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Sexual Assault and Online Help Seeking: An Analysis of Survivor Disclosures and Questions After Assault

Abby Luthi Sagers

A thesis submitted to the faculty of Brigham Young University in partial fulfillment of requirement for the degree of Master of Science

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ABSTRACT

Sexual Assault and Online Help Seeking: An Analysis of Survivor Disclosures and Questions After Assault

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Sexual assault is a pandemic issue that affects millions worldwide. In the U.S. it is estimated that one in five women and one in 38 men will be victims of rape or attempted rape at some point in their lifetime (Smith et al., 2018). Sexual assault has several significant long-term effects, including negatively impacting survivors’ psychological, emotional, physical, and interpersonal well-being. After a trauma from sexual victimization, survivors face the difficult process of making sense out of what happened, what to do about it, and whether to disclose the experience to others. Reporting, whether formally or informally, can be extremely difficult for survivors, and may even deepen the pain of the experience depending on the response to such a disclosure. However, studies indicate that help-seeking and disclosure are beneficial for the physical and emotional health of the survivor. In this era of social media, many survivors turn to supportive online communities to disclose and/or seek help following their sexual trauma. This study focused on online discussions of sexual violence as shared on reddit, a social media website centered on member discussion and content sharing. The purpose of this study was to examine subreddit forums on rape and sexual assault to identify what issues were shared and what questions were asked by sexual assault survivors following their victimization. Specifically, the research questions included, 1) What types of issues are survivors choosing to share online after assault? And 2) What questions do they ask, and support do they seek from the online community after an assault? Around 300 posts on rape and sexual assault subreddits were
analyzed using constructivist grounded theory methodology (Charmaz, 2014). Results suggest that reddit users posted to determine whether their experiences were abusive, to seek help, and to share their stories and seek a supportive witness from the online community.

Keywords: sexual assault, rape, online self-disclosure, online reporting, online help-seeking, reddit
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Sexual Assault and Online Help Seeking: An Analysis of Survivor Disclosures and Questions After Assault

Sexual violence is a pandemic problem, with the World Health Organization reporting that one in three women worldwide have experienced sexual and/or physical violence (World Health Organization, 2013). According to a survey on national intimate partner and sexual violence, nearly one in five women and one in 38 men in the U.S. have experienced completed or attempted rape in their lifetime (Smith et al., 2018). For nearly one in sixteen women, this is their first sexual experience, leaving these survivors especially vulnerable to mental and physical health problems (Hawks et al., 2019).

There are several terms that reference different aspects of sexual violence. For simplicity’s sake, this paper will use the term sexual trauma to reference sexual assault, rape, abuse, and other sexual victimization and exploitation. This references any forced or unwanted sexual event in which an individual was victimized. Additionally, the term “survivor” will be used instead of the term “victim,” because it emphasizes empowerment of those who have endured sexual trauma.

Following sexual victimization, survivors are left grappling with the trauma, trying to make sense of what happened to them and what they should do about it. Sexual trauma leaves survivors vulnerable to physical, mental, and emotional health problems, and can negatively influence their relationships. Part of the difficult decision-making process following sexual assault is deciding whether to report, or tell someone about their victimization. Disclosing one’s sexual trauma is extremely difficult and if others respond negatively to such a disclosure, it could perpetuate the pain felt by survivors and dissuade them from getting help or sharing their experience again.
In this era of social media, several online movements have been created to shine a spotlight on sexual assault and violence against women. Movements like “Me Too” and “Times Up” have used social media to create supportive communities, raise awareness, dispel myths about assault, hold perpetrators accountable, empower survivors, and connect them to resources and support. While very few survivors formally (or even informally) report their victimization, online social media communities have created a space that survivors can use to share their trauma and seek help. This allows survivors to disclose their experience with more anonymity, and without the potential risk of backlash from reporting to one’s social circle or local community members. Since social media is becoming a more prevalent avenue for sexual assault disclosure, it would be helpful to better understand how survivors use online discussion boards to find support and resources following a sexual assault.

This study pulled data from reddit, an online social networking site in which users can share content and participate in forums focused on specific topics. The purpose of this study was to examine what survivors disclose on subreddit forums dedicated to rape and sexual assault, and what types of questions and support these survivors seek from this online community. Having this understanding would allow service providers and clinicians to better comprehend what survivors may be struggling with and their needs post-victimization, along with how reddit can be used as a resource and support for clients.

The Aftermath of Sexual Assault

Effects of Sexual Trauma

Sexual violence, including harassment, assault, and rape, is a traumatic experience that does not end with the assault, but lingers in the life of a survivor. The impact of this violence goes far beyond just physical injuries and can leave survivors feeling afraid, ashamed, alone, and
plagued by flashbacks. Sexual trauma has been associated with several significant, long-term, negative effects, including physical, psychological, emotional, social, and relational hardships. Survivors of sexual trauma are at high risk for developing mental health problems, such as symptoms of PTSD, depression, substance abuse, anxiety, and eating disorders (APA, 2013). It has been reported that sexual assault survivors constitute one of the largest groups of PTSD sufferers, with 60% of all survivors meeting the diagnostic criteria at some point in their lives (Foa et al., 1987; Kilpatrick et al., 1987). Immediate and enduring emotions often follow sexual trauma, including: anger, self-blame, guilt, shame, humiliation, a sense of loss, fear, helplessness, isolation, and low self-esteem (Fortier et al., 2009; Gold et al., 2008).

Adverse health problems, such as sexual difficulties and dysfunction, commonly arise following assault (Hawks et al., 2019). Van Berlo and Ensink (2000) found that psychological and emotional dysfunction, including symptoms of post-traumatic stress disorder and depression, are related to sexual problems, such as low sexual interest or desire and sexual aversion. Survivors of sexual trauma may also experience related behavioral problems, such as hypersexual or sexually avoidant behavior (Hughes et al., 2015). These problems negatively affect survivors and their families.

The struggles experienced by survivors and their attempts to return their lives to normalcy are to be expected following sexual victimization. Patrak and Hedge (2002) discuss individual factors that affect post-sexual assault reactions. This includes three phases experienced by those who have been victimized: anticipatory, impact, and reconstitution. The “reconstitution phase” has been described as the weeks and months following the assault in which the individual attempts to resume basic living, which might include seeking support and implementing safety precautions (Koss & Harvey, 1991). Survivors may appear to be adjusting,
but this adjustment can also be viewed as a form of denial in which the individual tries to actively cope with trauma and restore equilibrium in their life (Patrak & Hedge, 2002). In fact, there are several factors that could potentially reawaken and prolong the assault-related trauma for the survivor, including: if they decide to press charges, the nature and violence of the sexual aggression, the survivor’s age, sex, ethnicity, preexisting mental health problems, prior sexual victimization, coping skills, and/or social support systems (Ruch & Chandler, 1983; Patrak & Hedge, 2002). Along with dealing with resulting trauma, it is at this point that survivors decide whether or not to disclose their victimization to others, including if they feel more comfortable reaching out to online forums as they process and work through the effects of their victimization.

Unfortunately, the deleterious effects of sexual trauma are often exacerbated by other factors following assault. For instance, the complexity of deciding whether to report or disclose one’s abusive experience may compound negative health consequences. Additionally, intra and interpersonal challenges, lack of accessible resources, societal misconceptions about sexual assault, confusion (of what happened, what to do and where to turn), and re-victimization are examples of other factors that survivors may experience after being assaulted.

These factors influence how survivors view their own experiences with sexual trauma, and how they view themselves. Re-victimization of survivors does not necessarily mean survivors experience the sexual trauma again, but instead often occurs when trusted confidants respond poorly to the disclosure of sexual trauma. Family, friends, religious and community leaders, local law enforcement, medical professionals, legal officials, and others may play critical roles in the consolation or re-victimization of survivors (Fanflik, 2007). Overall, there are several complex and painful factors that survivors face following victimization.
Examining the barriers faced by those who have survived sexual trauma and identifying their decision-making process may allow for the following to take place: Provide space to honor their voices; understand the serious nature of these events; provide advocacy; illuminate the individual, social, and cultural pressures and powers that work against those who have been assaulted; and identify challenges that exist to reporting.

**Reporting**

Formal disclosure references when sexual assaults are reported to law enforcement, medical professionals, and education or church leaders or counsellors; alternatively, informal disclosure includes sharing with friends, family members, or associates (Ahrens et al., 2007; Ullman & Filipas, 2001). Typically, if survivors do disclose, they are more likely to disclose informally, and when they do, are more likely to seek support rather than advice. The deleterious effects of sexual trauma on survivors can be compounded by the intense decision-making process associated with whether to report or disclose the experience. Disclosure includes telling someone about the abuse, through either formal or informal support sources (Ullman, 2002 p. 913). This is typically a complicated, cyclical process, characterized by uncertainty about who to trust, and confusion about the potential costs and benefits that accompany reporting (Ullman, 2011). While millions are victims of sexual trauma each year, most who are victimized do not disclose informally, and even fewer formally report their experience. This means that many who are sexually traumatized do not formally report this crime to law enforcement or medical professionals, and many do not informally share their experience with those closest to them.

Researchers estimate that between 70-90% of sexual assaults go unreported to police (Morgan & Kena, 2018; Belknap, 2010; McGregor et al., 2000; Sabina & Ho, 2014), making sexual assault one of the most underreported crimes in the U.S. (McGregor et al., 2000). These
statistics are contrary to the common rape myth that many sexual assault allegations are false or exaggerated. Many survivors delay disclosure or never disclose, both of which have been found to contribute to the emotional distress and negative health outcomes they experience as a result of victimization (Andalibi et al., 2016; Quadara, 2008; Sinclair & Gold, 1997). On the other hand, appropriate disclosure and help-seeking has been associated with decreased psychological distress (Rickwood et al., 2005), and renders survivors less vulnerable to re-victimization (Acierno et al., 1999). Despite the difficulty of sharing one’s experience of sexual trauma, survivors are more likely to find some relief and support following their disclosure. However, there are several barriers discouraging survivors from reaching out to report.

There are several factors survivors are dealing with and must consider following sexual abuse, and there are many barriers that make the decision to informally or formally disclose one’s assault very difficult. Though a lack of reporting can be detrimental to both the survivor and society in general, reporting of sexual trauma is very low. This is often because many survivors do not recognize their experience as sexual trauma. Many, for example, assume that because their victimization did not follow the “typical rape narrative” of a woman being raped by a stranger late at night in a public place, their experience does not fit the crime, and therefore should not be reported (RAINN, 2013; Weiser, 2017). However, this scenario is highly unlikely, meaning if survivors are comparing their experience to this narrative, very few will fit this ‘definition’ of rape. Many survivors are confused or unsure if their experience “counted” as sexual trauma, especially if they were sexually assaulted and not raped. Additionally, many survivors consider their own part in the experience, and assume that if they had been sexual, were drinking, or somehow “put themselves in that situation”, then it did not merit reporting since they see it as their fault. Self-blame is a common survivor response following
victimization, and Campbell et al. (2009) reported that higher rates of self-blame are associated with decreased help-seeking and disclosure.

Another common reason, expressed by survivors, for not reporting is fear of consequences. This includes fears of: retaliation from the assailant, not being believed, being blamed, the response of their family and community, and poor treatment by police (RAINN, 2013; Wolitzky-Taylor et al., 2011; Spencer et al., 2017; Belknap, 2010; Adefolalu, 2014; Kilpatrick et al., 1992). Not only do survivors face the deleterious effects of trauma, but they also experience intense fear and anxiety of what would happen if they did report or find help. Whiting et al. (2019) examined survivors’ posts on a social networking site that used the “#WhyIDidn’tReport” hashtag, and found key reasons for not reporting included fear, feeling powerless, self-blame, and wanting to protect others. This study noted the powerful systemic forces at play that act as barriers between survivors and reporting.

Other barriers to disclosure, as found in research, include: thinking the assault was not serious or important enough to report, intense feelings of shame and guilt, embarrassment, fear of blame, self-blame, believing their assault was a private matter, assuming nothing could be done, uncertainty about others’ reactions, confidentiality concerns, lack of emotional competence, lack of experience regarding health care systems, and believing that police would not help or negative attitudes towards legal processes, the justice system, and professional help-seeking (RAINN, 2013; Chon, 2014; Walsh & Bruce, 2014; Spencer et al., 2017; Belknap, 2010; Neville & Pugh, 1997; Lievore, 2003; Payne et al., 1999; James, 2007; Ungar et al., 2009).

**Response of Others to Sexual Assault Disclosure**

While failing to report or disclose sexual trauma can compound negative outcomes for survivors, there may also be some downsides to disclosure depending upon how the report is
received (Ahrens et al., 2009; Shroud, 1999; Ullman, 2002, 2011). Ullman and Filipas (2001) noted that potentially two-thirds of survivors disclose to at least one person, even if they disclose several years after the victimization. How others respond to a survivor’s disclosure often affects the survivor’s healing and decision to disclose the assault to others in the future (Godbout et al., 2014). Overall, family, friends, religious and community leaders, local law enforcement, legal officials, and others may play critical roles in the consolation or re-victimization of survivors (Fanflik, 2007).

Supportive responses to a survivor’s disclosure include being believing, being empathetic, and helping the survivor connect to resources and feel heard. Survivors who receive this positive support experience fewer negative outcomes. This includes lessened physical, psychological, and emotional distress that promotes resiliency (Ahrens et al., 2007). Research has found that negative outcomes can be alleviated by coping skills and formal and informal support (Campbell et al., 2009). It may be difficult for another person to take the news that their friend, family member, or community member experienced sexual trauma, and it is important for these others to get the help and support they need if they are struggling to know how to respond.

Conversely, re-victimization of survivors (in an emotional or relational form) often occurs when trusted confidants respond poorly to the disclosure of sexual trauma. Unfortunately, survivors are likely to receive more negative than positive reactions following their disclosure, with studies indicating that up to three fourths of survivors report negative reactions when they shared their victimization with others (Campbell et al., 2001; Ullman & Filipas, 2001). Negative reactions such as implicit or explicit victim blaming, stigmatizing, distracting from or minimizing the event are likely to increase a victim’s shame, guilt, and/or psychological and emotional distress (Campbell et al., 2001; Ullman, 2010).
These negative responses are frequently informed by rape myths, defined as widely held public beliefs that tolerate and normalize sexual assault to the point that blame is shifted from the perpetrator to the victims, often based on arguments of the victim’s behavior, modesty, alcohol intake, sexual history, etc. (Edwards et al., 2011). These myths not only maintain rape culture and sexual violence in society, but also create a significant barrier that survivors must hurdle in an already harrowing process of decision-making post-victimization. For example, one particularly poignant rape myth is that a significant number of formal reports of sexual victimization are fabricated or exaggerated. The assumption that many sexual assault allegations are false is damaging to survivors since it minimizes or denies the trauma survivors have experienced, and minimizes their decision to report (Belknap, 2010). These messages from society intensify a survivor’s shame, guilt, and confusion, and remove accountability from perpetrators, thus perpetuating rape culture.

Additionally, a society that is informed by such rape myths can dissuade survivors from reporting at all. As mentioned previously, survivors who don’t report are less likely to receive physical and mental healthcare, and low reporting means perpetrators are not held accountable and are more likely to continue as offenders (Bachman, 1993; Chon, 2014; Neville & Pugh, 1997). Survivors already carry the burden of trauma, confusion, and fear following their assault. It is important for people to learn the potential positive or negative impact their reactions to disclosures can have on those who survived sexual victimization.

**Decision Making Factors Following Sexual Trauma**

Though deciding whether to report is clearly one of the most prominent decisions following sexual trauma, survivors also must decide what help and resources to seek (if any) to move forward. DeLoveh and Cattaneo (2017) developed a model based on interviews with
sexual assault survivors to examine the decision-making process following victimization. The “Deciding Where to Turn” model identified three key decision points for survivors: 1) whether the problem is related to sexual assault and if they need help, 2) considering their options – what they can do, and 3) considering the consequences of those options. These decision points resulted in four behavioral choices: coping on one’s own, seeking support from friends and family, seeking support from formal resources (such as law enforcement), or covert help-seeking, in which needs were met without disclosure of their sexual trauma (DeLoveh & Cattaneo, 2017).

As previously stated, research has found that survivors often do not recognize their experience as sexual assault or do not think their experience was severe enough to merit reporting or getting help (DeLoveh & Cattaneo, 2017; Krebs et al., 2016; Patterson et al., 2009; Tjaden & Thoennes, 2006). This model shows the options survivors consider following assault, including classifying what happened to them, if they can do anything about it, and what might happen if they do. Again, this relates to common cultural narratives regarding what “real” sexual assault is, and whether survivors have internalized rape myths, which could distort how they view and label their victimization.

**Social Media Disclosure**

Recently, awareness of the commonness of sexual assault and other forms of harassment, violence, and abuse has increased following more prevalent discussions of gender and power. News outlets have reported story after story of women coming forward to share allegations of harassment and assault from well-known celebrity, media, and political figures. These reports have been met with outrage and calls for justice and change, primarily through social media movements such as ‘Me Too’ and ‘Times Up’. These, and other movements, use online communities to highlight the prevalence of sexual trauma, offer support, seek justice, and
promote social change. Additionally, this has created supportive online communities of survivors and other allies in which it is safer to disclose and seek support. While there have historically been many structures and norms that work to prevent or discourage survivors from reporting their sexual assault, these online initiatives have provided a voice for many to safely share their experiences and be connected to resources and support.

Research has found that many may reach out to these online communities for services and support to cope with trauma and mitigate the negative outcomes associated with sexual violence (Dworkin, 2018). Similar to in-person reactions to disclosure, online responses that survivors receive vary in quality and helpfulness. However, help-seeking behavior occurring online has been found to often come from survivors who felt they had nowhere else to turn (Moors & Webber, 2013). So while survivors may or may not receive a quality and helpful reply online, it often feels like a safer and more accessible option for help-seeking and disclosure.

Rape and sexual assault are socially-stigmatized topics that are uncomfortable to discuss, and especially difficult to disclose. As a result, online self-disclosure of sexual trauma can be beneficial for survivors who wish to avoid in-person negative reactions of others and/or who hope to maintain anonymity (Andalibi et al., 2016). In examining reddit posts in which sexual trauma was disclosed, Andalibi et al. (2016) found that these users were more likely to use anonymous accounts, and most were directly seeking support – whether information, advice, or opinions and network. In examining the decision process after sexual assault, Dworkin (2018) explained that better understanding the process and context of help-seeking behaviors may inform strategies to improve help-seeking experiences for survivors. So understanding when and who survivors disclose to on online communities, and what questions they ask can provide
clinicians with a better understanding of what survivors of sexual trauma might need following their victimization.

While this paper does not focus on social media movements, it does focus on online discussions of sexual violence as shared on reddit. Subreddit forums on rape and sexual assault provide such an online community in which survivors and others share experiences, seek advice, and offer support. Since there is limited research on online sexual assault disclosures, the purpose of this study was to identify what survivors choose to disclose, what issues they share, and what questions they ask on these online forums dedicated to sexual violence.

Methods

To better understand the decision-making process following sexual trauma, subreddit forums dedicated to sexual assault and rape were examined to identify what survivors chose to disclose and the questions and help-seeking they shared. While there are several forums that offer support to survivors of sexual violence and harassment, the two used for this study included r/sexualassault and r/rape. These forums were chosen because their titles and content clearly aligned with the research questions and provided a good sample of survivors sharing their experiences. Around 300 posts from these forums were copied from reddit in their entirety. This was enough to reach saturation in the data, where the themes were consistent and well developed. The posts collected were then analyzed using qualitative coding analysis. Since reddit is a forum-based site, there is not a character limit for each post. For the purpose of this study, certain parts of posts that addressed the research questions were collected and analyzed, especially questions shared by users. According to Schreier (2012), qualitative content analysis is an appropriate methodology when analyzing short response data that requires interpretation. This
was a more amenable kind of analysis than using grounded theory, due to the brevity of the data in the reddit posts.

**Sample**

This sample consists of worldwide reddit users who came to the public subreddit forums dedicated to rape and sexual assault to seek advice on their sexual assault experiences. The researcher’s ability to obtain demographic information from the participants was limited in part because of the limited information available on reddit, and the passive analysis conducted, meaning that the researcher did not reach out to participants to gather specific demographic information. Copying posts from subreddit forums allowed researchers to gather the content of the post, comments to the post, the username, and the approximate date of when it was posted (i.e. about 1 year ago). Information such as sex, relationship status, socioeconomic status, and occupation were not available, which prevented drawing any conclusions based on sample characteristics.

**Procedure**

Reddit allows users to share content and participate in subreddit forums on specific topics. These forums were created for the intent to share experiences and provide a community of support. It is unclear if recent social movements focusing on shining a light on the prevalent issue of sexual violence has increased posts on reddit, but many users shared their experiences (often for the first time), and sought help, advice, support, and resources. Other users on the same subreddit can make comments to survivors’ posts. It is often unclear how long the rape and sexual assault subreddit forums have been active. Some posts were not written by survivors of sexual trauma or did not disclose or seek help. These posts were analyzed, and those that did not fit share experience, seek advice or support, or ask questions were removed from the final
dataset. The reddit posts that were analyzed in the final dataset included around N=300 posts. The data collection process included gathering a large number of posts, analyzing them, and then no longer gathering more once it was clear that the researcher had reached a round number, and when the data was saturated and themes were repeating. It was determined that more than 300 posts were not needed to understand why survivors were posting to this online community.

**Data Analysis**

The primary researcher used Mayring’s (2000) procedures for conducting inductive qualitative content analysis. Mayring’s three core steps are: (1) selecting units of analysis, or the posts that were collected, (2) creating categories, and (3) establishing themes. The first core step, selecting unit of analysis, was by determining which posts to analyze. This was done by cleaning the reddit dataset to only include posts that include information directly related to the research questions, which are: 1) What types of issues are survivors choosing to share online after assault? and 2) What questions do they ask, and support do they seek from the online community after an assault?

Next, the researcher developed inductive categories (step 2) using an open coding method by reading each post and naming concepts or preliminary codes. Each post was coded line by line, often resulting in multiple codes in one post. While the primary researcher (and author of this paper) performed the majority of the focused coding and organizing of each preliminary code/concept into categories, she would often bring questions and data to a research team, which included a fellow graduate student and their research chair. Following the development of conceptual categories, the researcher established themes to connect underlying meaning in categories, while continuing to receive feedback from the research team. This internal auditing
process, as described by Creswell and Poth (2017), was used to ask questions of the group and reflect about common themes and their meanings that were notable in the data.

In reviewing this data to determine the types of issues survivors choose to share, early codes included posts that asked questions and those seeking advice, and these were refined to more specific with more categories, such as posts that sought context, posts that expressed emotions, and posts that did both.

**Trustworthiness**

The primary researcher is a marriage and family therapy master’s student at an accredited university who has experience working with sexual assault survivors as a member of a rape crisis team, as well as in a clinical setting. As such, the researcher recognizes the background she has regarding this issue and the need for reflexivity and attempts to be aware of her potential biases. The researcher sought trustworthiness at all phases of research, including in preparation, data analysis, and reporting. Although sample characteristics were not readily available to be examined by the researcher, content analysis methodology was used by the primary coder, along with memos and use of internal and external audits as the study progressed to ensure reflexivity and rigor. This included sharing findings with other researchers which included the researcher’s academic chair and her fellow colleague, allowing them to review the study’s progress. All researchers are White academics, and thus the research team attempted to be careful of their biases and how those can influence the study.

**Results**

Prior to choosing which subreddits to analyze, researchers briefly reviewed several of the forums associated with survivors of sexual violence. Some public subreddits that contain similar self-disclosure or questions of sexual violence include r/rapecounseling (with 15,471 members)
and r/survivorsofabuse (with 15,209 members). There are also private subreddits, such as r/SexualAbuseVictims, in which reddit users must be invited if they hope to join. After a brief review of each of these public pages, these various subreddits appeared to have very similar posts, with themes that continued across each forum. Because the information shared in each forum appeared homogeneous, the researcher felt comfortable taking samples from only two of the forums as they appeared representative of other forums. Common reasons for sharing seem to stretch across various pages, with only slight differences between pages dedicated to sexual violence, abuse of any kind, or abuse or sexual violence specific to childhood.

The two reddit forums used in this study included: r/sexualassault and r/rape, which as of April 2020, had 2,118 and 17,743 members, respectively. Because the rape subreddit has eight times as many members, it contains more data and is used much more frequently. Reddit does not provide a specific date and time that the post was shared, and instead gives a general estimate of how long ago something was posted. Since posts on the “rape” subreddit were much more common, the time stamps from the posts collected varied from “a month ago” to “a few days ago,” while the “sexual assault” subreddit posts that were collected had time stamps of “1 year ago.” The differences in when these posts were shared did not seem to influence the themes found across posts, although the rape forum has more posts shared more often.

The purpose of these reddit forums is to provide resources and a sense of community for those who have been victimized, as indicated by the disclaimer “a resource for survivors and their loved ones” atop the r/rape page. The posts collected for this study indicated that reddit users understood this purpose. While posters on this forum did not say so explicitly, the overarching purpose for the posts appeared to be some form of help- or support-seeking. Almost all posts, with a few exceptions for non-survivors who were sharing resources or promoting
research, were intended to help the poster find support and solidarity in a community of fellow survivors and allies. Consistent with the overarching purpose of help- or support-seeking, three main themes emerged throughout the coding process: seeking context surrounding the assault, seeking help following the assault, or seeking a supportive witness from the online community. There was also an “other” theme that included subcategories that did not fit under the three previously stated themes. Within these themes, subthemes emerged. Each theme and subtheme will be defined, with representative posts included for each. Some posts qualified for multiple themes and subthemes, while others only one.

Figure 1

Themes and Subthemes
Seeking Context

In an effort to better understand the circumstances surrounding their own experience, many posters asked logistical questions regarding their assault. These questions were often specific and were intended to provide clarity and an explanation for the trauma they experienced, and help posters figure out what happened and what to do next. These questions included clarification and labeling what happened to them (72), questions of if they were to blame (16), legal questions (15).

Clarification and Labeling

Many posters were shocked and confused about what happened to them leading to several questions, which included being unsure what to call happened to them, asking if their experience “counted” as assault or rape, or asking directly is it was assault or rape. “Was I sexually assaulted?” “I don’t know what to call this incident. Can anyone help?” “I don’t know whether this counts as assault?????” “I don’t know what to call it or if I have the right to call it anything”, “Was it rape?” “Is this sexual abuse? Molestation? Does that count as sexual assault?” “Was it rape or a misunderstanding?” “Is it rape/sexual assault if it’s your significant other?” “Does anyone know whether this is technically rape or not?” “Is it still assault if I don’t say no?”

Self-Blame

Some posters wondered whether they were to blame for what happened to them, often asking if their behavior or lack of behavior prior to or around the time of their victimization (which could include drinking, having a previous relationship with their perpetrator, a lack of saying no, etc.) meant they are responsible for what happened. Many also asked if their experience “counted” as sexual assault or rape if they felt they were to blame. “I feel like I was to blame,” “it could be considered a gray-area situation because I agreed to hang out with him,”
“So who was at fault? Me or him?” “I wonder even whether it was sexual assault sometimes because i didn’t fight hard enough,” “does it matter that I was drunk? does it matter that I was stupid and allowed it to happen?” “do you think it was my fault?” “Why didn’t I say no? Was it my fault?”

**Legal Questions**

Posters sometimes asked specific questions to the legal process following their sexual victimization, including if they should report, whether their experience was reportable, if they had enough evidence, and so on. “Is this enough evidence to warrant an investigation?” “do you still think I can do something legally about it?” “Should I report him or not?” “Will my 2 children be taken away from me while this is all investigated?” “Is it too late to report sexual assault/abuse?” “I have evidence, what now?” “I’m wondering if it is possible to report without pursuing anything further?”

**Seeking Help**

Following sexual victimization, survivors are often confused and dealing with extremely difficult emotions and circumstances. Many posters had less specific questions but sought the thoughts and opinions of the subreddit community to help advise them on what to do and where to go next as they tried navigating the emotional effects of their trauma. The types of help posters sought included seeking general advice (25), what their next steps should be (14), how to heal and move forward (25), seeking specific advice (34), and seeking resources (6).

**General Advice**

Many posters shared with the purpose of asking for specific advice, thoughts, and opinions from the online community, including getting a second opinion and seeking others input to deal with their own confusion and emotional responses to their victimization. “Advice/help?”
“Please if you have any advice or can calm my anxiety,” “Please respond with advice so I can get a balanced perspective,” “i really wish i didn’t have to talk about this and ask for advice to strangers on reddit but i don’t have anyone else i can talk to […] please give me some type of advice,” “I’m really struggling and really need opinions” “I figured it wouldn’t hurt to ask for some advice from people who aren’t disconnected from the culture,” “what do you guys think about it?” “I just want someone else’s opinion.”

Next Steps

Some posters often sought guidance on the next steps they should take to help them navigate the confusing and emotionally taxing results of a sexually traumatic experience. This was similar to seeking advice, but instead of seeking general advice, these posters often seemed at a loss, and were therefore turning to the subreddit community to know where they should start, what they should do and what should come next. For instance, “What do I do?” “please tell me what to do with this,” “i don’t know where to go from here. mental health very much in jeopardy,” “i don’t know what to do […] I just need help,” “should I do anything about it? […] I just don’t know what to do now,” “I really don’t know what to do or how to feel.”

How to Heal and Move Forward

Several posters sought advice of how to move forward from their sexual assault, including requests to know how to heal, how to get over it, how to forget it ever happened, and how to move on. Many of these posts seemed to assume that the reader and responder would have personal experience and understanding with this. “What else should I be doing? What am I missing? How do I heal?” “I really just want to move on and forget about it,” “how can I get over it?” “how can I move on from rape?” “How do you heal from/ have healthy sexual relationships after sexual assault?” “How do I get back to my old self?” “my whole question is
how have you coped after?” “What are some of your strategies for dealing with it?” “I DON’T KNOW HOW TO COPE,” “how did you get through it?” “Will i get over it?”

**Specific Advice**

Some posters sought advice and opinions to questions that were very specific to their individual case. “But why do I feel that I want him? That I love him? That I miss him?” “Should I continue relationship with this person knowing they had past that included sexual assault,” “Advice on getting a Pap smear?” “is it really PTSD or I’m actually asexual?” “Can rape lead to the body developing more quickly,” “can I still have my first time after being raped? or does it mean that my virginity is stolen already,” “is it okay forgive them?” “Does being a victim make you unlovable?” “I’m genuinely concerned that my husband would want some kind of revenge against this guy. Is it selfish to not tell him yet?”

**Resource Seeking**

A few posters asked for specific resources. Some questioned who to call or who could help them, such as: “I don’t know how to get help?” and “Do I seek counselling?” Others asked whether telling someone would help them. For example, “How can you tell your parents and does it make it better?” “Do you think that it is good idea for me to start telling more people about what happened? Will it help?”

**Seeking a Witness**

Several experiences were posted with the intent of the poster’s experience being witnessed and validated by the online community. This theme included posters sharing what happened to them with the purpose of providing context, expressing their emotional responses, and finding support. Along with sharing what happened, posters also sought validation and understanding. The subthemes include: needing to tell someone (44), sharing their disclosure
experience (5), sharing their emotions (18), seeking emotional validation (28) and seeking solidarity and understanding (17).

**Needing to Tell**

For some posters, the purpose of sharing was not necessarily to ask questions or seek advice but was just to share their story and be witnessed by the community. This included posts from those who had no one else to talk to, who needed to get it off their chest, or who needed to process what had happened to them through writing. “I feel so defeated. I’m sorry if this is the wrong place to post I don’t know who I can talk to about it,” “Sorry for the vent, I just have no one to even begin to talk about this with or how I feel,” “This is going to be more of a vent and I apologize to anything this may trigger or upset, I just don’t know where else to talk to about this.” “Something I needed to get off my chest. […] Other people are coming out and sharing their stories but i still do not have the strength to but behind a fake name. but this is a start i guess. Thank you to you whoever has read my story.” “I do want to tell my full story,” “I just needed to write this all down, so that I can start processing it” “I just needed to tell someone,” “I needed to write this. I can’t be alone with this.”

**Sharing Disclosure Experience**

Some posters shared what happened when they disclosed their sexual assault to someone. This usually included the negative responses they received, which could explain their turning to an online community for further support. “Told my grandma and now I’m doubting,” “I now regret telling my best friend because I feel as though she does not believe the situation or blew it off,” “My roommate dismissed my assault?” However, a few posts included positive disclosure experiences, including: “reported my rape today […] i am so grateful for the respect and support i was given today.”
Sharing Emotions

As part of sharing their experience, many posters would share the emotional reactions they had to the trauma they experienced, often as a part of their story, and often in an effort to understand what happened to them. “He made me feel so weak,” “I feel so angry, hurt, and confused…I don’t know how to make the feelings stop,” “the situation made me feel small and afraid,” “I feel so broken.” “It’s just really overwhelming. I hate feeling the doubt along with the pain.” “All of this weight upon me and I hardly bear it anymore,” “I still feel so much guilt and shame from allowing this to happen to me.” “I am eaten up by my own shame and hatred towards him and I just don’t know how to deal with it.” “I am so deeply affected and I can’t stop being depressed…” “I feel like I am damaged goods […] I’m just broken […] I just feel like a burden and if my partner would be better off without a girl like me who’s all messed up and complicated.”

Seeking Emotional Validation

Some posters sought validation of their emotional response to sexual trauma to try to understand what happened to them, and whether their reaction was typical or normal, based on the circumstances. Instead of asking for validation or clarification in order to understand what happened to them, like in the clarification and labeling subtheme, posters within this subtheme wanted to know if their reaction was justified, or if they were overreacting. “I’m very angry right now […] am I overreacting?” “Am I crazy to think that way?” “Am I crazy? Do I not have a right to be upset about this?” “Does it get better? Can someone tell me it does?” “I don’t know what to call it or if I have the right to call it anything,” “It would just help to have some validation and perspectives from others on this,” “Are my feelings justified?” “Is it okay to feel
this way?” “I just want to know if I’m being dramatic or what?” “Is this behavior normal? Do I overreact?”

**Seeking Solidarity and Understanding**

Several posters asked if anyone reading had similar experiences. Posters often wondered whether someone personally understood what their experience was like and if they could therefore share advice. The purpose of these questions seemed to be helping the poster know they were not alone and that there was a community that understood and supported them. “Just any advice from people who have overcome stuff like this or in general on what I should do?” “Has anyone else experienced anything like this? How did you navigate it, what is coping skills have worked for you?” “I am also wondering if anyone of you who has also been through this has had the same reaction or if it’s just me?” “Just any advice from people who have overcome stuff like this or in general on what I should do?” “Were you able to sustain a friendship? Were you able to forgive?” “Has anyone else experiences feeling very numb to the whole process after you’ve been raped…” “Can anybody our here relate?”

**Other**

These posts shared with the online community either did not fit the criteria of coming from a survivor of sexual violence, or contained no specific questions, advice-seeking, sharing of experience, or seeking validation and understanding. This included support systems of a victim who were asking questions, seeking advice, or sharing experience (17), and posters who were checking if they themselves actually perpetrated sexual violence against someone else (5).

**Support Systems of Survivors**

While these posts were similar to the questions, stories, and advice-seeking coming from survivors, many secondary survivors or support systems of survivors shared the experience of
their loved ones and asked questions, advice, and for understanding from the online community. “Did my boyfriend experience a sexual assault?” “When I try to talk about it she starts crying and I don’t want to startle her again,” “My friend was sexually assaulted just now, need advice.” “How to get intimate with my GF who was assaulted in the past?” “I want to see this guy sent to jail, even though I know that’s not what she wants.” “How can I be in a room with someone who literally did the worst thing imaginable to the girl I’m with?” “My gf was most likely raped by her ex-gf and won’t do anything about it in terms of the law.” “My wife’s story […] It was years ago, but I also experienced it as my personal trauma.” “girlfriend was raped, it’s always on my mind, what do I do?”

**Did I Perpetrate**

A few posts included experiences in which an individual wondered whether they had perpetrated sexual harassment or assault on another person and wanted to understand what they had done. “Wrongful sexual harassment claim […] I can’t actually be fired for this right?” “I didn’t know that it was sexual assault when i was doing it but after she had woke i realized that she had no consent and that i just wanted to pleasure myself;” “she says I didn’t’ sexually assault her because she didn’t say no […] Did I sexually assault my girlfriend?” “Did I rape her without my knowing? Did i really rape someone?”

**Discussion**

Sexual assault and rape are socially stigmatized and difficult to talk about. Because of this, several survivors withhold reporting for a time or never report (Quadara, 2008), and if they do disclose, they may receive negative responses that discourage them from future disclosure (Ullman, 2002). Though disclosure of sexual abuse is very difficult, delayed or non-disclosure can cause additional emotional distress and negative health outcomes (Quadara, 2008; Sinclair &
Gold, 1997). Disclosure and support seeking, on the other hand, have been found to have good psychosocial effects on survivors (Rickwood et al., 2005). Therefore, reaching out and disclosing one’s sexual abuse to an online forum can have a positive effect on the poster and allow them to find the support and resources they need.

Because sexual assault is stigmatized, a survivor’s disclosure entails social risks. An individual perceiving such stigmas may be unwilling to disclose or seek support directly when they need it, owing to their fear of rejection (Williams & Mickelson, 2008). However, online self-disclosure provides less social risk and more anonymity for survivors to seek support following their victimization. When people feel anonymous, they are more likely to disclose personal information (Joinson & Paine, 2007). This, along with the absence of nonverbal cues and the threat of in-person rejection, facilitates more intimate disclosures in places like online support groups and forums (Tidwell & Walther, 2002). A study that analyzed abuse-related posts on reddit explained that because both throwaway and identified user accounts are somewhat anonymous, in that they do not share personal information, this allows for more depth and breadth of disclosure than fully identifiable interactions, such as in-person or other social media site disclosures (Andalibi et al., 2016). The findings of the current study follow previous research findings that anonymity and an online community dedicated to survivors of such abuse increase likelihood of disclosure and support-seeking, since stigma seems less of a concern. One poster, in describing why they shared their story on the forum, said “Maybe because I trust the anonymity of this place and therefore can properly open up, or it may be I need some help in the form of a soundboard to bounce ideas off, or it may be a cry for help.” Several survivors posted under throwaway accounts, or their accounts and stories contained very little personal information. This seemed to help the posters feel less fear and anxiety about being judged or
retaliated against for their disclosure, and instead, created a safe environment to share their story, ask questions, and seek advice and support.

Additional research is needed to explore online disclosure and dialogue surrounding sexual assault and rape, and only a few studies have attempted to understand the experiences of survivors that seek help and support online, or the characteristics of online spaces that encourage or discourage such disclosures (Andalibi et al., 2016). This study employed qualitative methods to address this gap in research by investigating self-disclosures of sexual assault and rape survivors to understand what issues they chose to share or discuss online, and what questions they asked an online community following their assault. This qualitative analysis contributes to an understanding of sexual assault self-disclosure in online spaces and suggests that there is substantial in-depth, private stories being shared, along with emotional disclosure, an effort to understand and be understood, and direct and indirect support seeking. Our analysis indicates that for the most part, survivors sought support by trying to understand and process the context and emotions surrounding their assault, through questions, advice-seeking, sharing of experience, and seeking understanding and validation. There were some posts that did not fit this criteria, including: posts by the members of support systems of survivors (family members, significant others, etc.) who were trying to process and understand the assault of a loved one, individuals trying to understand whether they perpetrated sexual assault or harassment, and posts by researchers trying to gather data. While the researcher initially assumed the majority of posts would ask specific questions or for specific resources, the findings actually indicated that most posters sought support.

The posts analyzed for this study emphasized a survivor’s need to grapple with and figure out the context and emotions surrounding their victimization. To do this, survivors needed to
share their story, process and comprehend what happened to them, and to feel supported and understood in picking up the pieces following a traumatic event. The most common theme by far that emerged in the posts was questions to clarify and label what had happened to the poster (72 posts). This indicates a need for more education and understanding of the definition of rape and sexual assault, especially for populations at highest risk of victimization (such as on college campuses). The other most common themes included a need to share one’s experience with someone (44 posts), seeking general advice from the online community (34 posts), and seeking emotional validation (28 posts). Specific resource seeking was a much less common theme. This appears to be a theme for online self-disclosures of sexual assault, as another study of sexual assault-related questions and answers on the non-anonymous Yahoo Answers! site found that help- or resource-seeking occurred rarely while posts mainly involved seeking emotional support (Moors & Webber, 2013). Overall, rather than seeking specific help and resources, survivors turned to the reddit community for support, understanding, and assistance in processing and dealing with what happened to them. This online community provided a safe, usually anonymous space for posters to be witnessed, validated, and to receive the help and support they needed and asked for.

**Clinical Implications**

Considering that the most common theme of the posts included questions to clarify and label what had happened to the poster, clinicians should assess for potential sexual violence that their clients have experienced, but do not recognize as sexual assault or rape. This study, along with other research findings, make it clear that many who have been victimized are unsure and do not think that their experience “counts” as sexual assault or rape (RAINN, 2013; Weiser, 2017). This is likely due to common misconceptions about sexual violence, or rape myths
including the “typical rape narrative. Since most assaults do not follow this narrative, many survivors may be confused. Some posters, for instance, assumed that rape has to be violent and result in physical injuries, so they could not call their experience rape if it did not result in physical injuries. Additionally, survivors may feel responsible or to blame for the experience if they were drinking, had been sexual with that person previously, did not fight back at all or hard enough, or “put themselves in that situation”. Considering their own role, survivors may feel their experience does not count as sexual violence since they are to blame (Campbell et al., 2009). Clinicians must help clients to recognize and name what happened to them, working through and challenging the misconceptions and rape myths, so that clients can recognize they are not at fault and move forward and heal from the trauma they have experienced.

While the barriers to disclosure, including fear of social reactions, faced by survivors make formal and informal reporting extremely difficult, there are also clear benefits to disclosure and seeking social support. Clinicians, therefore, should create a safe therapeutic environment in which clients who have experienced sexual violence can feel comfortable to disclose and process their experience. If clients seem unsure what happened to them or are hesitant to share, clinicians could refer their clients to online forums such as reddit to provide an anonymous way to seek support, understanding, and resources. As noted in a recent study of social reactions to disclosures of sexual assault on Twitter, online forums offer a unique context for disclosing violence and receiving support (Bogen et al., 2019). For an online forum such as reddit, clinicians could inform their clients that their posts can be anonymous, thus decreasing their concern of judgement and retaliation, and increasing their willingness to disclose more intimate and personal information or questions about their victimization (Tidwell & Walther, 2002; Joinson & Paine, 2007; Andalibi et al., 2016). Clinicians should be familiar with the forum they
are recommending their client to join, reading several of the posts and comments to understand what their client may experience, and should ensure it is a moderated and positive environment. Furthermore, clinicians should warn clients of potential trigger warnings in reading the other posts on the forum, as several are graphic and could be upsetting for a fellow victim. The rape and sexual assault subreddits appeared to be moderated and supportive online communities, but many posts shared explicit details of the poster’s assault, and therefore could be triggering. If this is a concern, clinicians suggest their clients post and read the comments their post receives, but be cautious about reading others’ posts.

**Future Research**

As previously stated, there are several subreddit forums that address sexual victimization and attempt to offer support for those who have been victimized. This study only reviewed two of these pages, r/rape and r/sexualassault for the data collection and analysis. Therefore, future research could collect and analyze data from the subreddit forums that were not included in this study or could include data from other online communities, including forums dedicated to child sexual abuse, intimate partner violence, and so on. This could be done to see if purposes for posting were similar like we saw when we briefly reviewed a few posts from each subreddit page, or if they provide different information for why posters share their experiences online. Additionally, some of the posts collected for this study referenced sexual abuse that occurred in childhood. Since these posts often followed the same themes, they were included in this sample. However, future research could focus more specifically on online self-disclosure of childhood sexual abuse, including online forums and communities dedicated to that subject.

Although this study was unable to collect the demographic information for the posters, research has shown that females are more likely to be victimized than males. While males also
experience sexual assault, over 90% of victims are female (National Sexual Violence Resource Center [NSVRC], 2015). Sexual violence against men and boys has been neglected in research, and the studies that have been done have inconsistent findings, resulting in an unclear prevalence of male survivors (World Health Organization, 2012). As a result, much of the literature on this topic focuses on female survivors. There is a clear need for more research focused on the experience of male survivors of sexual assault. This could also include more research on male self-disclosures of sexual assault online.

Overall, online sexual assault disclosure is an understudied area. Such self-disclosure should be studied further to understand the nuances of support seeking to an online group, the anonymity sought by this population, and the responses that posters are likely to receive. This study did not examine the responses to such self-disclosures but doing so would be informative to better understand whether online forums provide adequate answers, support, and resources. Future research such as this could allow clinicians and scholars to better understand the impact of these online social media platforms, and the ways in which they can enable positive and therapeutic disclosures and a sense of community that could lead to a variety of healing opportunities.

**Limits and Conclusion**

Although this study attempted to capture and understand survivors’ nuanced and complex experience and purpose for posting through coding and analysis, the author acknowledges the limitations and potential misrepresentation that can occur when analyzing social media data from a vulnerable population or group to which the researcher does not explicitly belong. Additionally, the method of data collection limited participants’ demographic information, making it impossible to draw conclusions related to gender, age, race, and so on. As a result of
qualitative methods, the interpretation and coding of the data was influenced by the researcher’s own values, biases, and experience. Additional coders were used, which may have assisted in diversifying the interpretations made and increasing the validity of the results produced. The identified results of this study are only one interpretation of the data, with potential variants in results if the data were analyzed and coded by a different researcher or researchers, based on their subjective experiences. However, the findings of this study may be used to aid clinicians in assisting survivors of sexual assault and rape find answers to common questions, challenge common misconceptions and myths, and offer support and validation through the use of online forums and social media communities.
References


https://apps.who.int/iris/bitstream/handle/10665/77434/WHO_RHR_12.37_eng.pdf;jsessionid=E531C873026A7EAD5336FD5A8468A3D8?sequence=1