Published in final edited form as:

Vict Offender. 2018 ; 13(6): 814–833. doi:10.1080/15564886.2018.1479910.

Risk Avoidance Strategies after Sexual Assault: A Dyadic Study of Survivors and Informal Support Providers

Sarah E. Ullman, Katherine Lorenz, and Erin O'Callaghan

Department of Criminology, Law, & Justice, University of Illinois at Chicago

Abstract

Interview data from 45 matched pairs of survivors disclosing sexual assaults and their primary informal support provider (friend, family, significant other) were used to explore survivor-support provider perspectives on self-protective behaviors survivors and those close to them take to protect themselves from future assaults. Strategies for reducing risk taken by survivors included behavioral changes, security measures, self-defense strategies, avoiding alcohol/drugs, and protecting others. Support providers play critical roles by encouraging survivors to pursue risk avoidance strategies, and employing these strategies themselves. Counseling and prevention implications are drawn in the context of risks facing survivors trying to avoid further sexual victimization.

Sexual assault has myriad of effects on survivors' psychological, social, and health outcomes (Campbell, Dworkin, & Cabral, 2009). Post and colleagues (2002) posit that there are tangible and intangible costs associated with being sexually assaulted (i.e. "The Rape Tax"), concluding that sexual assault is a rather expensive crime to experience in many regards. In terms of intangible costs, victims often experience loss of quality of life and diminished mental health, which contributes to a loss in productivity (Post et al., 2002). Other changes may occur in survivors' cognitions and behaviors as a result of sexual assault. Increased fear resulting from sexual assault and fear of being re-assaulted may lead many survivors to make various changes in their lives to try to avoid future assault and/or prepare themselves and others to deal with the reality of sexual assault. In fact, the "shadow of sexual assault" hypothesis posits that fear of sexual assault drives women's fear, not only of sexual crime, but also of other crimes like robbery and physical assault (Ferraro, 1996). Thus, it is important to study how risk taking, precautions, and women's cognitions and behaviors change, not only to document the negative effects sexual has on women's lives but also the potentially adaptive ways in which some make changes that may increase their freedom.

Feminists and scholars have argued that precautions and behavioral restriction are harmful effects of sexual assault that keep women fearful and in their subordinate status or place in society (Brownmiller, 1975). Although other changes like taking assertiveness and/or self-defense training and helping others may empower women to increase their own freedom as individuals as well as the collective freedom of women as a whole (Delacoste & Newman,

1981; McCaughey, 1997), while the threat of rape persists. Research shows that assertiveness in sexual situations, active resistance strategies (screaming, fleeing, fighting) and self-defense training can lead to lower risk of sexual assault and/or rape completion and being attacked in the first place (Livingston, Testa, & VanZile-Tamsen, 2007; Orchowski, Gidycz, & Raffle, 2008; Senn et al., 2015; Ullman, 2007; Ullman & Vasquez, 2015). In addition to improving women's sense of perceived control, self-confidence, and self-efficacy (Brecklin, 2008; Pinciotti & Orcutt, 2017), research shows that forceful resistance, in particular, may also reduce self-blame and guilt that passive female victims often suffer after the incident (Gidycz et al., 2006; Meyer and Taylor, 1986; Mezey and Taylor, 1988). By enhancing perceived control and reducing self-blame, such resistance strategies can enhance women's recovery from sexual assault (Peter-Hagene & Ullman, 2018; Senn et al., 2015). However, outside of these active resistance strategies in the face of assault and self-defense training, there is little scholarly work examining the day-to-day strategies women employ to avoid possible sexual victimization.

As the recent “#metoo” movement and Hollywood scandals regarding sexual assault and harassment have publicly revealed (see Johnson & Hawbaker, 2018; MacKinnon, 2018 for review), women are frequently victimized, and report taking precautions and restricting their behavior in myriad ways to avoid assault. This movement has given greater visibility to the epidemic of sexual assault, including the “rules” of avoiding sexual assault (see “Strategies to Avoid Sexual Assault and Rape,” 2018, for example), and the victim blaming responses survivors received when they did not follow these rules (e.g., see Twitter hashtags #rapecultureiswhen and #victimblaming). Contemporary news stories such as the Think Progress' article “All of the Things Women are Supposed to Do to Prevent Rape” (Culp-Ressler, 2014) highlight the steps women are expected to take to avoid being sexually assaulted, discussing how burdensome all of these expectations and modifications to daily behavior can be for women simply to avoid rape. However, as Culp-Ressler (2014) points out, the advice women are given to avoid sexual assault reinforces a misplaced focus of prevention strategies. The threat of sexual assault significantly impacts all women's lives by circumscribing their lives including freedom of speech, action, and movement in the world, even if they are fortunate enough to avoid being victimized themselves. Many contemporary news stories and posts on social media (especially the recent #MeToo and Hollywood scandals) clearly illustrate the impact of sexual assault in terms of the extreme lengths many women must go to throughout their daily lives to avoid assault and harassment. Despite this severe and pervasive reality, there is not much scholarly work available, particularly qualitative and dyadic in nature, talking about this risk avoidance engaged in by women daily.

A national study showed that 47% of American women reported not doing things they needed to do and 71% reported not doing things they wanted to do because of fear of victimization (not sexual assault specifically; Runyan et al., 2007). They also found that women with both personal and vicarious (that of close others) experiences of victimization were more likely to: have guns, carry weapons, carry devices, and use home protection strategies compared to women with no victimization experiences. They also found behavioral strategies were most common for self-protection with women reporting being alert and aware of one's surroundings (99%) and keeping doors at home locked (96%) as

most common, whereas taking martial arts or self-defense training (19%) was least commonly reported.

Furthermore, some evidence shows that protective behavioral strategies (e.g., speaking directly/assertively; providing one's own transportation; meeting dates in public instead of private places) which have been less studied in relationship to future victimization risk may help to avoid being revictimized (Fisher, Daigle, & Cullen, 2010; Gilmore et al., 2016; Orchowski et al., 2008) and the severity of future sexual assault if assaulted (Gilmore et al., 2016). Arguably, all of these changes post-assault are negative as women are not responsible for sexual assault, perpetrators are, so they should not have to face this threat and reality nor make changes in their lives to adapt. Sexual assault may result in various deleterious impacts some of which may also involve positive changes (e.g., increased risk awareness, self-efficacy, assertiveness) that help women to break free of fear and passivity and may facilitate recovery (Orchowski et al., 2008). However, it is important to better understand how women do take actions to protect themselves and to understand how they feel about that as well as how others in their lives, such as family, friends, and romantic partners are also affected by women's risk avoidance post-assault and support them in various ways.

While studies have been done examining recovery, women's taking of precautions, and resistance/self-defense training, they have not been studied together previously, nor have informal support sources whom women most commonly tell about assault and seek support from afterward been interviewed for their perceptions of survivors' post-assault behaviors. Contemporary news and social media have recently drawn renewed attention to the volume of women who are sexually assaulted, as well as the prescriptive responsibilities placed on women to avoid sexual assault and the negative responses that ensue when women do not adhere to these steps. However, this recent media visibility of sexual assault is not an empirical or rigorous examination of sexual assault risk avoidance, and has primarily focuses on higher-income White women. This study examines changes women make following sexual assault in their risk behaviors and precautionary tactics in a sample of dyadic matched pairs of survivors and their informal supporters who were interviewed separately as part of a larger community-based study of sexual assault recovery in women.

Current Study

Most sexual assault research to date has focused on survivors or informal support sources, or professionals, separately. Research has yet to study survivors and their informal support networks simultaneously to try to obtain a richer picture of the ways in which recovery unfolds in the context of relationships over time. We sought to address this gap by examining survivors' post-assault behaviors during recovery and their relationship with their primary informal SP. This study used dyadic survivor-SP interview data to explore the following research questions: 1) How do survivors talk about their risk avoidance post-assault, 2) How do SPs perceive survivors' management of risk post-assault?, 3) Are there any discrepancies between survivor and SP perspectives on risk management post-assault, 4) What risk avoidance behaviors do survivors engage in post-assault and how are these behaviors influenced or not influenced by the SP?

Method

Participants

The sample of this study included adult female sexual assault survivors who disclosed their assault to an informal SP. Survivors had previously participated in a 3-year longitudinal survey ($N = 1,863$) regarding unwanted sexual experiences and the social reactions they received when disclosing these experiences (see Peter-Hagene & Ullman, 2018, for study description).

We had 56% response rate at Wave 3 which was 1,012 women. Of those completing wave 3, 682 who indicated interest in participating in a follow-up interview were eligible to be recontacted, and of those, some were excluded due to reasons of: no longer interested ($n = 197$), left the Chicago area ($n=138$), no updated sexual assault or race information ($n = 19$). That left a pool of 410 to contact that we stratified by race and alcohol status to ensure we oversampled women of color to obtain a diverse interview sample and obtained at least half with alcohol related sexual assaults. We contacted all participants we could reach by phone or email and assessed whether survivors were willing to give us contact information for several SP's they told about the assault for a later interview, which some did not do for various reasons, as interview eligibility was also limited to survivors who could provide us with those contacts. We had more participants eligible to be interviewed than we could interview, so we did not contact all eligible participants for interviews. Ultimately, we interviewed 53 survivors and 45 of their SPs.

Survivors who indicated interest in being contacted for interviews were also asked to provide contact information for a friend, family member, or significant other who they told about an unwanted sexual experience. SPs were contacted later for a separate interview that focused on their experience helping the survivor. Separate interviews with survivors and SPs ($N=90$) took place over 2 years, resulting in a sample of $N=45$ matched pairs of survivor and SP interviews. Written informed consent was obtained for all interviews immediately prior to the interview. The study was approved by the University of Illinois at Chicago IRB.

Survivors were an average of 43 years old ($s = 11.93$) and ethnically diverse: 75% non-White (African American, Latina, Native American, or multi-racial), 18% White, non-Hispanic, 7% not reported. Approximately 60% of survivors had children. About 76% had attended or graduated from college; 24% were currently enrolled in school, and 38% were currently employed.

SPs were also an average of 43 years old ($s = 14.23$). Two-thirds (64%) were female, and 64% had children. Approximately 66% were non-White (African American, Latino, Native American, or multi-racial), and 19% were White, non-Hispanic. Most had attended or graduated from college (66%) and were currently employed (60%). Of the 45 SPs, about half were friends (51%), family (33%) or significant others (16%) of survivors.

Procedures

Semi-structured face-to-face interviews were conducted by one of three trained interviewers on the research team. Interviews lasted an average of one hour, but ranged from 30 minutes

to 3 hours. Participants were compensated \$30USD for the interview portion of the study. After each interview, interviewers created “summary” documents, which included interesting points, questions raised, final thoughts, and unanticipated feelings emerging from the interview. Interviews were audio-recorded, transcribed, and checked by other members of the research team. During the transcription process, brief summaries and identified patterns were added. Interviewers conducted a final review of their transcripts for accuracy. Interviewers and members of the research team met to discuss emerging themes and patterns following transcription, as an initial stage in developing the codebook.

Measures

The interview protocol for survivors and SPs focused on the survivor’s disclosure of an unwanted sexual experience, social support provided/received, and appraisals of the survivor-SP relationship. Interview participants were also asked to discuss the survivor’s post-assault experience in terms of recovery and coping, including coping methods and appraisals of the survivor’s recovery progress. The present study focused on survivor recovery. Overall, there were 20 codes under the umbrella of the “recovery” category, though the focus of this study fell onto one particular recovery code: recovery risk, described as: “the extent to which survivor engages in risky behavior and/or self-protection strategies (e.g., self-defense/assertiveness training, adding locks to doors, going out in groups, avoiding alcohol).” Thus, for the present study, we examined the survivor and SP interview content relevant to this code.

Data Analysis

Members of the research team summarized each interview transcript to identify patterns and themes, which were later discussed among the research team in a process similar to that of thematic analysis (Braun & Clarke, 2006). The research team conducted several trials of interview coding and refinement to develop a codebook that covered the content of individual interviews and themes reflecting the matched pair relationships. Coding trials resulted in several revisions of the codebook whereby codes were added, renamed, redefined, and/or combined. The codes were descriptive in nature and were used to summarize and describe the primary topic of the excerpt (Saldana, 2012). We examined the context of the codes by reviewing transcripts and interviewer summaries when identifying relevant interview excerpts (i.e., quotes).

We used Atlas.ti Version 7 qualitative analysis software for coding and analysis. We identified codes that made the most analytic sense of the data (termed “focused” coding; Charmaz, 2006) and used the identified codes to pair with segments of the transcript. Specifically, we selected codes that best represented what was happening in the interview text. We coded the data separately and compared our interpretations of the content with other members of the research team to achieve consensus (Eisikovits & Koren, 2010). This process took place in several stages. First, pairs of coders separately coded each interview matched pair using the codebook. Second, one coder in the pair then reviewed both coded transcripts to identify any inconsistencies in the assigned codes. Third, the coders discussed these disagreements until reaching a joint consensed version by both parties (Patton, 2009). In cases where agreement was not obtained, double coding (i.e., simultaneous coding;

Saldana, 2009) was used as a compromise between the two codes. Fourth, the original interviewer reviewed the coded transcript for agreement with the assigned codes. The coders and interviewer discussed any disagreements and corrected the coded transcripts until consensus was reached between the three parties. During the coding process, researchers created memos within the transcripts to highlight any relationships or inconsistencies within and between the survivor and SP interviews, or to capture unanticipated themes in the data (Charmaz, 2006). The inclusion of memos allowed coders to pay attention to the relationships between different matched pair interviews.

Analysis took place using an iterative process in several stages after coding was completed. We analyzed the interview at both the individual level and at the level of the matched pair (i.e., dyadic). First, we conducted queries in Atlas.ti software to identify the number of times each interviewee endorsed a particular code related to risk and recovery and the type of survivor-SP relationship (i.e., friend, family member, significant other). Second, like that of thematic analysis, members of the research team individually reviewed the quotes for each query in search of patterns and noteworthy findings (Braun & Clarke, 2006). Third, the team met several times to review the identified themes and patterns. During this process, we looked for similarities and contrasts within and between the 45 matched pairs in response to the proposed research questions of the present study.

Results

Results are presented according to several themes revealed from the quotes including behavioral changes, security measures, self-defense protective strategies, changes in drinking related behavior and contexts, and protecting others. We present both survivors' responses regarding these themes as well as SP's perceptions of survivors' post-assault risk management, as well as changes both made, as sometimes SP's also made similar changes in risk-reduction/avoidance behaviors for themselves and in support of survivors. Of the 45 matched pairs interviewed, 25 survivors mentioned this theme in their interviews as did 20 SP's.

Some of these changes were likely a result of increased fear following the assault or simply recognizing risk related to the specific assault they experienced, and trying to avoid that risk in the future. Others were changes done with the support of their SP or involved avoiding and/or navigating contextual factors, like making changes in larger social networks or avoiding risky situations/neighborhoods. Generally, women reported increased awareness, fear, and hypervigilance, which for some led to behavioral restrictions that limited their lives and likely were long-lasting negative effects of assault, limiting their full participation in life events, activities, and socialization. This avoidance behavior is one aspect of PTSD, a common effect of sexual assault (Kramer & Green, 1991; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992).

In presenting quotes throughout the results, we use several abbreviations as noted here to indicate demographic characteristics and type of relationship in the following order: (S/SP Relationship, Gender, Age, Race/Ethnicity). SO = Significant Other, F = Family, FR =

Friend; M = Male, F = Female; B = African American, W = White, N = Native American, H = Hispanic, MR = Multi-Race, U = Unknown.

Day to day behavioral changes/restrictions

We noted several behavioral changes made by survivors and SPs in their daily routines, as well as other larger changes in post-assault living situations ($N=6$). These changes tended to involve restricting one's life in some way or losing prior activities (e.g., jobs, social engagements) in the hope of avoiding future assaults, which have been noted in past research as a negative effect of the fear and reality of sexual assault in women's lives (Cobbina, Morash, Kashy, & Smith, 2014; Lane, Gover, & Dahod, 2009; Gordon & Riger, 1989). One survivor who had been drinking when attacked by a stranger noted that she would cross the street or pretend to be on her cell phone to try to divert a potential perpetrator (male) from her.

"I would be paranoid when there's a guy and I would cross to the other side of the street or I would have my cell phone out and act like I'm talking to somebody with the hopes that would throw them off since I'm talking on the phone."

(S FR, F, 46, B)

The SP, a female friend, echoed the survivor's increased awareness and spoke about them both taking precautions following her assault.

"It made her be very aware of what's going on outside in the world."

(SP, FR, F, 43, U)

She also echoed her own strategy, staying away from men who were up to no good:

"When I see guys acting out intoxicated trying to talk to some women, I remove myself, because I don't know what's on their mind."

(SP, FR, F, 43, U)

Both the survivor and supporter in this dyad spoke about how they have altered their daily behavior to avoid risky people and situations where they could be assaulted via a set of rules. These rules include no drinking or drugs to reduce impairment that might lead to being victimized especially in contexts with others who use substances who may pose risks for violence. Not walking around with headphones was another rule to ensure one was paying full attention to one's surroundings and could not be easily taken by surprise by a perpetrator. A protective behavior was to pretend to be talking on one's cell phone when trying to get someone's attention away from oneself; that is to make oneself unavailable to be interrupted by people one didn't want to interact with by faking being on the phone. Given this survivor's stranger assault related to drinking, her precautionary strategies made sense, and she also felt that was better than other women in her support group who were attacked by boyfriends or others they knew because she said that they in a way contributed to those choices. This is interesting as it shows that assault characteristics may help reduce self-blame if survivors focus on the ones that lead to less self-blame (stranger assailant) and better recovery, as opposed to those that do not (pre-assault drinking), known to lead to greater self-blame (Peter-Hagene & Ullman, 2018). However, this also reveals how rape

myths can be applied by survivors making downward social comparisons in a way that makes them feel and/or appear less blameworthy than survivors in other circumstances (Taylor, 1983).

One survivor spoke of taking multiple precautionary strategies including changing the locks on her apartment after the assault and taking extra precautions when meeting men. She had met a man and brought him to her home, where he then violently attacked her. She felt guilty about this because she invited him home and misjudged him, not realizing he might attack her. They had gotten high together and she believes he spiked her drugs in order to assault her, so now she is more careful about who she hangs out with.

When asked about the survivor's changes in risk-taking, her friend SP said:

"Maybe slight changes to a point, I think. I don't think she will do that anymore. I don't think she has."

(SP, FR, F, 66, MR)

The SP was referring to how the survivor used to be a "party girl" and would bring men she met at the bar back to her home. Because the survivor was assaulted by someone she brought back, the SP believed that she would not engage in that behavior anymore.

Some survivors being mentioned being cautious regarding new places and meeting new people and even moving to a safer neighborhood, as this survivor who was raped by a stranger who broke into her apartment mentions:

"He [SP, her son] knows I'm still cautious about certain things in life and about moving to a different place and meeting new people. Well our prime concern was safety, so we wanted to move to an area that was much safer."

(S, F, F, 54, HW)

Other changes survivors made included: taking different jobs because of safety concerns, altering one's routine to avoid being victimized, and avoiding being around men alone.

In one case, a survivor with a history of abusive partner relationships, changed her job (sex work involving exploitative pornography) to a job that was "safer" and took a pay cut because she was concerned about being assaulted again after having been assaulted by men in the context of trying to get an agent to do that work. When speaking about her new job (cleaning homes), she discussed the precautions she would take in her day-to-day work life. Specifically, she described screening every client now before cleaning their home.

"I'm a lot more paranoid than I used to be, like when I go on a cleaning job cause I do cleaning for a living now, you know, something that's a little bit safer, doesn't pay as much, but it's safer. If it's one guy by himself, I'm not very quick to be like, "oh yeah." I screen them, I make sure that they're serious."

(S, FR, F, 25, MR)

These situations of moving to new neighborhoods and job changes away from those involving sexual exploitation may have positive effects in increased feelings of safety for

survivors, but also likely result in economic costs, as sexual assault research has shown occurs (Loya, 2015).

Another survivor with a history of multiple sexual assaults including her mother's boyfriend at 17, an abusive partner, and a friend says she now avoids risky behaviors and situations since the assault. She changed her route when going home, and when she is out at night and says she is scared, she prays to God to protect her from rapists. (S, F, F, 54, B)

"I'm not gonna put myself in harm's way or jeopardy, knowing that I'm taking a risk on my life, I don't take the same bus home no more. If I go home, if I'm uncomfortable, I'll go a different way. I have two ways to go, one way is a long way around, I'll still do that...they [offenders] don't discriminate on no certain area, what they going to do it in, right? They want to rape one of us, so every time I go out, I pray, Lord keep me safe on my journey there, journey back, I ask God to go with me when I'm out there, if it's dark cuz it get dark early."

(S, F, F, 54, B)

After the assault, another survivor with a history of sexual abuse by multiple family members while growing up and a stranger rape at age 18 was too scared to go outside.

"It's been like, 18, 19 years, and to see that picture, it took me back there, and I couldn't leave outside, I couldn't go nowhere. I had a date with my boyfriend at the time, and I couldn't go outside. You have to protect yourself."

(S, F, F, 44, B).

Security measures

Another theme was taking specific security measures to hopefully increase their safety and reduce the risk of being raped again. One woman who had been abducted and raped by a stranger at age 24 discussed securing her home and having a weapon available as well as deciding to live in a security building.

"I got a police lock that I put up against the door. I've got a bat behind my door. I'm in a safe, secured building."

(S, FR, F, 56, B).

Her friend echoed her increased efforts to protect herself saying:

"I must say for the last two years she's been more forthcoming with defending herself."

(SP, FR, F, 58, MR)

Another survivor who had been raped by three strangers in her house spoke about how, since the assault, she appreciates that her building has security and security cameras and that she won't move because she is afraid to live alone and will never live anywhere again that doesn't have security.

"It has damaged me a lot because I live by myself right now, but the apartment building I live in is security 24/7 and we got cameras all around the building. Every side of the building is cameras and there's security watching those cameras 24/7 so

can't nobody come up through the gangway and crawl up to the second-floor window and come in here without them seeing it. I would not take an apartment that doesn't have security. My sister keeps saying, "why don't you just go on and get you a nice little ole ranch house? I don't want to live by myself. Had you noticed I ain't never wanted to live by myself? I lived with you how many years? I lived with her so many years. I told her I'm scared to live by myself. [She said] You scared? I said yeah."

(S, FR, F, 41, B)

Self-defense/protective strategies

Survivors spoke of actively defending themselves, carrying weapons, or other devices for self-protection (N = 8). These forms of active resistance/self-defense are potentially more empowering for women as opposed to simply altering one's behavior and may enhance women's freedom to move about in the world (Delacoste & Newman, 1981; McCaughey, 1997), although survivors may engage in both behavioral restrictions in addition to active self-defense strategies as noted below. One survivor spoke about not taking public transit at night or leaving her house and she spoke about how she is more prepared to defend herself, keeping pepper spray with her and a bat in the house.

"I know to stay outta situations. I don't have no business standing on the corner waitin' on no bus late at night. I'm not askin' for no trouble. I'm not lookin' for no trouble and if trouble comes to me, I'm gunna do the best I can to protect myself. I don't think a woman has to carry a gun, but she should have something. My little brother gave me pepper spray."

(S, FR, F, 56, B)

Another survivor who had been abused by her uncle in childhood and experienced marital rape by her ex-husbands also spoke of keeping a weapon with her and becoming more assertive with men who harassed her as she wanted to be prepared if they attempted to assault her:

"I found myself always confronting men, always in an argument and it got so bad I started carrying a knife. I would go passing by, I took very offensive to, "ooo you look good" [comments], I took very offensive to that."

(S, F, F, 57, B)

Another survivor spoke about increasing her refusal assertiveness in sexual situations with men, which has been found to reduce revictimization risk in past research (Ullman & Vasquez, 2015).

"The second time he tried to do it, he was a bit more assertive, he wanted to, right then and there, so I knew then that I was really uncomfortable around him. I told some people and tried to put him out, call the police on him one time. I just felt really sorry especially when you're in my space and you try to take something that belongs to me and I'm asking you to stop, no means no, no matter what."

(S, F, F, 54, B)

Some survivors also spoke of a new awareness of the risk of being sexually assaulted and realizing that they are vulnerable and have to be careful around other people and that terrible things can happen. One survivor who had been raped by a stranger at 15 and later in life by her violent ex-husband talked about this in reading media coverage of rape.

“It just let me know there’s bad people mix with good people in the world. We don’t know until it happens. It has made me very cautious of being close to people. I keep it in the front of my mind, “this happen to me, you got to be careful.” It’s so many people I done read in the newspaper -- they found women sexually abused with their throats cut, thrown in the river, burned up. I say, lord thank you that didn’t happen to me.”

(S, F, SO, 54, B)

After the assault, this survivor was more cautious about being outside at night and no longer went outside at night without her husband (SP). She also rearranged her work schedule so she only works in the day time and was cautious when meeting new people. This example shows the pervasive effects on women’s lives of being assaulted and resulting restrictions women incorporate into their lives to try to avoid further victimization. She mentioned that it is always at the forefront of her mind, revealing how her view of the world and herself in it has shifted due to being assaulted.

Another survivor spoke about how she always has her guard up now after being raped by an ex-coworker in a blitz-style attack and experiencing other coerced sexual encounters with male acquaintances coming over to her house. For example, she doesn’t put her name on her door anymore so nobody can find her:

“So definitely now I can’t trust it, I can’t trust. ‘Bout the only thing I got is a loud mouth, loud voice when people bothering me. I stayed in buildings where me and my daughter was living and then, maybe I feel safe. If I don’t put a name on my doorbell, shouldn’t nobody ring it, shouldn’t nobody be knocking at my door.”

(S, FR, F, 47, B)

Her daughter tells her that she is unnecessarily paranoid. Her SP (a friend) spoke about how the survivor got a dog and will not speak to the perpetrator when he comes to town.

“She finds out he’s in town, she’ll answer the door, but if he tries to come in, she got a dog. The dog let’s her know if anybody coming in or around.”

(SP, FR, F, 71, B)

Another survivor spoke about always being guarded to avoid being assaulted after an attempted rape by a neighbor at age 7 and a later sexual assault by her girlfriend’s brother at their house in her teens.

“I don’t even have company, you could sit here for hours and nobody’s gonna knock on my door and my bell, I turn it off, just so you won’t bother me.”

(S, FR, F, 58, B)

Perhaps some of the survivor’s behavioral changes were due to her friend SP’s warnings to her as expressed in their interview:

“I told her: there’s bad people out here, you can’t be gullible and think that everybody’s nice, because they’re not. That’s how they get you, they trick you by talking in a nice manner but once they’ve got you, the mask comes off and then you got the wolf, you got the big bad wolf.”

(SP, FR, M, 49, H)

A couple of survivors spoke of getting tasers for self-protection and using them to actively resist possible assailants, as the survivor below describes.

“I [survivor] told her [SP], I said, “if something else happens to me, I’m buying me a Taser” I’m gonna tweak it so it’s about like 100 thousand volts” And, “if a guy comes with me this time, I’m not only going to knock him down with a Taser, I’m gonna walk up to him and go, “ZIP, ZIP, ZIP, ZIP, ZIP,” I’m gonna put it on his testicles and everywhere.” She said, “oh my god, would you really?” I said, “well, you’ve never had anything happen to you like I’ve had, so you don’t understand.”

(S, FR, F, 56, B)

Another survivor spoke about how she realizes it [sexual assault] is not her fault after being assaulted by an acquaintance, a stranger, and suffering past abuse by an ex-fiance. However, she has tried to slow down her life since she was assaulted to avoid revictimization, but also acknowledges the difficulty in avoiding assault because it is out of her control, so now she carries a taser with her everywhere.

“I keep a Taser in my purse so it’s okay. I’ve always had something in my purse, a pen, a comb. I mean something like that, but I realized that stuff might not do anything. I had probably bought this Taser a little over a year ago.”

(S, F, F, 22, B)

Interestingly, her mother (SP) expressed that the survivor was clueless and seemingly unaware of risky situations and continued to be too trusting of people, while thinking she’s a good judge of character, yet not learning from her experiences.

“You’d think that experience would have altered her, she held onto that anger for quite a while, but the anger didn’t alter her behavior...but it seems to be getting better as she’s gotten older.”

(SP, F, F, 62, B)

Altering alcohol/drug consumption or drinking circumstances

One of the most common themes mentioned by multiple participants who were drinking prior to assault was drinking and/or drug use (N = 8). In some cases, both survivors and SP’s indicated avoiding drinking/drugs or being more cautious regarding their use to avoid victimization. Some survivors spoke of no longer drinking at all or sobering up since the alcohol-involved assault occurred.

“I can’t even say what, I have tried to push it so far in the back of my head, but I do know that alcohol was involved with it and to this day I don’t drink.”

(S, F, F, 59, B).

In some cases, both survivors and their SP's spoke of altering their daily behavior to avoid risky situations where they could be assaulted, such engaging in drinking and drugs.

"Both of us don't drink or drug anymore and we constantly go to support groups".

(SP, FR, F, 43, U)

"So I learned a valuable lesson after that. When you go somewhere when you're with people, you don't go nowhere with people that drink, you don't drink yourself, and you always have your own car, so when you're ready to go, you can leave."

(S, FR, F, 56, B)

Since the assault, this survivor is much more cautious about her drinking behaviors. Again, this shows the fine line between blaming and changing behaviors to avoid future assaults. The survivor talks about how she does not drink in public anymore, or if she does, it is very responsibly.

"I don't have to go out in the street to do anything. If I want a bottle of wine, I'm supposed to have it right here. And if I drink too much and fall asleep in this chair, that's fine. I'm in my house, not out in the street. I'm not in harm's way"

(S, FR, F, 56, B).

One survivor who had a past abusive marriage involving ongoing rape and other assaults related to her substance abuse explains that she is not the same person since the assault. She does not do things she used to do and does not talk or think the same way now that she is sober and has a supportive non-abusive boyfriend.

"I would still be doing some of those things and now sober, I stopped. I don't do a lot of things I used to do. I don't talk the same way. I don't think the same way. I'm finding out there's a good person in here (laughs). I just thought I was a mess, I thought I was mean, not caring, but that's not true."

(S, SO, F, 45, B)

A survivor described making day-to-day decisions that protect her from being assaulted again, specifically referencing drinking, where she feels that if she does not drink then she will not be assaulted after being raped in college. She also projects this cautiousness to other women who drink:

"I'm always searching for a way to feel safer and focusing on well if I don't get drunk in an unfamiliar place, this won't happen to me again. So, I'm always trying to like project that on other people. You're not safe if you're not protecting your drink (laughs)."

(S, SO, F, 23, W)

Another survivor was assaulted at age 19 when she had her first alcoholic drink and was violently attacked after passing out by a man she had just met at a summer festival. She is very cautious about who she goes out with and how much she drinks, and who she drinks with. She explains that the assault taught her a lot about how to behave, and now she doesn't do things that will get her assaulted. She refers to this as "being stupid" to use the words of her mom:

“Now I’m extremely vigilant when it comes to who I go out with, where I go, how much I drink, who I drink with, all because of that one incident. And now I’ve learned a lot from being stupid as my mom would call it.”

(S, FR, F, 30, B)

Another survivor talks about sobering up since the assault and is afraid of revictimization. She got raped while she was drunk by a couple of men, and her husband used to have sex with her when they were both drunk which made her feel violated, but now they both have stopped drinking, so it’s better. She prays to God that she isn’t tempted by alcohol or around bad people, as means to avoid assault. She also talks about being scared and wary of people now that she is sober.

“After it happened, I still didn’t stop going out and stuff like that. I wasn’t really scared. But now that I’m sober, yes I’m scared. I wouldn’t want nobody to try to take nothing of mine from me without me wanting to do it too. I don’t want it to happen again and I do use my tools, I pray and ask God “don’t let me even think about that and keep me clean and sober so I’ll never even be around people, cause when you in a situation where everybody can see you out there, they not looking at you like a human, they looking at you like a piece of meat. When people even come up to my car or get too close to me I’m like, “look, what do you want?” Don’t get too close cause I don’t know you. Cause men, they don’t care if you ain’t got no teeth or nothing. They don’t care, all they want is sex.”

(S, F, F, 49, B)

In this case, the survivor’s mother got her daughter and her daughter’s husband to stop drinking/using drugs. Her mother (SP) noted the changes in her behavior saying:

“You know, she’d meet some guys that loved her for her. But she had her husband, she couldn’t, you know what I’m saying? And they was not nice to her. So now she says, she’ll never do that again. She would never put herself out there again like that.”

(SP, F, F, 72, B)

Implicit in this topic, is the subject of blame for drinking prior to assault. In one case, the survivor had been in abusive relationships and had been assaulted by men in the context of drug abuse. She explained when asked by the interviewer to clarify whether she felt she shared any blame:

“Yea shared, like I put myself in that position and you were an asshole (laughs), so there go, I mean you drunk and you leave a bar and you walking home two in the morning, you don’t deserve it, but if it happens you put yourself in that position”

(S, SO, F, 45, U).

Her SP (a male partner) echoed this about her:

“When I met her, she was still drinking heavily. That was something that would cause her to place herself in places with people she didn’t know or otherwise put herself at risk. One of my first things in having a relationship with her was my

effort to help her learn not to do that. That meant not drinking at all which she no longer has been for many years now.”

(SP, SO, M, 55, W).

Another woman said that she was assaulted, and started sleeping with several other individuals and was assaulted again. She attributed this revictimization to – what she perceived to be - risky sexual behavior at the time, but also realized that it wasn’t her fault. She spoke about how she is lucky that worse things did not happen to her when she thinks about all the risks she used to take by going out drinking. After the assault, she reflected on the risks she used to take and was upset with herself. She has since altered her drinking behaviors and no longer brings men home, which helps her feel that she is avoiding risk of assault. As a result, she is cautious about where she lives, the men she sees, and is scared of men now. While this realization and stopping drinking was helpful in the sense that she has not been raped since these changes, she also now fears men, an aftereffect of sexual assault.

Her SP (husband) expressed that he told her, (presumably after the assault):

“You have to stick by your decisions, you chose to stay at home, you’re going to be home now and be a housewife, that’s what you chose, because that’s what you wanted. She goes “yeah, that’s actually what I wanted.” So, go ahead, give it up [going out].”

(SP, SO, M, 32, H)

Protecting others

Other survivors who were parents spoke of protecting children and grandchildren. One survivor with a history of past intimate partner violence expressed projecting her fear of being assaulted again and the changes she made in her life to avoid being assaulted again to her daughter (SP) and also to other women she knows at the homeless shelter:

“What I tell my daughters, I used to always tell them don’t ever accept a ride from a man, a stranger, because once you get into that car he’s gonna do whatever he want to do to you. The girls at the homeless shelter, I would just say, don’t put yourself in those types of positions. Find a better way to do whatever you’re trying to do, however you’re trying to get money. Going on the streets, people have gotten killed from jumping in, getting in the car for guys. And that’s where all mine [assaults] came from is getting in the car.”

(S, F, F, 50, B)

Since the assault, another survivor became more protective of her grandchildren and began teaching them about telling someone about any unwanted touching they may experience.

“It made me more protective with them; with who was around them. It makes me more protective of my grandchildren, whereas if they’re not able to talk, really talk and tell you, you’re looking for signs if somebody’s messing with them or if I think something ain’t right, you know I’ll talk to them. I have a granddaughter who’s very rambunctious. I tell her all the time; tell me if somebody is touching you in your private parts. Tell. Don’t hold it, don’t keep it to yourself, tell me or

somebody. Tell your daddy, tell your mommy, tell aunties, because that way, if somebody does do something, they won't have to hold that pain and guilt in. If somebody's hurting you, you tell. So, it's made me more protective, as far as my grandchildren and my children were concerned."

(S, F, F, 46, B)

This protection of her grandchildren was probably due to the fact that she experienced early child sexual abuse (CSA) herself. Her SP (son) also shared a similar sentiment that the survivor's assault also made the SP (her son) more protective of his own daughter, which shows that one's assault can not only increase a survivor's awareness of the threat to others, but those around her can also become more aware and protective of other women and children.

"I've been around a lot of women that had sexually motivated issues with guys doing stuff. Most of my female friends told me like stuff happened with their little kid, so many women in my circle have been molested, it has made me a little paranoid when it comes to my daughter. I'm thinking, I don't want her alone with nobody, long enough to do something to her cause I don't know how I'm a take that."

(SP, F, M, 30, B)

Another survivor spoke about giving her grandchildren diaries to write in, in the event that they are assaulted and don't want anyone to know, so they can write about it in their diary.

"My grandkids, I over-give [to] them. They grown now, but even my nieces and nephews always give them things. I gave my little nieces diaries, I gave my girls diaries. Because when things happen to you, maybe you might not want to tell anybody, but you need to get that out of you, you know what I mean?"

(S, FR, F, 58, B)

One survivor of CSA by her brother and other relatives spoke about being overprotective of her children after the assault and vigilant with other men:

"With my daughter, I was a little bit too overprotective of her with her brothers to the point where I had to step back, because none of my sons did that. I was super vigilant with the boys that were not abusers."

(S, F, F, 44, H)

Some SPs also recognized this protection that survivors had over their children as a result of the assault. As one SP (friend) of a survivor who was sexually abused by her ex-husbands and date-raped stated:

"I think it causes her to be more over protective of her little boy, which I mean she just like is extremely obsessive compulsive about her little boy."

(SP, F, F, 55, W)

Discussion

The present study of victim-informal supporter dyads examined how survivors' assaults and the impact of assault affect their risk and protective strategies for avoiding future assaults. We sought to answer several research questions related to survivors' post-assault risk avoidance, SP perceptions of this risk avoidance, and whether risk avoidance strategies are influenced by the SP. We found five themes of risk avoidance behavior: day-to-day behavioral changes/restrictions, security measures, self-defense/protective strategies, altering alcohol/drug consumption, and protecting others.

Results reveal that survivors engage in various risk avoidance strategies following sexual assault. Survivors in this sample discussed making, often restrictive, behavioral changes in their day-to-day life. Otherwise said, following victimization, survivors modified their daily activities to include various precautions such as avoiding certain locations, not being out at certain hours, and not walking with headphones in or alone. A couple of survivors even found new homes or employment that they perceived to be safer from perpetrators. Others added additional security measures to their residence. It is not surprising that following assault, it was instinctual for many survivors to make precautionary modifications to their daily routines, as these changes align with the prescriptive norms women are socialized to adhere to in order to avoid being victimized (Bedera & Nordmeyer, 2015). Thus, many survivors in this sample, similar to many women in society, internalize the victim-centered prevention strategies. This suggests some level of rape myth acceptance, as making these behavioral modifications perpetuates the belief that women only get raped in certain contexts and under certain circumstances. Furthermore, this approach continues to place the responsibility for sexual assault on the victim, and encourages defensive prevention strategies. This is not to say that survivors, or women in general, should not take precautions that make them feel safer from being assaulted, though it should be noted that, following assault, women are relying on these prevention strategies to avoid revictimization, and are inadvertently acquiescing to a rape culture that holds victims responsible. Interestingly, some survivors in this sample noted that they were adhering to rape myths by making these behavioral changes and were aware that they were not culpable for their assault. Yet, they still made these changes. We speculate that, following assault, women will take any measures – even measures they know are not guaranteed to prevent revictimization – to make them feel safe from the possibility of future assault. This may also reveal a hint of complexity to the idea of self-blame. Survivors may know they are not to blame for the assault, but may still feel a hint of responsibility to adhere to the societal “rules” of sexual assault prevention. They may also make changes to enhance their perceived control following assault, which is known to predict better recovery (Frazier, 2003). Given the reality that individual-focused protective strategies alone cannot stop rape makes it critical to also develop perpetrator- and societal-focused prevention strategies and norms reflecting a broader ecological approach (Basile, 2015).

While self-defense/martial arts training was only used by 19% in a national study of women regarding precautions taken to avoid victimization generally (Runyan et al., 2007), some women in this study mentioned self-defense training and/or resistance as a strategy they used to avoid sexual assault. While self-defense training may serve to empower survivors

and increase feelings of safety, some self-defense trainings may lure individuals into a false belief that assaults occur in a violent and stranger-perpetrator context, and that they can “fight off” any potential predators. Limiting or stopping drinking alcohol was also commonly mentioned by survivors (and sometimes their SPs), whose drinking in general and/or drinking prior to assault led to their assaults. Again, this supports our contention that women inadvertently acquiesce to the rape culture that blames women for drinking and being assaulted. In another study using these data, we found that it was fairly common for survivors (of both alcohol and non-alcohol related assaults) to alter substance use behaviors post-assault for reasons outside of (or in addition to) risk avoidance (Ullman, Lorenz, Kirkner, & O’Callaghan, under review). Interestingly, Gilmore et al. (2016) reported that protective behavioral strategies were negatively related to sexual assault severity 3 months later in heavy drinking college women, suggesting that such behaviors may reduce rape risk or at least the severity of future alcohol-related assaults.

In this study, we found that following assault, survivors engage in five main strategies of risk avoidance. Survivors discussed employing one or more risk avoidance strategies to, ideally, prevent revictimization. Several survivors in this sample went to extraordinary measures to avoid possible revictimization, including not having relationships with men, not leaving their house, not socializing with certain people or in certain locations or at certain hours. This illustrates the detrimental impact sexual assault has, namely that survivors will essentially cut themselves off from the world to avoid being victimized again and to regain control and feel safe. While we expected that survivors would take measures to avoid being revictimized, it is unclear from our data if survivors who engaged in risk avoidance strategies were still revictimized. Many survivors in this sample experienced multiple sexual assaults, though we were unable to examine temporally whether revictimization occurred after the survivor began to implement these risk avoidance strategies. Making significant changes in one’s life to avoid revictimization, but still being revictimized may have a negative effect on recovery and feelings of safety, beyond that of the original assault. As such, we call on future researchers to qualitatively examine the relationship between risk avoidance, revictimization, and mental health impacts.

We explored SP perceptions of survivor’s risk avoidance strategies, and the role (if any) that SPs play in survivor’s risk avoidance. We did not find any discrepancies in survivor and SP’s accounts of the survivor’s risk management. For the most part, it seemed that SPs either encouraged or supported the survivor’s risk avoidance strategies. We did not observe any instances where SPs were upset by the survivor’s behavioral changes or protective strategies or did not agree with her making these modifications. Overall, SPs seemed to sympathize and understand that the survivor needed to make modifications to her lifestyle to feel safe from possible future victimization. In some instances, the SP thought the survivor should be engaging in more risk avoidance strategies, reinforcing the prescriptive norms women are expected to follow to avoid sexual assault. Regarding alcohol and drug use, in another paper using this same sample, we observed that a few survivors who stopped drinking experienced deterioration in some relationships (see O’Callaghan, Lorenz, Ullman, & Kirkner, under review). More generally, these data showed that some relationships with significant others were strained because it was difficult for survivors to be in public, social settings. So,

possibly relationship changes occur over time for survivors engaging in more drastic risk avoidance strategies (e.g., not leaving the house, avoiding alcohol-related social events).

Limitations

This study used a small, volunteer, convenience sample of dyadic matched pairs that were more positive in their relationships by virtue of still being in relationships and willing to do interviews on this topic. Interviews of SP's were primarily about their relationships with survivors, as they were recruited via survivors, so less focus was on SPs and future dyadic studies should ask SPs more about their own experiences. Only one SP was interviewed for each survivor, but survivors often told multiple sources, so broader social networks warrant future study. The retrospective design meant 12 years on average had elapsed since assaults ($M=12.3$; $SD=11.7$), which may have influenced accounts by survivors and SPs. SP's may have been cautious about what they said about survivors, even though confidentiality was promised. Some pairs may have talked to each other about the study, which may have affected their discussions about sexual assault and relationships. Talking about sexual assault appears to be helpful to survivors with few reporting negative effects of study participation and some positive effects on help-seeking (Kirkner, Relyea, & Ullman, in press), so this may be an opportunity for relationship partners to reflect on this topic and their relationships. Future research is needed in larger samples of survivor-SP dyads and/or their broader informal social networks to better understand how to help them navigate the impact of sexual assault. Despite these limitations, the present study provides a rich understanding of the ways in which risk avoidance and self-protection occur following sexual assault in the context of relationships over time by examining substance use, recovery, and informal relationships from a dyadic perspective.

Implications

This study has several implications for clinical work with survivors, their informal SP's, prevention of sexual assault, and future research. First, clinicians need to explore survivors' experiences of continued fear and behavioral changes including restricting their activities to help them navigate their post-assault recovery and empower them to live as safely and freely as possible. Countering rape myths and any survivor self-blame and not giving advice on self-protection is likely to be wisest or following the survivor's lead in talking about these issues and reinforcing whatever adaptive strategies they are taking and helping them to make changes they wish to make but may be struggling with. Prevention program developers should address the contextual realities of women's lives (e.g., dangerous neighborhoods and varied situational and relational contexts of violence), including the behavioral and security restrictions they are encouraged and feel compelled to enact to protect themselves from perpetrators in a society where sexual assault is still prevalent and protections are inadequate. Targeting perpetrators in interventions, bystander intervention programs in risky contexts, and social norms marketing campaigns regarding alcohol use and rape myths are needed, as well as education and training in resistance and self-defense training for interested women, as it has been shown to reduce victimization risk, severity of assaults if attacked, and to have positive psychological effects. Additionally, sexual assault prevention training should discuss strategies for potential informal SP's to support survivor's risk avoidance strategies throughout the recovery process while also countering any particularly

restrictive avoidance strategy that could be detrimental to the survivor. Based on commentary by SPs, we also recommend that prevention strategies and interventions focusing on the quality of support provided by SPs should assist SPs in helping survivors manage their risk avoidance strategies without using victim-blaming attitudes or terminology. Because only informal SP's assessments of survivors' risk avoidance were studied here, future research could also look at how formal SPs assess survivor's risk avoidance strategies post-assault, and how that may impact the survivor (e.g. particularly in a therapist-client setting). Finally, broader efforts to address gender inequality in society, acceptance of interpersonal violence, and violence more generally are necessary macro-level changes needed to reduce sexual assault prevalence.

Acknowledgments

This study was supported by a grant from the National Institute on Alcohol Abuse and Alcoholism (AA #17429) to Sarah Ullman, Principal Investigator. We thank Mark Relyea, Rannveig Sigurvinsdottir, Amanda Vasquez, Liana Peter-Hagene, Meghna Bhat, Cynthia Najdowski, Saloni Shah, Susan Zimmerman, Rene Bayley, Farnaz Mohammad-Ali, Shana Dubinsky, Diana Acosta, Brittany Tolar, and Gabriela Lopez for assistance with data collection.

References

- Basile KC (2015). A comprehensive approach to sexual violence prevention. *New England Journal of Medicine*, 372, 2350–2352. [PubMed: 26061841]
- Bedera N, & Nordmeyer K (2015). "Never go out alone": An analysis of college rape prevention tips. *Sexuality and Culture*, 19, 533–542.
- Braun V & Clarke V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.
- Brecklin LR (2008). Evaluation outcomes of self-defense training for women: A review. *Aggression and Violent Behavior*, 13, 60–76.
- Brownmiller S (1975). *Against our will: Men, women, and rape*. New York: Simon and Schuster.
- Campbell R, Dworkin E, & Cabral G (2009). An ecological model of the impact of sexual assault on women's mental health. *Trauma, Violence, & Abuse*, 10, 225–246.
- Charmaz K (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.
- Culp-Ressler T (2014, 6 10). All of the things women are supposed to do to prevent rape. Think Progress. Retrieved from <https://thinkprogress.org/all-of-the-things-women-are-supposed-to-do-to-prevent-rape-b9365bf520c1/>
- Davis R & Brickman E (1996). Supportive and unsupportive aspects of the behavior of others toward victims of sexual and nonsexual assault. *Journal of Interpersonal Violence*, 11, 250–262.
- Davis RC, Taylor B, & Bench S (1995). Impact of sexual and nonsexual assault on secondary victims. *Violence and Victims*, 10, 73–84. [PubMed: 8555121]
- Delacoste F, & Newman F (1981). *Fight back!: feminist resistance to male violence* (1st ed). Minneapolis, Minn: Cleis Press.
- Eisikovits Z & Koren C (2010). Approaches to and outcomes of dyadic interview analysis. *Qualitative Health Research*, 20, 1642–1655. [PubMed: 20663940]
- Ferraro KF (1996). Women's fear of victimization: Shadow of sexual assault? *Social Forces* 75, 667–690.
- Frazier PA (2003). Perceived control and distress following sexual assault: A longitudinal test of a new model. *Journal of Personality and Social Psychology*, 84, 1257–1269. [PubMed: 12793588]
- Gidycz CA, Rich CL, Orchowski LM, King C, & Miller A (2006). The evaluation of a sexual assault self-defense and risk-reduction program for college women: A prospective study. *Psychology of Women Quarterly*. 30, 173–186.

- Gilmore A, Maples-Keller J, Pinsky H, Shephard M, Lewis M, & George W (2016). Is the use of protective behavioral strategies associated with college sexual assault victimization? A prospective examination. *Journal of Interpersonal Violence*. Advance online publication.
- Gordon M, & Riger S (1989). *The female fear: The social cost of rape*. New York: Free Press.
- Johnson CA & Hawbaker K (2018, 1 31). #MeToo: A timeline of events. *Chicago Tribune*. Retrieved from <http://www.chicagotribune.com/lifestyles/ct-me-too-timeline-20171208-htlmlstory.html>
- Kramer T, & Green B (1991). Posttraumatic stress disorder as an early response to sexual assault. *Journal of Interpersonal Violence*, 6, 160–173.
- Lane J, & Gover A, & Dahod S (2009). The impact of perceived risk and fear on sexual assault. *Violence and Victims*, 24, 172–192. [PubMed: 19459398]
- Livingston JA, Testa M, & VanZile-Tamsen C (2007). The reciprocal relationship between sexual victimization and sexual assertiveness. *Violence Against Women*, 13, 1–16.
- Lorenz K, Ullman SE, Kirkner A, Mandala R, Vasquez AL, & Sigurvinsdottir R (2017). Social reactions to sexual assault disclosure: A qualitative study of informal support dyads. *Violence Against Women*. Advance online publication.
- Loya R (2015). Rape as an economic crime: The impact of sexual violence on survivors' employment and economic well-being. *Journal of Interpersonal Violence*, 30, 2793–2813. [PubMed: 25381269]
- MacKinnon CA (2018, 2 4). #MeToo has done what the law could not. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/02/04/opinion/metoo-law-legal-system.html>
- McCaughey M (1997). *Real Knockouts: The physical feminism of women's self-defense*. New York: New York University Press.
- Meyer C, & Taylor S (1986). Adjustment to rape. *Journal of Personality & Social Psychology*, 50, 108–115.
- Mezey GC, & Taylor PJ (1988). Psychological reactions of women who have been raped: A descriptive and comparative study. *British Journal of Psychiatry*, 153, 330–339.
- O'Callaghan E, Lorenz K, Ullman S, & Kirkner A Dyadic study of effects of sexual assault disclosure on survivors' close relationships. Manuscript submitted for publication.
- Orchowski LM Gidycz CA, & Raffle H (2008). Evaluation of a sexual assault risk reduction and self-defense program: A prospective analysis of a revised protocol. *Psychology of Women Quarterly*, 32, 204–218.
- Patton MQ (2009). Designing qualitative studies. *Qualitative Research and Evaluation Methods*, 3, 230–246.
- Peter-Hagene LP & Ullman SE (2018). Longitudinal effects of sexual assault victims' drinking and self-blame on PTSD. *Journal of Interpersonal Violence*, 33, 83–93.
- Pinciotti C, & Orcutt H (2017). Rape Aggression Defense: Unique self-efficacy benefits for survivors of sexual trauma. *Journal of Interpersonal Violence*. Advance online publication.
- Post L, Mezey N, Maxwell C, & Novales Wilbert W (2002). The rape tax: Tangible and intangible costs of sexual violence. *Journal of Interpersonal Violence*, 17, 773–782.
- Rothbaum B., Foa E, Riggs D, Murdock T, & Walsh W (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress*, 5, 455–475.
- Runyan C, Casteel C, Moracco K, & Coyne-Beasley T (2007). US women's choices of strategies to protect themselves from violence. *Injury Prevention*, 13, 270–275. [PubMed: 17686939]
- Saldana J (2009). An introduction to codes and coding. *The Coding Manual for Qualitative Researchers*, 1–31.
- Saldana J (2012). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Senn C, Eliasziw M, Barata P, Thurston W, Newby-Clark I, Radtke H, & Hobden K (2015). Efficacy of a sexual assault resistance program for university women. *New England Journal of Medicine*, 372, 2326–2335. [PubMed: 26061837]
- Strategies to help avoid sexual assault and rape (2018). Nicholls State University. Retrieved from <https://www.nicholls.edu/wrso/sexual-assault/safety-tips/>
- Taylor SE (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, 38, 1161–1173.

- Ullman SE, Lorenz K, Kirkner A, & O'Callaghan. Post-assault substance use and coping: A qualitative study of sexual assault survivors and informal support providers. Manuscript submitted for publication.
- Ullman SE (2007). A 10-year update on "Review and critique of empirical studies of rape avoidance." *Criminal Justice and Behavior*, 34, 411–429.
- Ullman SE, & Vasquez AL (2015). Mediators of sexual revictimization risk in adult sexual assault victims. *Journal of Child Sexual Abuse*, 24, 300–314. [PubMed: 25942287]