THE PROCESS AND CONTEXT OF HELP-SEEKING AFTER SEXUAL ASSAULT

BY

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DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Psychology
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2016

Urbana, Illinois

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ABSTRACT

Sexual assault is a common experience that has been associated with a number of problematic psychosocial outcomes. To cope with the trauma of sexual assault and mitigate these negative outcomes, survivors may reach out for services and support. However, the responses that they receive vary in their quality and helpfulness. While a theoretical model of help-seeking from the sociology literature—the network episode model—calls attention to aspects of the social context in which help-seeking occurs and the sequence of steps that help-seekers may undertake, such a perspective is missing from the literature on help-seeking after sexual assault. Better understanding the process and context of these help-seeking experiences may inform strategies to improve help-seeking experiences for survivors. The current study involves mixed-method data collection and analysis from a large sample of undergraduates in order to address this gap in the literature. We investigated a) how the social contexts surrounding help-seeking are associated with whom is contacted for help and b) the association between help-seeking experiences and the likelihood of ending help-seeking. Results suggest that the structure of social networks (a measure of social context) is important to consider when understanding to whom survivors disclose sexual assault. In a mixed effects logistic regression, structural characteristics of the network (e.g., degree centrality, number of components) were significant predictors of the proportion of network members told as well as which network members received disclosures, above and beyond variables commonly associated with disclosure likelihood (e.g., social support, self-blame), which complement qualitative findings that characteristics of social networks can both facilitate and place limits on disclosure. Further, in an investigation of predictors of help-seeking dropout, we identified associations between characteristics of each contact with a responder (e.g., the degree to which responders communicated rape myths) and

survivors' likelihood of dropping out of help-seeking. After presenting these analyses, we

summarize and interpret the results in light of the network episode model.

ACKNOWLEDGMENTS

I am indebted first to my research advisor and committee chair, Dr. Nicole Allen. She has been a wonderful mentor throughout my time in graduate school and has had an enormous influence on the way that I think about social problems across levels of analysis. She has been consistently encouraging while also holding me to high standards that pushed me to do my best. I am so thankful for her support and wisdom.

I am also sincerely appreciative of the other members of my dissertation committee: Drs. Jennifer Greene, Nathan Todd, Daniel Newman, Howard Berenbaum, and Michael Kral. Each provided unique support to my professional development during my time in graduate school and was immensely supportive of my dissertation work.

I could not have done this work without my devoted team of undergraduate research assistants. Courtney Marin and Cindy Blocker transcribed and helped to code and analyze qualitative data; Thomas Luke and Caitlin Schutz analyzed social network data. They all dedicated themselves fully to work that was often tedious. They have my deepest gratitude.

Beyond my dissertation committee and project team, many others have provided support who warrant mention. I am particularly grateful for the help of Natalie Watson, who provided writing support, Jennifer Lyons, who served as a statistical consultant, and Ross Wantland, whose input was influential as I developed these and other research ideas. Finally, I thank my friends and family, whose support makes all of my work possible.

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CHAPTER 1: GENERAL INTRODUCTION

Sexual assault is a common experience: in their lifetime, 17-25% of women and 1-3% of men will be sexually assaulted (Black et al., 2011; Fisher, Cullen, & Turner, 2000; Koss, Gidycz, & Wisniewski, 1987; Tjaden & Thoennes, 2000, 2006). Experiencing sexual assault has been associated with a number of problematic outcomes, particularly with regard to mental health (see Campbell, Dworkin, & Cabral, 2009 for a review). To cope with the trauma of sexual assault and mitigate these negative outcomes, survivors may reach out for services and support (Amstadter, McCauley, Ruggiero, Resnick, & Kilpatrick, 2008; Kaukinen & DeMaris, 2009; Kaukinen, 2002, 2004; Ullman & Filipas, 2001a), but the responses that they receive vary in their quality and helpfulness (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl., 2007; Ullman, 2000; Zweig & Burt, 2007). Better understanding the process and context of these help-seeking experiences may help to account for differences in post-assault outcomes and inform strategies to improve help-seeking experiences for survivors.

Mental Health Outcomes of Sexual Assault

The deleterious effects of sexual assault on mental health have been well documented (Campbell et al., 2009; Goodman et al., 1993). In terms of mental health, experiencing sexual assault has been associated with outcomes including depression (Au, Dickstein, Comer, Salters-Pedneault, & Litz, 2013; Cecil & Matson, 2005; Cook, Pilver, Dinnen, Schnurr, & Hoff, 2013; Harris & Valentiner, 2002; Zinzow et al., 2010), anxiety (Cook et al., 2013), post-traumatic stress (Au et al., 2013; Baugher, Elhai, Monroe, & Gray, 2010; Brown, Testa, & Messman-Moore, 2009; Najdowski & Ullman, 2009), disordered eating (Collins, Fischer, Stojek, & Becker, 2014), and substance use (Booth, Mengeling, Torner, & Sadler, 2011; Najdowski &

Ullman, 2009). These mental health sequelae present critical needs for survivors, which many survivors attempt to address through help-seeking processes.

Help-Seeking After Sexual Assault

Many survivors of sexual assault actively seek help to mitigate the potential negative outcomes of sexual assault. In general, help-seeking can be thought of as a process of obtaining support and assistance to meet needs in the context of stressful life circumstances, which covers a range of types of contact (e.g., disclosures of problems, explicit efforts to seek tangible aid) with different types of responders (Gourash, 1978). In the context of sexual assault, survivors may have a variety of needs, including emotional support, legal assistance, and medical attention, and their experiences accessing community responders to meet these needs have received a great deal of research attention (e.g., Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001; Campbell, 1998, 2008). This research has explored survivors' contacts with both informal (e.g., friends, family) and formal (e.g., law enforcement, healthcare) sources of support and services, as well as the antecedents and consequences of disclosing to responders and/or seeking help. Generally, the major thrusts of the research in this area relate to (a) the frequency with which survivors contact particular responders, (b) facilitators and barriers to contacting particular responders, (c) the types of responses that survivors receive, and (d) the impact of these responses on survivors.

Frequency of contact with responders. First, a main focus of the sexual assault help-seeking research has involved understanding the frequency with which survivors of sexual assault contact a variety of responders. It is clear from this work that many survivors do not tell anyone about their assault (about a third; e.g., Rennison, 2002; Fisher, Daigle, Cullen, & Turner, 2003; Krebs, Lindquist, Warner, Fisher, & Martin, 2007; Wolitzky-Taylor et al., 2011). Those

who do disclose sexual assault tend to tell informal supporters (e.g., friends, family) (Ahrens et al., 2007; Fisher et al., 2003; Ullman & Filipas, 2001a; Ullman, 1996, see Ullman, 1999 for a review). Fewer approach formal sources (Campbell, Wasco, et al., 2001; Fisher et al., 2003b; Krebs et al., 2007; Paul, Walsh, et al., 2013; Ullman, 1996a; Wolitzky-Taylor et al., 2011). Overall, it seems that survivors may contact a wide range of responders, and formal responders are less likely to be contacted than informal responders. However, a recent review of this literature conducted by Sabina and Ho (2014) suggested that the focus on whether or not services have been accessed in isolation paint a limited picture by not attending fully to the *process* through which survivors may seek help from multiple responders. For example, it is possible that contacts with responders may influence the likelihood of continued help-seeking, but this possibility has not been examined.

Responses received. Second, help-seeking research has documented the variety of responses that survivors may receive from informal and formal sources. Responses that have been conceptualized as positive by researchers include validation/belief (Ullman, 1996b), emotional support (Ahrens et al., 2007; Ullman, 1996b, 2000; Zweig & Burt, 2007), empathy (Ahrens et al., 2007), mobilizing support (Ahrens et al., 2007), the provision of tangible aid/information support (Ahrens et al., 2007; Ullman, 1996b, 2000), checking on survivors (Zweig & Burt, 2007), seeking revenge (Ahrens et al., 2007), and listening/encouraging talking (Ullman, 1996b). Survivors report appreciating many aspects of the formal response, including responders who are nonjudgmental and believe them (Monroe et al., 2005), help them heal from the assault (Monroe et al., 2005), act with care and compassion (Ericksen et al., 2002; Fehler-Cabral, Campbell, & Patterson, 2011), and attend to their needs (Ericksen et al., 2002). They also report appreciating services that meet their needs (Monroe et al., 2005), help them to feel safe

(Ericksen et al., 2002), allow them control and choices (Ericksen et al., 2002; Fehler-Cabral et al., 2011), and include the provision of information (Ericksen et al., 2002; Fehler-Cabral et al., 2011).

Negative responses (i.e., secondary victimization; Campbell & Raja, 1999) include taking control of decisions (Ullman, 1996b, 2000), doubting the survivor (Ahrens et al., 2007), cold/detached reactions (Ahrens et al., 2007), victim blame (Ahrens, 2006; Ahrens et al., 2007; Ullman, 1996b, 2000; Zweig & Burt, 2007), unsupportive reactions (Ahrens et al., 2007), treating the survivor differently (Ullman, 1996b, 2000), distraction (Ullman, 1996b, 2000), refusing or failing to help (Ahrens, 2006; Ahrens et al., 2007), insensitivity (Ahrens, 2006), and egocentric reactions (Ullman, 2000).

These responses have a mixed impact on survivors' post-assault outcomes, depending on response type. Positive responses from responders, including emotional and instrumental support, have been widely conceptualized as buffers to traumatic stress (Kaukinen, 2004). However, this relationship has not received consistent empirical support (see Ullman, 2007 for a review) with some studies finding no relationship (Borja, Callahan, & Long, 2006; Ullman, 1996) and one study only finding an effect for receiving responses that are *perceived* to be helpful (Campbell, et al., 2001). It appears, though, that negative social responses have a strong impact on traumatic stress (Borja et al., 2006). Research on community samples of women has identified that receiving more frequent insensitive or negatively-perceived responses is associated with more severe psychopathology (Campbell et al., 2001, Starzynski et al., 2005; Ullman & Filipas, 2001b), while a study of undergraduate women found that only experiencing controlling behaviors (a negative response) were associated with greater severity of PTSD, depression, and anxiety (Orchowski, Untied, & Gidycz, 2013). Further, receiving negative

reactions has been found to discourage continued help-seeking (Ahrens, 2006; Campbell & Raja, 2005), and encouragement to contact formal responders can increase the likelihood of survivors seeking such sources of support (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Patterson & Campbell, 2010; Paul, Zinzow, McCauley, Kilpatrick, & Resnick, 2013). These responses can also affect relationships with responders. While disclosing a sexual assault can sometimes result in strengthened relationships, particularly with friends, disclosures can also have a negative impact on relationships (Ahrens & Aldana, 2012; Ahrens & Campbell, 2000; Banyard et al., 2010).

It is clear that the responders to whom survivors turn for support do not consistently provide high quality support, which has important implications for post-assault experiences and well-being. However, missing from this literature is attention to the ways in which survivors' social contexts facilitate or impede help-seeking and affect subsequent mental health. Survivors' informal social networks might be structured in a way that either affords them easy access to positive supports or leaves them with only negative supports. For example, depending on how large or close-knit their social network is, or how many weak or strong relationships they have with others (both structural characteristics of social networks), survivors may have more access to help after sexual assault. Such findings punctuate the need to examine the *context* in which survivors are engaged in help-seeking with attention to structural characteristics of survivors' informal social networks.

Predictors of help-seeking. A third main focus of the research involves understanding the factors that predict contact with responders. Facilitators to help-seeking include experiencing assaults that fit a stereotypical view of what "counts" as sexual assault (Starzynski et al., 2005), having more severe mental health symptoms (Starzynski, Ullman, Townsend, Long, & Long,

2007), and experiencing more lifetime traumatic events (Ullman & Brecklin, 2002). Barriers to help-seeking include fear, embarrassment, shame, concerns about negative reactions from others, and a lack of certainty about whether what happened constituted rape (Ahrens, Stansell, & Jennings, 2010; Banyard et al., 2010; Filipas & Ullman, 2001; Heath, Lynch, Fritch, McArthur, & Smith, 2011; Patterson, Greeson, & Campbell, 2009; Starzynski et al., 2005; Wolitzky-Taylor et al., 2011). Demographic barriers have also been identified: in a large community study of sexual assault survivors, factors including younger age or lesbian, gay, or bisexual sexual orientation were associated with decreased help-seeking (Starzynski et al., 2007). However, this literature has been limited by a focus on correlates of help-seeking to formal responders. Less work has focused on the facilitators and barriers of help-seeking from informal responders. In addition, no work has examined the ways in which aspects of social contexts beyond perceptions of social support—namely, the ways in which relationships within social networks are structured—might also account for differences in help-seeking.

There is a great deal of evidence to indicate that survivors' informal social networks play a critical role in the aftermath of sexual assault (Ahrens et al., 2007; Fisher et al., 2003; Ullman & Filipas, 2001b; Ullman, 1996, see Ullman, 1999 for a review). These networks can be described in terms of their content and structure (Pescosolido, 1991). The content of social networks involves the kinds of responses and support offered. In the aftermath of sexual assault, the provision of social support is a type of network content that has been identified as a correlate of both help-seeking and well-being after assault (see Ullman, 2010 for a review). Network structure involves the number and type of relationships between members of the networks, and has been used to understand help-seeking for a variety of social problems (e.g., applications for social services among the elderly, Auslander & Litwin, 1990; seeking professional parenting

advice, Birkel & Reppucci, 1983). While network content has received attention in the literature, network structure has not been used to examine help-seeking after sexual assault.

Theoretical Frames for the Sexual Assault Help-Seeking Literature

Despite increasing attention to potential theories in which the help-seeking literature could be couched (Kaukinen, 2002), the empirical work in this area has been largely atheoretical; that is, theoretical models of help-seeking are often not used to inform the development of research questions and the interpretation of findings (Sabina & Ho, 2014). Approaching this work through a theoretical frame could help to narrate existing findings and suggest new directions for research. Thus, identifying a theoretical foundation for help-seeking research is a critical component of advancing research in this area.

The broader help-seeking literature provides a source of theory in which the understanding of survivors' help-seeking processes can be further examined (Kaukinen, 2002). This body of literature has diminished its focus on predictors of single acts of help-seeking (e.g., contacting the police) and individual-level rational models of accessing services (e.g., weighing pros and cons) and increased its focus on multilevel help-seeking processes and the impact of these processes on health in order to more accurately reflect the complex nature of help-seeking (Allen, Griffiths, & Lyne, 2004; Carpentier & Bernard, 2011).

From this broader body of literature, a number of theoretical frames have been suggested to understand help-seeking after sexual and domestic violence in particular (for reviews, see Kaukinen, 2002 and Sabina & Ho, 2014). Ecological models are commonly suggested as potential frames. Such models attend to how multiple levels of analysis (e.g., individual, interpersonal, and societal) can interact to impact various stages of help-seeking and recovery (Campbell et al., 2009; Liang, Goodman, Tummala-Narra, & Weintraub, 2005). Other suggested

models focus only on individual (e.g., the transtheoretical model) (Prochaska, DiClemente, & Norcross, 1992) or macro levels of analysis (e.g., feminist theory; Edwards, Dardis, & Gidycz, 2012). However, in practice, research on help-seeking typically does not apply such models (Sabina & Ho, 2014).

The network episode model (NEM) is an ecological-type model that is emblematic of the shifts towards attention to process and context in the help-seeking literature, and has promise for addressing some of the aforementioned gaps in the sexual assault help-seeking literature. The NEM aims to contextualize medical and mental health service-seeking by suggesting variables at multiple levels of analysis that might be relevant to understanding help-seeking processes (Pescosolido, 2011). In the NEM, systems in which a help-seeker exists influence help-seeking processes over time. Specifically, interactions with these systems are seen as being shaped by systems' structure and content, and these interactions are considered to be a primary influence on decision-making for health-related needs. Unlike other ecological models, it pays particular attention to ways in which elements of the multi-level social ecology around help-seekers can be characterized as social networks and studied using social network analysis. In most practical applications of the NEM, the social networks of the help-seeker are examined to predict components of the help-seeking process. While the NEM originated in medical sociology, it is multidisciplinary in nature, and has been applied to diverse research topics, including decision-making about birth attendants (Edmonds, Hruschka, Bernard, & Sibley, 2012), service use among people who are homeless (Bonin, Fournier, & Blais, 2007), and entering psychiatric treatment (Pescosolido, Gardner, & Lubell, 1998). In the latter study, for example, the authors examined characteristics of individuals (e.g., gender, race, age), the structure of their social networks, and the type of mental illnesses they experienced to challenge rational choice models

of seeking psychiatric treatment. Using a mixed method approach, they identified that people in large, dense networks were more likely to access mental health treatment than those in smaller or more disperse networks. Importantly, the NEM does not suggest that variables relevant to help-seeking will operate in the same way across types of social problems for which people seek help.

The NEM has promise in helping to elaborate on the help-seeking processes and contexts of survivors of sexual assault through its provision of a framework in which to place variables relevant to help-seeking (Pescosolido, 2011); indeed, it has been suggested as a way to understand women's help-seeking after violent crime broadly (Kaukinen, 2002). It has not yet been applied to sexual assault specifically. However, it has the potential to advance research on this topic in two ways. First, this model places a greater focus on *process*, or pathways, rather than single steps in isolation, which has also been identified as a key direction for the literature on help-seeking after sexual and domestic violence to move (Sabina & Ho, 2014). To this end, the network episode model considers "illness careers," in which help-seekers undergo a dynamic, potentially uneven process of help-seeking and recovery over time (Pescosolido, 1991). The network episode model focuses on key points, patterns, and pathways in such careers, with particular attention to timing, duration, and order of steps (Pescosolido, 2011). For example, rather than focusing exclusively on entry into a particular formal service, research conducted through the network episode model might seek to understand how experiences with responders influence the continuation of help-seeking from both formal and informal responders. Additionally, there is no one "correct" step or pathway to take across help-seekers (Pescosolido, 2011), which allows room for a greater emphasis on fit between help-seekers and available services. Second, the network episode model emphasizes the *contexts* surrounding help-seeking (Pescosolido & Levy, 2002), which is consistent with calls to move beyond individual-level

predictors of help-seeking after sexual assault (Sabina & Ho, 2014). Networks within and across multiple levels of analysis can be examined. For example, the NEM-SA might call attention to the structure, content, and function of interagency networks (e.g., Sexual Assault Response Teams) or social networks of survivors in understanding help-seeking after sexual assault.

The network episode model is a close fit for the theories and values that have been applied to sexual assault help-seeking research. It incorporates aspects of ecological models, which are commonly used in studies of help-seeking after sexual assault and violence against women more broadly (e.g., Liang et al., 2005; see Sabina & Ho, 2014 for a review). Indeed, Bronfenbrenner's (1979) macrosystem, exosystem, and microsystem roughly parallel the community, institutional/organizational, and personal networks subsystems, respectively, in the network episode model. There are also aspects of the chronosystem (e.g., changes in help-seeking role over time) and the mesosystem (e.g., interactions between support network members and representatives of institutions/organizations) that are included in the illness career subsystem. In addition, unlike Bronfenbrenner's model, the network episode model poses a specific set of variables of potential relevance to help-seeking that are not explicitly included in models such as Bronfenbrenner's (most notably, network variables like density). Finally, its inclusion of variables from a variety of disciplines (e.g., personality psychology, social network research, neurobiology) have the potential to move research on help-seeking after sexual assault towards a more multidisciplinary space. The network episode model is also consistent with feminist and empowerment-based philosophies of understanding help-seeking practices in survivors of sexual assault (Ullman & Townsend, 2008) in its value for survivor choice and agency. In addition, survivors are not seen as passive actors who respond to the options given to them. Instead, they are seen as skilled and agentic navigators of their lived realities who are

informed by a multilevel context through which they make meaning and navigate options (Pescosolido, 2011). To attend to the influence of patriarchy or rape-supportive contexts on help-seeking after sexual assault, a contextual approach such as this is necessary.

However, the network episode model requires some adaptation to effectively fit the sexual assault literature. First, mental or physical health conditions (i.e., the focus of most previous applications of the network episode model) are defined by their effect on people's lives, so needs specifically related to mental or physical health are most pressing and are thus typically positioned as the focus of inquiry. In contrast, survivors of assault may have multiple intersecting needs, including mental *and* physical health care, social support, and justice, or no needs at all. Thus, the term "illness career" seems less applicable to describe the post-assault help-seeking process, as the main focus of help-seeking might not be to address a physical or mental illness. In light of the value for empowerment in the field of sexual assault research and action, the parallel construct in the adapted network episode model for sexual assault (NEM-SA, see Figure 1.1) is called the "survival career." Second, while the network episode model places characteristics of the physical or mental health condition (i.e., the "episode base") into the individual subsystem, sexual assault is not a phenomenon that is internal to a person in the same way that illness is; rather, it is something that happens *to* a person and may or may not affect that person. Thus, the NEM-SA positions the assault and its characteristics as a "starting point" from which the survivor career emerges.

The Current Study

In light of these key findings and through the lens of the network episode model, the literature on help-seeking after sexual assault could be strengthened in two major ways. First, much of the work in this area has been done with a focus on single time point, decision, or

outcome related to help-seeking. Less attention has been paid to broader pathways or processes of help-seeking (Sabina & Ho, 2014), despite evidence that suggests that survivors make a variety of help-seeking decisions, and early experiences may affect later ones (Ahrens et al., 2007). A greater focus on process could help to account for the entirety of survivors' post-assault experiences, rather than just focusing on a particular segment of these experiences. Second, recent reviews have called for greater research attention to the contexts in which help-seeking occurs (McCart et al., 2010; Sabina & Ho, 2014). Survivors' contexts may play an important role in influencing help-seeking processes, but this has been largely unstudied. In particular, understanding how informal social networks might constrain or facilitate access to various sources of support could account for disparate findings in the literature. Thus, the current study focuses primarily on the process and context of help-seeking after sexual assault, using a mixed-method approach and the theoretical frame of the network episode model. Specifically, the current study examines two sets of research questions (numbered according to their associated chapter), some of which have corresponding hypotheses that are presented in each chapter. Chapter 2 examines how survivors decide whether and to whom to disclose their assault within their social network. The specific research questions addressed in Chapter 2 are:

Question 1: What characteristics of social networks are related to survivors' likelihood of disclosing their assault within the network?

Question 2: How are people to whom survivors are likely to disclose positioned within their social networks?

Question 3: What is the differential role of characteristics of social networks versus other potential correlates of help-seeking (e.g., level of trauma, type of assault, gender) with regard to help-seeing likelihood?

Chapter 3 explores correlates of survivors' decisions to continue seeking help once they have embarked on a help-seeking process. The specific research questions addressed in Chapter 3 are:

Question 4: Is the perceived quality of responses associated with continued engagement in help-seeking?

Question 5: Is the timing of responses associated with continued engagement in help-seeking?

Question 6: Are characteristics of survivors and the assaults that they experienced associated with continued engagement in help-seeking?

In chapter 4, the findings from chapters 2 and 3 are integrated and discussed in light of the Network Episode Model for Sexual Assault.

Figure 1.1: Network Episode Model for Sexual Assault (NEM-SA)

Community

Institutions
(Formal Responders)*

Support Networks
(Informal Responders)*

Episode Base
(Assault
Characteristics)*

Survival Career*

The Individual*

Molecular System

* Components of the NEM-SA addressed in the current study

CHAPTER 2: WHO IS TOLD ABOUT SEXUAL ASSAULT? SOCIAL CONTEXTS OF

ASSAULT DISCLOSURE

After sexual assault, many survivors turn to members of their informal social network (e.g., friends, family members, romantic partners) for support (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Fisher, Daigle, Cullen, & Turner, 2003; Ullman & Filipas, 2001; Ullman, 1996, see Ullman, 1999 for a review). Survivors' choices regarding whether to seek help within their social networks and to whom of their available network members to disclose can have important implications for the kinds of responses they receive, which can in turn influence their continued help-seeking and well-being (Ullman, 2010). Thus, it is important to examine correlates of disclosure in understanding how to improve post-assault experiences. In past examinations of this topic, characteristics of survivors and the assaults that they experienced have been examined as potential correlates of disclosure, and several characteristics of typical disclosure recipients (e.g., gender) have been identified (Banyard, Moynihan, Walsh, Cohn, & Ward, 2010). However, the literature on correlates of disclosure has been limited by a focus on disclosure to formal responders (e.g., police, healthcare systems) and a lack of attention to the role of contexts around survivors in their help-seeking decisions. In light of increasing public attention to the role of peer networks in supporting survivors, it is important to understand both (a) what facilitates disclosure to informal responders generally and (b) to whom, of potential informal responders, survivors typically disclose. A potential avenue for exploration of these topics involves examining characteristics of survivors' networks themselves. These networks vary in their content (e.g., the kinds of support that they provide) and their structure (e.g., the number and types of relationships present between network members), and both have been associated with help-seeking for healthcare needs. Thus, the current study investigates who,

among potential informal responders in the social networks of college students who have experienced unwanted sexual contact, is contacted for help, and how survivors narrate their decisions about whom to contact.

Social networks can be described with regard to both structure (e.g., the number of network members and the number of relationships between them) and content (e.g., the amount of support offered; Pescosolido, 1991). Structural variables have been used to understand help-seeking for a variety of problems (e.g., applications for social services among the elderly, Auslander & Litwin, 1990; seeking professional parenting advice, Birkel & Reppucci, 1983). The sexual assault help-seeking literature, though, has focused primarily on the content of social networks. Specifically, the degree to which social support is provided has been identified as a correlate of both help-seeking and well-being after assault (see Ullman, 2010 for a review). While a recent review called for greater attention to the ways that survivors' contexts might influence help-seeking (Sabina & Ho, 2014), the structure of survivors' social networks have not been examined in relation to help-seeking. Thus, the current study examines the ways in which survivors' networks are structured and how people to whom survivors disclose are positioned in those networks to understand help-seeking decisions.

Indeed, there is evidence that sexual assault survivors' social networks play a central role in their efforts to seek support after sexual assault (Pescosolido, 2011; Ullman, 1999). While sexual assault is highly underreported to formal responders like the police (Fisher, Cullen, & Turner, 2000), it is commonly disclosed to people within survivors' social networks (e.g., family and friends; (Ahrens et al., 2007; Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001; Filipas & Ullman, 2001; Fisher et al., 2003; Starzynski, Ullman, Filipas, & Townsend, 2005). Likewise, 28.9% to 41.5% of college students have received a disclosure of sexual assault (Banyard et al.,

2010; Dunn, Vail-Smith, & Knight, 1999; Paul et al., 2013), suggesting that peers are a critical component of the help-seeking process after sexual assault. Further, there is evidence that disclosures can occur years after an assault (Orchowski & Gidycz, 2012; Ullman & Filipas, 2001), which indicates that survivors engage in a long-term process of help-seeking that involves ongoing evaluations of whom to tell about their assault as new people join their social networks.

The choice of disclosure recipient can affect the type of response received and how that response is interpreted. For example, in a qualitative study of survivors' contacts with informal responders, disclosing to people with whom the survivor had a closer relationship was associated with more positive social reactions, while disclosing to people with whom the survivor had a less close relationship was associated with more negative social reactions (Ahrens & Aldana, 2012). Further, the closeness of the relationship affected survivors' interpretation of varying social reactions (e.g., even negative reactions could be seen positively when the responder was a close friend). Thus, understanding to whom survivors choose to disclose is an important component of understanding their overall experiences with help-seeking after sexual assault, but this topic has been only minimally explored.

Correlates of Disclosure. It appears that many survivors of sexual assault engage in a decision-making process that involves weighing the pros and cons of disclosure, although some do not have an opportunity to engage in such a process when responders find out about the assault without a deliberate disclosure (Ahrens, Campbell, et al., 2007). Determinants of the pros and cons of disclosure appear to include characteristics of (a) survivors' social networks, (b) survivors themselves and the assaults that they experience, and (c) the responders to whom survivors could potentially disclose.

Social network characteristics. Characteristics of survivors' social networks may be important to consider as correlates of disclosure, as they may affect the pros and cons that survivors weigh. The literature on sexual assault-related help-seeking has focused primarily on network content, but there is reason to believe that network structure may also be important.

Network content. The literature on help-seeking after sexual assault has focused on social support as a type of network content that can influence help-seeking processes. The degree to which survivors perceive that others support them could encourage disclosure by leading survivors to expect that they will be supported rather than blamed about their assault. Indeed, the broader help-seeking literature has identified that social support is associated with help-seeking likelihood (Delaney, Grube, & Ames, 1998). In relation to sexual assault specifically, in a prospective study of college women, Orchowski and Gidycz (2012) found that greater attachment to others was related to an increased likelihood of disclosure to informal responders.

Network structure. Both the broader theoretical literature on help-seeking (Pescosolido, 2011) and a recent review of correlates of help-seeking in sexual and domestic violence (Sabina & Ho, 2014) have called for greater attention to how structures of social networks facilitate help-seeking. In the broader help-seeking literature, various aspects of social network structure have been related to help-seeking (Birkel & Reppucci, 1983). For example, in a study of elderly people applying for social services, people with smaller social networks were more likely to apply for social services than those in larger social networks (Auslander & Litwin, 1990). As another example, women who have less dense social networks or contact their family networks less frequently attended more parent group sessions and sought more professional parenting advice than women who had denser networks or contacted their family networks more frequently (Birkel & Reppucci, 1983). This work suggests that social network structure may be related to

help-seeking. Still, these findings may not directly suggest correlates of help-seeking within informal networks because these studies focused on help-seeking for formal sources of support, which might indicate an unwillingness to seek help from informal responders. The characteristics of social networks that serve as facilitators and barriers to help-seeking may be different for sexual assault than for the problems assessed in these studies. For example, sexual assault is a highly stigmatized experience that might involve network members as stakeholders (e.g., as perpetrators or bystanders). Thus, an investigation of how social network structure is related to help-seeking within informal networks after sexual assault is needed. In the social network literature, several different variables are used to describe how networks are structured, and each of these variables may be important in explaining help-seeking after sexual assault.

Network interconnectedness. Connections between members of survivors' networks could also encourage or discourage help-seeking. While there are a number of social network measures that assess connections between actors, for the purposes of the present study, two basic measures are of interest. First, at the level of the network member, degree centrality represents the number of relationships (i.e., ties) that a given network member has to other network members, whereas, at the level of the network, the average degree represents the average number of ties that network members have to each other. Highly interconnected networks (i.e., networks with high average degree) tend to provide higher social support to members (Granovetter, 1983; Walker, Wasserman, & Wellman, 1993; Wellman & Wortley, 1990), and network members with higher degree centrality might be more likely to be those with whom a person has closer relationships. However, networks with high average degree also tend to be norm-reinforcing and share the same kind of knowledge (Pescosolido, 1991). As a result, survivors in networks with high average degree might be more likely to get a similar response regardless of to whom they

turn. This could support continued help-seeking when networks share knowledge that is supportive of survivors of sexual assault, but it could impede this process when shared knowledge is unsupportive of survivors. In addition, the number of friends shared by two people is associated with the likelihood of negative gossip passing between them (Grosser, Lopez-Kidwell, & Labianca, 2010), so in networks with high average degree, information may be more likely to spread among network members. In such networks, then, survivors may be compelled to disclose the assault with network members whom they had not originally planned to tell. This might discourage survivors from telling highly-connected network members (i.e., those with high degree centrality). It is also possible that survivors in close-knit networks who do not want their broader network to find out about their assault may be discouraged from telling even their closest supporters. In less well-connected networks, survivors could receive any number of responses, depending on whom they approach, and could feel more confident that their disclosure will not be shared with others in the network. Thus, there is reason to believe that highly interconnected networks could either impede or facilitate help-seeking after sexual assault, but this has not been investigated.

Number of components. Components (also called cliques) in a network represent independent interconnected groups (i.e., people who have contact with each other but not with other network members). Since components may share knowledge and norm endorsement (Friedkin, 2001), having more components can provide alternatives if one component provides unhelpful responses. Additionally, if survivors hope to engage their entire network in assisting them after assault, they may have to disclose separately to different components (rather than relying on one network member to notify other network members) and ultimately make more disclosures. However, more components may also be associated with less disclosure if survivors

have different types of relationships with people in different components that may be associated with their willingness to disclose across components. For example, if a survivor has a group of work friends and a group of friends from childhood, she may tell the friends from childhood but not the work friends.

Characteristics of survivors and assaults. There is some evidence that characteristics of survivors and the assaults they experienced may be correlates of disclosure to informal responders, although much of this literature has focused on disclosure to formal responders. First, some demographic differences have been identified in disclosure likelihood; namely, college women seem to be more likely to disclose unwanted sexual experiences than college men (Banyard et al., 2010). Second, several studies have also identified that experiencing greater psychological distress is associated with a greater likelihood of help-seeking (Starzynski, Ullman, Filipas, & Townsend, 2005; Starzynski, Ullman, Townsend, Long, & Long, 2007; Ullman & Filipas, 2001; Ullman, 1996), perhaps because it raises a need for support that can be addressed through help-seeking or increases the likelihood that responders will approach survivors first about their apparent distress (Ahrens et al., 2007). For example, a friend may ask a survivor why she has been upset or withdrawn lately, which may compel the survivor to disclose the assault rather than lying. Third, self-blame has been associated with disclosure likelihood. Increased self-blame has been associated with decreased self-reported likelihood to report a hypothetical sexual assault to formal responders (Orchowski, Meyer, & Gidycz, 2009), although a study of sexual assault survivors found that those who only tell informal responders had higher self-blame than those who told both formal and informal responders (Starzynski et al., 2005). Fourth, characteristics of the assault experienced have been related to disclosure likelihood. Experiencing injury has been associated with an increased likelihood of informal disclosure

(Fisher et al., 2003), as have the presence of victim and/or perpetrator substance use (Fisher et al., 2003; Orchowski & Gidycz, 2012; Rickert, Wiemann, & Vaughan, 2005) and a lower level of acquaintance with the perpetrator (Orchowski & Gidycz, 2012). These findings are consistent with research that assaults that are likely to be perceived as more serious by others may be more likely to be disclosed to informal responders (Starzynski et al., 2005).

Characteristics of potential responders. Characteristics of potential responders might determine whether they receive disclosures, including (a) gender, (b) relationship type, (c) strength of relationship, and (d) concerns that the responder will tell others about the assault.

Gender. Demographic characteristics, such as gender, may determine whether network members receive disclosures. A study of college women identified that survivors were more likely to disclose to women than men (Orchowski & Gidycz, 2012). Survivors may expect that women will be more able to understand sexual assault experiences than men; indeed, a study of women's experiences receiving disclosures indicated that assault survivors were more likely to receive disclosures than those who had not been assaulted (Paul et al., 2013).

Relationship type. Out of potential informal responders, survivors typically see friends as relatively more supportive (Golding, Siegel, Sorenson, Burnam, & Stein, 1989; Ullman, 1999), while male significant others tend to be seen as less supportive (Golding, Stein, Siegel, Burnam, & Sorenson, 1988; Ullman, 1996b). Indeed, a study of college women identified that survivors were more likely to disclose to friends than family members (Orchowski & Gidycz, 2012).

Strength of relationship. Relationship closeness may also be important to consider. In network analysis, relationship closeness is called "tie strength" and is often operationalized as the frequency of contact with network members (Granovetter, 1983). Strong ties—network members with whom the survivor interacts frequently—may be more willing to help than weak

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ties (Walker et al., 1993; Wellman & Wortley, 1990). Since the presence of strong ties suggests regular interaction, it is possible that survivors may have more opportunities to tell such responders. Ahrens and colleagues pointed out that, when network members are present in the aftermath of an assault or are able to notice trauma symptoms, they may inquire about survivors' well-being, which may ultimately elicit a disclosure (Ahrens et al., 2007). Thus, survivors would be expected to be more likely to disclose to strong ties than weak ties.

Concerns about information spread. A central concern for survivors considering disclosure is whether others will find out about their assault: in a study of college women's reporting behaviors, about a fifth of survivors said that they were reluctant to report to the police because they were afraid that others would find out about what happened (Fisher et al., 2003). Some responders may be more likely to spread information about an assault within and/or outside of the network, and these responders may be less likely to receive a disclosure.

The Current Study

Despite the evidence that social networks play a critical role in the aftermath of sexual assault, the nature of survivors' utilization of their social networks for assistance after sexual assault is not well understood. Presumably, all survivors do not discuss their assault with every member of their social network, but the degree to which survivors discuss their assault with members of their social network is not known. Further, while the specific people to whom survivors choose to disclose determines the kind of response that survivors will receive (Ullman, 1999), the factors that influence survivors' decisions to disclose or not disclose to specific network members are also not well understood. Understanding to whom survivors typically disclose assault within their informal social networks, as well as the potentially complex reasons why survivors make these decisions, could inform efforts to improve peer responses to sexual

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assault. In addition, structural characteristics of survivors' social networks may be associated with disclosure to members of those networks across survivors, but this possibility has not been explored. *How* networks matter for sexual assault specifically is unclear, so qualitative approaches may also be useful in uncovering the varied mechanisms by which networks may be associated with disclosure. Thus, this study aimed to understand both *whether* characteristics of survivors, their networks, and informal responders matter in sexual assault disclosure decisions, as well as the variety of reasons *why* and *how* these characteristics matter or do not matter to survivors.

Given these research questions as well as our feminist perspective that centralizes the lived experiences of survivors of sexual assault, reduces hierarchies between researchers and participants, and expands the potential methods seen as appropriate for inquiry (Campbell & Wasco, 2000), we selected a mixed-method design. Our mixed-method goal was complementarity, which involves using qualitative findings to clarify and expand upon quantitative results (Greene, Caracelli, & Graham, 1989). In doing so, we hoped to use qualitative methods to "story" the experiences common across survivors of sexual assault that we identified through quantitative analyses as well as communicate the narratives of people with unique experiences.

Three research questions, each associated with hypotheses, drove our quantitative analyses. Because the relationship between network structure and help-seeking has not been explored fully, we pose nondirectional hypotheses related to these predictors. First, what characteristics of survivors' networks are associated with disclosure to members of those networks? Hypotheses for this research question are as follows:

H1a: Perceptions of social support quality will be positively associated with disclosure likelihood.

H1b: Average network degree will be associated with disclosure likelihood.

H1c: Number of components will be associated with disclosure likelihood.

Second, what characteristics of survivors are associated with disclosure to network members? Hypotheses for this research question are as follows:

H2a: Women will be more likely than men to disclose to network members.

H2b: PTSD severity will be positively associated with disclosure likelihood.

H2c: Self-blame will be negatively associated with disclosure likelihood.

H2d: Assault severity will be positively associated with disclosure likelihood.

Third, what characteristics of network members (e.g., position in the network) are associated with the likelihood of receiving a disclosure?

H3a: Friends will be the most likely to receive a disclosure, while family members will be the least likely.

H3b: Women network members will be more likely to receive a disclosure than men network members.

H3c: Tie strength will be positively associated with the likelihood of receiving a disclosure.

H3d: Network members whom survivors are unconcerned will tell others will be more likely to receive a disclosure than network members whom survivors are concerned will tell others.

H3e: Degree centrality will be associated with the likelihood of receiving a disclosure.

Method

The qualitative and quantitative data were collected concurrently. This study received Institutional Review Board approval.

Survey recruitment. Participants were undergraduate students recruited through notices posted on the Psychology Subject Pool. All students over the age of 18 were eligible to participate. Upon completion of the survey, participants automatically received one course credit through the Psychology Subject Pool for participation. Initially, 794 participants consented to participate. The removal of two participants who provided nonsensical responses and two participants who answered no questions left 790 participants from which we selected the 206 participants who endorsed any of types of sexual assault (ranging from unwanted sexual contact to completed rape) since age 14. Of these participants, $N = 173$ survivors provided complete data on whether they told $N = 1064$ network members and were thus included in the analytic process.

Survey measures. Data were collected through an online survey that took about 50 minutes to complete (see Appendix A for the survey measure).

Network content: Perceived social support. To clarify the extent to which social networks afford social support to participants and examine the relationship of perceptions of social support to disclosure decisions, the study assessed perceived social support using The Multidimensional Scale of Perceived Social Support (Zimet & Dahlem, 1988). This scale has 12 items that assess social support from friends, family, and a significant other (e.g., "My family really tries to help me"). Responses were rated on a 5-point Likert scale ranging from strongly disagree to strongly agree. The scale has been found to have good internal and test-retest reliability, as well as moderate construct validity (Zimet & Dahlem, 1988). In the subsample

used for the current study, internal consistency reliability was $\alpha = 0.94$. An overall scale score was calculated by taking the mean of all items.

Network structure. The survey included a name generator, name interpreter to assess the structure of participant's egocentric social networks (Burt, 1984). While it is difficult to fully capture support providers using a single name generator prompt (Marin & Hampton, 2007), the researchers hoped to reduce the burden on participants of completing a long and potentially stressful survey. The survey thus used a single name generator prompt from the General Social Survey in light of its relatively stronger reliability and consistency in comparison to other common name generators: "Looking back over the last 6 months—who are the people with whom you discussed matters important to you?" (Burt, 1984; Marin & Hampton, 2007). Participants could list up to 10 people. Then, participants were presented with a network member-by-network member matrix and asked to select boxes to indicate which network members discussed important matters with each other (i.e., had ties with each other). These matrices were symmetrized across the diagonal (for simplicity, participants were not instructed to "confirm" ties by indicating that, for example, network member A talked to network member B about important matters and network member B also talked to network member A about important matters- reciprocity was assumed) and the diagonal was set to 0.

Network interconnectedness: Degree centrality and average degree. Degree centrality is a statistic at the level of individual network members that reflects the number of ties between the network member and other network members in survivors' egocentric networks (not including the survivor). Average degree is a statistic at the level of the network that represents the average number of ties between network members. These variables were calculated in UCINET (Borgatti, Everett, & Freeman, 2002). While density is another common measure of network

interconnectedness, unlike density, degree centrality provides a measure of the interconnectedness of a network that can be measured at both the level of the network overall and the individual network members, and is thus appropriate to capture multilevel variance.

Number of components. Network members were considered to be part of the same component if they had a relationship with each other but not to other network members as indicated by the member-by-member network matrix. Components could range in size from 1 (i.e., an isolate) to 10 people. We used UCINET to count the number of components in the network.

Survivor characteristics.

Gender. Participants were asked to indicate their gender (response options: man, woman, other). No participants in the current subsample endorsed "other."

Post-traumatic stress. To assess post-traumatic stress, the survey used the PTSD CheckList- Civilian Version (PCL-C; 17 items; Weathers, Litz, Herman, Huska, & Keane, 1993). This scale asks whether participants have experienced a range of symptoms (e.g., "Repeated, disturbing memories, thoughts, or images of a stressful experience") corresponding to the DSM-IV PTSD criteria in the past four months on a 5-point Likert scale ranging from "not at all" to "extremely." A review of the internal consistency of this measure found that the values were above $\alpha = .75$ across samples (Wilkins, Lang, & Norman, 2011). This scale has acceptable one-week test-retest reliability (Wilkins et al., 2011). The survey also asked the extent to which these symptoms affected participants' functioning. Scale scores were calculated by summing all items. Twenty-four participants were missing one item, one was missing two items, and one was missing three items; these missing values were replaced with participant-level mean scores. Internal consistency reliability in the subsample used for analyses was $\alpha = 0.94$.

Self-blame. The behavioral self-blame subscale of the Rape Attribution Questionnaire (Frazier, 2003) was used to assess self-blame. Five items assessed the frequency of various blaming thoughts in the past month (e.g., "I should have resisted more") on a five-point Likert scale (1 = never, 5 = very often). The mean of these five items was computed. Frazier reported internal consistency reliability values ranging from 0.77 to 0.89 for women survivors of sexual assault (Frazier, 2003). Internal consistency reliability for the subsample used in analyses was α = 0.91.

Sexual assault history and severity. The Sexual Experiences Survey- Short Form Victimization (Koss et al., 2007) assessed participants' history of sexual assault. This is the most widely-used self-report measure of sexual assault and includes seven behaviorally-based items (e.g., "A man put his penis into my vagina, or someone inserted fingers or objects without my consent by…") with five follow-up questions each regarding tactics used (e.g., "Threatening to physically harm me or someone close to me.") representing a range of unwanted sexual behavior from sexual contact to completed rape. Participants were instructed to indicate how many times (ranging from 0 to 3+) they have experienced each combination of behaviors and tactics over the past 12 months and since age 14. While the internal consistency of this scale is generally low but acceptable (see Cecil & Matson, 2006 for a review), for the subsample used in these analyses, internal consistency was measured at α = 0.95. All participants who endorsed any unwanted sexual behavior were asked which experience was the most meaningful to them and then asked a number of follow-up questions about that experience, including when it happened, the nature of the victim-offender relationship, whether the participant felt that this experience is sexual assault, and whether the participant was under the influence of drugs or alcohol at the time. In addition, consistent with the scoring rules from Koss et al. (2008), a sexual assault severity variable was

created to indicate (a) the most severe type of sexual assault that participants had ever experienced and (b) the type of sexual assault that participants indicated was most meaningful. The mutually exclusive categories were: sexual contact, attempted sexual coercion, sexual coercion, attempted rape, and rape.

Characteristics of network members. The survey asked a series of questions about each network member listed in the name generator.

Gender. Participants were asked to indicate network members' gender (response options: man, woman, other). No participants in the current subsample endorsed "other."

Whether survivor told network member about assault. To assess disclosure to responders, the survey listed the names of network members that participants had provided and asked the following question: "Please indicate which of these people you told about your sexual experience." Response options were: "I told this person, and they were helpful to me," "I told this person, and they were not helpful to me," and "I did not tell this person." For the current analyses, the first two response options were combined to create a dichotomous variable (0 = survivor did not tell network member about assault; 1 = survivor told network member about assault).

Survivor-network member relationship. The survey asked about the nature of each network member's relationship with the participant. Response options were "Spouse (husband or wife)," "Romantic partner (boyfriend or girlfriend)," "Date (someone whom you are dating casually who is not your boyfriend or girlfriend)," "Coworker," "Relative," "Friend," "Acquaintance (someone whom you have met before but do not know well)," and "Other." For the purposes of data analysis, spouse, romantic partner, and date were collapsed into a category

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called "Romantic Partner," and coworker, acquaintance, and other were collapsed into a category called "Other." Thus, there were four categories: romantic partner, friend, relative, and other.

Network member gender. The survey asked about each listed person's gender. Possible response options were man, woman, and other. No participants in the current sample selected "other" for any network members.

Tie strength: Frequency with which survivor talks to network member. The survey asked, "How often do you talk to this person (in person, over text, on the phone, online, or using any other means)?" and presented the list of network members named earlier in the survey. Response options were, 4 = "At least once a day," 3 = "At least once a week," 2 = "At least once a month," and 1 = "At least once a year."

Whether survivor was concerned that network member would tell others. To assess survivors' concerns about whether network members would tell others about the assault at the time when the assault happened, the survey asked, "Please indicate whether you were concerned that these people would tell others about your sexual experience," followed by a list of all network members named earlier in the survey. Response options were: "I was concerned that this person would tell others about my sexual experience," "I was NOT concerned that this person would tell others about my sexual experience," and "I did not have a relationship with this person at the time." Thus, the levels of this variable were no, yes, and no relationship at the time.

Interview recruitment. The survey was used to select participants for targeted interviews. Participants who answered "yes" to any questions on the Sexual Experiences Survey and indicated that their most significant experience occurred in the last five years were asked as part of the survey if the researchers may contact them about participating in a paid interview. Those who agreed were shown a recruitment message for the survivor interviews and asked to

provide their name and contact information at that point. The research team contacted these prospective participants via email, text, and/or phone to schedule an interview time.

Interview procedure. Forty-eight participants agreed to be contacted and provided contact information. After extensive follow-up efforts, qualitative interviews were ultimately conducted with $N = 20$ survivors of attempted or completed unwanted sexual contact using a semi-structured protocol (see Appendix B for the interview protocol and Table 2.1 for a description of survivor interview participants). Interviews were scheduled with participants at a time and place that was private and convenient to them (e.g., a room at the local library; the participant's house), although interviews were held at a campus psychological clinic if the participant had no location preference. After obtaining voluntary consent, the interviewer began the interview, audiorecording with the participants' permission (19 participants agreed to audiorecording) and taking notes. In general, the interviewer worked to reduce hierarchies between herself and interviewees by offering support and information, validating participants' experiences, and following participants' narrative lead when possible (Campbell & Wasco, 2000). Interviews began with inquiries into the nature of participants' social support to build rapport. The interviewer then asked about the incident that they indicated was the most significant to them in the survey. Next, the interviewer worked with survivors to identify all of the formal and informal responders whom they contacted and wrote them down on notecards. With the assistance of the participant, these notecards were arranged chronologically and the interviewer probed about how the participant made decisions about starting and ceasing contact with each responder, with particular attention to the role of earlier responders in informing these decisions. The interviewer also asked whether there were responders whom they wanted to contact but did not, and investigated why this was not possible. The interviews took

approximately 90 minutes. At the end of the interview, the interviewer gave the participant a list of local resources and paid him or her $20, regardless of whether all questions had been asked and answered. The interviewer maintained field notes to help inform study refinement and data analysis.

Analyses. The quantitative and qualitative analyses took place simultaneously, which allowed the emerging qualitative and quantitative findings to inform each other. The quantitative analyses were conducted through a postpositivist paradigm: we assumed the presence of an objective reality that can be imperfectly apprehended through research, attempted to maximize reliability and validity, and aimed to generalize our results. The qualitative analyses were conducted under a constructivist paradigm that assumed that the results were co-created between researchers and research participants and aimed to illuminate the complexity of survivors' explanations for their disclosure decisions (e.g., themes were identified by their theoretical significance rather than their numerical frequency).

Qualitative analyses. An initial qualitative analysis was conducted to determine potential variables that might explain why survivors chose to tell particular network members. Because of the lack of literature in this area, this allowed for the generation of hypotheses that could then be tested quantitatively as well as the description of potential factors associated with decisions about whom to tell that are not best captured quantitatively or are not testable given the research design. All interview participants ($N = 20$) were included in analyses, even though some did not make any disclosures, because the interview discussed their thought process regarding why they did not tell anyone.

To prepare the data for these analyses, I first selected the sections of data that spoke broadly to survivors' decision making regarding (a) whether to talk about the assault at all and

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(b) whether to tell informal network members specifically (i.e., holistic coding, Dey, 1993; Saldaña, 2013). I then engaged in first-cycle coding (Saldaña, 2013) to identify the specific factors that entered into these decisions in an exploratory manner. Specifically, I created codes that answered the questions, "Why did the survivor decide to talk (or not talk) about the assault?" and "Why did the survivor decide to talk (or not talk) to particular network members about the assault?" While 20 interviews is within the recommended number of interviews to reach theoretical saturation for grounded theory studies (Creswell, 2012), in order to determine whether the sample size was sufficient to reach saturation on this specific question, I tracked the number of new first-cycle codes created after coding each new transcript following the procedures of Guest and colleagues (Guest, Bunce, & Johnson, 2006). Figure 2.1 depicts the percentage of total codes created during the coding process. In both data segments, new codes were created less frequently as the number of interviews coded increased. No new codes were created after coding the 18th interview, suggesting that conducting additional interviews would be unlikely to result in a substantial number of new topics for investigation.

I then examined the codes created during first-cycle coding to identify second-cycle (thematic) codes. Second-cycle codes were created for conceptually significant themes; frequency of the code across interviews was not a primary determinant of whether a second-cycle code was created (Guba & Lincoln, 1994; Miles & Huberman, 1994). I summarized these codes in a codebook that included illustrative verbatim and detailed descriptions of codes. I then coded all interviews using this codebook. A trained undergraduate coder separately coded all interviews to check inter-coder reliability. Initially, kappa was 0.56 ($p < .001$), 95% CI (0.47, 0.65), indicating moderate agreement (Landis & Koch, 1977). All areas of discrepancy were then discussed until full consensus was reached.

Quantitative analyses. To conduct analyses we used mixed effects logistic regression in

SAS 9.4® (PROC GLIMMIX procedure) with the maximum likelihood by quadrature

approximation estimation method, which is a common parameter estimation method for

generalized linear mixed models (UCLA: Statistical Consulting Group, n.d.). We modeled the

participant-specific probability that a given network member was told by a survivor about the

assault, using independent variables that were drawn from a combination of the empirical

literature and the emergent findings from the qualitative analyses. Multilevel modeling was

selected to account for dependency in the data and separate variance at the level of the individual

and the setting. Network members (level 1) are nested within survivors (level 2).

Quantitative Results

  Descriptive statistics. Participants were mostly women (82.66%), heterosexual

(94.22%), and White (66.47%), with a mean age of 19.72 ($SD = 1.32$). Most survivors (76.88%)

told at least one network member, and survivors told an average of 34.56% of their current

network members ($M = 2.21$ network members, $SD = 2.14$).

  At the survivor level (Table 2.2), social support was significantly negatively associated

with PTSD symptom severity, $r = -0.31$, and gender: women reported significantly more social

support, $r = -0.28$. The network structure variables—number of components and average

degree—were only significantly associated with each other, $r = -0.42$. Self-blame was

significantly associated with PTSD symptom severity, $r = 0.18$, and assault severity, $r = -0.28$.

Women reported significantly more self-blame than men, $r = -0.18$. The proportion of the

network told was not associated with the independent variables.

  At the level of network members (Table 2.3), degree centrality was significantly

positively associated with tie strength, or the frequency with which survivors talked to network

members, $r = 0.10$. Network members' degree centrality was not associated with survivors' concerns about whether network members would tell others, $F(2, 1061) = 0.79$, $p = .45$, yes versus no mean difference $= 0.16$, $p = .46$. Women alters tended to have higher degree centrality ($M = 1.41$) than men ($M = 1.21$), $t(760.51) = 2.31$, although there was no difference in the frequency with which women ($M = 3.38$) and men ($M = 3.31$) talked to survivors, $t(1062) = 1.39$. Survivors tended to have the strongest ties with people with whom they had no relationship at the time of the assault ($M = 3.51$), and the weakest ties with people whom they were concerned would tell others at the time of the assault ($M = 3.31$). In terms of relationship type, survivors had the strongest ties with romantic partners ($M = 3.37$) and the weakest ties with network members in the "other" category ($M = 3.20$). "Other" network members had the highest degree centrality ($M = 1.76$) while romantic partners had the lowest ($M = 0.57$). Survivors reported the greatest concern that relatives would tell others about the assault compared to other types of network members, $\chi^2(6, N = 1064) = 86.11$.

When comparing network members told and not told about assaults (Table 2.4), network members who received disclosures tended to have higher tie strength with survivors, $t(868.88) = -3.24$, be women, $\chi^2(1, N = 1064) = 14.61$, be people whom survivors were unconcerned would tell others at the time of the assault, $\chi^2(2, N = 1064) = 148.17$, and be friends, $\chi^2(3, N = 1064) = 94.63$. Degree centrality was not significantly associated with likelihood of receiving a disclosure at the bivariate level.

Model development. Three models were ultimately tested: a null model without explanatory variables ("null model"), a model with a random intercept added to the null model ("random intercept model"), and a model with the hypothesized variables included ("final model").

A first step in multilevel modeling is to establish between-group variance (Bliese, 2000). To accomplish this, an intraclass correlation was calculated (ICC1; the percentage of total variability that can be accounted for by between-group differences) using the random intercept model and the formula $\rho_I = \tau^2{}_0 / (\tau^2{}_0 + (\pi^2/3))$ to understand the amount of variation in telling network members between survivors (Snijders & Bosker, 1999, p. 224). As a general rule, multilevel modeling is warranted when 5% of the variance exists at level 2 (James, 1982). The value of ICC1 was 0.43, suggesting significant cross-survivor variation in whether survivors chose to tell network members and indicating that multilevel modeling is warranted. ICCs for independent variables are presented in Table 2.3.

The null and random intercept models were then compared to determine if the model fit was significantly improved by the addition of a random intercept. Comparing the -2 log likelihood values for these models indicated a significant difference, $\chi^2(1) = 145.22$, $p < .001$, indicating that the random intercept should be retained. Using the random intercept model, the odds ratio of telling a given network member when the value of all potential independent variables is 0 was derived by raising e to the power of the intercept of this model. The odds ratio was 0.47, meaning that the probability of telling a given network member was 0.47 times the probability of not telling a given network member (said differently, the probability of not telling a given network member is more than twice the probability of telling that network member).

The full model was then tested. This model can be expressed by the following equation:

Level 1:   log[(probability that survivor told network member)$_{ig}$ /1 – (probability that

survivor told network member)$_{ig}$]= B_{0g}

+ B_{1g}(survivor-network member relationship$_{ig}$)

+ B_{2g}(network member gender$_{ig}$)

$\quad\quad\quad\quad + B_{3g}(\text{frequency with which survivor talks to network member}_{ig})$

$\quad\quad\quad\quad + B_{4g}(\text{whether survivor was concerned that network member would tell}$

$\quad\quad\quad\quad\quad \text{others}_{ig})$

$\quad\quad\quad\quad + B_{5g}(\text{degree centrality}_{ig}) + r_{ig}$

Level 2:$\quad\quad B_{0g} = \gamma_{00} + \gamma_{01} (\text{perceived social support}_g)$

$\quad\quad\quad\quad + \gamma_{02} (\text{average degree of network members}_g)$

$\quad\quad\quad\quad + \gamma_{03} (\text{number of components}_g)$

$\quad\quad\quad\quad + \gamma_{04} (\text{survivor gender}_g)$

$\quad\quad\quad\quad + \gamma_{05} (\text{PTSD severity}_g)$

$\quad\quad\quad\quad + \gamma_{06} (\text{self-blame}_g)$

$\quad\quad\quad\quad + \gamma_{07} (\text{severity of focal assault}_g) + u_{0g}$

$\quad\quad B_{1g} = \gamma_{10}$

$\quad\quad B_{2g} = \gamma_{20}$

$\quad\quad B_{3g} = \gamma_{30}$

$\quad\quad B_{4g} = \gamma_{40}$

$\quad\quad B_{5g} = \gamma_{50}$

The results for the full multivariate model are presented in Table 2.5. The odds ratios can be interpreted as the change in odds of telling a given network member for a given survivor given a one unit increase of the independent variable when all other variables in the model are held constant (Anderson, Kim, & Keller, 2013).

The first research question asked what characteristics of survivors' networks are associated with disclosure to members of those networks. First, the hypothesis that perceptions of social support quality would be positively associated with disclosure likelihood was not

supported in our multivariate model, (OR = 1.56, p = .12), although the fact that this relatively

large odds ratio was nonsignificant may be a function of sample size. Second, the hypothesis that

average degree would be associated with disclosure likelihood was supported: average degree

was negatively associated with disclosure likelihood in a multivariate context. A one-unit

increase in average degree—for example, if each member of their network had one more

relationship with others in their network—was associated with a 51% reduction in odds of

disclosure. Third, the hypothesis that the number of components would be associated with

disclosure likelihood was supported. A one-unit increase in number of components—that is, if

survivors had one more component in their network—was associated with a 26% reduction in

odds of disclosure. Figure 2.2 illustrates network structure associations with disclosure

likelihood. In this figure, average degree is held constant while the number of components is

varied, and then the number of components is held constant while average degree is varied. This

suggests that network structures involving multiple dense components are associated with less

disclosure, while network structures involving relationships distributed across the entire network

are associated with more disclosure.

The second research question asked what characteristics of survivors are associated with

disclosure to network members. First, we hypothesized that women would be more likely than

men to disclose to network members, but gender was not associated with disclosure in our model

(OR = 1.14; p = 0.80). Second, we hypothesized that PTSD severity would be positively

associated with disclosure likelihood. PTSD severity was a significant predictor of the likelihood

of disclosure, OR = 1.04, $p < .01$, such that a one-unit increase in PTSD severity was associated

with a 4% increase in the odds of disclosure. Third, we hypothesized that self-blame would be

negatively associated with disclosure likelihood, but this hypothesis was not supported, OR =

0.91, $p = .59$. Fourth, we hypothesized that assault severity would be associated with disclosure likelihood. This hypothesis was not supported, $OR = 1.17$, $p = .19$.

Our final research question asked what characteristics of network members are associated with the likelihood of receiving a disclosure. First, we hypothesized that friends would be the most likely to receive a disclosure and family members would be the least likely. This hypothesis was supported. Specifically, relatives had 97% lower odds of receiving a disclosure than friends, $OR = 0.03$, $p < .001$. Romantic partners were the most likely to receive a disclosure, but they were not significantly more likely to receive a disclosure than friends, $OR = 1.86$, $p = 0.13$. Second, we hypothesized that women would be more likely to receive a disclosure than men, and this hypothesis was supported: women had 163% higher odds than men of receiving a disclosure, $OR = 2.63$, $p < .001$. Third, we hypothesized that tie strength would be positively associated with the likelihood of receiving a disclosure. Indeed, a one-unit increase in tie strength (e.g., talking to someone daily rather than weekly) was associated with a 56% increase in the odds of receiving a disclosure, $OR = 1.56$, $p < .01$. Fourth, we hypothesized that network members whom survivors were unconcerned would tell others at the time of the assault would be more likely to receive a disclosure than network members whom survivors were concerned would tell others. Indeed, this relationship was supported. Being unconcerned that a network member would tell others was associated with a 623% increase in the odds of disclosure relative to network members whom survivors were concerned would tell others, $OR = 7.23$, $p < .001$, and not having a relationship with the network member at the time of the assault was associated with a 93% decrease in odds relative to network members whom survivors were concerned would tell others at the time of the assault, $OR = 0.07$, $p < .001$. Fifth, we hypothesized that degree centrality would be associated with the likelihood of receiving a disclosure, and this hypothesis was supported: a one-unit

increase in a given network member's degree centrality (i.e., having one more relationship within the survivor's network) was associated with a 34% increase in odds of receiving a disclosure, *OR* = 1.34, *p* < .01. Figure 2.3 depicts this result visually.

In summary, in terms of characteristics of survivors' networks, average degree was negatively associated with disclosure likelihood and the number of components was negatively associated with disclosure likelihood. In terms of characteristics of survivors, only PTSD severity was associated with disclosure, and this relationship was positive. Of the characteristics of network members that we tested, relationship type was associated with disclosure (friends were the most likely and family members were the least likely to receive a disclosure), women were more likely to receive a disclosure than men, tie strength was positively associated with disclosure likelihood, survivors were most likely to tell people whom they were unconcerned would tell others, and degree centrality was positively associated with disclosure likelihood.

Qualitative Results

Generally, the explanations for survivors' decisions regarding whether and whom to tell about their assault fell into three themes (i.e., second cycle codes) that paralleled our research questions for the quantitative portion of the study: (a) characteristics of survivors' social networks, (b) characteristics of survivors (including the assault that they experienced), and (c) characteristics of network members. While it was likely not an accident that these categories paralleled our quantitative research questions, given that the same data analyst conducted both quantitative and qualitative analyses concurrently, there was warranted evidence for the presence of these themes. In most instances, characteristics of survivors determined *whether* they sought help, while characteristics of survivors' social networks and network members determined *whom* was contacted within their network. The specific reasons for deciding to talk or not talk to

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various responders within each theme (i.e., the first-cycle codes) had some overlap with the quantitative variables tested and serve to elaborate on the quantitative findings, while some unique differences emerged that extend the quantitative results.

Characteristics of survivors' social networks. Characteristics of survivors' social networks were discussed by participants as a determinant of their disclosure decisions. Typically, network characteristics determined the potential broader implications of disclosure and were related to both whether and from whom survivors sought support. For some survivors, the perpetrator's connectedness to their social network posed extra consequences on their disclosure and ultimately discouraged disclosure.

> *"[The perpetrator] was, kind of a family friend, um, like my sister was, friends with his younger brother and they had grown up together. And so, um… by not saying anything, um, I allowed my sister to still have that friendship..."* –Richelle

For other survivors, network structure facilitated disclosure. Some survivors noted that they intended to tell one network member but ended up telling other mutual friends who happened to be present at the time of the disclosure. Others survivors noted that they were encouraged to talk to some network members by other network members or network members made partial or full disclosures without their consent. As an example of a partial disclosure, Li's boyfriend contacted her friend in order to find information that would allow him to take revenge:

> *…my boyfriend ask her the, [perpetrator's] information on where [the perpetrator's] class is at. And, uh, that friend told my boyfriend and that friend told me, um, your boyfriend asked me something about…and, uh, so I told, told her. –Li*

Thus, the connection between Li's boyfriend and her friend led her to make a disclosure that she might not have made otherwise.

Characteristics of survivors. With regard to characteristics of the survivor, six themes emerged that typically determined whether they sought help.

First, the **characteristics of the assault** that the survivor had experienced were noted as influencing a perceived need for support. Survivors discussed the use of physical force and the presence of injury as characteristics of an assault that would warrant significant help, such as the activation of formal responders.

> *"If it had been like, the situation where he had forced me, like, forced me down or… had a weapon or something like that. That would definitely be something, I feel like I would've needed more support for"* -Cara

In contrast, less "classic" or stereotypical assaults were often seen as not a significant event that warranted directed help-seeking.

Second, a related theme emerged regarding survivors' **subjective understanding of the seriousness of their unwanted sexual experience**. Recognizing that the assault was serious or was actually sexual assault was, in many cases, a first step in seeking help, as other factors seemed not to matter in some cases in which the assault was not recognized as a problem.

> **"***So I didn't really know what it was, for a long time… and I think had I known, I probably would have… um… sought, out, support"* –Regina

While the subjective understanding of the seriousness of the assault was often concordant with the characteristics of the assault, this was not always the case. Even assaults that are typically considered to be "severe" were not always seen as such by participants, and assaults that are typically considered to be less "severe" sometimes presented unique needs that led participants to see them as more serious.

Third, survivors described their **level of comfort with talking about sexual assault or knowledge of sexual assault as a phenomenon** as a barrier to seeking help. Some survivors discussed being unsure how to explain what happened to them, or recognizing that talking about sexual assault is taboo.

> *"I feel like my school didn't really focus on… educating kids on that either. So, I didn't know what, like I just knew that, it- it was just like a taboo… subject, in general."* –Nina

Three participants were active in campus anti-violence organizations and thus had an increased level of comfort with the topic of sexual assault that both facilitated disclosure and made them keenly aware of the potential risks of disclosure.

Fourth, survivors' **coping strategies and style** typically discouraged them from seeking help; participants said that they wanted to move on, avoid the issue, or handle the assault on their own.

> *"Um… I think [not talking about] it allowed me to kinda process it? Like, let it sink in and… think of what I could've done differently, if anything."* –Richelle

However, Sophie was an exception to this rule: she intentionally adopted a "full disclosure" coping style in which she shared her experience widely to minimize its impact on her. She describes her reasoning:

> *"…I didn't wanna make a big deal out of it, but to just be, like, my new friends that I make here, at college, to just tell them, like, a matter of fact thing, like, it happened, it's done, like, whatever. In an attempt to, like, move on."* -Sophie

Fifth, **the psychological impact of the assault** (e.g., trauma, self-blame) was a determinant of disclosure. When the psychological impact was low, survivors often felt that it was unnecessary to disclose (e.g., because they did not need support).

"I don't think it defines me or anything, it's just, an event, that happened, that… It only

influences a part of me that very few people see, so, it's- it's really not necessary, for

them to know." -Cara

When survivors were confident that the assault was not their fault (i.e., self-blame was low),

some felt less concerned about others blaming them, which removed a potential barrier to

disclosure. However, self-blame was noted as a potential reason for disclosure, as survivors who

blamed themselves sometimes wanted to "check" their blame with their peer group.

"I didn't need to, discuss it with someone else to validate that what I did was okay, or…

what had happened or whatever, I, had felt, comfortable enough with it that I had

handled it appropriately."-Annie

High levels of psychological impact brought higher needs for support, which facilitated

disclosure. However, high psychological impact also added barriers to disclosure. For example,

survivors might feel increased shame, be afraid to relive the experience through a disclosure, or

feel like they were not ready to talk about what happened. In these cases, survivors might not

tell even close friends.

Finally, the **perceived broader implications of disclosure**, beyond the experience of

disclosing the assault itself, were typically a barrier to disclosure. While survivors typically

disclosed to receive something positive in the immediate interaction with the responder (e.g.,

support), the potential negative long-term consequences of disclosure were often more salient.

These negative implications varied and including "making it real" (i.e., validating the

significance of what happened to them), experiencing a loss of privacy, or being seen in different

ways by others.

"Okay one thing is, like, if I would've told people then, like, they might've thought, like, she can't handle small situations on her own. Stuff like that. And I'd rather, like, I don't know, just, like, I can handle something by myself." -Tonya

Characteristics of network members. Characteristics of network members were also mentioned as determinants of whom survivors contacted for help.

First, network members' **perceived ability to discuss sexual assault** was a facilitator of disclosure to those network members. Some network members were seen as being particularly understanding of sexual assault (e.g., the survivor knew that they had been assaulted before or had supported others who had been assaulted), and others were seen as not being willing or comfortable to discuss sexual assault.

"I guess that it's a really heavy thing, to bring up. And I don't- I kinda- I don't wanna dump that on someone who, I don't think can handle it." –Cara

Second, responders' **anticipated reaction to the disclosure** was mentioned as a potential determinant of disclosure. Some responders were seen as being potentially unhelpful or insensitive, and thus were less likely to receive disclosures, while others were seen as being potentially helpful or sensitive about the assault, and thus were more likely to receive a disclosure.

"...I just kinda learned like, if you didn't say things, then people wouldn't be negative about it" –Annie

Third, a number of interview participants noted that they were less likely to tell network members when they were **concerned that those network members would tell others about their sexual assault experience**. The people who would potentially learn about their assault determined whether this risk was a problem. Survivors expressed that they were unconcerned

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that network members would tell people to whom they were close, since they expected to tell these people anyway. However, several survivors expressed more general concern about losing control of their personal information and their community as a whole learning about their assault.

> *My (sighs)… my friends now… There's a, big group of us. Um… and it's hard to keep a secret, for very long. There's… I can honestly say one, particular person who I could tell, this to. And… I, would have complete trust in her to not say anything, ever… Um… the rest of them, (laughs) love them, but… you know… my business is everyone's business sometimes, it feels like…* -Regina

Next, survivors mentioned **network member gender** as affecting their willingness to tell others, often because it changed the anticipated response of the responder or because women were seen as more able to discuss sexual assault. Many participants noted that they felt more comfortable telling women relatives and friends about sexual experiences. A male participant, Josh, said that he felt uncomfortable sharing his sexual assault experience with men due to hypermasculine norms.

Survivors generally reported telling people with whom they had a **close relationship** (i.e., strong ties). This took several forms. Some survivors mentioned that they tended to tell people whom they saw often or spoke to frequently; for example, for those survivors who did not see their assault as serious, they noted sharing their assault as a form of "checking in" when they saw a network member. While survivors communicated about their assault in a variety of ways (e.g., over text, on the phone), several noted that they preferred talking about it in person and waited to tell people until they could speak to them in person. Other survivors said that they had some friends whom they tended to talk to about serious matters and others with whom they

tended to discuss more superficial topics, and noted that they were unwilling to tell these latter friends.

Finally, aside from the closeness of a relationship, participants mentioned the **type of relationship** (e.g., friends, family, romantic partner) between themselves and their network members as a determinant of their comfort disclosing. Several interview participants noted that they were likely to disclose to romantic partners because sexual activity could be potentially triggering. While Li said that she was most scared to tell the person she was dating when she was assaulted because she was afraid of his reaction, she also felt that it was particularly important to tell him because of his relationship to her. Most participants said that they were very likely to tell friends, in some cases as a way to keep these network members informed about survivors' lives. However, participants described having different groups of friends to whom they would turn for different needs and under different circumstances.

> *Um, as of right now I'm probably more likely ta tell my friends here. Um, just because of location-wise. But, um, it's hav- it has been times where I've talked ta like, other- other people, my friends in [my hometown] about like, other situations not regarding this, where- cause-, as far as like, talking about my relationship, I'm more so, comfortable with my friends from [my hometown] since, that's where I'm from, they probably knew me, when everything started and, they know him. –Natasha*
>
> *…there's kind of a different relationship [with my friends from home] because I've known them since birth and so then, there's more to that I can tell them anything. With roommates in a fraternity house, as much as they would die for me and do anything for me and I love those guys, it's just not necessarily the place I would ever consider*

bringing up a sitch- a situation of, like, being uncomfortable in some sort of sexual

situation. -Josh

Participants also generally noted feeling uncomfortable discussing sexual activity with family members and feeling concerned about family members' reactions.

Disconfirming evidence. While most reasons for disclosing fit into one of the three previously discussed categories, there were several survivors who described making disclosures that did not fall into the categories above because they did not describe engaging in any deliberations over the decision to tell someone else. These disclosures could be characterized as spur-of-the-moment or impulsive. Some were made while drunk and some described mentioning their assault in passing but not fully discussing what happened to them.

Discussion

This study highlights the role of context in sexual assault survivors' help-seeking decisions by suggesting that social network structure matters when understanding how widely survivors disclose their assault. Specifically, survivors tended to disclose to a smaller proportion of their network when many network members had relationships with each other or when the network had many components. Since networks tend to be less segmented when members are more interconnected, this might appear to be contradictory, but it could suggest that networks with multiple densely-connected components (i.e., groups of people that are strongly connected to each other but not to people in other groups) most strongly discourage disclosure. The qualitative results also help to explain this finding. Several participants thought about their networks as being comprised of different groups and said that they turned to different groups for different needs. Thus, survivors with multiple components may limit their disclosures to only certain components and ultimately tell a smaller proportion of their network. Further, survivors

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explained that the presence of more relationships within these groups, or in their network as a whole, discouraged them from telling network members to prevent their information from being spread. While the qualitative results suggested that interconnected networks facilitated more indirect disclosures (i.e., network members pass information to other network members when they are connected to each other), the quantitative results only address the likelihood of making direct disclosures and thus would not capture information spread within the network. The interview results also extended these quantitative results by suggesting that network connections to the perpetrator added additional costs to disclosure (e.g., disclosures are more likely to affect the perpetrator or people with relationships to the perpetrator in highly interconnected networks), which could be assessed in future research as a correlate of disclosure. As a whole, these findings extend previous research that has established the importance of informal responders as a part of the post-assault help-seeking process (Ahrens et al., 2007; Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001; Filipas & Ullman, 2001; Fisher et al., 2003; Starzynski, Ullman, Filipas, & Townsend, 2005; Ullman, 1999) to indicate that the structure of informal social networks, rather than the content (i.e., social support) is associated with help-seeking decisions. This is consistent with research on help-seeking for other social issues (Auslander & Litwin, 1990; Birkel & Reppucci, 1983). For example, people with smaller social networks have been found to be more likely to apply for social services than those in larger social networks (Auslander & Litwin, 1990). This study is the first to apply this lens to sexual assault and unlike existing research in this arena, which focuses primarily on the relationship of network structure to accessing formal responders, the current study suggests that network structure is related to whether networks themselves are accessed.

Network structure also mattered in understanding to whom survivors disclosed their assaults. Specifically, survivors were more likely to tell people who had higher degree centrality (i.e., more relationships to other network members). While this likely reflects survivors' likelihood to tell their closer friends—indeed, in our study and in past work, social support was associated with network interconnectivity (Granovetter, 1983; Walker, Wasserman, & Wellman, 1993; Wellman & Wortley, 1990)—our qualitative results provided an additional explanation: interview participants described receiving implicit or explicit encouragement from some network members to tell other network members, and the chances of this would be expected to increase as connections between network members increase.

While network structure was related to disclosure likelihood, network content was not. That is, social support was not a significant predictor of the extent to which survivors disclosed assault in their network. This is inconsistent with past research that has suggested that survivors disclose when they feel that they will be treated well (Fisher et al., 2003). Since the current study assessed current social support rather than support at the onset of help-seeking for assaults that occurred since age 14, it reflects longer help-seeking processes than those assessed by Fisher and colleagues, who studied assaults that occurred in college only. It is possible that disclosing to one's network may have changed the degree to which support is perceived in one's network. Perceptions may become more positive, negative, or mixed, depending on the kinds of responses offered. Survivors in our study had more time to experience such shifts than survivors in Fisher et al. (2003). Future research could investigate this possibility by assessing perceived support at the time of assault. It is also possible that our study was under-powered to detect an effect for social support, given the relatively large but nonsignificant effect size associated with this relationship.

Characteristics of survivors themselves received mixed support as correlates of disclosure. Other than PTSD severity, previously-identified correlates of disclosure—self-blame (Orchowski et al., 2009; Starzynski et al., 2005), gender (Banyard et al., 2010), and assault severity (Fisher et al., 2003; Starzynski et al., 2005)—were not associated with the extent of disclosure within networks. It is possible that, since we explored disclosures made to survivors' informal social networks, we captured a broader range of discussions about unwanted sexual experiences that may be less influenced by these factors. Indeed, in our qualitative results, we were surprised to find that many survivors made disclosures that they did not see as meaningful acts of help-seeking. For example, some survivors made disclosures as part of casual conversations about recent life events. For survivors who thought through their disclosure decisions more carefully, other factors not explored in our quantitative models appeared to affect their decision-making (i.e., comfort talking about sexual assault, coping strategies/style, thinking that the assault was serious, perceived broader implications of disclosure).

Characteristics of network members were associated with their likelihood of receiving a disclosure. While past research has examined the likelihood of disclosing hypothetical assaults (Orchowski et al., 2009) and the characteristics of people who say that they have received a disclosure (Paul et al., 2013), this work investigates whom of survivors' available supports are actually told about an assault. First, survivors tended to tell people to whom they spoke more often, while they were less likely to tell people to whom they spoke less often. The qualitative results suggest that more frequent contact provides more opportunities for disclosures to happen. Second, concerns about network members telling others appeared to factor into survivors' decision-making about whom to tell. This is consistent with past work that indicates that concerns about personal information being spread factor into survivor decision-making about

disclosures (Fisher et al., 2000), but extends this work to indicate that concerns about *specific people* are associated with whether those people are told. While this variable may be subject to retrospective method bias—for example, survivors may justify their failure to tell a person with a concern that the person might have told others—the wording of the question for this variable meant that survivors' recollection of their perceptions at the time of the assault were assessed. Certainly, these perceptions could have changed over time, and more recent concerns could potentially factor in to decision-making. Future research could address this possibility. Third, survivors were more likely to tell women than men, consistent with previous research (Orchowski & Gidycz, 2012). Based on the interview findings, it seems that that survivors feel more comfortable telling women about sexual experiences. Fourth, survivors were more likely to tell romantic partners and friends than family members. Friends have been noted as more likely disclosure recipients than family members (Orchowski & Gidycz, 2012), consistent with our findings. While past research on survivors' perceptions of people to whom they disclose has found that romantic partners tend to be seen as less supportive than other support sources (Golding et al., 1988; Ullman, 1996b), the current study suggests that they are still likely to be disclosure recipients, indicating that perhaps survivors do not anticipate the negative reactions that they may receive. Our interviews suggested that survivors disclosed to romantic partners out of necessity (i.e., so that they could be aware of sexual triggers) rather than, necessarily, a need for emotional support.

Limitations. As with all research endeavors, a number of limitations were present in this study. First, the collection of egocentric network data from survivors meant that ties between survivors and network members were dependent on the report of survivors (i.e., they were unconfirmed by network members). While this approach is consistent with the methods used by

other researchers examining social networks and help-seeking (Pescosolido et al., 1998) and has been found to be valid and reliable (Marin & Hampton, 2007), future research could conducted closed-network analyses within groups of friends to confirm these findings. Second, because of the wording of the question about network members' knowledge of the assault, this study only assesses whether survivors actively told network members about the assault. These findings would not account for instances in which network members found out about the assault indirectly (e.g., a survivor tells her mother who tells her father), which our qualitative results suggest is an important facet of the help-seeking process. However, since this study focused on survivors' active decision-making about whom to tell, such indirect disclosures were not of central interest to the study. Nevertheless, future research could use broader wording for the question (e.g., "does this person know about your sexual experience") or specifically ask if survivors told network members or if others told them (e.g., "did you tell this person about your sexual experience" and "did someone else tell this person about your sexual experience"). Third, the social network that survivors reported on reflects a *current* social network, consisting of people to whom survivors talk about important matters. Many of the focal assaults occurred in the past and survivors' networks were likely different at that point in time. Nevertheless, survivors still had a high frequency of disclosing to members of their current network. Future research could examine this question longitudinally or ask survivors to retrospectively report on their network at the time of the assault (though this methodology would be subject to recall bias). Fourth, it is possible that survivors told people who are not in their immediate network or those with whom they do not discuss important matters. This limitation could be addressed by using closed network methods that capture people to whom survivors are not directly connected but may come into contact with survivors by nature of their presence in a broader network. Finally, the

limitation to reporting on ten network members presents a ceiling effect, such that people who had more than 10 network members were unable to describe those network members. Again, using closed network methods could address this limitation.

In sum, this study presents new evidence that (a) characteristics of the structure of survivors' social contexts are associated with their disclosure decisions and (b) characteristics of survivors' potential informal responders are associated with whether they will receive a disclosure. These findings suggest that characteristics outside of survivors' own desire to seek help might affect their choices in this regard, although more research is needed to establish the causal direction of this relationship. As part of efforts to empower survivors to make free choices about how to access help after assault, though, considering the ways in which survivors' social contexts may be structured to facilitate or impede their help-seeking efforts may thus be a critical task for practitioners and researchers.

Table 2.1: Description of Survivor Interview Participants

Pseudonym	Gender	Race	Type of Sexual Experience Indicated as Most Meaningful	Relationship to Perpetrator	Months Since Assault	Number of Informal Responders Told	Formal Responders Told
Annie	Woman	White	Attempted sexual coercion	Date	3	0	None
Ashley	Woman	Black	Rape	Romantic partner	10	1	None
Becca	Woman	White	Attempted rape	Acquaintance	2	3	None
Beth	Woman	White	Sexual contact	Stranger	7	5	None
Cara	Woman	White/Latina	Sexual contact	Romantic partner	45	2	None
Claire	Woman	White	Attempted rape	Stranger	5	6	None
Claudia	Woman	White	Attempted sexual coercion	Ex-romantic partner	57	2	None
Josh	Man	White	Sexual contact	Date	0	0	None
Kim	Woman	White	Attempted rape	Acquaintance	44	7	Teaching Assistant
Li	Woman	Asian	Sexual coercion	Friend	0	3	None
Maurice	Man	Black	Rape	Ex-romantic partner	20	1	None
Natasha	Woman	Black	Sexual contact	Romantic partner	0	0	None
Nina	Woman	White/Asian	Sexual coercion	Romantic partner	49	2	Therapist
Paige	Woman	White	Rape	Acquaintance	3	4	None
Reagan	Woman	White	Rape	Date	46	5	None
Regina	Woman	White	Rape	Acquaintance	30	0	None
Richelle	Woman	White	Sexual coercion	Romantic partner	9	1	None
Sarah	Woman	White	Attempted sexual coercion	Romantic partner	49	1	None
Sophie	Woman	White	Sexual coercion	Relative	51	16	Therapist, crisis hotline, professor
Tonya	Woman	Black	Sexual contact	Friend	2	0	None

Table 2.2: Correlation Table of Focal Survivor-Level Variables

	M(SD)	Range	Correlations						
			1	2	3	4	5	6	7
1. Proportion of network told about assault	0.35(0.30)	0-1							
2. Perceived social support	4.07(0.78)	1-5	-0.01						
3. Number of components	3.47(1.79)	1-10	-0.11	0.05					
4. Average degree centrality across network members	1.19(0.87)	0-4.8	-0.03	0.07	-0.42**				
5. PTSD symptom severity	1.84(0.79)	1-4.71	0.10	-0.31**	-0.01	0.06			
6. Self-blame	2.44(1.16)	1-5	-0.03	-0.14	0.07	-0.08	0.18*		
7. Severity of most meaningful assault	3.97(1.62)	2-6	0.05	-0.04	0.10	0.06	0.09	0.28**	
8. Survivor gender	--	1 = women 2 = men	-0.03	-0.28*	-0.05	0.04	0.15	-0.18*	-0.12

** $p < .01$ *$p < .05$

Table 2.3: Associations Between Network Member-Level Variables

	Descriptives	Bivariate associations			
		1	2	3	4
1. How often survivor talks to network member (tie strength)	$M = 3.36$ $SD = 0.74$ $ICC1 = 0.20$	--			
2. Degree centrality	$M = 1.34$ $SD = 1.36$ $ICC1 = 0.35$	$r = 0.10**$	--		
3. Network member gender	66.8% women 33.2% men $ICC1 = 0.06$	$t(1062) = 1.39$	$t(760.51) =$ 2.31* (women, men)	--	
4. Concerned network member would tell others at time of assault	20.4% not friends at time 68.0% not concerned 11.6% concerned	$F(2,1061) = 6.13**$ (not friends at time, not concerned, concerned)	$F(2,1061) = 0.79$	$\chi^2(2, N = 1064) =$ 4.47	--
5. Relationship to network member	8.5% romantic partner 24.9% relative 63.2% friend 3.5% other	$F(3,1060) =$ 22.70** (romantic partner, friend, relative, other)	$F(3,1060) =$ 14.47** (other, relative, friend, romantic partner)	$\chi^2(3, N = 1064) =$ 143.51** (romantic partners mostly men, friends mostly women, relatives mostly women)	$\chi^2(6, N = 1064) =$ 86.11** (most concerned that relatives would tell others, least concerned about romantic partner/other)

*$p < .05$, **$p < .01$. For significant t-tests and ANOVAs, categories are listed from highest mean to lowest mean.

Table 2.4: Comparing Network Members Told and Not Told About the Assault

Variable	Told About Assault		Bivariate Difference Test
	No: *M (SD)*	Yes: *M (SD)*	
How often survivor talks to network member	3.30(0.76)	3.45 (0.67)	$t(868.88) = -3.24, p < .001$
Degree centrality	1.32 (1.33)	1.38 (1.41)	$t(1062) = -0.66, p = 0.51$
	No: *N* (% of group not told)	Yes: *N* (% of group told)	
Network member gender			$\chi^2(1, N = 1064) = 14.61, p < .001$
Woman	431 (60.6%)	280 (39.4%)	
Man	256 (72.5%)	97 (27.5%)	
Other	0	0	
Concerned network member would tell others at time of assault			$\chi^2(2, N = 1064) = 148.17, p < .001$
No	380 (52.5%)	344 (47.5%)	
Yes	103 (83.7%)	20 (16.3%)	
No relationship at the time	204 (94.0%)	13 (6.0%)	
Relationship to network member			$\chi^2(3, N = 1064) = 94.63, p < .001$
Romantic partner	57 (63.3%)	33 (36.7%)	
Friend	373 (55.5%)	199 (44.5%)	
Relative	236 (89.1%)	29 (10.9%)	
Other	21 (56.8%)	16 (43.2%)	

Table 2.5: Final Model Results

Fixed Effects	B (SE)	OR
Intercept	-5.34 (1.65), $p < .01$	0.00
Level 2 (Survivor Level)		
Perceived social support	0.42 (0.27), $p = .12$	1.52
Average degree centrality across network	-0.71 (0.27), $p < .01$	0.49
Number of components	-0.29 (0.12), $p = .01$	0.74
Survivor gender- Woman	0.14 (0.54), $p = .80$	1.14
Survivor gender- Man †	--	
PTSD symptom severity	0.04 (0.02), $p < .01$	1.04
Self-blame	-0.09 (0.17), $p = .59$	0.91
Severity of most meaningful type of assault	0.16 (0.12), $p = .19$	1.17
Level 1 (Network Member Level)		
Relationship- Romantic partner	0.62 (0.41), $p = .13$	1.86
Relationship- Relative	-3.52 (0.36), $p < .001$	0.03
Relationship- Other	-0.48 (0.76), $p = 0.53$	0.62
Relationship- Friend†	--	
Network member gender- Woman	0.97 (0.27), $p < .001$	2.63
Network member gender- Man†	--	
How often survivor talks to alter	0.45 (0.17), $p < .01$	1.56
Concerned network member would tell others- No relationship at time	-2.69 (0.55), $p < .001$	0.07
Concerned network member would tell others- No	1.98 (0.41), $p < .001$	7.23
Concerned network member would tell others- Yes †	--	
Degree centrality	0.29 (0.11), $p < .01$	1.34
Model fit		
τ^2 *(SE)*	3.51 (0.83)	
-2 log likelihood	867.83	
AIC	901.91	

Level 1 $N = 1064$; Level 2 $N = 173$ †Referent group

Figure 2.1: Saturation in First-Cycle Coding

Deciding Whether to Tell Anyone
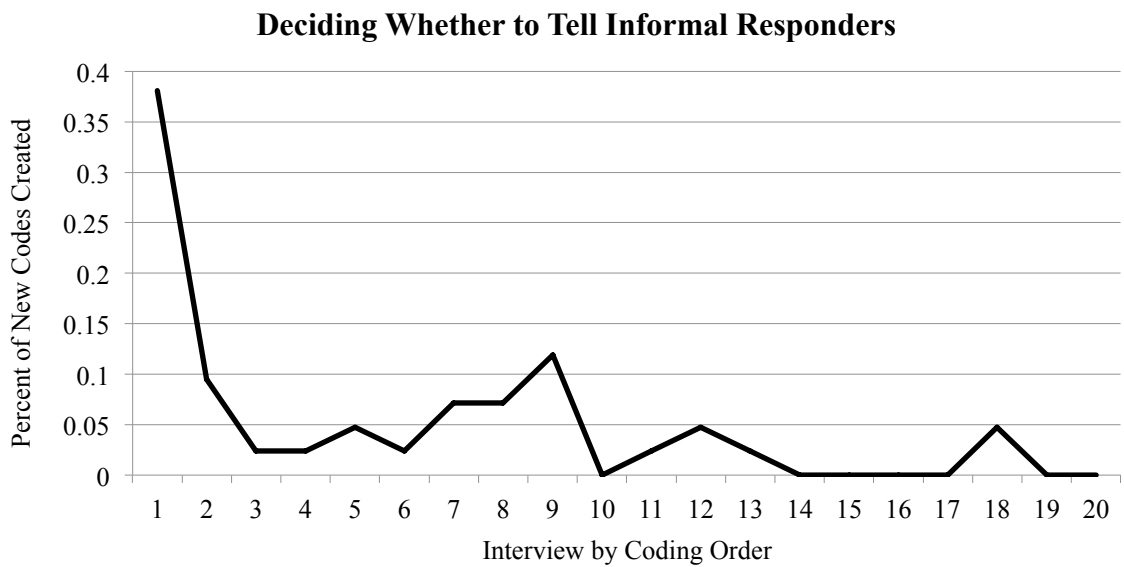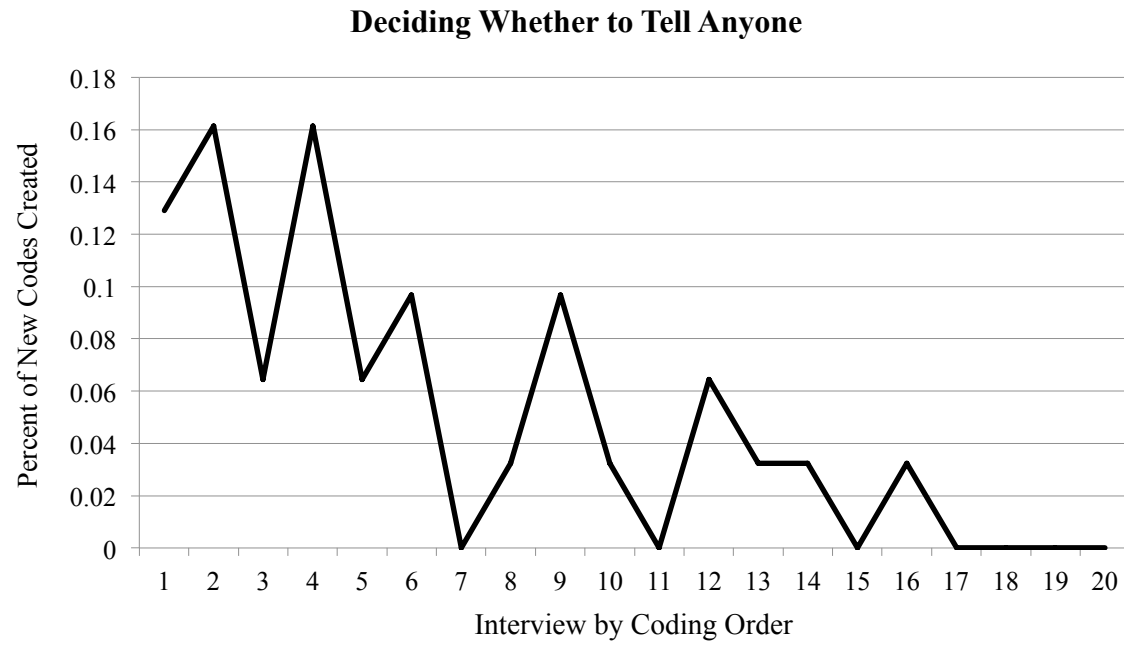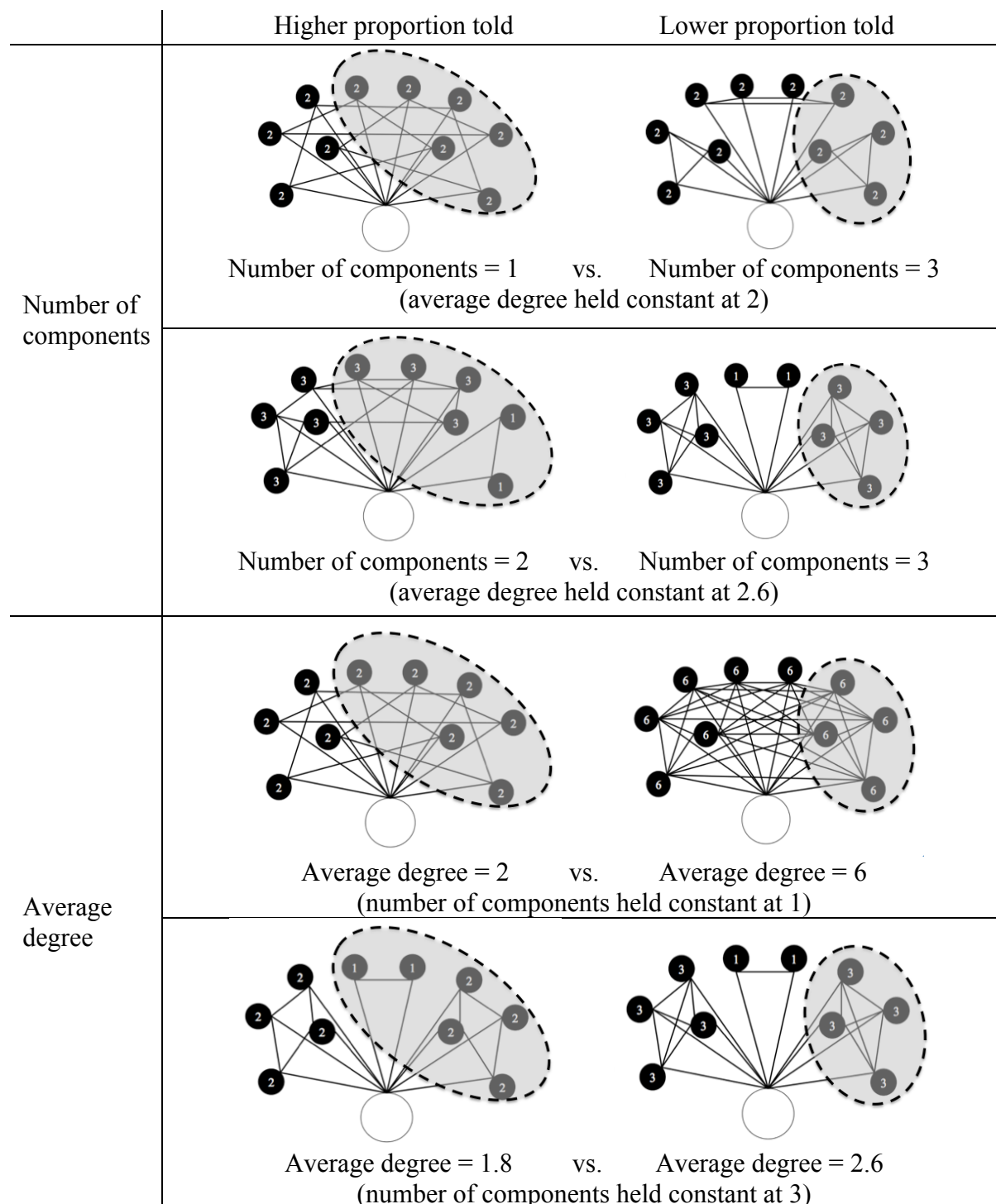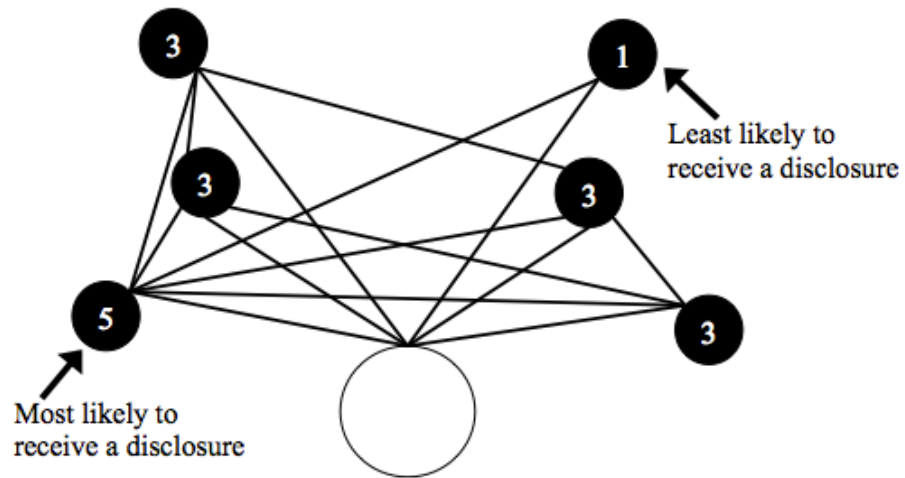

Deciding Whether to Tell Informal Responders

Figure 2.2: Association of Network Structure with Proportion of Network Receiving Disclosure

	Higher proportion told	Lower proportion told

Number of components = 1   vs.   Number of components = 3
(average degree held constant at 2)

Number of components = 2   vs.   Number of components = 3
(average degree held constant at 2.6)

Average degree = 2   vs.   Average degree = 6
(number of components held constant at 1)

Average degree = 1.8   vs.   Average degree = 2.6
(number of components held constant at 3)

Note. Black circles represent network members and white circles represent survivors. Numbers in the black circles represent the number of relationships that each network member has to other network members (i.e., degree centrality). Gray shaded circles represent the proportion of the network that received a disclosure.

Figure 2.3: Association of Network Structures with Disclosure Likelihood to Network Members

CHAPTER 3: CORRELATES OF SEXUAL ASSAULT SURVIVORS' DROPOUT OF

HELP-SEEKING PROCESSES

Many survivors of sexual assault engage in complex processes of help-seeking that can involve contact with a variety of responders (Ullman, 2010). Each time survivors makes contact with responders—whether informal (e.g., friends, family) or formal (e.g., therapists, police)— they may receive information about other help, tangible aid in accessing other help, or implicit or explicit encouragement or discouragement from seeking further help. There is evidence that these contacts with responders influence whether and how survivors seek additional help (Ahrens, 2006). However, the sexual assault literature has focused primarily on correlates of help-seeking related to particular types of responders (e.g., whether or not to report the assault to the police), first or last contacts with responders, and characteristics of overall help-seeking experiences, rather than understanding help-seeking as a process that involves a series of experiences that might affect later steps in the process. To address this gap, the current study aims to investigate the association between contacts with responders in survivors' early help-seeking experiences and their decisions to continue or discontinue help-seeking.

The Complexity of Post-Assault Help-Seeking

After sexual assault, survivors may have a variety of needs, including emotional support, legal assistance, and medical attention. To meet these needs, survivors may reach out to others for help. Typically, survivors contact informal responders (e.g., friends, family; (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Fisher, Daigle, Cullen, & Turner, 2003; Ullman & Filipas, 2001; Ullman, 1996, see Ullman, 1999 for a review). Fewer approach formal sources (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001; Fisher et al., 2003; Krebs, Lindquist, Warner, Fisher, & Martin, 2007; Paul, Walsh, et al., 2013; Ullman, 1996; Wolitzky-Taylor et al.,

2011), and some—about a third—do not tell anyone at all (Fisher et al., 2003; Krebs et al., 2007; Rennison, 2002; Wolitzky-Taylor et al., 2011). When survivors do seek help, this process can involve multiple contacts with a variety of responders and can last for weeks to years (Ahrens, Stansell, & Jennings, 2010).

Despite this complexity, research has characterized only narrow elements of the process. For example, research has attempted to enumerate facilitators and barriers of disclosure to informal responders and police (Sabina & Ho, 2014). Other work has focused on understanding first (Ahrens et al., 2007) and last (Ahrens, 2006) contacts with responders. While this work is important in order to characterize specific elements of the help-seeking process, a recent review of this literature conducted by Sabina and Ho (2014) suggested that the focus on whether or not services have been accessed in isolation paint a limited picture by not attending fully to the *process* through which survivors may seek help from multiple responders.

Experiences with Responders as Predictors of Continued Help-Seeking

There is evidence that contacts with responders influence later help-seeking decisions, both in terms of what responders do and how what they do is perceived by survivors.

Survivors' evaluation of the quality of social responses that they receive might affect their continued engagement in help-seeking. These perceptions of response quality involve evaluations of the degree to which needed services or supports are provided and the degree of harmfulness/helpfulness of responses (both immediately in terms of discomfort/comfort and ultimately in terms of longer-term impact; Campbell & Raja, 1999). Broadly speaking, responses that are perceived negatively appear to discourage further help-seeking (Staller & Nelson-Gardell, 2005; Ullman & Najdowski, 2011) by leading survivors to question the utility of further help-seeking, increasing self-blame, or leading survivors to question whether their experience

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counted as rape (Ahrens, 2006). Experiences with responders that are perceived as being harmful, for example, may lead survivors to expect that help-seeking will continue to have negative consequences (Staller & Nelson-Gardell, 2005), and decide to disengage from that service and/or from seeking support from other services (Ahrens et al., 2007, 2010; Ullman, 1999).

The actual behaviors engaged in by responders might also be associated with help-seeking continuation. Responses involving articulating rape myths, including excusing the perpetrator, minimizing the seriousness of the assault, or blaming the victim (McMahon & Farmer, 2011) have been characterized as insensitive from a best-practice standpoint (Ullman, 2010. In the sample of survivors who had been "silenced," all reported being blamed for their assault (Ahrens, 2006). In contrast, victim blame from informal responders has been related to increased likelihood of disclosure to mental health professionals (Starzynski, Ullman, Townsend, Long, & Long, 2007), suggesting that survivors who experience victim blame (and perhaps, other forms of rape myth acceptance) may need additional support from novel sources. Importantly, though, survivors vary in the degree to which they view behaviors consistent with rape myth acceptance negatively (Ahrens & Aldana, 2012; Dworkin, Newton, & Allen, 2015). A minority of survivors view victim blame and other problematic responses as helpful or consistent with their needs, particularly if they blame themselves or have a close relationship with the responder. Thus, when understanding how interactions with responders might influence continued help-seeking, it is important to consider both the actual behaviors engaged in and survivors' perceptions of these behaviors.

Other Correlates of Continued Engagement in Help-Seeking

Survivors' engagement in help-seeking is unlikely to be solely determined by their contacts with responders. There is evidence to suggest that (a) the timing of help-seeking and (b) survivors' level of need may relate to their decisions to continue or discontinue help-seeking.

Timing. There is some evidence that the timing of contact with responders relates to the continuation of help-seeking. Ahrens and colleagues identified distinct patterns in help-seeking timing after sexual assault, including those who disclose only in the immediate aftermath of assault and those who continue to disclose over time (Ahrens et al., 2010). As the time since assault increases, the utility of contacting medical responders and the police may reduce because of the destruction of physical evidence, so survivors who disclose late may be left with only informal responders to contact. Further, as time passes after sexual assault, psychopathology typically decreases (Breslau, 2009; Weaver & Clum, 1995), which may reduce the need for continued help-seeking. However, the degree to which the timing of contact with responders is associated with continuation of help-seeking remains unexamined.

Severity of assault. The severity of the assault for which survivors seek help may be associated with continuation of help-seeking. Assault severity may affect survivors' ability to identify that what they experienced was sexual assault or determine survivors' level of post-assault needs (e.g., psychopathology, offender accountability), both of which are associated with assault disclosure (Kilpatrick et al., 2007). More severe assaults are expected to be associated with continued help-seeking because they would be more likely to be labeled as sexual assault (Littleton & Henderson, 2009) and be associated with concomitant distress (Brown, Testa, & Messman-Moore, 2009).

The Current Study

While help-seeking after sexual assault has been widely characterized as a complex process that may involve a sequence of many contacts with responders, correlates of help-seeking have been understood more narrowly (e.g., in relation to disclosure to particular responders). Examining how each contact with a responder after sexual assault affects the continuation or termination of help-seeking could help to clarify the role of responders in affecting help-seeking processes. Therefore, to address this gap, the current study investigates correlates of survivors' decisions to continue or discontinue early help-seeking in a sample of college students. By measuring characteristics of individual contacts with responders, we aim to determine whether aspects of each contact were associated with survivors' continuation or discontinuation of help-seeking. This study examined three central questions:

Question 1: Does the perceived quality of responses affect continued engagement in help-seeking?

> H1a: Responses that involve behaviors associated with rape myth acceptance will be associated with termination of help-seeking while responses that do not will be associated with continuation of help-seeking.

> H1b: Low perceived responsiveness will be associated with termination of help-seeking while high perceived responsiveness will be associated with continuation of help-seeking.

Question 2: Does the timing of responses affect continued engagement in help-seeking?

> H2a: Contact with responders that happens earlier after an assault will be associated with an increased likelihood of continued help-seeking, while contact with responders that happens later after an assault will be associated with a decreased likelihood of continued help-seeking.

Question 3: Are assault characteristics associated with continued engagement in help-seeking?

H3a: More severe assaults will be associated with increased continuation of help-seeking.

Method

Data were collected through an online survey that took about 50 minutes to complete (see Appendix A for the survey measure). This study received Institutional Review Board Approval.

Recruitment. Participants were recruited through notices posted on the Psychology Subject Pool. All students over the age of 18 were eligible to participate. Upon completion of the survey, participants automatically received one course credit through the Psychology Subject Pool for participation. Initially, 794 participants consented to participate. The removal of two participants who provided nonsensical responses and two participants who answered no questions left 790 participants from which we selected the 206 participants who endorsed an unwanted sexual experience (ranging from unwanted sexual contact to completed rape).

We investigated how and whether dropping out of the help-seeking process could be deduced from survey responses. Presumably, at least some survivors of sexual assault in our sample would continue to seek help related to their assault after they completed the survey. Complicating this issue, many participants described sexual assaults that occurred quite proximally in time to their survey participation. Saying that these participants' last described contact with a responder in the survey is truly the last in their help-seeking process would likely be invalid. Thus, we explored the time period in which most disclosures were made—in effect, the "critical period" of frequent disclosure—and limited the analytic sample to those who were assaulted longer than this amount of time ago in order to minimize the likelihood of further contacts after this point in time. By doing so, we could then have reasonable confidence that the last described contact in the survey was the last in the critical period of help-seeking. See Figure

3.1 for descriptive data regarding the timing of contacts with responders in subsamples who were assaulted at least 2 years before prior to taking the survey. It is evident that most contacts (65.9%) were made within a year of the assault, and the likelihood of contact with responders decreases as the year goes on, although many contacts are made after a year. Based on this information, analyses were conducted only on those participants assaulted at least a year prior to taking the survey, with the knowledge that some may have continued to seek help. This involved the exclusion of 106 participants whose most meaningful assault (about which follow-up questions were answered) occurred less than a year before taking the survey. Rather than interpret the dependent variable as representing a true termination of the help-seeking process, this was interpreted as the termination of this process within the critical period of help-seeking.

Of the 98 participants whose assault occurred at least a year prior to participation, we excluded 40 participants who did not describe at least one contact with a responder related to the sexual assault. Four additional participants had missing data on at least one focal variable and were excluded from analyses, leaving a final sample size of $N = 54$.

Survey measures. The online survey assessed a number of aspects of participants' sexual experiences, contact with responders, and mental health.

Sexual assault history and severity. The Sexual Experiences Survey- Short Form Victimization (SES-SFV; Koss et al., 2007) assessed participants' history of sexual assault. This is the most widely-used self-report measure of sexual assault and includes seven behaviorally-based items (e.g., "A man put his penis into my vagina, or someone inserted fingers or objects without my consent by…") with five follow-up questions each regarding tactics used (e.g., "Threatening to physically harm me or someone close to me.") representing a range of unwanted sexual behavior from sexual contact to completed rape experienced since age 14. All participants

who endorsed any unwanted sexual behavior were asked which experience was the most meaningful to them and then asked about contact with responders related to that experience. Consistent with the scoring rules from Koss et al. (2008), a sexual assault severity variable was created to indicate the type of sexual assault that participants indicated was most meaningful (about which they answered follow-up questions). The mutually exclusive categories were: sexual contact, attempted sexual coercion, sexual coercion, attempted rape, and rape.

Contact with responders. Participants who endorsed a history of sexual assault were asked to identify what types of formal responders (e.g., police, 911, therapists) they contacted as a result of their experiences by choosing from a list. They were then asked to name the first, second, and third formal responder whom they contacted. Each of these first three contacts with formal responders was supplemented with a series of follow-up questions (e.g., how long after the assault they contacted that responder, what the experience was like, when they stopped contact with them). Similarly, they were asked to name up to three of the first informal responders whom they told about their experience. As with the formal responder contacts, participants were asked a series of descriptive follow-up questions about their contact with informal responders. Finally, the (up to) three informal and (up to) three formal responders were listed together, and participants were asked to number these people in the order that they talked to them. They were able to indicate that some contacts occurred at the same time (e.g., a survivor told her mother and father at the same time); these contacts were combined into a single contact for the purposes of analyses and all variables describing their perception of their experiences were averaged. From this information, the researchers created a variable for each responder to represent whether participants subsequently contacted an additional responder afterwards. If they did not, they were considered to have dropped out of help-seeking

Perceived responsiveness. Among the follow-up questions asked regarding each contact with up to six formal and informal responders, the survey asked a number of questions regarding survivors' perception of the quality of responses. First, to assess the degree to which responders provided expected services/supports, the survey presented the responder identity along with the following response options: "did not provide me any of the services/supports that I hoped for," "provided me with some of the services that I hoped for," "provided me with all of the services that I hoped for," "provided me with more services than I hoped for," and "I did not have any hopes about the amount of services that I would receive." This final response option was treated as a "not applicable" response and contacts with these responders ($n = 14$) were excluded listwise. Second, to assess helpfulness, the survey presented the prompt, "Looking back, [responder identity] was…" with the following response options: very unhelpful, somewhat unhelpful, neither helpful nor unhelpful, somewhat helpful, and very helpful. Third, to assess responder sensitivity, the survey presented the prompt, "Looking back, [responder identity] treated me…" with the following response options: very insensitively and uncompassionately, somewhat insensitively and uncompassionately, neutrally, somewhat sensitively and compassionately, and very sensitively and compassionately. Fourth, to assess how comfortable or uncomfortable the response felt, the survey presented the prompt, "At the time, my experience with [responder identity] felt…" with the following response options: very upsetting and/or uncomfortable, somewhat upsetting and/or uncomfortable, comfortable, and very comfortable. These items were averaged to create a perceived responsiveness score for each responder. Internal consistency reliability was $\alpha = 0.89$.

Rape myth acceptance. To assess rape myth acceptance of responders separate from survivors' perceptions of whether responders treated them sensitively, we asked four questions

that corresponded to the four domains of rape myth acceptance (i.e., "she asked for it," "he didn't mean to," "it wasn't really rape," and "she lied"; McMahon & Farmer, 2011). Specifically, the survey used the prompt, "I got the sense that [responder identity]…" with the following items: felt that I was to blame for my sexual experience, felt that the person with whom I had the sexual experience was not to blame for what happened, thought that my sexual experience was not sexual assault, and did not believe me. Participants rated each item on a three-point Likert scale (response options: 1 = not at all, 2 = somewhat; 3 = very much). These items were averaged to create a rape myth acceptance score for each responder. Internal consistency reliability was α = 0.62.

Analyses. Contacts with responders were clustered by participants, which presented several analytic options. Although observations were ordered in time, survival models (e.g., Cox regression) were not possible because our measurement of dropout was connected to responders (e.g., a participant dropped out after contacting a third responder) rather than measured on a true timeline that was standardized across participants (e.g., a participant dropped out after 90 days). The latter is required for survival analyses. Further, based on visual inspection of the Schoenfeld residual plots created using R 3.1.1 (R Core Team, 2014) and examination of the chi square tests of the ρ values, the researchers concluded that no variables were dependent on the order of responder contacts, which justified proceeding with analyses that did not directly account for the order in which responder contacts took place. Nevertheless, the clustered structure of the data still required methods that accounted for the correlation within a given participant's responders to avoid violating assumptions of independence of observations (Raudenbush & Bryk, 2002). Marginal models (e.g., as estimated using generalized estimating equations) and conditional models (e.g., as estimated using mixed effects logistic regression) both can predict dichotomous

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outcomes (i.e., dropout or no dropout) using correlated, clustered observations (Agresti, 2007). These models have slightly different interpretations. The coefficients in conditional models are interpreted in a cluster-specific manner and would represent the difference in odds of dropout for a one-unit change in a covariate within a given survivor. For example, a conditional model would model the difference in dropout between a responder with a score of 4 on responsiveness and a second responder for the same survivor with a score of 3 on responsiveness. In contrast, in marginal models, the coefficients represent the odds of dropout corresponding to a one-unit difference in a covariate across all responders without accounting for whether they "belong" to the same survivor. Since marginal models would compare one-unit changes across all observations rather than making these comparisons within a single participant's observations, they are more appropriate when participants have few observations (i.e., when the data are "sparse") (McNeish, 2014). Specifying random effects in a conditional model with sparse data might be difficult, since between-cluster differences are often exaggerated (McNeish, 2014). In the current study, survivors had between one and three observations, which justified the use of a generalized estimating equation that takes repeated observations into account. Further, making cluster-specific inferences was not a goal of this study. Thus, we used PROC GENMOD in SAS® 9.4 to model a generalized estimating equation that accounted for repeated observations. While we do not present these results in the current document, we also used PROC GLIMMIX with a random intercept to compare the findings from mixed effects logistic regression to those obtained through the generalized estimating equation, and the results were largely similar in terms of significance and directionality.

Results

There were 94 documented contacts with responders corresponding to 54 participants (1-3 ordered responder contacts per person) who were assaulted a year or more prior to the survey with sufficient data to be included in at least basic analyses. All further results describe this subsample.

Descriptive statistics. Participants were mostly women (88.89%), White (66.67%), and heterosexual (94.44%), with an average age of 20.39 ($SD = 1.56$, range: 18-26). See Figure 3.2 for a chart representing the number of survivors contacting a first, second, or third responder and persisting in help-seeking after each of these responder contacts. Most (64.71%) of those who described a first contact described a second contact and 30.30% of those who described a second contact described a third contact. While none described a fourth contact, all ($n = 22$) of those who described a third contact endorsed telling more informal responders than three, so they were assumed to have persisted in help-seeking after the third contact. All but four contacts were with informal responders, limiting our ability to test how the type of responder might influence continued help-seeking. Table 3.1 includes descriptive statistics and bivariate associations between the number of responder contacts described and the survivor-level covariates (i.e., assault severity and post-traumatic stress symptom severity). Neither was statistically significantly associated with the number of responder contacts described.

A central focus of the current study was to examine how experiences with one responder influenced further help-seeking. See Table 3.2 for descriptive statistics regarding survivors' perceptions of their experiences with responders. Survivors tended to see responders as highly responsive and responders tended to not act in a way consistent with rape myth acceptance. Perceived responsiveness was significantly negatively correlated with rape myth acceptance,

such that responders who were seen as more responsive were less likely to behave in a manner consistent with rape myth acceptance. In terms of these variables' association with help-seeking continuation, only perceptions of higher rape myth acceptance and time between assault and responder contact were significantly associated with help-seeking continuation, such that those who continued help-seeking after contact with a responder tended to rate that responder as having higher rape myth acceptance, and responder contacts made later after the assault were less likely to be followed by additional contacts with responders.

Model building. The first model (Table 3.3) tested included the two variables assessing interactions with responders. In this model, only the rape myth acceptance of the responder was a statistically significant predictor of ending help-seeking processes, while perceived responsiveness was not a statistically significant predictor. Model findings indicated that, for every one-point increase in responders' rape myth acceptance, the odds of dropout decreased by 90% ($OR = 0.10$, $p = .01$). This suggests that both greater rape myth acceptance and perceived helpfulness are associated with continued help-seeking. To understand how these variables operated in the context of other potentially-important predictors of dropout, the second model (Table 3.4) tested retained both variables assessing interactions with responders and added two additional covariates of interest: how long after the assault the responder contact occurred and the severity of the assault for which survivors were seeking help (i.e., the most meaningful assault). In this model, greater rape myth acceptance remained a statistically significant correlate of continued help-seeking ($OR = 0.16$, $p = .04$). Of the newly added variables, only one emerged as significant: a unit increase in how long after the assault the contact occurred was associated with 22% increased odds of dropout ($OR = 1.22$, $p = .01$), indicating that disclosures made longer after the assault were associated with a decreased likelihood of continued help-seeking.

Discussion

Help-seeking after sexual assault is a highly complex process that involves multiple interdependent steps. In the first study to conduct an in-depth analysis of multiple steps in the help-seeking process after sexual assault, our findings provides new insight into the factors that promote or discourage continued engagement with a help-seeking process. While past research has focused primarily on single help-seeking decision points (e.g., first disclosures, last disclosures, contacting the police), this study takes a broader perspective to understand the characteristics of survivors and responders that are associated with the continuation of help-seeking. Importantly, findings suggest that dropout from help-seeking processes is associated with responders' behaviors and help-seeking appears to decrease over time.

Survivors' evaluations of their interactions with responders after sexual assault appear to be related to their continued engagement with help-seeking processes. Survivors who contacted a responder who acted in a manner consistent with rape myth acceptance were more likely to continue help-seeking than those who contacted a responder who expressed validation, belief, and perpetrator blame. Responses that are supportive of rape-myths (e.g., victim blame, denying that the experience was sexual assault) may be distressing, thus creating a need for more or other services/supports. For example, survivors who are told that what happened to them was not truly sexual assault may seek validation of their experiences elsewhere. In this sense, the "silencing" documented by past research (Ahrens, 2006)—or initial disclosures that end help-seeking—may not always represent a negative process. Instead, it might indicate that survivors' needs have been adequately addressed through the validation of their experiences and no further help-seeking is needed. While it is somewhat surprising that survivors' perceptions of the responsiveness of the people with whom they interacted—in terms of their sensitivity, the

comfort of responses, the degree to which responders provided the services/supports that they hoped for—was not a significant predictor of help-seeking continuation, it is possible that some responses were effective at resolving survivors' needs (leading to termination of help-seeking) while others led survivors to feel optimistic that future responders would respond positively (leading to continuation of help-seeking). Taken as a whole, though, these results highlight the tenacity of survivors in getting their needs met even in the face of problematic responses. Future research could examine how survivors' actual needs and the success of responders in resolving them influences help-seeking or use qualitative methods to examine what leads them to feel that they no longer need to seek help.

The timing of help-seeking also appears to be related to dropout. Consistent with our expectations, responder contacts made later after the assault were less likely to be followed by further responder contacts. This is consistent with past findings that some survivors disclose only in the immediate aftermath of assault (Ahrens et al., 2010). Since these later contacts were made more proximally to survey completion, it is possible that they do not represent a true dropout from help-seeking—indeed, in the only study to knowledge to assess patterns in timing of help-seeking after assault, some survivors continued to disclose over long periods of time (Ahrens et al., 2010)—but it is still likely that contacts with others about an assault decrease in frequency over time as the salience of the assault or need for help decrease. Changes to the frequency of help-seeking over time could be an area of investigation for future research. Future research could also explicitly ask survivors whether they intend to tell additional responders, although whether participants could accurately report on their future behavior is debatable.

It is notable that, consistent with previous research (Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001), perceptions of responders were generally quite positive; very few participants

reported having negative contacts with responders. Given the potential harm that can be caused by negative responses (Ullman, 2010), this is a heartening finding. Future research could use larger samples to capture more variation in responder quality. Further, most responders in this sample were informal responders (e.g., friends, family), while few were formal responders (e.g., police, healthcare). While the low frequency of contact with formal responders was expected based on past research (Campbell, Wasco, et al., 2001; Fisher et al., 2003; Krebs et al., 2007; Paul, Walsh, et al., 2013; Ullman, 1996; Wolitzky-Taylor et al., 2011), it precluded testing the impact of contact with formal versus informal responders.

Surprisingly, this study did not provide support for idea that assault severity relates to continuation of the help-seeking process. Against our hypothesis, assault severity was not associated with the continuation of help-seeking. Although the extant literature suggests that more severe assaults may be associated with increased distress and ability to identify that what happened was assault (Brown et al., 2009; Kilpatrick et al., 2007), it might also be associated with increased stigma, which could reduce the likelihood of disclosure. Further, survivors with less severe assaults may not have fewer needs than those with more severe assaults, but instead may have *different* needs (e.g., understanding what happened, participating in discussions of sexual experiences) that may still promote contact with responders It is possible that assessing other areas of need (e.g., physical injury, desire for a criminal justice response) could better capture the variety of survivors' needs as they relate to help-seeking continuation. Further, it is possible that survivors' level of need is associated with dropout later in help-seeking processes (i.e., beyond the first three contacts). Since we focused only on early contacts with responders, it was not possible to detect these effects for the 41% of survivors in the current study who

indicated that they continued help-seeking after their third contact with a responder. It is also possible that our sample size was not large enough to detect effects.

The cross-sectional, retrospective nature of our study design limited the conclusions that can be drawn from this work for several reasons. First, although the subsample analyzed only included those who were assaulted more than a year prior, it is possible that those who "dropped out" of help-seeking ultimately made more disclosures after taking the survey. This choice also resulted in a relatively small sample size, which may have limited the power necessary to detect some effects. Second, the perceptual variables were limited by the retrospective nature of our data collection; it is possible that evaluations of the responses are tainted by the ultimate outcome of the assault. For example, a survivor who experienced significant traumatic stress might see her contacts with responders as more ineffective at resolving her needs than one who did not experience this degree of traumatic stress. Longitudinal investigations could resolve these limitations but are subject to their own methodological concerns (e.g., observer effects, recruitment challenges).

It is also difficult to draw conclusions regarding the purpose of participants' contacts with responders. Some survivors might not have simply telling others about their experience rather than intentionally seeking help. It could be argued, though, that any disclosure of a potentially-traumatic life event is an act of help-seeking, as each disclosure creates an opportunity for the survivor to further understand the event or gain access to supports even when he or she did not disclose for those purposes. Nevertheless, future research could assess whether these findings hold when survivors are explicitly asked about acts of help-seeking.

In conclusion, the current study provides new evidence for the complexity of survivors' help-seeking processes after sexual assault. While the study design precludes causal conclusions,

results suggest some potential mechanisms by which each contact with a responder might influence the continuation of help-seeking, including the degree to which responders are perceived to be helpful or supportive of rape myths. Practitioners working with survivors of sexual assault could pay greater attention to evaluating survivors' individual needs and work to meet those needs to reduce the amount of time that survivors spend seeking help after assault.

Table 3.1: Descriptive Statistics for Survivor-Level Variables

Variable	Descriptive Minimum-Maximum	Mean(SD)	Correlations 1	2
1. Number of responder contacts described	1-3	1.80 (0.71)		
2. Severity of most meaningful type of assault	2 (sexual contact)-6(completed rape)	4.11(1.64)	.00	

N = 54

Table 3.2: Descriptive Statistics for Responder-Level Variables

Variable	Minimum-Maximum	Mean(SD)	Association with continued help-seeking	Correlations 1	2
1. Perceptions of responsiveness	1 (very unresponsive)-4.75 (very responsive)	3.92(0.89)	$t(92) = 0.06$ $p = 0.95$		
2. Rape myth acceptance of responder	1 (low rape myth acceptance)-2.75 (high rape myth acceptance)	1.22(0.31)	$t(91.66) =$ -2.18 $p < 0.01$	-.47**	
3. Time between assault and contact with responder	1 (within 24 hours)-8 (1 or more years later)	3.54 (2.77)	$t(58.02) = 2.83$ $p < 0.01$	-.20	-.19

$N = 94$; **$p < .01$

Table 3.3: Model 1

Variable	Odds (SE)	95% Confidence Interval		p
		LL	UL	
Intercept	19.97 (7.26)	0.41	971.27	0.13
Rape myth acceptance of responder	0.10 (2.50)	0.02	0.60	0.01
Responsiveness	0.76 (1.35)	0.43	1.37	0.37

Participant-level $N = 54$; responder-level $N = 94$

Table 3.4: Model 2

Variable	Odds (SE)	95% Confidence Interval		p
		LL	UL	
Intercept	5.83 (8.80)	0.08	413.85	0.42
Rape myth acceptance of responder	0.16 (2.47)	0.03	0.95	0.04
Responsiveness	0.89 (1.36)	0.49	1.62	0.71
Time between assault and contact with responder	1.22 (1.08)	1.05	1.42	0.01
Severity of most meaningful type of assault	0.88 (1.15)	0.67	1.17	0.38

Participant-level $N = 54$; responder-level $N = 94$

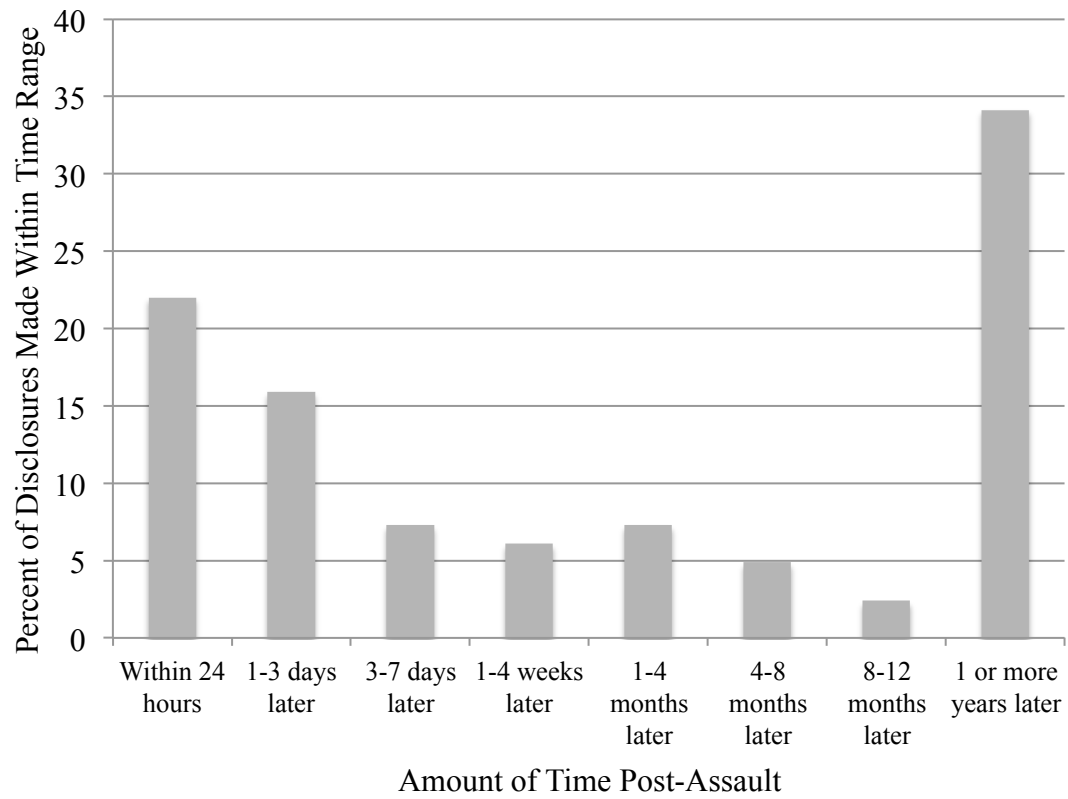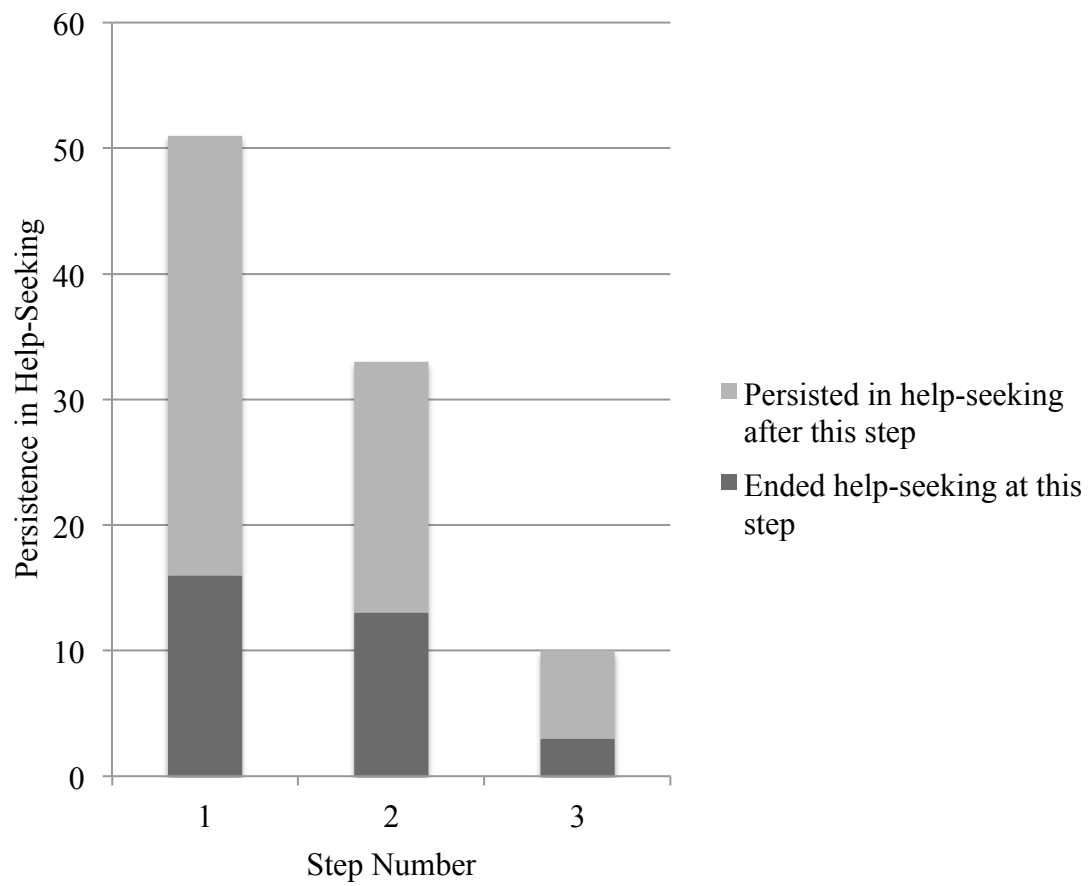**Figure 3.1: Timing of Disclosures in Participants Assaulted >2 Years Before Participation**

Figure 3.2: Persistence in Help-Seeking

CHAPTER 4: INTEGRATIVE DISCUSSION

After sexual assault, many survivors have needs relating to the assault (Campbell, Dworkin, & Cabral, 2009; Goodman, Koss, & Russo, 1993), which many try to meet through reaching out for help (Amstadter, McCauley, Ruggiero, Resnick, & Kilpatrick, 2008; Kaukinen & DeMaris, 2009; Kaukinen, 2002, 2004; Ullman & Filipas, 2001). The current research explores post-assault help-seeking through a version of the network-episode model (Pescosolido, 2011) that has been adapted to be specific to sexual assault. While network episode model has been suggested as a way to understand women's help-seeking after violent crime (Kaukinen, 2002), this is the first study to apply this model to sexual assault. This research emphasizes the importance of considering help-seeking after assault as a process—or a *survival career*—that is dependent on the contexts in which it is embedded. In doing so, it responds to calls for the literature on help-seeking after sexual and domestic violence to attend more to process and context (Sabina & Ho, 2014). The findings of the current research support this call for a shift in focus: results suggest that help-seeking after sexual assault may not be fully captured by examining only single decision points in isolation. Further, by focusing on the context of survivors' help-seeking, the current research emphasizes that assault survivors do not seek help in isolation; rather, they are embedded in social contexts that constrain and facilitate their efforts to seek help.

The network-episode model suggests that the structure of systems in which a help-seeker exists influence help-seeking processes (Pescosolido, 2011). Results from Chapter 2 suggest that the structure of sexual assault survivors' informal social networks is associated with which network members receive disclosures. These results, summarized in the context of the NEM-SA in Figure 4.1, suggest that variables within multiple network-episode model subsystems are

relevant to understanding help-seeking after sexual assault. Specifically, in terms of the episode base, the severity of the assault was cited in the qualitative results as influencing whether others were told about an assault, such that more severe assaults were more likely to be disclosed. In the individual subsystem, mixed-method results suggested that higher psychopathology, self blame, and comfort with discussing sexual assault all promoted disclosure, while perceptions that disclosing the assault would have negative consequences and an avoidant coping style were associated with a lower likelihood of disclosing. In the support network subsystem, characteristics of networks as a whole and network members were explored. In terms of characteristics of networks, our qualitative results suggest that, when the perpetrator was connected to the network and information was likely to spread, survivors were less likely to disclose. Quantitatively, lower average degree centrality and fewer components increased disclosure likelihood. In terms of characteristics of network members, both the quantitative and qualitative results suggested that concerns that the person would tell others, the type of relationship, and the closeness of the relationship were associated with the likelihood of disclosure to those people. Quantitatively, network members with higher degree centrality were more likely to receive a disclosure. Qualitatively, network members' gender, perceived ability to discuss assault, and anticipated reaction were associated with disclosure likelihood. As in research on the role of social contexts in help-seeking, perceptions of social costs, including stigma, are associated with help-seeking behavior (Day et al., 2005; Rosenfield et al., 1997) and, as suggested by the network-episode model, perceived costs were inextricable from social networks. For example, survivors were less likely to disclose when they perceived that information was likely to spread within the network. These findings confirm past work using the network-episode model that suggests that characteristics of networks outside of social support

influence trajectories of well-being. In a study of the relationship between network structure to depressive symptoms in adolescents, both network structure and perceptions of social support were related to well-being (Falci & McNeely, 2009). While the current research did not directly assess well-being as an outcome of help-seeking, it suggests that aspects of network structure are important to consider when understanding paths to well-being. Additionally, consistent with the findings of Pescosolido and colleagues (Pescosolido, Gardner, & Lubell, 1998), contacts with responders were not always chosen freely. Survivors in our sample sometimes had responders tell other network members without permission, and sometimes ended up telling responders whom they had not planned to tell because they were present for disclosures to other responders. This supports the network-episode model's challenge to rational choice models, which posit that people make intentional decisions regarding their help-seeking (Pescosolido, 2009), and is consistent with past research that has found that survivors of sexual assault sometimes have control of their help-seeking taken away from them (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007).

According to the network-episode model, early steps in help-seeking processes influence outcomes of later steps (Pescosolido, 2011). Interactions with community systems—and, in particular, the content of these community systems—influence decision-making for post-assault needs over time. After sexual assault, the content of informal systems (e.g., support networks) as well as formal systems (i.e., professional responders) can include responders' ability to effectively interact with survivors. In Chapter 3 (results are summarized in the context of the NEM-SA in Figure 4.2), the degree to which responders endorsed rape myths was associated with continued help-seeking. Within the survival career, the timing of help-seeking was associated with continuation: contacts with responders that occurred later after an assault were

less likely to be followed by continued help-seeking, which may reflect a decreased salience of the assault event or need for help as time passes. This is consistent with the network-episode model's supposition that timing is important to consider when understanding help-seeking trajectories (Pescosolido, 2011).

This research had several limitations. First, its cross-sectional, retrospective design prevented causal inferences from being made. All network and mental health variables represented reality at the time of survey participation rather than at the time of the assault. Longitudinal research is needed to establish causal relationships. Second, its use of an undergraduate convenience sample may limit generalizability, but given that this is a time of particularly high risk for sexual victimization (Fisher, Cullen, & Turner, 2000), this sample may be appropriate. Third, there was a relatively low frequency of help-seeking from formal responders, which we had hoped to explore in comparison to help-seeking from informal responders. Future research could use larger general-population samples in an effort to sample more survivors who sought help from formal responders.

This research also had strengths. First, our mixed method design allowed us to explore both variables that might account for differences in help-seeking across survivors and understand the meaning of these processes to survivors in more depth. Second, by using the network-episode model as a theoretical basis, the current research organizes variables relevant to help-seeking after sexual assault within a transdisciplinary framework. Because of this, we were able to compare the findings of this study to past theory and research using the network-episode model, which highlights the similarities and differences of help-seeking after sexual assault versus for physical or mental health-related needs. Perhaps most notably, most applications of the network-episode model have focused on networks as predictors of entry into formal systems. This work

has generally identified that various network characteristics either facilitate instrumental support in accessing formal resources (e.g., by making referrals) or pressure people to access formal resources (Pescosolido et al., 1998). In this research, we primarily explored patterns of utilization of informal responders, given the relatively low utilization of formal resources by survivors. It is possible that different network mechanisms facilitate access of informal networks than those that facilitate access of formal access.

Comparing the findings of this research to the network-episode model also highlights areas that are still left to explore. In the NEM-SA, survival careers are influenced by five "subsystems," or levels of analysis: molecular, individual, support networks (i.e., informal responders), institutions (i.e., formal responders), and community. First, while we explored some variables within the individual subsystem, we did not fully explore how others might influence help-seeking. For example, the network-episode model suggests that social location (e.g., education, race, insurance coverage) might relate to help-seeking processes, but the relative homogeneity of our undergraduate sample precluded comparisons across these groups. Indeed, there is reason to believe that social location influences help-seeking after sexual assault, as racial differences have been identified in willingness to access mental health care after sexual assault (Ullman, 2008), but other aspects of social location have not been fully explored. Second, some of the subsystems in the network-episode model that may contain variables relevant to help-seeking after sexual assault were not within the scope of this research. Specifically, the molecular and community subsystems were not explored. The molecular subsystem includes genetics and molecular processes that have remained almost entirely unexplored as correlates of help-seeking. The community subsystem includes variables including relevant cultural beliefs and socioeconomic resources that may affect survivors' access to help. Additionally, recent
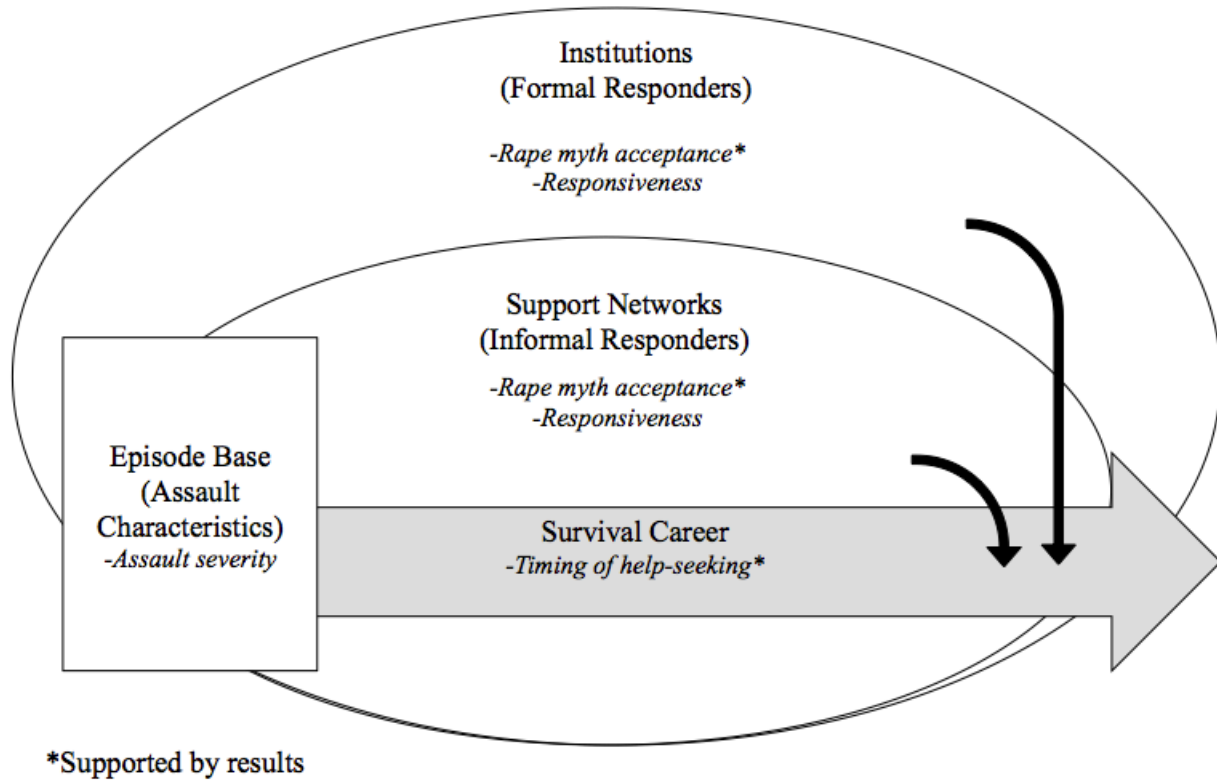
92

research has investigated the role of geographic settings in facilitating or hindering help-seeking (Logan, Evans, Stevenson, & Jordan, 2005; Rennison, Dragiewicz, & DeKeseredy, 2013), which further supports the importance of examining community contexts in understanding help-seeking. Future research could directly explore these subsystems. Third, as mentioned previously, the findings of this research confirm past work that indicates that most survivors do not come into contact with formal responders (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001; Fisher, Daigle, Cullen, & Turner, 2003; Krebs, Lindquist, Warner, Fisher, & Martin, 2007; Paul et al., 2013; Ullman, 1996; Wolitzky-Taylor et al., 2011). Because of the low frequency with which survivors contacted formal responders in our sample, though, the current research is unable to fully speak to the role of variables within the institutional subsystem of the NEM-SA. Fourth, the role of inter- and intra-organizational networks within the institutions subsystem may be relevant to explore. Research has only recently begun to examine inter-organizational networks responding to sexual assault (Campbell, Greeson, Bybee, & Neal, 2013) and domestic violence (Allen et al., 2009) as well as the impact of these networks on survivors. These topics are worthy of further exploration.

Figure 4.1: NEM-SA Results (Chapter 2)

Support Networks
(Informal Responders)

Characteristics of Networks
-Social support
-Average degree centrality*
-Number of components*
-Perpetrator's connection to
network°
-Likelihood of information
spread°

Characteristics of Network
Members
-Frequency of contact*/relationship
closeness°
-Concerns that person would tell
others*°
-Gender°
-Type of relationship*°
-Degree centrality*
-Perceived ability to discuss sexual
assault°
-Anticipated reaction°

Episode Base
(Assault
Characteristics)
-Assault severity°

Survival Career

The Individual
-Psychopathology*°
-Self-blame°
-Gender
-Comfort with discussing sexual assault°
-Perceptions of disclosure impact°
-Coping style°

*Supported by quantitative results °Supported by qualitative results

Figure 4.2: NEM-SA Results (Chapter 3)

Institutions
(Formal Responders)

-*Rape myth acceptance**
-*Responsiveness*

Support Networks
(Informal Responders)

-*Rape myth acceptance**
-*Responsiveness*

Episode Base
(Assault
Characteristics)
-*Assault severity*

Survival Career
-*Timing of help-seeking**

*Supported by results

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APPENDIX A: SURVEY MEASURE

The questionnaire used to gather the data that has been presented in this thesis may be found in a

supplemental file named questionnaire.pdf.

APPENDIX B: INTERVIEW PROTOCOL

[NOTE: This is a qualitative interview protocol. While the questions are presented here with specific phrasing and in a particular order, we are likely to deviate from this protocol as appropriate to the conversation with participants. This might involve presenting these questions at different points in time and with different wording. However, the questions we ask will be entirely within the spirit of the current protocol.]

Thank you for coming in today to share your experiences. We are hoping to understand how people with various types of nonconsensual sexual experiences make decisions about who to talk to about those experiences. I will be asking a series of questions that are similar to the questions you answered in the survey, but here, I'm hoping to hear your story and experiences. There are no right or wrong answers, and please feel free to skip any questions you'd rather not talk about.

[Review consent form]

- Identify what pseudonym they want to use in a write-up.
- Identify the assault they mentioned in the survey and described as the most meaningful. Use the language that they used in the survey to describe the experience (e.g., sexual assault,
- People make different decisions about what to do after experiencing something like this. In the hours or days after this happened, what did you do? Who, if anyone, did you talk to about what happened?
- Write down all of the people/services/agencies visited or disclosed to on notecards, order them with the assistance of the participant.
- For each person/service/agency:
  - How did this go for you?
    - What did they do well?
    - What did you like best about your experiences with [person or service]?
    - Is there anything [person or service] could have done better?
    - What would you recommend to improve the services provided by this resource?
    - Is there anything you needed or hoped to get that you did get from [person or service]?
    - Is there anything you needed or hoped to get that you did not get from [person or service]?
  - Why did you talk to [person or service]?
    - How did you find out about [service]?
  - What made it easier or harder to talk to [person or service]?
  - Did they affect what you did or whom you talked to next?
    - If so, how?
    - Did they give you any advice or suggestions?
      - If so:
        - Why did you or didn't you take their advice?
  - Did they follow up with you to see how you were doing?
- For resources not contacted:

- o Was there a reason why you did not contact this resource?
- o What do you think the experience of people with this resource is typically like? What kinds of things happen when people seek out this resource?
- For overall help-seeking experiences:
  - o What did you need the most after this happened?
  - o What were some of the positive effects of telling other people about what happened?
  - o What were some of the negative effects of telling people about what happened?
  - o Generally, how do you think you could have been better served?
- If a friend told you that she had been sexually assaulted and asked where you think she should go to get help, what would you tell her?