson 2012; Letellier 1994). In fact, research on IPV among same-sex partners remained virtually non-existent up until the 1990s, when the emergence of HIV increased focus on the lesbian, gay, bisexual, and transgender community (Renzetti 1992). A recent systematic review of the literature regarding IPV among gay, bisexual, and other men who have sex with men (MSM) demonstrated that while research focusing on male same-sex IPV is increasing, the research that does exist has been hampered by multiple barriers, including difficulty in

recruitment efforts and the reporting of intimate personal information, both of which may be compounded by homophobia and heteronormativity (Finneran and Stephenson 2012). In other words, MSM may fear stigma and discrimination that may result from openly or candidly expressing stories or intimate feelings on this sensitive topic. Therefore, online FGDs, which have been known to increase confidentiality (Williams, et al. 2012), were used to reduce the conceivable discomfort of expressing personal information that may often be difficult to discuss in offline settings (McKenna 2007).

Nonetheless, given that online focus groups are a fairly novel approach, research on the topic remains scant. Empirical comparison studies of the two modalities are even further limited, particularly on a sensitive topic. Thus, as a response to the lack of studies, this paper will report on the analysis of data quality using synchronous online and in-person FGDs, while using a case study of intimate partner violence. Further, this paper aims to encourage researchers who are considering doing focus groups online and also demonstrate the value of online FGDs as a way of engaging a marginalized population on a sensitive topic.

METHODS

This study was approved by the _____ University Institutional Review Board (IRB).

Recruitment

The data were drawn from projectLUST Speaks, a qualitative, exploratory research study examining gay and bisexual men's perspectives of IPV within both their community and same-sex male relationships. Self-identified gay and bisexual men were systematically recruited over five months in 2011 in Atlanta, GA using venue-based sampling (VBS). As a method to access hard-to-reach populations, venue-based recruitment is a process in which a sampling frame of venue-time units is created through formative research with key informants and community members (Muhib, et al. 2001). This recruitment method has been shown to be effective for reaching men who have sex with men (MSM) and other hard-to-reach populations (MacKellar, et al. 2007).

Potential participants were recruited by study staff outside of gay-friendly bars, clubs, and coffee houses and were provided with information on how to complete a web-based eligibility survey. The survey consisted of questions on age, location, and sexual orientation. Recruitment also included advertisements and respondent-driven efforts at several community organizations throughout the Atlanta area. Advertisements included flyers and posters (with a phone number and email address) and asked for gay or bisexual men ages 18-45, who lived in metropolitan Atlanta to participate in a discussion on issues impacting same-sex male relationships. Upon being screened over the phone by study staff, eligible participants were allowed to opt for participating in either the in-person FGDs or online FGDs.

Participants

A total of 89 men were invited to participate in the FGDs, with intentional over-scheduling of participants in anticipation of participant truancy. Overall, 64 individuals were present and participated in the FGDs, 52 (81.2%) of whom participated in-person and 12 (18.8%) of whom participated online. The participants were predominantly young (52.0% under 35), described themselves as educated (51.1% with some post-secondary education), and were employed full- or part-time (78.9%). The FGDs were also diverse, consisting of 68.8% Black/African-American men, 23.4% White/Caucasian men, 3.1% Asian/Pacific Islander men, and 3.1% men of other races.

Procedures

Over a period of one month, ten FGDs were held in three venues: in-person at a local AIDS service organization or at the University, and online using the real-time web-based meeting client Adobe Connect. In total, eight in-person and two online FGDs were held and led by the same experienced moderator using an identical question guide. The question guide provided themes for discussion, focusing on experiences of IPV among gay and bisexual men. It also included questions concerning the participant's views on the prevalence of violence within gay male relationships and communities, and questions on the availability and accessibility of IPV resources for gay and bisexual men in the Atlanta area.

To be consistent with conventional focus group methods, FGDs were selected to be small in order to create a comfortable setting that encouraged participation

interaction ([Krueger 1994](); [Liamputtong 2011]()). Each focus group consisted of four to ten participants who did not know each other prior to the discussion. At the beginning of each FGD, the moderator stressed the confidential nature of the discussion to the participants, who were also provided with explicit ways to withdraw from the discussion. To ensure confidentiality in the online FGDs, a unique user name was assigned to each participant in advance to log into the "chat-room" with the moderator and a technical assistant controlling access. The platform, Adobe Connect, in particular provides a "withdraw" (log-off) button, which allowed participants to exit at any time. The in-person discussions were audio-recorded and later transcribed verbatim, whereas the online discussion threads were automatically downloaded to a readable text file. Upon completion of the FGDs, participants were provided with a resource guide that outlined local and gay-friendly mental health services.

Data Analysis

In an effort to produce a comparative analysis of equal parts, two in-person FGDs were randomly selected from the initial eight in-person FGDs for comparison. Analysis comprised three stages. In Stage I, the transcripts were assessed for quantitative outcomes, including word count, length of discussion in minutes, proportion of words used by the moderator versus participants, and intragroup conflict. Intragroup conflict (i.e., disagreements or insults) included occurrences of insults or judgments towards other participant's beliefs, attitudes, or behaviors. Disagreements were instances of "lack of consensus or approval", primarily illustrated by *"I disagree"*. While many

(Asbury 1995; Kitzinger 1994; Watson, et al. 2006) have stressed the importance of reflecting on group interaction in analysis and reporting of FGD data, this study only examined intragroup conflict as no formal methodology exists for the analysis of group interaction. Additionally, no formal analysis was conducted examining the use and significance of emoticons and punctuations, however they were briefly looked at in relation to intragroup conflict.

In Stage II, the transcripts were coded thematically using both inductive and deductive coding using MaxQDA software. Two trained researchers independently coded all of the transcripts in order to create rigorous coding to assess inter-coder reliability. The codes were then compared across transcripts in terms of their presence within each of the FGDs and in relation to the number of off-topic or irrelevant comments. Comments or statements were considered off-topic or irrelevant if they were not within the bounds of the discussion guide or conversation. Finally, in order to assess the scope and patterns of responses, Stage III of analysis entailed comparing the length and number of responses of two randomly selected questions:

(1) *Do you feel that the [Atlanta, GA] environment is one that is welcome, accepting or supportive?*

(2) *In your opinion, which is the most prevalent issue for local gay and bisexual men in relationships – physical, emotional, or sexual abuse? Why?*

Stage III of analysis also included a comparison of responses obtained from both formats, using a question that could incite participants to share personal stories or elicit sensitive emotions:

(3) Do you know anyone who has experienced intimate partner violence – like physical, emotional, or sexual abuse – with a same-sex male partner?

RESULTS

On average, more participants participated in the in-person FGDs (mean 7) than the online FGDs (mean 6). **Table 1** shows that the online participants contributed fewer words than did the in-person. The online groups tended to last longer than the in-person groups (mean 120 minutes versus 93); this effect became more pronounced in further analyses that took into account the length of the group and the proportion of words used by the moderator. **Table 1** shows that online participants typed only about a third as many words as spoken by the in-person participants. Additionally, the proportion of words spoken by the moderator in the in-person method was less than half (16.0%) than that in the online format (41.0%).

Intragroup conflict (i.e., disagreements and insults) was different across formats (See **Table 1**). The average number of intragroup conflicts in the in-person FGDs was 2, whereas the online FGDs had an average of 7 intragroup conflicts. Online FGD 'D' with the largest number of intragroup conflicts was also the longer of the two online groups by 3,400 words and the proportion of words used by the moderator was approximately

half of the moderator in online group 'C'. In the online FGDs, participants articulated strong views and opinions by using capital letters and punctuations. Additionally, they used asterisks, exclamation marks, line spacing, and acronyms such as LOL ('laugh out loud) to convey mood and nuances in expression. One participant in particular online typed in caps-lock in online FGD 'D'.

Stage II: Thematic Coding

The online FGDs had comparatively more off-topic or irrelevant comments (see **Table 1)**. For example, when asked where gay men can turn if they are experiencing emotional abuse, a participant in online FGD 'D' stated "*I am 24 and I've been in a relationship since I was 17 (that's right)!"* However, even though the discussion got off-topic in the online FGDs more frequently than the face-to-face groups, the online FGDs still produced similar numbers of thematic codes. The number of codes that emerged are summarized by FGD format in **Table 2.** Of 27 thematic codes identified across all four transcripts, 25 codes appeared in both FGD formats (e.g., *race, geographic, jealousy*). Moreover, the one code that looked at being safe and secure (*safety/security)* within the participant's intimate relationship or in public only appeared in the in-person FGDs. Similarly, the more sensitive in nature code (*victim/perpetrator)*, appeared only in the online FGDs as explicitly experiencing violence within a same-sex relationship.

Stage III: Patterns of Responses

Table 3 demonstrates the different response patterns observed in the two FGD formats for the two example questions. On average, participants responded to questions with more and longer answers in the in-person FGDs compared to the online FGDs, where participants provided shorter and fewer answers. For example, in the in-person FGDs, the average word count for Question 1 was 1,682 words at a rate of 60 words per response, whereas the online FGDs produced an average of 275 words at a rate of 11 words per response. While the word counts for Question 1 were substantially different across the two formats, the number of responses was relatively similar (in-person FGDs: 28; online FGDs: 24). **Table 4** provides an excerpt of the responses received in both formats to demonstrate these response patterns. Overall, the participants in the in-person FGDs tended to take turns speaking, and provided comparatively longer responses each time they spoke. Conversely, in the online FGDs, participants tended to provide shorter, immediate answers to questions simultaneously, resulting in real-time "threading" (the overlapping of multiple conversations (Stewart and Williams 2005).

To further demonstrate the scope of responses received in both formats, **Table 5** provides excerpts of responses to a sensitive question on experiences with violence. In the online FGDs, participants tended to speak more openly and candidly of their own relationships, and, more specifically, of their own first-hand experiences with violence in same-sex male relationships. Conversely, the in-person FGDs, participants less

commonly shared intimate stories with violence despite additional probing efforts and spoke more often in the third person.

DISCUSSION

This study compared in-person FGDs with online FGDs by evaluating the overall data quality produced by each method. The findings indicate that online FGDs may be particularly beneficial when the research topic comprises sensitive subjects and a marginalized population. Although the in-person FGDs resulted in larger word counts and greater detail about fewer subjects, the online FGDs resulted in shorter answers with less detail about comparatively more topics, illustrating that the online participants required fewer words to communicate their ideas. However, despite these quantitative differences, both formats produced the same number of responses containing largely identical types of thematic codes. Thus, these findings suggest that while online FGDs may produce less dialogue between participants and fewer spoken words in general, the data produced by online FGDs thematically resemble the data produced by in-person FGDs (Turner, et al. 1998; Walston and Lissitz 2000).

Nonetheless, some important differences in thematics emerged across the two formats. While one code *(safety/security)* was discussed online in the in-person FGDs, the sensitive nature of the one code *(victim/perpetrator)* highlights the heightened confidentiality of the online FGDs. That is, participants in the online FGD may have felt more able to discuss personal information, including experiences of IPV more openly or

15

candidly due to the increased sense of anonymity. This finding contributes to the limited body of literature that indicates that online FGDs can be successful as a method to obtain personal or sensitive information (Kenny 2005; Massey and Clapper 1995; Walston and Lissitz 2000). Discussing these types of first-hand accounts of experiencing violence during an in-person FGD is in fact not desirable, particularly among a population that is already marginalized. The findings suggest that the online FGDs may have helped create a comparatively safer space for IPV experiences to be discussed with minimized risk to the participants. Thus, online focus groups make it possible for researchers to interview a population that may not be willing to openly discuss behaviors that may be stigmatized in a face-to-face environment.

The results also suggest that the role of the moderator is qualitatively different during online FGDs versus in-person FGDs. At the request of the moderator, the participants in the in-person FGDs took turns speaking and did not speak over each other, allowing the moderator to direct the flow of the discussion and probe more easily when required. In comparison, in the online FGDs, participants answered questions simultaneously. The moderator also had to speak more frequently, asking participants to elaborate on their previous statements. The online participants were also more easily taken off-task. Although this posed a challenge to the moderator in terms of keeping up with each response and probing where necessary, nearly all participants in the online discussions were able to have their opinions heard on any given topic, compared to the in-person groups, where by necessity of time and organization, not every participant

was able to speak on every subject. Probing also proved more difficult in the online FGDs, as non-verbal or visual cues that traditionally allow the moderator of an in-person FGDs to elucidate further discussion were unavoidably absent from the online FGDs.

The findings showed that the online FGDs had moderately more intragroup conflict than the in-person focus groups, highlighting Stewart and Williams (2005) belief that "synchronous communications allow for more heated and open exchanges providing data that is more 'oral' than 'literate'". In fact, many of the disagreements that arose between participants sparked new topics of discussion, provided richer data with more breadth, and allowed for the moderator to type/speak less, thus permitting the discussion to flow more organically (Hennink 2013). Furthermore, the number of group conflicts that occurred in the online FGDs compared to the in-person FGDs also suggest that there was less of a chance for a hierarchy to form among the group or for some participants in the FGDs to dominate the discussion and potentially stifle the contribution of others (Hennink 2013). Similarly, the number of group conflicts may have created less of a chance for participants to conform to what others have said, thereby eliminating the potential for "group talk" (Hennink 2013). Nevertheless, it was clear in the online FGDs that participants were generally not inhibited from speaking candidly.

Likewise, the lack of visual cues in the online FGDs may have helped in increasing data breadth and lowering participant inhibition. As Poster (1995) suggests, the lack of visual cues, in fact, plays an important role in encouraging candid exchanges:

> "Without visual clues about gender, age, ethnicity and social status, conversations open up in directions which otherwise might be avoided. Participants in these virtual communities often express themselves with little inhibition and dialogues flourish and develop quickly."

As evidenced by the number of group conflicts that occurred within the online format, participants may have felt more confident in disagreeing with others. Disagreements were often demonstrated with the use of capital letters and punctuations, thus illustrating the participant's attempts to convey mood and nuances in lieu of spoken word and visual cues (i.e. smiling, eye contact). One participant in particular typed all of his responses in caps-lock, perhaps in effort to distinguish his responses from the others. As evidenced by the number of disagreements, this may have created less of a chance for participants to conform to what others have said, thereby eliminating the potential for "group talk" (Hennink 2013). Nevertheless, while it is unknown as to whether or not intragroup conflict occurs as a result of the synchronous nature of the online FGDs or because there is an evident absence of lack of visual cues (e.g., facial expressions), it still remains apparent that the anonymous nature of the Internet provided a mechanism for the participants to be more open with others and express their disagreements more freely than in real communication (Nguyen and Alexander 1996).

Despite the demonstrated strengths of online FGDs, the results nonetheless indicate the use of online FGDs, or at least exclusive use of online FGDs, may not be appropriate in all circumstances. Loss of connection is reported by many researchers as a technical limitation to online FGDs (Murgado-Armenteros, et al. 2012), though this phenomenon was not observed during this study. In fact, none of the participants in the FGDs lost connection from either the software or the Internet. As such, this may not be a concern for synchronous FGDs as it would be for forum-based or computer-mediated groups, involving remote participants. Second, the population in question was an urban, literate population with ready access to internet-enabled computers. Participants in the online FGDs tended to be more highly educated and comparatively less racially diverse than participants in the in-person FGDs. Although qualitative samples are inherently and intentionally biased, these sorts of artificial biases could impact the dated generated from FGDs. Third, the research question for this study involved a sensitive topic among a marginalized and hard-to-reach population, as demonstrated by the fact that certain stigmatizing themes (e.g., self-identification as a survivor of IPV) emerged only in the online FGD format. In other words, while use of online FGDs may not be appropriate in all settings and for all topics, the results presented here indicate that online FGDs are an effective, rigorous method of generating data on sensitive topics among marginalized groups. Consideration must be given when choosing the most appropriate method to answer the research question. Once the method has been determined, it may be appropriate to support a traditional method with an online FGD or collect all the data using an online FGD.

LIMITATIONS

There are several limitations to the current study. First, the selected sampling strategy of assigning participants to one of the two focus group modalities was based on participant availability and preference. Although this process risks systematic bias, it was pragmatic with the constraints of the study and ultimately a similar demographic composition across in-person and online groups was obtained. However, the participants who joined the online FGDs reported having received more education than participants in the in-person FGDs; it is thus possible that if all study participants were compelled to participate in the online FGDs, the quality of data would have been compromised. Second, only two FGDs were used to compare to two in-person FGDs. Although this resulted in a small quantity of data for comparison, online FGDs are a novel format and only two FGDs were conducted as part of the research study. Lastly, although the moderator and other study staff received no negative feedback about the online FGDs, additional and purposive follow-up was not conducted with online participants to debrief their experiences and learn more about how they perceived their participation in the online FGDs.

FUTURE WORK

As technology continues to advance and the online domain becomes more imbedded into the everyday, the role of online focus groups has evolved. With the advent of conferencing software and the increasing availability of broadband internet

access, researchers are now able to adapt synchronous chat-room-based focus groups into video-based formats. Offering similar benefits to synchronous online focus groups, the video-based format has participants connect real-time to web-based platforms such as Skype or Google Hangout, and interact via their webcams and microphone on their computers or tablets. As these formats become more popular in qualitative research, future studies should gauge the quality of data received in traditional in-person FGDs and the two modalities of online FGDs (chat room- and video-based). An additional step in this research should examine the quality of data obtained from these formats, using a non-marginalized population and a less-sensitive/neutral subject area.

DECLARATION OF CONFLICTING INTERESTS

FUNDING

TABLES

Table 1. *Stage I:* Descriptive analysis of Focus Group by method.

Measure	Type of Focus Group (n=4)					
	In-Person			Online		
	A	B	Mean	C	D	Mean
Participants	9	5	7	4	8	6
Word count	14,200	17,614	15,907	3,261	6,700	4,981
Length (mins)	83	103	93	125	115	120
Moderator word count (%)	20%	11%	16%	56%	25%	41%
Intragroup conflicts	0	3	2	1	13	7
Off-topic comments	11	9	10	0	38	19

Table 2. *Stage II:* Thematic Codes and Presence within Focus Groups by Method

Code *Definition*	In-Person		Online	
	FGD A	FGD B	OFGD C	OFGD D
Dominance Dominance, submission, aggression, and passivity.		X	X	X
Drugs/alcohol Any reference to using drugs or alcohol, being high or drunk.	X		X	X
Economics Money, material issues, work, being the financial provider, partner benefits.	X			X
Gay/Bisexuality What it is to be or act gay, coming out, being noticed, giving off a gay vibe, the lifestyle, being closeted, "down-low", internalized homophobia, having gay role models, being exposed to gay people, having girlfriends on the side *only as part of being gay/bisexual*.	X	X		X
Geography Any reference to space, locations, cities, states in relation to being welcomed, comfortable, and safe.	X	X	X	X
HIV/STI Discussion of HIV/STI status	X			X
Inequalities Inequalities between partners: age, race/ethnicity, body size, social class/capital/access/privilege, income, housing.		X		X
IPV - Emotional Discussions of emotional violence, including controlling behaviors, manipulation, secrets, games.	X	X	X	X
IPV – Other Discussions of stalking a partner, of one partner having power over the other, and the cycle of abuse.	X	X	X	X
IPV – Physical Discussions of physical violence (i.e. domestic and as conflict resolution), including punching, hitting, and damage to property.	X	X	X	X
IPV - Sexual Discussions of sexual violence, including coerced sex.		X	X	X
IPV - Verbal Name-calling, and threats.	X	X	X	
Jealousy Any reference to jealousy within relationships.	X	X	X	X

Code		Col1	Col2	Col3	Col4
LGBT resources	Discussion of types of available support resources, including: social media, online technology, support groups, community organizations, family, friends, religion, etc.	X	X	X	X
Masculinity/Gender	Discussions/definitions of masculinity, not being masculine enough, femininity, "thug", gender roles, being "flamboyant".	X	X	X	X
Mental health	Discussion of mental health states, including depression, lowered self-esteem, suicide ideation, isolation, being alone, withdrawn from society as a result of IPV.	X	X	X	
Monogamy	Discussions of cheating and fidelity.		X	X	X
Police/Legal system	Any reference to the police or legal system in relation to domestic and intimate partner violence.	X	X		X
Race	Discussions of race as it relates to homosexuality.	X	X		X
Religion/Spirituality	Any reference to religion or spirituality.	X	X		X
Responses to IPV	Any reference to impacts of and dealing with IPV, including seeking counseling or therapy.	X	X	X	X
Safety/Security	Explicit discussions of being safe, unsafe, being in fear due to lack of security, in relationship and in public.	X	X		
Self-esteem	Discussions of self-esteem, self-image, (in)security, how self-esteem impacts relationships, how self-esteem impacts IPV.	X	X	X	
Stigma/Discrimination	Discussions of homophobia and stigma/discrimination as it relates to being gay/homosexual.	X	X	X	X
Top/Bottom	Any reference to being a top or bottom, how status affects relationship or how others see you as a "top" or "bottom".	X	X	X	X
Triggers/Symptoms	Discussions of triggers and symptoms of IPV, being able to recognize abuse.	X	X	X	X
Victim/Perpetrator	Discussions of being a victim or perpetrator of violence as it relates to same-sex relationships.			X	X
27 codes	Total	22	22	19	23

Table 3. *Stage III:* Response patterns for Question 1[*] and Question 2[+] by Focus Group method.

| | Type of Focus Group (n=4) | | | | | |
| | In-Person | | | Online | | |
Measure	A	B	Mean	A	B	Mean
Number of responses[*]	30	26	28	14	34	24
Word count[*]	1,807	1,557	1,682	159	392	275
Word count per response[*]	60	60	60	11	12	11
Number of responses[+]	7	25	16	3	25	14
Word count[+]	283	2,388	1,336	32	390	211
Number of responses[+]	40	96	68	11	16	13

[*]Q1: Do you feel that the [Atlanta, GA] environment is one that is welcoming, accepting, or supportive?
[+]Q2: In your opinion, which is the most prevalent issue for local gay and bisexual men in relationships – physical, emotional, or sexual abuse? Why?

Table 4a. *Stage III:* Comparison of Data Quality of Responses to Question 1 by Method.

Question #1 Response Comparison: In-person FGD 'A' versus Online FGD 'D' (excerpt)	
In-person FGD	**Online FGD**
I: Um, how do you guys feel being gay and bisexual men in Atlanta? Do you feel like Atlanta is a welcoming environment? Do you feel like it's one that you are comfortable in? That, one that's accepting and welcoming for you? **P:** Actually, no. Atlanta is not really. Because place is a, a Bible belt a Bible belt state. But, you know. But me, I really don't care because I love who I am. **I:** Can you tell me a little be more about what you mean by Bible belt state and what that. **P:** Well [unclear] religious. Its been that way since I been here. I've been here since '84. But uh, you know, people are cool, some people are cool and some are not with it [unclear]. **I:** Okay, thank you for that. Yeah. **P:** Well, actually we have, you know, we have two house representatives serving in the Gold Dome that are openly gay. **I:** Mhmm. **P:** And more and more people are in city councils that are openly gay. So, it's kind of accepting kind of not, cause of. I know, probably for African American men it's not, and in my situation probably neither, so.	**I:** (17:14) Let's start by talking about how comfortable you all feel being gay and bisexual men living in Atlanta. Do you feel like the environment is one that is welcoming, accepting and supportive? **R:** (17:14) I do **S:** (17:15) It depends on where you are in Atlanta **A:** (17:15) yes, relaxing **I:** (17:15) Feel free to respond to each other as well as me **W:** (17:15) some places **J:** (17:15) I was scared when I first moved here, but I definitely feel accepted. **I:** (17:15) Which places? **J:** (17:15) Atlanta is the "gayest" city I've lived in, growing up in rural [state]. I feel it's pretty open here, i **J:** (17:15) Im out at my job **S:** (17:15) If you're in midtown then sure...I wouldn't feel comfortable outside of Midtown **A:** (17:15) outside of the city is difficult **J:** (17:15) I live in Downtown, [name], and I feel comfortable lol **W:** (17:16) midtown has a lot of gay guys, but metro atlanta is a little less **S:** (17:16) Then again...its really about self-acceptance. **J:** (17:16) very true

Table 4b. *Stage III:* Comparison of Data Quality of Responses to Question 2 by Method.

Question #2 Response Comparison: In-person FGD 'B' versus Online FGD 'C' (excerpt)	
In-person FGD	**Online FGD**
I: I guess the most serious issue for gay men, so, if you had to choose between emotional abuse, like verbal abuse, um sexual abuse, and physical abuse, which one do you see most often? **P:** Emotional. Emotional **I:** You see emotional? **P:** Emotional **P:** As far as in relationships? Or just in Atlanta…. **I:** Relationships **P:** I would say emotional **P:** I saw it all. I even have the scars to prove it. You know, um, in front of friends, um, in front of enemies, you know, that's the worst thing you can do when you know somebody who really don't like our relationship and you front in front of them. You know, um, where, I, my mother was dealing, she was dealing with stomach cancer, and he had knee surgery. So I was like between two households. And it was like, I'm just, running myself raggedy but to hear you say you can just get the F out the house, and, you know, F you, I don't need you, and da-da-da-da-da, and, the, the sanity was I would still be there. But I think because I promised his mother. You know, when this time come I would be there to help him, and you know, so forth. But um, the uh, the fights, and this was cause I had to go back to see about my mom, in a small town. This is in a small town, where everybody knows your name. And, I mean they knew about me, they knew about us, and you know, we were the cool couple, you know, but…	**I:** (17:45) In your opinions, when it comes to abuse, which is the most prevalent issue for local gay and bisexual men in relationships – physical, emotional or sexual abuse? Why? **T:** (17:47) sexual abuse **G:** (17:47) i've seen a lot of emotional and sexual abuse **T:** (17:47) because after the physical they think that going to make everything alrght **L:** (17:48) emotional... two broken halves does not make a whole. **I**: (17:48) Thanks for that, everyone.

Table 5. Comparison of Data Quality of Responses to Same Sensitive Question by Method.

Response Comparison of Sensitive Topic In-person FGD 'C' versus Online FGD 'A' (excerpt)	
In-person FGD	**Online FGD**
I: But, um, have you ever known anyone who's experienced violence in a relationship with a man. Yeah? P: Yeah I: Okay, alright, and can you tell me a little bit about what those experiences looked like. Was it a specific type of abuse that you, that your friend was experiencing? Was it physical mostly? Was it emotional? P: Well basically it was verbal. I: Verbal? Okay. P: Yeah. Because I know at one point in time, I witnessed where, a friend of mine, his mate was always verbal accusing. I: What did it look like? What did he say? P: It was the way he was treating, actually talking to him. You no good, know, do this, do that. Uh, when they went out together, it was always, didn't I tell you not to do this, or do that. And it got to the point where he really couldn't continue.	I: (17:39) Now we are going to move to another sensitive issue, that is, violence. Do you all know men who have experienced domestic or intimate partner violence – like physical, emotional or sexual abuse – with male partners? D: (17:40) no L: (17:40) not personally, but i've witnessed same-sex partners fight. T: (17:41) I have experience domestic violence until the point someone had to go to jail T: (17:41) it was mental and physical abuse I: (17:42) Thanks for sharing that, guys. For those o f you who have seen or been a part of that, can you tell me a little about those experiences? L: (17:43) it was in public, and painful to watch. I: (17:43) Was it physical abuse you saw, [L]? L: (17:44) mostly verbal T: (17:44) he was dominant and I was submissive so my role was to do what he say without talking back both in private and public I: (17:45) I'm sorry to hear that, [T]. How long did that go on for? T: (17:45) almost 2 years

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