Spring 5-2021

The Aftermath of Sexual Assault: Creating the "I Am More Than My Experience" Workbook

Isabella Chung
chungi1@unlv.nevada.edu

THE AFTERMATH OF SEXUAL ASSAULT:

CREATING THE "I AM MORE THAN MY EXPERIENCE" WORKBOOK

By

Isabella Chung

Honors Thesis submitted in partial fulfillment

for the designation of Research and Creative Honors

Departments of Criminal Justice and Psychology

Dr. M. Alexis Kennedy

Dr. Lianne Barnes

Dr. Lisa Menegatos

Greenspun College of Urban Affairs and College of Liberal Arts

University of Nevada, Las Vegas

May, 2021

Abstract

The following thesis includes a literature review of the immediate and long-term effects of sexual assault on victims in regards to their physical, mental, and emotional health and romantic relationships. Being that typical responses immediately after an assault are fear, disbelief, and activation of the sympathetic nervous system, it is to no surprise that long term issues of depression, anxiety, and Posttraumatic Stress Disorder (PTSD) often arise as well. Thus, a workbook was created with the intention of educating readers about sexual assault and helping victims/survivors to heal from the trauma with the incorporation of writing prompts, therapeutic artwork, self-diagnostic questionnaires, and resources. Ultimately the workbook will be published in English and Spanish, online as a PDF, and distributed to shelters, clinics, and hospitals across Southern Nevada. Note that the workbook is not included in this draft due to copyright restrictions, but will be available for reading after publication.

Acknowledgements

First, I would like to thank my thesis committee. You three ladies have not only taught me so much about my topic, but you have believed in me. You have shown me all the research and work to be done for sexual assault victims/survivors and you have ignited within me a passion for sexual assault reform. I never thought that I would complete a project like this one, and I never knew how important this would become for me. As I reflect now, I know it would not have been possible without my gracious leaders.

I would also like to recognize my best friend and roommate, Dayanah Towner. You have been my cheerleader throughout this entire process. You have seen me stressed, tired, discouraged; you were there when I wanted to give up. But throughout this entire process, you have been patient with me, you have supported me, you've filled my ears with encouragement and my stomach with delicious food. Thank you for everything. I treasure our friendship so much.

Next, I acknowledge my parents and siblings. From a young age, my parents have sacrificed everything to support me. You both are my heroes, my role models, the best parents I could imagine. To my siblings Gavin and Aurora, you two have my heart forever. I will never forget anything each of you has done for me. I love you all more than you know.

Last, I would like to give thanks to God. Being that I am a sexual assault victim *and* survivor myself, this was naturally a challenging project--emotionally, mentally, academically. Thank you to God for giving me the strength to begin this lifelong journey of healing. And thank you to my angels Ashu and Grampie for staying by my side throughout it all. The best is yet to come.

The Effects of Sexual Assault on Victims

Sexual assault is an extensive historical and present-day issue, indiscriminate of an individual's age, culture, biological sex, or sexual orientation. According to the *Rape, Abuse & Incest National Network,* sexual assault is an overarching term that describes completed or attempted sexual behaviors without the consent of the recipient person (Sexual Assault, 2020). While there are endless forms of sexual assault, all involve a complex dynamic of power sought by the perpetrator and injury experienced by the victim. The overarching goal of the proposed project is to develop a workbook designed to support victim recovery. The workbook may also help to raise awareness about the frequency of sexual assault in society.

A thorough comprehension of rape, sexual assault, and consent are crucial to the discussion of sexual assault and its influences on victims. Sexual assault is a broad term used to describe "sexual contact or behavior that occurs without explicit consent of the victim" (Rape, Abuse & Incest National Network, 2020, par. 1). Examples of sexual assault include sexual touching and forcing a victim to fulfill sexual acts, such as oral sex or touching (Rape, Abuse & Incest National Network, 2020). One form of sexual assault is rape, which entails penetration by a sex organ of the vagina, anus, or oral cavity, no matter how slight, without the consent of the recipient person (State of Nevada Department of Public Safety, 2017). While rape and sexual assault are used interchangeably, they are not always synonymous. Still, both rape and sexual assault can be traumatic and take place against the will of the victim.

The primary differentiating factor between desired sexual activity and sexual assault is the consent of the recipient party. There are three facets to consent: affirmative consent, freely given consent, and capacity to consent (Legal Role of Consent, 2020). Affirmation refers to the recipient's actions or words regarding the sexual acts (Legal Role of Consent, 2020). Second,

freely given consent questions whether the recipient was coerced via fraud, violence, or threat, and if their consent was based on one of these coercions (Legal Role of Consent, 2020). It is not uncommon for perpetrators to use physical pressure, emotional coercion, or psychological manipulation to force an individual into sexual activity (Sexual Assault, 2020). Last, capacity to consent determines if the recipient had the legal ability to consent (Legal Role of Consent, 2020). Legal ability includes many factors, such as the individual's age, developmental or physical disability status, intoxication status, and consciousness (Legal Role of Consent, 2020). In addition, legal ability accounts for the relationship between the perpetrator and the victim, and the vulnerability of the victim. The perpetrator's position of power and the vulnerability of the victim—such as if the victim was imprisoned, elderly or in general, dependent on others for care—are factors that influence the individual's capacity to consent (Legal Role of Consent, 2020).

Sexual assault is considered a serious crime, yet there continues to be a consistently high level of sexual assault incidences occuring in societies around the world. In the United States, there were a total of 734,630 reported rapes in 2018 for a population of 275,325,390 persons ages 12 or older (U.S. Department of Justice, 2020). Specifically, in Nevada, there were 1,865 reported rapes and attempted rapes in 2017, which equates to one rape every 4 hours, 41 minutes, and 49 seconds (State of Nevada Department of Public Safety, 2017). Note that a majority of rape cases are not reported to law enforcement for a plethora of reasons, including but not limited to: fear of retaliation; belief that law enforcement would or could not do anything to help; fear of insufficient evidence; fear of familial reactions (The Criminal Justice System: Statistics, 2020). As a result, an estimated three of four rapes go unreported (The Criminal Justice System: Statistics, 2020). To try to increase the participation of victims, the proposed workbook will help

survivors navigate the crime system either through a flowchart or a step-by-step guide.

Literature Review

People in leadership positions have been struggling for decades on how to address the problem of sexual assault. One area of focus at the governmental and campus level has been on college campuses. Other groups that experience statistically significant higher rates of victimization are LBTQ+ (Lesbian, Gay, Bisexual, Transgender, Queer) and disabled populations. The intersectionality of these groups requires a brief consideration of their prevalence of sexual assault. This paper will also provide a brief review of the negative impacts of sexual assault, including physical and psychological harm, as well as emotional and relational harm. Both areas show patterns of acute and chronic issues in sexual assault victims. After a discussion on the impacts of sexual assault, victim recovery will be reviewed, highlighting some current resources and therapeutic approaches.

Female College Student Populations

One way to understand sexual assault is to look at who are most vulnerable to becoming victims. Young people ages 18-34 years-old make up more than half of the reported sexual assault victim population (Victims of Sexual Violence: Statistics, 2020). Moreover, women are especially at risk. In fact, 9 out of 10 rape victims are female, and women ages 18-24 are four times more likely than the general population to be sexually assaulted (Victims of Sexual Violence: Statistics, 2020). This does not take away the validity of the male survivor experience, but reminds us of the problem at hand: sexual assault is happening at disturbing rates throughout the world disproportionately to women.

For both men and women, the incidence of rape is heightened on college campuses (Victims of Sexual Violence: Statistics, 2020). While male college students ages 18-24 are five

times more likely than non-students of the same age to be raped or sexually assaulted, female college students are three times more likely than non-student females of the same age to be raped or sexually assaulted (Victims of Sexual Assault Violence: Statistics, 2020). Thus, it becomes apparent that collegiate populations experience an increased vulnerability to perpetrators.

Researchers are attempting to explain the reasons behind spikes of sexual assault on college campuses. One theory proposed by Schwartz and DeKeseredy (1997) in particular is helpful to this discussion. Schwartz and DeKeserdy (1997) proposed a male peer support model which reasoned that males often turn to their close peer groups for support when experiencing romantic relationship problems characteristic of the college student population. Sexual assault becomes relevant to the discussion when members of college peer groups, such as fraternities, athletic teams, or dorm halls, maintain hostile beliefs towards women. The support of sexist, antifeminism ideals "may provide men with the confidence and encouragement that dealing with women in abusive ways is socially appropriate" (Franklin, Bouffard, Pratt, 2012, p. 1459). From this, Schwartz and DeKeseredy (1997) concluded that males are more likely to commit sexual violence when their actions feel supported by male peers.

Other research from Gottfredson and Hirschi (1990) showed correlations between low self-control and criminality. They explained that while everyone is capable of criminality, individuals with low self-control are more likely to commit crime and misbehavior. Low self-control is of relevance and may be problematic to college campuses since students of this population are predominantly young adults, and the prefrontal cortex, an area of the brain that is responsible for decision making, is not yet fully developed (Johnson, Blum, & Giedd, 2009). Interestingly, individuals with low self-control also tended to gravitate towards other like-minded individuals who are involved in crime or experience low self-control (Gottfredson & Hirschi,

1990). This finding was arguably an allusion to later conclusions of Schwartz and DeKeseredy (1997) who found that sexual violence is increased in male peer groups.

The findings of both Schwartz and DeKeseredy (1997) and Gottfredson and Hirschi (1990) have been supported in subsequent studies over the years. Their research was repeated later by Franklin, Bouffard, and Pratt (2012) who attempted to explain the high quantity of women rape victims on college campuses by examining factors that were likely predictors of who would be sexual assault perpetrators. The authors tested Schwartz and DeKeseredy's (1997) males peer support model as well as Gottfredson and Hirschi's (1990) theory of crime. Given the idea that all-male peer groups can become toxic environments with sexually abusive narratives, and that individuals with low self-control are oftentimes associated with crime, Franklin et al. (2012) proposed the following hypotheses: first, that inclusion in an all-male peer group will predict abusive attitudes and behaviors towards women; and second, that abusive attitudes and behaviors towards women will predict sexual assault. Similarly, the authors hypothesized that all-male peer groups will have little significance in regard to sexual assault if self-control levels are normal or high.

The study consisted of surveys administered to male undergraduate students at a large university (Franklin et al., 2012). The sample contained a total of 255 male respondents, and the findings of the study revealed that fraternity members were not only taught by their peers about abrasive tactics used to gain access to sex, but they also reported feeling pressured by their peers to have sex unlike nonmember participants. This study underlines the concept that low-self control and association with all-male peer groups are predictors of college sexual assault.

In addition to the idea that college campuses are hotspots for sexual assault because of the presence of sports team and fraternity peer groups, alcohol abuse is also a major precursor to

sexual assault. By extension, researchers estimate that over 50% of acquaintance and date rape incidents involve alcohol use by either or both parties (Benson, Gohn, & Gross, 2007). Moreover, recent surveys indicate that over 40% of college students report moderate alcohol consumption (Benson et al., 2007). Hence, the relationship between alcohol and sexual assault is undeniable, and there are various suggestions to explain this link: first, "alcohol use by a woman may serve as a cue to an aggressive man, signaling that a woman is willing to engage in sexual activity," and second, "friendly behavior by a woman may be perceived as sexual interest if the man or woman is drinking" (Benson et al., 2007, p. 341-342). Other theories blame the physiological defects caused by alcohol, such as decreased cognitive processing or misinterpretation of consent, for sexual assault behavior.

To measure the relationship between the alcohol and sexual assault in college populations, Benson et al. (2007) assessed 350 undergraduate women across the United States. Their findings were consistent with the prediction that sexual assault was related to alcohol use and number of lifetime sexual partners. Using statistical analysis, they found significant correlations between alcohol use and sex drive as well as between level of alcohol use and vulnerability to sexual coercion (Benson et al., 2007). Participants of this study also reported a higher percentage of sexual assault while intoxicated--78.7% of participants reported assault compared to 50% of participants in previous studies. Overall, the focus on college students in this study supports the consensus that while sexual assault is prevalent across genders and age groups, it is a particularly salient problem for college females.

LGBTQ+ Populations

Research consistently reveals abnormally high victimization rates for individuals of the LGBTQ+ community. For example, in 2010, the Centers for Disease Control and Prevention

conducted the National Intimate Partner and Sexual Violence Survey, revealing the high levels of sexual violence, intimate partner violence, and stalking experienced amongst lesbian, gay, and bisexual populations (U.S. Department of Health and Human Services, 2016). When compared to levels experienced by women who self-identify as heterosexual or lesbian, the CDC found that bisexual women are targeted at disproportionate levels. By extension, reports show that nearly one in two bisexual women have been raped while one in six heterosexual women have been raped in their lifetime. Gay men also experience sexual assault at rates higher than those experienced by their heterosexual counterparts. For example, 40% of gay men and about 50% of bisexual men have experienced sexual violence in their lifetime (U.S. Department of Health and Human Services, 2016). Unfortunately, additional stigmas regarding fear of law enforcement, retaliation by the perpetrator, and issues of maintaining masculinity exist for gay, lesbian, and bisexual populations (Javaid, 2017). These factors perpetuate substantial issues of underreporting and lack of treatment (Javaid, 2017).

Disabled Populations

Differently abled individuals are another one of the highest risk populations for sexual assault. Particularly, people with intellectual disabilities are targeted up to four times more than the general population (McGilloway, Smith, & Galbin, 2018). We can also assume that the outlined statistics for disabled populations, like those for females and LGBTQ+ groups, are lower than the real rates since there is the constant problem of underreporting sexual victimization. In a systematic review by McGilloway et al. (2018), thirteen studies were assessed to outline the most common barriers faced by individuals with intellectual disabilities when reporting sexual assault. The first identified barrier was fear. By extension, individuals likely do not report their victimization in fear of being attacked again, in fear of not being believed by

their confidant, or in fear that they will be blamed for the assault (McGilloway et al., 2018).

Another major barrier was communication: it is oftentimes hard for individuals with intellectual disabilities to verbalize the assault. When individuals report their assault, it is not unusual for them and their person of trust to feel frustrated by the communication difficulty, which can discourage the victim from seeking additional help (McGilloway et al., 2018). A final major barrier to reporting was sexual knowledge and understanding in the victim. Since individuals with intellectual disabilities suffer from decreased cognitive functioning, they may not know how to protect themselves whether this is physically or emotionally. All of these barriers, in conjunction with the fact that there are decreased available resources for individuals with intellectual disability, make this population much more vulnerable to sexual assault.

In conclusion, even if we struggle to understand the true rates of sexual assault, it is undeniable that sexual assault is an unfortunately common victimization experienced. Being a victim of sexual violence changes an individual's life, and the effects of this trauma can last a lifetime. Thus, targeted resources for members of the LGBTQ+ and disabled communities will be necessary to highlight in the workbook, as it will primarily focus on females ages 18-24.

Physical Impacts: Immediate and Short-Term

There are many different ways in which a victim can be affected by their rape experience, including physically, psychologically, and in their relationships. Throughout the course of a sexual assault, physiological responses such as muscle tension and increased heart rate are predictable, and changes in the brain can be observed (Mason & Lodrick, 2013). First, the sympathetic nervous system is activated. This includes our 'fight, flight, or freeze' response which can be further divided into conscious cognitive behavior and unconscious physiological behavior (LeDoux & Pine, 2016). While the victim may seem disconnected from reality, their

sympathetic nervous system is working at the unconscious physiological level. Hence, the individual is actively processing the trauma deep within the brain. The freeze term refers to an additional facet of the sexual assault response being that it is a common behavior in victims (LeDoux & Pine, 2016).

Furthermore, sexual assault is interpreted by the body as a life-threatening circumstance (LeDoux & Pine, 2016). As a result, received sensory information does not first travel to the cerebral cortex of the brain for processing; rather, this information goes directly to the amygdala (LeDoux & Pine, 2016). The amygdala is a small structure of nuclei located beneath the temporal lobe of the brain. This structure is responsible for emotional response; establishment of fear; and recognition of danger and threat. After denoting the danger at hand, the amygdala will send its signal to the hypothalamus, which forwards signals to the pituitary gland and adrenal glands of the hypothalamic-pituitary-adrenal axis (Haskell & Randall, 2019). The adrenal glands will then release a surge of hormones, including adrenaline, cortisol, and several opiates (Lanius, Brand, Vermetten, Frewen, & Spiegel, 2012; Haskell & Randall, 2019).

The role of adrenaline, a catecholamine hormone, is to support and heighten the fight-or-flight response; it aids in constricting blood vessels and increasing heart rate, pumping blood throughout the body (Haskell & Randall, 2019). In addition, a corticosteroid known as cortisol is released to pause unnecessary processes that are happening elsewhere in the body such as digestion. Essentially, cortisol permits the body and brain to pour all resources and energy into finding safety and eliminating the threat. The third group of hormones that is released is the opiates. These hormones act as natural morphine to the body, numbing pain as necessary and suppressing the emotional response (Lanius et al., 2012). Whilst all of these hormones are helpful for acting in a time of immediate danger, they also impair the victim's ability to think

rationally (Lanius et al., 2012).

Notably, during a traumatic event the prefrontal cortex is weakened and distorted (Haskell & Randall, 2019). This area of the brain dictates planning, memory, reason, logic, and problem solving. Hence, the influx of adrenaline and cortisol enfeebles the body's executive functioning (Haskell & Randall, 2019). Along with the loss of prefrontal cortex functioning, the victim's hippocampus functioning declines (Mason & Lodrick, 2013). The hippocampus is an area of the brain that is responsible for learning and memory storage, as well as organization of spatial and temporal information. Because trauma disrupts memory consolidation, the process by which short-term memories are converted into long-term memories,the individual who is being assaulted may not remember the setting or time of the assault accurately (Mason & Lodrick, 2013).

The victim's memory may also be fragmented or concentrated around minute details whilst seemingly more significant facts such as the perpetrator's description or the location of the rape are unknown (Mason & Lodrick, 2013). This is a phenomenon known as distorted prefrontal cortex activity where attention becomes hyperfocused on negligible details. In the end, the faltering of the hippocampus makes the police report and prosecution process even more difficult for the victim to see victory. What's more is that the victim may experience tonic immobility, the 'freeze' aspect of the fight, flight, or freeze response. During tonic immobility, the immense amount of fear in the victim causes involuntary paralysis and the victim typically cannot speak regardless of full consciousness (Haskell & Randall, 2019). One study by Moller, Songergaard, and Ome (2017) found that during the rape, 70% of 298 females reported significant tonic immobility while 48% reported extreme tonic immobility. Moreover, the authors concluded that tonic immobility at the time of the rape was a significant predictor of

PTSD and depression six months after the rape. It is worth noting that tonic immobility often leads to self-blaming in the victim, but the reality is that most individuals cannot accurately predict how they will react to rape unless they are forced into this predicament.

Physical Impact: Long-Term

From the time a rape begins, the victim's life is forever altered. Not only is their reality faltered, but on a more physiological level, rape changes a victim's brain performance. These changes begin with the trauma. Sexual assault, while common, is a trauma that can trigger long standing conditions. A trauma, which is defined as any extremely stressful situation in which the individual feels they cannot cope or that have lost control of the situation, can lead to chronic mental health conditions that change the functioning of the brain (Onderko, 2020). Experiencing a trauma can result in developing Post-Traumatic Stress Disorder (PTSD), a mental illness that affects roughly 8% of Americans (Bremner, 2006). In contrast, the lifetime prevalence of PTSD for sexual assault victims is around 50%, and rates of PTSD within two weeks of the assault can be as high as 94% (Chivers-Wilson, 2006). Common symptoms of PTSD are anxiety, flashbacks, nightmares, hyperarousal or distress about the trauma (Chivers-Wilson, 2006).

Prior to understanding the impact of trauma on the brain, it is crucial to understand the brain from a baseline standpoint. Research demonstrates that brain development can be divided into segments associated with the characteristic stages of life. Despite the fact that most brain development occurs before birth, brain development also progresses after birth and continues to evolve throughout time (Bremner, 2006). Brain development is pertinent to trauma since recent data suggests that areas of the brain are affected differently per each stage of development (Bremner, 2006). By extension, several studies detail the brain changes associated with individuals with PTSD who were sexually abused during their childhood.

One study done by Bremner, Vermetten, Schmahl, Vaccarino, Vythilingam, Afzal, Grillon, and Charney (2005) examined the neural correlates in patients with post-traumatic stress disorder. The study was inspired by animal models which demonstrate the long-term effects on areas of the brain including the hippocampus, amygdala, cingulate, and prefrontal cortex as a consequence of stress in early life. Animal studies revealed that lesions in the medial prefrontal cortex resulted in weakened fear responses in that animals with the characteristic brain deficits were unable to terminate fear responses after fear conditioning trials. In relation to human subjects, studies show that lesions in the medial prefrontal cortex are associated with abnormal emotional expression and inability to empathize in social situations.

Furthermore, the amygdala brain structure is precisely related to the stress response (Bremner et al., 2005). Past studies with electrical stimulation of the brain showed connections between the amygdala and "peripheral signs of autonomic hyperactivity, increased catecholamine turnover, and fear-related behaviors... while lesions of the amygdala in humans result in an impairment in fear conditioning" (Bremner et al., 2005, p. 2). If amygdala lesions reduce fear responses, it follows that increased amygdala activation may correlate with hypersensitivity to fear conditioning.

More recent studies have taken on the task of appointing neuroimaging to identify specific neural correlates of fear and emotion. Neural correlates in this context refer to the brain activity that is required to produce fear. In their study, Bremner et al. (2005) hypothesized that women with PTSD arising from childhood sexual abuse would show different brain patterns, including increased amygdala function during fear acquisition and decreased function or complete failure of activation of the medial prefrontal cortex during fear extinction. For clarification purposes, acquisition is defined as the beginning stages of learning or classical

conditioning when a response is established. In contrast, extinction refers to the decline and eventual disappearance of a conditioned response to a stimulus. A total of 19 female healthy participants partook in the study; eight had PTSD related to severe early childhood sexual abuse, and eleven did not have a history of childhood sexual abuse or PTSD. The experiment consisted of biweekly positron emission tomographic (PET) imaging of cerebral blood flow and psychophysiology recordings of heart rate and skin conductance (Bremner et al., 2005).

The authors found that participants with PTSD from childhood sexual assault activated both sides of the amygdala during fear acquisition whereas females without PTSD activated only a portion of the left amygdala. In addition, the PTSD group showed varying levels of activation and deactivation in other areas of the brain in correlation to fear acquisition. Areas that were increasingly activated include the bilateral superior temporal gyrus, cerebellum, bilateral inferior frontal gyrus, and posterior cingulate. Areas with deceased function in response to fear acquisition include the medial prefrontal cortex, visual association cortex, medial temporal lobe, and inferior parietal lobule (Bremner et al., 2005). This data broadcasts a direct contrast between the group with PTSD related to childhood sexual abuse and the control group.

What significance does the discussed experiment hold regarding long term physical impacts of sexual assault? To begin, this study provides support to the idea that the amygdala is activated more during fear acquisition in individuals with sexual assault-related PTSD than in individuals without PTSD. Other structures in the brain are affected as well, like the medial prefrontal cortex, visual association cortex, medial temporal cortex, inferior parietal lobule, posterior cingulate, and inferior frontal gyrus (Bremner et al., 2005). All of these structures play a role in memory function which is congruent with the current conclusion that various brain networks, such as memory, are impaired as a result of PTSD.

Individuals with PTSD also displayed decreased blood flow in the medial prefrontal cortex and anterior cingulate during the fear extinction phase (Bremner et al., 2005). Essentially, there are connections between the medial prefrontal cortex and the amygdala which allow for control of the amygdala during the fear response. There is an inverse relationship between the amygdala and the medial prefrontal cortex: decreased blood flow to the medial prefrontal cortex correlates to increased blood flow to the amygdala. When there is decreased blood flow to the medial prefrontal cortex, the communication with the amygdala is dampened. As a result, the amygdala is not inhibited by the medial prefrontal cortex. Thus, individuals cannot stop, or rather it is difficult for them to stop, feelings of fear after exposure to a harmful stimulus. This turns out to be one of the most challenging aspects of PTSD as the victim's brain is affected almost permanently, and even attempts to act normal are conquered by defensive physiological instincts.

Another study that is relevant to the discussion of the long-term physical impacts of sexual assault details the resting cerebral glucose metabolism and perfusion patterns in women with sexual assault-related PTSD (Kim, S., Chung, Kim, B., Lee, Yoon, & An, 2011). For this study, Kim et al. (2011) hypothesized that decreases in both regional cerebral blood flow and glucose metabolism in the resting brain are deficient in patients with acute, sexual assault-related PTSD. Note that the distinguishing factor between acute and chronic PTSD is time: acute PTSD occurs within the first three months following the rape whereas chronic PTSD continues after the initial three months.

In their study, Kim et al. (2011) analyzed twelve female subjects with sexual assault-related PTSD. Two imaging tests were used throughout the course of the study: brain perfusion single photon emission computed tomography and F-fluorodeoxyglucose positron emission tomography. The PTSD group demonstrated significantly lower cerebral blood perfusion than

the control group in the left hippocampus and left basal ganglia (Kim et al., 2011). The PTSD group also presented lower cerebral glucose metabolic activity in the left hippocampus, left superior temporal, and precentral gyri than the control group. In contrast, patients with PTSD showed a spike in glucose metabolism in the cerebellum, suggesting that the increased metabolic activity of the cerebellum may be the cause of hyperarousal behaviors seen in PTSD patients, such as increased heart rate variation, exaggerated startle response, and sleep abnormalities (Kim et al., 2011). The analysis of both cerebral perfusion and glucose metabolism observations in a population that has been freshly diagnosed with PTSD provides striking results that allude to the complexity of trauma and its long-term effects on the victim.

In addition to the problems related to the hyperarousal aspects of PTSD, many sexual assault victims with this disorder experience cognitive difficulties. Jenkins, Langlais, Delis, and Cohen (1998) further demonstrate some of the many long-term physical impacts of rape on an individual. The study examines learning and memory in rape victims with PTSD. While the memory impairment mechanism was unknown at the time of the study, it was established that stress-induced damage to the limbic system was likely to blame for the decreased memory capacity in individuals suffering from PTSD. Given this information, the authors hypothesized that patients with PTSD derived from rape would exhibit similar memory decline to patients with PTSD derived from combat. Jenkins et al. (1998) compared 15 rape victims with 16 non-victim, non-PTSD individuals, matched on age, education, and biological sex. The victim group with PTSD showed statistically significant impairments in verbal learning compared to the scores of the control group. These results were echoed in a more recent study comparing 21 rape survivors and 27 control participants (Duke, 2004). Duke found pronounced impairments in the working memory of survivor participants, which may have been associated with substance abuse or

frontal lobe degeneration as a result of trauma. These conclusions regarding memory and brain physiology emphasize the challenges associated with PTSD (Bremner et al., 2005; Duke, 2004; Jenkins et al., 1998).

Psychological Impact: Immediate/Short-Term

In addition to physiological changes in the nervous system, sexual assault impacts an individual emotionally in a variety of ways. It is crucial to recognize and understand the psychological effects of rape for what it is--not "merely unwanted sex," but rather a traumatic, life-changing, and oftentimes dangerous occurrence (Resik, 1993, p. 223). Failure to understand the psychological repercussions of rape further perpetuates low report and prosecution rates and slows the development and administration of therapy for rape victims (Resik, 1993).

During an assault, most victims become fearful, helpless, and disoriented (Mason & Lodrick, 2013). This surprised response may stem from the societal anecdote that rapes only happen in dark alleys, at nighttime with a stranger but a majority of rapes occur in private by trusted individuals close to the victim. Thus, in the moment of the rape, "most people faced with such threat [will] not actively defend themselves" (Mason & Lodrick, 2013, p. 29). Lack of response or submission may be a fear response and is in no way a form of consent. Instead, these reactions are caused by interruptions in the brain as a response to trauma. Other predictable reactions to rape include dissociation mechanisms, like derealization, which entails detaching from one's surroundings, depersonalization, which entails detaching from oneself, and memory loss (Lanius et al., 2012). These mechanisms ultimately protect the brain from feeling an overwhelming sense of fear or stress as the result of an intense stimulus.

Immediately following an assault, it is critical for a victim to achieve safety away from the threat and to receive medical attention, along with collection of physical evidence for

possible prosecution, as soon as possible. In the midst of seeking safety, the victim is also faced with a flood of emotions with the primary emotion being fear. In general, individuals demonstrate a spectrum of emotional reactions with behaviors ranging from the extremes of hysterical crying to somber silence (O'Donohue, Carlson, Benuto, & Bennett, 2014). Note that the way the victim presents themselves is likely not the way they are feeling internally, especially in hospital or police station settings. In a study conducted by Veronen, Kilpatrick, and Resick (1979), 96% of victims described themselves to be "scared, worried, and... shaking or trembling" after completion of the crime while 92% described feeling "terrified and confused" (Resick, 1993, p. 224). Other common feelings include shame, humiliation, degradation, guilt, self-blame/self-hate, anger, revenge, and embarrassment. Unfortunately, these feelings do not dissipate after a few hours; they linger and develop over time. Veronen et al. state that 84% of participants reported feeling depressed and 96% of participants reported feeling exhausted two to three hours after the rape (Resick, 1993).

Another study completed in 1992 assessed the reactions of rape victims every week for twelve weeks following the rape (Resick, 1993). A total of 95 victims were involved in the study, and consistent progression of symptoms was seen across all participants. For example, just one week after the rape, 94% of the victims met the diagnosis criteria for clinical depression and PTSD. At the end of the study, the percentage of victims who met the PTSD criteria decreased to 47% (Resick, 1993). These participants later developed chronic PTSD. Other studies conducted in the 1970s and 1980s focusing on women two weeks after the rape found that most victims became depressed and fearful, and experienced clinically significant sexual dysfunction as well as issues with self-esteem and social adjustment as a result of rape (Resick, 1993).

Interestingly, authors Rothbaum, Foa, Riggs, Murdock, and Walsh (1992) denoted in

their twelve-week study that participants who showed signs of recovery excelled within the first month after the rape and continued to show signs of recovery for the remainder of the three-month time period. Other studies by Calhoun, Stafford, and Moss (1982) and by Resick (1988) further support the notion that victims begin recovering at substantial strides within the second and third month after the rape, and that victims who do not begin showing signs of recovery within this immediate timeframe will struggle more with their healing process. Some authors contradict this conclusion and argue that individuals do not begin showing large-scale improvements until six, twelve, or even eighteen months after the rape (Resick, 1993). While all rape experiences are unique, similarities exist amongst rape victim reactions and paths to recovery. By extension, an overall trend has emerged: a majority of rape victims experience an intense reaction for the first few months following the assault (Resick, 1993). This reaction diffuses by the three month-mark, but long term mental and emotional issues such as depression, anxiety, PTSD, avoidance, low self-esteem, sexual dysfunction, and social adjustment, continue for years.

A more recent study published in 2020 compares the effects of rape in female adolescents at two weeks and one year after the incident. The study took place in Cape Town, South Africa, with 31 female participants ages 14-18 years old (Oshodi et al., 2020). Despite the fact that Cape Town is one of the largest cities in Africa, the rates of rape are disproportionally high for this age group; in fact, during the 1990s, upwards of 40% of rape victims in South Africa were minors. Improvements have been made in the legal and healthcare systems to provide immediate care for underaged rape victims, but there is an absence of long-term resources for victims, hence the reason for this research. Moreover, this research was significant considering “the risk of experiencing negative mental health sequelae post rape may be more pronounced in adolescents

given their developmental stage" (Oshodi et al., 2020, p. 254).

As mentioned, participants of the study were female adolescents aged 14-18 years old with 99% of the participants being in grade 7 (Oshodi et al., 2020). Participants were recruited from a rape crisis center and were excluded if their rape experience had occurred longer than two weeks prior to the study. Individuals were also excluded if they showed suicidal ideation and if they lived with the perpetrator of their rape. Data collection consisted of repeated survey assessments, the first taking place at the baseline appointment within two weeks of the rape, and the following assessments occurring at one, three, six, nine, and twelve months after the rape.

The results of the study in Cape Town provide a cross-cultural confirmation of the serious acute response to sexual victimization. At the baseline appointment, 90.3% of participants reported feelings of terror; 93.5% reported feelings of danger; and 96.8% reported feelings of helplessness, all common emotions of rape victims (Oshodi et al., 2020). Though suicidal ideation was an exclusion criterion, 54.8% of participants were marked to be at risk for suicide at the baseline appointment. This is abnormally high compared to an adult sample of a similar study which reported 30% of participants being marked as at risk for suicide (Oshodi et al., 2020). Oshodi et al. (2020) hypothesized that the more developed, more mature coping mechanisms in adults were the reason for lower risk for suicide percentages. Nonetheless, the elevated risk for suicide percentages further communicate the undeniable significance of rape at all ages.

The results of the study were disheartening. Overall, there were no noteworthy changes in major depression, anxiety, and rape-related PTSD between the beginning and end assessments (Oshodi et al., 2020). Minimal fluctuations correlated to stabilized scores on the assessment, but the overarching conclusion was that negative psychological effects of rape are present for at least

two years after the incident. Moreover, there is evidence pertaining to children and adolescent rape as a predictor of adult rape. Since females ages 16-19 are some of the most vulnerable targets for rapist perpetrators, future efforts in sexual assault reform must address the need for intervention in young adult cases to prevent later revictimization. In summary, this article underscores the recurring psychological effects of rape throughout time, which is reflected in Resick's article as well. As stated by Resick, "rape victims suffer fear and anxiety reactions, including sexual fears and dysfunctions, that abate somewhat over the first few months postcrime but then continue at an even level for an infinite period of time" (Resick, 1993, p. 235). Both authors prognosticate trends in long-term psychological effects of sexual assault which can be referenced in the next section.

In general, the process of recovery following a rape is characterized by two stages: the acute phase and the reorganization phase (Kennedy, 2009). Collectively, the symptoms experienced during these stages are referred to as Rape Trauma Syndrome, a term first coined by Burgess and Holstrom in 1974, which shares various overlapping symptoms with PTSD (Kennedy, 2009). The acute phase can be divided by emotional response. In the expressed style of emotional response, the victim exhibits fear, anxiety, muscle tension or restlessness, and sobbing (O'Donohue et al., 2014). In contrast, the controlled style consists of an individual appearing emotionless, calm, and subdued (O'Donohue et al., 2014). This phase can last for several weeks following the assault, and symptoms are typically severe (Kennedy, 2009). In the ideal situation that an individual completes the reorganization phase, they will eventually begin to recognize the effects of the rape on their life and establish healthy coping and healing mechanisms (O'Donohue, 2014). The latter part of recovery will be discussed when reviewing long-term emotional impacts. In any case, recovery is not linear or simple. It is complex,

individualized, and emotionally taxing.

Emotional Impact: Long-Term

Adult and adolescent rape victims disclose common immediate and short-term reactions to rape such as fear, depression, anxiety, and development of PTSD. *How do these reactions manifest in the long run of a victim's life?* Based on extensive post-rape studies, the truth is that the fear, depression, anxiety, and/or PTSD will likely never go away. The victim will never truly 'get over' the rape, but instead will learn to cope with the rape in the second half of recovery known as the reorganization phase in which the victim begins to process the emotional effects of the rape (Kennedy, 2009). This phase is marked by disruptions in one's lifestyle, general functioning, and sexual activity as well as development of phobias and increasing regularity of nightmares related to the trauma (Kennedy, 2009; O'Donohue et al., 2014). Victims may even seek contact information or work and home location changes in hopes of feeling safe again (O'Donohue et al., 2014). The reorganization stage can persist for quite some time. It is not only a complicated process of realization and reflection of what occurred, but it is emotionally painful and scary. Considering the extent of disruption that has taken place as a result of the rape, all of these reactions and behaviors are normal. It is important to remember that each victim is different; the circumstances of the rape, the relationship between the victim and perpetrator, the exertion of force used, the location of the assault, as well as the cultural background of the victim and the victim's support system, are some of the many factors that make each victim unique.

Various studies have taken place in hopes of characterizing victim trends years after the assault. In 1981, Ellis, Atkeson, and Calhoun assessed 27 female victims to determine the long-term rates of depression after rape. The mean amount of time since the rape for victims was three years (Ellis et al., 1981). Participants were compared to control females, who did not have a

history of rape or sexual assault, of the same age, race, socioeconomic level, and marital status. Assessments consisted of surveys and interviews. Based on the survey and interview data, there was an overall consensus that rape victims "are more depressed, get less enjoyment from their daily lives, report being more tense and fatigued, and report more interpersonal problems" (Ellis et al., 1981, p. 266).

A later study done by Kilpatrick, Edmunds, and Seymour (1992) recorded the rates of depression in 507 rape victims. Of this sample, 30% reported experiencing major depression at some point in time with 21% reporting current depression (Resick, 1993). These numbers were significantly higher data from other reports indicating 10% of non-rape female victims will experience major depression in their lifetime (Resick, 1993). These numbers are reminiscent of the study done by Ellis et al. (1981) where 19% of victim participants reported severe depression and 26% reported moderate depression in contrast to 8% and 15% of non-victim participants, respectively. Another parallel is drawn in the aspect of suicide: while Ellis et al. (1981) noted that 50% of raped participants admitted to having suicide ideations, Kilpatrick et al. (1992) found in 1985 that 44% of rape victims considered suicide, and 19% of victims attempted suicide.

A more recent meta-analysis with a total of 88,539 participants echoed these findings (Dworkin, 2018). Dworkin referenced 39 independent samples to evaluate the correlations between sexual assault and prevalence of a DSM-diagnosed disorder in victim and non-victim populations. Diagnoses included anxiety disorders, depressive disorders, eating disorders, substance use disorders, Bipolar Disorder, Obsessive-Compulsive Disorder, and PTSD. Dworkin's (2018) most noteworthy findings were for depressive disorders, substance use disorders, and PTSD. For depressive disorders, 39% of sexual assault victims were diagnosed with a lifetime depressive disorder compared to 17% of non-victim participants. For substance

use disorders, 19% of sexual assault victims maintained this diagnosis in comparison to only 9% of non-victims. Last, for PTSD, 36% of sexual assault victims had PTSD diagnoses against 9% of non-victims. Thus, it is apparent across time that sexual assault victims suffer psychological deficits that persist after initial trauma reactions (Dworkin, 2018; Ellis et al., 1981; Resick, 1993). This conclusion is critical to the development of new resources, such as the proposed workbook, since future resources must address the longitudinal support that is needed by victims. Not only is it necessary to provide victims with immediate guidance for receiving healthcare and navigating the legal process, but we must also provide victims with long-term resources such as contact information for mental health professionals and support groups.

Emotional Impact: Relationships

In addition to depression and suicidal thoughts, studies show that rape victims frequently struggle with low self-esteem, social adjustment, and sexual dysfunction, which is debatably "the most long-lasting [problem] experienced by rape victims" (Resick, 1993, p. 232). A longitudinal study done by Burgess and Holmstrom in 1979 assessed the sexual functioning of 81 female adult rape victims four to six years after assault. Researchers interviewed each participant with repeated questions from the initial interview performed immediately after the rape during hospitalization as well as with new questions (Burgess & Holstrom, 1979). The independent variables were sex life prior to the rape; changes in frequency of sexual relations; symptoms of the rape, including flashbacks, discomfort with sex, inability to orgasm, or aversion towards sex; and last, the reaction of the victim's romantic partner. The dependent variable was the time it took for the victim to feel recovered in the aspect of sexuality. Terms such as 'recovery' and 'normal' were decided by the victims.

First, most individuals reported that it took months to resume their regular sex life--that

is, the sex life of the individual prior to the rape (Burgess & Holstrom, 1979). This finding was significant in that it denied hypotheses suggesting that individuals who were virgins prior to the rape would be affected more than individuals who were sexually active. On the contrary, some individuals found it easy to their 'normal' sex life since they "never equated that sex was rape" (Burgess & Holstrom, 1979, p. 650). This is where rape becomes complicated: it is not merely a violent act, but rather an intersection between violence and sex during the obliteration of one's rights. Hence, although it seems abnormal for victims to return to the sex life that was had before the rape, it is clear that there is a spectrum of reactions and coping mechanisms after sexual assault, some of which include reengagement in consensual sexual activity.

Moreover, for the frequency of sexual relations variable, 71% of sexually active victims reported a decrease in sexual relation frequency while 19% reported no change in sexual activity (Burgess & Holstrom, 1979). Of the participants that were sexually active at the time of the rape, 38% reported abstaining from sexual activity for at least six months after the incident. Some individuals reported drastic shifts in feelings about sex, quoting "'I felt I could go on forever without sex'" (Burgess & Holstrom, 1979, p. 651). Interestingly, 6 out of 63 sexually active participants showed increased frequency in sexual relations. This reaction is a coping strategy that attempts to liberate the victim from their negative feelings regarding the sexual aspects of the rape.

The next variable of study was sexual response, which included subjective symptoms such as flashbacks, disinterest in sex, sexual activity of choice, and sexual aversion, and physiological symptoms such as pain and discomfort during sex, difficulty or inability to obtain orgasm, and development of vaginismus, a medical condition involving muscle spasms in the vagina leading to involuntary constriction (Burgess & Holstrom, 1979). Ultimately, each victim

experienced a unique range of symptoms to varying degrees with victims having more symptoms, whether subjective or physiological, reporting longer recovery times (Burgess & Holstrom, 1979).

Last was the variable regarding the reaction of the victim's romantic partner upon learning about the rape. Almost half of the victims reported worry regarding their partner's reaction (Burgess & Holstrom, 1979). Those who were worried admitted to fear of blame, disbelief, degradation, being viewed as undesirable, and change in relationship dynamics. Other victims who were not worried about their partner's reaction reported telling subsequent sexual partners about their rape experience and using the corresponding person's reaction as an evaluation of the relationship. In sum, partner reactions for all victims were classified as positive or negative. Partner gender was not a significant predictor of reaction type, nor was partner gender stated in the study, and victims agreed that the best partner attitude was that of sympathy and understanding. Fortunately, more than half of the victims who told their partners received this response. In conclusion, Burgess and Holstrom (1979) provided pivotal discussion to the consequences of rape on sexual and romantic relationships. They stressed that "[even] years after the rape, there may still be an association between current sexual situations and the traumatic event" (Burgess & Holstrom, 1979, p. 648).

Miller, Williams, and Bernstein (1982) examined the influences of past rape on a romantic relationship. In this study, 43 heterosexual couples were interviewed, with 18 having received couples' therapy and 25 not. The inclusion criteria for the study were that both members of the partnership were adults, the female was the rape victim, and that the relationship was monogamous. Couples were interviewed before the couples' therapy session; after the therapy; and six months after the start of the study. Miller et al. (1982) found that male partners

frequently reported feelings of anger and revenge towards the perpetrator and feelings of resentment towards their partner. These attitudes or beliefs on behalf of both parties caused turbulence in the relationship. In fact, about 70% of female participants reported a desire for their partner to change in the aspects of communication, commitment, physical intimacy, emotional security, and expression of anger. For the couples who received therapy, 15 of the 18 couples were cited as having poor communication, excessive dependency, and a lack of trust in their partners. In addition, of all 43 couples, 20 couples were avoidant to talking about the rape and 24 couples had withheld details about the rape when informing their spouse.

As for physical intimacy, 14 of the 18 treated couples reported sexual unresponsiveness, premature ejaculation or lack of orgasm, abstinence or infrequent sexual relations, and emotionless sex (Miller et al., 1982). 58% of participants even agreed that "there was a continuing avoidance of sexual relations since the rape" (Miller et al., 1982, p. 55). These feelings were supported by the frequency of sexual intercourse, which was 1.93 times per month, a number significantly lower than that of the same age group. What's more is that there was no correlation between the degree of relationship maladjustment and the length of time after the rape. Miller et al. (1982) quote, "the same intensity of relationship disturbance and similar relationship problems were found, regardless of whether the victim had been raped less or more than one year prior to intake into the study" (p. 56). Thus, one can extrapolate that rape is echoed throughout a victim's life far after the incident occurs, whether this is physically, mentally, or emotionally. One may also begin to assume the effects of rape on not only the victim, but on their friend, family, and romantic relationships.

Additional research further demonstrates the negative impact sexual assault often has on the victim's romantic relationships. In a study conducted by Connop and Petrak (2002), six

males and three females in heterosexual relationships were interviewed about the impact of the female's sexual assault experience on their romantic relationships. Connop and Petrak (2002) ultimately named several themes across the interviews, including problems with support for both the male and female, differences in communication, feelings of anger and blame, and struggles with maintaining the sexual relationship. In terms of support, male participants admitted to feeling burdened by the magnitude of support that they felt was necessary for the healing of their female companion. In response to this support, females reported codependency in the relationship and a tendency for male partners to become overprotective. This combination of protection on behalf of the male and attempts to regain independence on behalf of the female led to difficulties in relationship communication and sexual intimacy (Connop & Petrak, 2002).

Male and female participants also reported feelings of anger and blame. Ultimately, it was difficult for male participants to distinguish rape from sex and to abandon all rape myths upheld by society (Connop & Petrak, 2002). This influenced female victims to feel guilt or embarrassment, and to self-blame or employ other rape myths in an attempt of conceptualizing the rape as less significant. The sexual aspect of these romantic relationships was in turn affected with males stating a lack of desire for their female companion, and females reiterating feelings of guilt, blame, and maintaining perceptions of themselves as impure or untouchable (Connop & Petrak, 2002). From the presented studies, it is unmistakeable that sexual assault has pronounced effects on romantic relationships. While the target audience of the workbook will be sexual assault survivors rather than their partners, writing prompts throughout the workbook will include opportunities for discussion of romantic relationship changes, and resources such as marriage and family therapists will be included.

Sexual Assault Recovery

Coping Mechanisms

Following a rape, the victim's first priority is often seeking safety. At the same time, the individual must attempt to process and cope with the traumatic event that has just happened. The development of healthy coping mechanisms is crucial to the long-term recovery of the victim. As a matter of fact, past research advises that victims who employ unhealthy coping mechanisms, like avoidance, are less likely to be successful in their recovery and more likely to prolong their symptoms (Littleton & Breitkopf, 2006). One model proposed by Snyder and Pulver (2001) identifies two facets of coping after a stressful event: approach coping and avoidance coping. Approach coping occurs when an individual employs relevant resources and strategies to deal with the problem or associated emotions at hand (Littleton & Breitkopf, 2006). In contrast, avoidance coping is an example of an unhealthy approach that frequently transpires when an individual feels they do not have sufficient resources. Behaviors associated with avoidance coping include denial that the stressor/trauma occurred and ignorance of thoughts regarding the stressor. Overtime, reliance on avoidance coping leads to increased attention to the stressor as well as self-criticism, both of which prolong an individual's healing process.

Regrettably, negative sequelae experienced by rape victims after the incident may further induce unhealthy coping mechanisms. For instance, the victim may find themselves self-blaming or feeling shameful and embarrassed about the rape (Littleton & Breitkopf, 2006). Furthermore, victims may receive a variety of unsupportive responses from their family and friends upon disclosure of the rape (Littleton & Breitkopf, 2006). The combination of mental, emotional, and even physical pain from the rape, along with a lack of support from personal relationships may ensue in the victim losing faith in themselves, society, the justice system around them.

In a study conducted by Littleton and Breitkopf (2006), the authors hypothesized that

victims with supportive personal relationships, and an overall strong support system, would rely less on avoidance coping. Their final data sample consisted of 216 females who reported an experience of completed rape. Participants completed online surveys asking about sexual experiences, coping strategies, social reactions, and support systems.

Aside from the data regarding trends in victim incapacitation and perpetrator force, victims reported having an average of five friends in their intimate support networks (Littleton & Breitkopf, 2006). On average, victims reported feeling highly satisfied with the support given by their friends and reported receiving mostly positive reactions after disclosure of the rape. In sum, the authors found that egocentric reactions, such as the receptive individual becoming angry or vengeful towards the perpetrator, to rape disclosure were most strongly associated with avoidance coping by the victim. This correlation stems from the presumption that individuals who become angered upon hearing about the rape are focused on their own emotions and will likely fail to provide support to the victim. Furthermore, "victims who experienced these reactions likely found themselves providing support to these individuals, draining their own already taxed coping resources" (Littleton & Breitkopf, 2006, p. 113). Thus, while individuals who reacted egocentrically did not participate in victim blaming rhetoric, this type of reaction is harmful in that it may contribute to the variety of negative reactions that may persuade a victim to utilize avoidance coping mechanisms.

A more recent article examined the effects of supportive social reactions on a victim's recovery (Ullman & Peter-Hagene, 2014). While prior research has established a positive correlation between harmful, negative social reactions to disclosure and maladaptive coping mechanisms, and increased PTSD symptoms, the purpose of this experiment was to identify links between positive social reactions, healthy coping mechanisms, and PTSD symptoms. For

ease of reference, negative social reactions entail blame, control, dismissal, treating the victim differently, and other responses that push the victim to engage in feelings of self-blame, helplessness, and distrust in the world. In contrast, positive social reactions are those of support which help the victim to reclaim lost control. Examples of positive social reactions include emotional support, such as listening to, validating, and comforting the victim, and practical support, such as providing and assisting with access to resources.

In this study, 1,863 sexual assault victims ages 18 to 71 years old completed a mail survey (Ullman & Peter-Hagene, 2014). Participants were assessed with scales based on social reactions, PTSD, and sexual experiences. According to Ullman and Peter-Hagene (2014), negative social reactions to sexual assault disclosure lead to a direct increase in PTSD symptoms as well as maladaptive coping. In the context of this study, maladaptive coping behaviors included denial, disengagement, substance abuse, and social withdrawal. On the contrary, positive social reactions to sexual assault disclosure lead to improvements in PTSD symptoms as hypothesize. More specifically, positive social reactions were related to an increase in perceived control over recovery in the victims, which decreased PTSD symptoms. Altogether, both studies confirm the narrative of other literature which concludes that strong social networks are pivotal to an individual's recovery (Littleton & Breitkopf, 2006; Ullman & Peter-Hagene, 2014).

A study by Burgess and Holstrom (1986) additionally reviews the coping behavior of rape victims across four to six years after the assault. The sample consisted of 81 females who were interviewed in a hospital emergency room immediately following the rape. Throughout the study, participants showed favorability for four types of conscious coping strategies: explanation, minimization, suppression, and dramatization. Explanation is the first mechanism of choice; in particular, it gives the victim a reason for the rape which provides them a sense of regained

control (Burgess & Holstrom, 1986). Dismissing the perpetrator as lustful or mentally ill were common forms of explanation. In other instances, the victim claimed the perpetrator was seeking revenge on them or that the perpetrator was merely acting on the victim because they were drunk or impaired in some way. Explanations were also focused on the victims--they often blamed themselves for going to the event, for acting inappropriately, or for not paying attention to forewarnings. While the term self-blame has a negative connotation, it is used in this sense for relief in the victim: they may believe they have learned from the experience which soothes their anxiety about the rape.

The second coping mechanism observed in the study done by Burgess and Holstrom (1986) was minimization. Essentially, minimization refers to the victim diminishing their experiences and anxieties about the rape to that which is less significant and more manageable for the victim. The victim uses minimization by comparing their experience to the violent image of what rape is supposed to be in society. Because the victim still thinks about the rape, but in a lesser context, minimization is distinct from avoidance. What is especially interesting about minimization is that it appeases the victim with the superficial belief that they were lucky to have been *only* raped and not beaten, killed, or kidnapped.

Suppression is another coping mechanism commonly seen in rape victims. This mechanism is synonymous to avoidance in which the victim refuses to think about the rape or talk about rape as a whole (Burgess & Holstrom, 1986). By consciously choosing to ignore the rape, the victim feels a return of cognitive control. The last coping mechanism discussed is dramatization, which is quite different from the other assessed mechanisms. With dramatization, the victim becomes preoccupied with the rape and spends extensive time thinking and talking about the incident. Individuals who use dramatization techniques are openly expressive about the

pain caused by the rape. In one example, “one victim traveled to another country, talked with women, and helped establish a feminist clinic to deal with issues of sex and violence” (Burgess & Holstrom, 1986, p. 358). All in all, the four defense mechanisms used by participants were equally effective as 74% of participants considered themselves to be recovered (Burgess & Holstrom, 1986), meaning that they had perspective on their assault and experienced a decreased frequency of reminders of the rape, with each reminder being less intense and physically distressful and more tolerable for the victim (Smith & Kelly, 2001).

Contrary to the previously discussed coping mechanisms which emphasize the anguish caused by rape, posttraumatic growth is a coping mechanism that occurs when the victimized individual experiences positive psychological growth after trauma (Ulloa, Guzman, Salazar, & Cala, 2016). With posttraumatic growth, the individual’s thinking is shifted to that of a more emotionally positive and adaptive mindset. In a literature review by Ulloa et al. (2016), seventeen studies regarding posttraumatic growth in sexual assault victims were assessed. The authors surprisingly found that the change associated with posttraumatic growth, whether it was change in relationships, personal strength, appreciation for life, or spirituality, differed across studies. For instance, participants of one study showed an increased appreciation for life while those of another study reported familial relationship and friendship growth (Ulloa et al., 2016). Others experienced closer relationships with their mothers and increased feelings of empathy. Some individuals even showed an increase in political advocacy related to their sexual assault. Therefore, without regards to the victim’s coping mechanisms of choice, sexual assault is an intense type of trauma with diverse methods of healing.

Therapeutic Approaches

For many rape victims, life after rape is a challenge. While seasons change and time

passes, the victim does not simply move on. Instead, they are likely stuck coping with the emotions at hand or attempting to return to the life they had before the trauma. Many victims seek therapy or medication to deal with the symptoms of their PTSD. Examples of medications for PTSD are tricyclic antidepressants, monoamine oxidase inhibitors, selective serotonin reuptake inhibitors, 5-HT2 antagonist, and anticonvulsants (Chivers-Wilson, 2006). Social programs and group therapy may also be utilized to address the long-term effects of rape (Chivers-Wilson, 2006). Aside from these approaches, treatment for rape victims is extensive and diverse. Just as every victim's experience is distinctive, the treatment plan for an individual is also individualized. Therapy techniques include working on retraining thoughts and bodily responses (Foa & Rothbaum, 1998).

One popular form of therapy for rape victims is cognitive-processing therapy (CPT). This approach is especially effective in treating PTSD (Resick et al., 2002). CPT consists of two components: cognitive therapy, which focuses on identifying and fixing negative thought patterns, and exposure to the traumatic event via writing and reading (Resick et al., 2002). On average, individuals undergo CPT for twelve weekly sessions (U.S. Department of Veterans Affairs, 2018). In essence, the purpose of CPT is to help the individual to recognize their unwanted thoughts that have resulted from the trauma (U.S. Department of Veterans Affairs, 2018). For sexual assault victims, CPT begins by focusing on distorted beliefs, such as denial, shame/guilt, or self-blame, that have arisen from the trauma (Resick et al., 2002). By acknowledging these thought patterns, the individual can start to understand how their beliefs about themself and about the world have shifted as a result of their assault (Resick et al., 2002). In turn, the individual deconstructs their dysfunctional beliefs and is able to better manage their feelings about the trauma (U.S. Department of Veterans Affairs, 2018).

The exposure aspect of CPT is incorporated when victims reflect on their trauma either by writing, reading, or speaking about it (Resick et al., 2002). Although this is a painful and difficult process, it is very helpful to the victim's release and acceptance of the trauma, both of which are necessary for recovery. These conclusions are supported by a study done by Resick et al. in 2002 which demonstrated the success of CPT. In this study, 121 rape victims were assessed four times: before treatment, after treatment, three months after treatment, and nine months after treatment (Resick et al., 2002). The findings revealed that CPT showed significant decreases in the PTSD, depression, and guilt measurements of participants after treatment, three months after treatment, and nine months after treatment. The success of these therapeutic approaches is of substantial consideration for the treatment of rape victims and development of relevant victim resources.

An especially relevant form of therapy for victims of sexual assault is art therapy. This type of therapy includes drawing, sculpting, and painting as a means to non-verbally express the painful feelings, memories, and thoughts surrounding a trauma (Schouten et al., 2015). The intention of art therapy is to promote acceptance, change, and development, all of which are central features of the art making process. Throughout time, art therapy has been cited repeatedly for the improvement of symptoms in adults with PTSD (Schouten et al., 2015). One study done in 2006 presented the effects of art therapy on individuals with combat-related PTSD. This approach was of particular excellence because it promoted memory reconsolidation, or the conversion of short term memories into long term memories; externalization, the process in which a victim gains ownership of their trauma and begins to view it as a past rather than a present event; progressive exposure to the trauma, which stimulates silenced or avoided emotions; reduced arousal, marked by less intense responses during direct or indirect reminders

of the trauma; reactivation of positive emotion, including emotions that may have been numbed during the trauma; improved emotional self-efficacy, or an individual's ability to express their emotions effectively; and improved self-esteem, marked by decreased feelings of self-blame and judgement, in the target population (Collie, Backos, Malchiodi, & Spiegel, 2006). In the article, Collie et al. (2006) explain that "only when traumatic material is seen as something that is owned by the person...can it be transformed from something that is distressingly active in the present to something passive that is part of the person's history" (p. 160). Art therapy does just this: it grants victims control over their art and traumatic memories and externalizes the trauma which supports victims and provides a safe outlet for emotional expression. This will be incumbent to include future resources for sexual assault survivors.

Current Resources

Though a few resources exist for sexual assault survivors, initiating the need for help and continuing to seek help when needed can be difficult for survivors. The Centers for Disease Control and Prevention has many systems in place that are dedicated to assisting rape victims. For example, the Office of Women's Health is a division of the CDC devoted to achieving health equity for women (U.S. Department of Health and Human Services, 2020). In addition, the CDC also funds the National Sexual Violence Resource Center which is a non-profit organization that serves to provide information and tools for sexual violence prevention and healing (National Sexual Violence Resource Center, 2020). This organization particularly focuses on research that promotes effective change in the community in relation to sexual assault (National Sexual Violence Resource Center, 2020).

The largest non-profit organization involved in helping victims of sexual violence is the Rape, Abuse, & Incest National Network (RAINN). This organization operates the National

Sexual Assault Hotline, which is available at all times of every day, in coordination with local providers across the country (Rape, Abuse & Incest National Network, 2020). In addition, RAINN maintains various programs that not only aim to prevent sexual assault, but also nurture victims in their healing and court processes (Rape, Abuse & Incest National Network, 2020). Another sexual assault hotline is available on an everyday basis locally through the Rape Crisis Center (Rape Crisis Center, 2020). They focus on prevention and education as well as support for victims of sex and labor exploitation (Rape Crisis Center, 2020). Child victims may seek help from the Child Protective Services division of Clark County.

While there is a wide range of resources available, the variety of resources can be daunting for victims to decipher when they are in a time of crisis or distraught. I believe that a compilation of these resources would be advantageous for rape victims and service providers.

Sexual Assault Workbook Proposal

As stated by Ullman and Peter-Hagene,

> Rape is traumatic because it entails a significant loss of control over one's body during the assault and can lead to a shattering of women's beliefs about their own safety in the world, increased feelings of vulnerability, and lower perceived control over recovery and self-efficacy. (2014, p. 498)

Therefore, it is unquestionable that rape victims experience an entire spectrum of emotions and likely need help to navigate their new reality after rape. The "I Am More Than My Experience" workbook will be a source of support--it will be a unique book that educates, comforts, and respects sexual assault victims. This workbook will contain four chapters, providing information on resources and strategies for victims. Each chapter will contain the following: a journaling prompt, an art therapy exercise, and quotes from survivors.

The workbook will begin with helping victims define the issue, so that they can begin to understand what they are experiencing and know they are not alone. Chapter I will discuss and

distinguish the types of sexual assault, including rape with an known versus a known perpetrator. This section will emphasize the prevalence of rape in societies around the world and in the United States. Quotes and stories from news reports, journal articles, and books will be implemented to denote the unfortunate commonality of rape. This chapter will also include local rape statistics in Southern Nevada. Data specific to vulnerable populations, such as women ages 18-24, members of the LGBTQ+ community, and disabled individuals, will be clearly stated. This chapter aims to build trust in the reader and establish credibility. The text and statistical information will be supplemented by coloring pages and friendly imagery. There will also be prompts throughout the chapter regarding the distorted beliefs of the reader. Example prompts include, 'what are my thoughts on sexual assault? What does sexual assault mean to me?' The goal of this chapter is to normalize the reader's experience and to introduce them to material that they may not have explored before. The main sources for this chapter will be RAINN, the State of Nevada Department of Public Safety, and the United States Bureau of Justice Statistics.

The second chapter will focus on common reactions during or immediately after a rape. Many victims feel that their reactions are unusual or wrong. By providing them with the science behind trauma, victims may be better able to manage their reactions. This chapter will talk about the physiological and psychological responses to victimization, including tonic immobility during the fight, flight, or freeze response, fear, depersonalization, and derealization. Referenced sources will be those from earlier sections in this proposal, including literature regarding the stress response and common emotional reactions. Myths surrounding rape will be mentioned and refuted. There will also be prompts throughout the chapter regarding the distorted beliefs of the reader, including 'why didn't I fight back? Do I believe this is my fault? Why/why not?' or 'who was this person to me before the incident? How do I feel about reporting them?' I will perfect

these questions with the help of Dr. Barnes, a licensed psychologist, so that the incorporated prompts are relevant and will not trigger the reader with memories of the assault. Furthermore, a list of reasons as to why rapists commit rape will be included with the intention of reassuring the victim that this is not their fault. Positive affirmations regarding healing, validation, and empowerment will be interspersed with coloring pages related to the topic. The inclusion of coloring pages, prompts, and affirmations will help to engage the reader in system calming effects.

Following this section will be a discussion of the typical long-term reactions to rape in Chapter III. The discussion will focus on elevated levels of anxiety and depression, self-blame and guilt, fear or lack of desire for sexual intimacy in relationships, and development of Rape Trauma Syndrome or Posttraumatic Stress Disorder. Since sexual assault is the leading cause of PTSD in women, common symptoms will be listed with encouraging guidelines to seek help (Chivers-Wilson, 2006). Again, the following prompts will be inserted in conjunction with art therapy: 'how do I feel now that some time has passed since my rape? How are my friendships and relationships affected by this incident?' Chapter III will also detail common coping mechanisms, such as avoidance. Questions like 'how have I been coping after my trauma?' or 'do I believe I am coping successfully? Do I need to seek external help?' will be included. The long-term impact of trauma on the brain will be discussed, too, to demonstrate the intensity of rape from a physiological standpoint even after initial onset.

The fourth chapter will introduce to the victim an extensive list of resources specific to Southern Nevada. Because the navigation of resources following an assault can be overwhelming, the resources will be listed in step-by-step guide on how to seek physical care immediately after the rape. This guide will include resources for sexually transmitted diseases

and pregnancy with information on testing and treatment in particular. Following this immediate guide will be a flowchart with information regarding the legal process for rape reporting in Nevada and therapy resources. Dr. Kennedy's expertise on criminal justice will be employed. Prompts like 'have I reported this rape? If yes, why? What am I hoping to achieve? If no, why? What will help me to heal?', or 'who or what is my support system? Who can I depend on for support throughout this process?' Locations for shelters and therapy groups or practitioners, including licensed psychologists, psychiatrists, and marriage and family therapists, will also be indicated, including those specific for LGBTQ+ and disabled populations. Contact information for suicide prevention will be emphasized. Other coloring pages, blank pages for journaling, and space for personal affirmations will be added if the length of the workbook permits this.

Overall, the objectives of this workbook are to organize the plethora of resources available without overwhelming the victim whilst simultaneously teaching the reader about rape and providing the victim an opportunity to process the trauma via journaling and art therapy. The workbook will eventually be published as a printable PDF online, in both English and Spanish versions, and will be distributed to women's shelters and hospitals in Southern Nevada with hopes of eliminating the stigmas about rape, increasing the utilization of resources by rape victims, and decreasing the magnitude of the long-term impacts of rape.

References Cited

Benson, B. J., Gohm, C. L., & Gross, A. M. (2007). College women and sexual assault: The role of sex-related alcohol expectancies. *Journal of Family Violence*, *22*, 341-351. https://doi.org/10.1007/s10896-007-9085-z.

Bremner, J. D. (2006). Traumatic stress: Effects on the brain. *Dialogues in Clinical Neuroscience*, *8*(4), 445–461.

Bremner, J. D., Vermetten, E., Schmahl, C., Vaccarino, V., Vythilingam, M., Afzal, N., Grillon, C., & Charney, D. S. (2005). Positron emission tomographic imaging of neural correlates of a fear acquisition and extinction paradigm in women with childhood sexual-abuse-related post-traumatic stress disorder. *Psychological Medicine*, *35*(6), 791–806. https://doi.org/10.1017/s0033291704003290.

Burgess, A. W. & Holmstrom, L. L. (1979). Rape: Sexual disruption and recovery. *American Journal of Orthopsychiatry*, *49*(4), 648–657. https://doi.org/10.1111/j.1939-0025.1979.tb02650.x.

Burgess, A. W., & Holmstrom, L. L. (1986). Adaptive Strategies and Recovery from Rape. In R. H. Moos (Ed.), *Coping with Life Crises* (pp. 353–365). Springer Science and Business Media.

Calhoun, J. F., Stafford, S., Moss, R. (1982). The role of depression, attributions, and sex in relation to negative arousal in problematic social situations. *Social Behavior and Personality: An International Journal, 10*(1), 41-46. https://doi.org/10.2224/sbp.1982.10.1.41.

Chivers-Wilson, K. A. (2006). Sexual assault and posttraumatic stress disorder: A review of the

biological, psychological and sociological factors and treatments. *McGill Journal of Medicine*, *9*(2), 111–118.

Collie, K., Backos, A., Malchiodi, C., & Spiegel, D. (2006). Art therapy for combat-related PTSD: Recommendations for research and practice. *Art Therapy*, *23*(4), 157–164. https://doi.org/10.1080/07421656.2006.10129335.

Connop, V. & Petrak, J. (2004). The impact of sexual assault on heterosexual couples. *Sexual and Relationship Therapy*, *19*(1), 29-38. https://doi.org/10.1080/14681990410001640817.

Duke, L. A. (2004). *Predicting memory impairment in rape survivors: Examining memory intrusions and locus of control orientation* (Publication No. 1423173) [Master's thesis, California State University, Long Beach]. ProQuest Dissertations Publishing.

Dworkin, E. R. (2018). Risk for mental disorders associated with sexual assault: A meta-analysis. *Trauma, Violence, & Abuse*,*21*(5), 1011-1028. https://doi.org/10.1177/1524838018813198.

Ellis, E. M., Atkeson, B. M., & Calhoun, K. S. (1981). An assessment of long-term reaction to rape. *Journal of Abnormal Psychology*, *90*(3), 263–266. https://doi.org/10.1037/0021-843x.90.3.263.

Foa, E. B., & Rothbaum, B. O. (1998). *Treating the Trauma of Rape: Cognitive-Behavioral Therapy for PTSD*. The Guilford Press.

Franklin, C. A., Bouffard, L. A., & Pratt, T. C. (2012). Sexual assault on the college campus: Fraternity affiliation, male peer support, and low self-control. *Criminal Justice and Behavior*, *39*(11), 1457-1480. https://doi:10.1177/0093854812456527.

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. CA, USA: Stanford

University Press.

Haskell, L. & Randall, M. (2019). The impact of trauma on adult sexual assault victims: What the criminal justice system needs to know. *SSRN Electronic Journal*, 1-42. https://doi:10.2139/ssrn.3417763.

Jenkins, M. A., Langlais, P. J., Delis, D., & Cohen, R. (1998). Learning and memory in rape victims with posttraumatic stress disorder. *American Journal of Psychology*, 155(2), 278–279.

Johnson, S. B., Blum, R. W., & Giedd, J. N. (2009). Adolescent maturity and the brain: The promise and pitfalls of neuroscience research in adolescent health policy. *Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, *45*(3), 216–221. https://doi.org/10.1016/j.jadohealth.2009.05.016.

Kennedy, M. A. (2009). Psychological syndrome evidence. In D. Krauss & K. Connolly (Eds.), *Psychology in the courtroom: Psychological expertise in court* (pp. 103-123). Ashgate Publishing Company.

Kilpatrick, D. G., Edmunds, C. N., & Seymour, A. K. (1992). *Rape in America: A Report to the Nation*. Arlington, VA: National Victim Center.

Kim, S.-Y., Chung, Y.-K., Kim, B. S., Lee, S. J., Yoon, J.-K., & An, Y.-S. (2011). Resting cerebral glucose metabolism and perfusion patterns in women with posttraumatic stress disorder related to sexual assault. *Psychiatry Research: Neuroimaging*, *201*(3), 214–217. https://doi.org/10.1016/j.pscychresns.2011.08.007.

Lanius, R. A., Brand, B., Vermetten, E., Frewen, P. A., & Spiegel, D. (2012). The dissociative subtype of Posttraumatic Stress Disorder: Rationale, clinical and neurobiological evidence, and implications. *Depression and Anxiety*, *29*, 701-708. https://doi-

org.ezproxy.library.unlv.edu/10.1002/da.21889.

LeDoux, J. E. & Pine, D. S. (2016). Using neuroscience to help understand fear and anxiety: A two-system framework. *American Journal of Psychiatry*, *173*(11), 1083-1093. https://doi.org/10.1176/appi.ajp.2016.16030353.

Legal Role of Consent. (2020). https://www.rainn.org/articles/legal-role-consent.

Littleton, H., & Breitkopf, C. R. (2006). Coping with the experience of rape. *Psychology of Women Quarterly*, *30*(1), 106–116. https://doi.org/10.1111/j.1471-6402.2006.00267.x.

Mason, F., & Lodrick, Z. (2013). Psychological consequences of sexual assault. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *27*(1), 27–37. https://doi.org/10.1016/j.bpobgyn.2012.08.015.

McGilloway, C., Smith, D., & Galvin, R. (2018). Barriers faced by adults with intellectual disabilities who experience sexual assault: A systematic review and meta-synthesis. *Journal of Applied Research in Intellectual Disabilities*, *33*, 51–66. https://doi.org/10.1111/jar.12445.

Moller, A., Songergaard, H.P., & Ome, L.H. (2017). Tonic immobility during sexual assault - a common reaction predicting post-traumatic stress disorder and severe depression. *Acta Obstetricia et Gynecologica Scandinavica*, *96*, 932–938. https://doi.org/10.1111/aogs.13174.

National Sexual Violence Resource Center. (2020). *About the National Sexual Violence Resource Center*. https://www.nsvrc.org/about/national-sexual-violence-resource-center.

O'Donohue, W., Carlson, G. C., Benuto, L. T., & Bennett, N. M. (2014). Examining the scientific validity of rape trauma syndrome. *Psychiatry, Psychology and Law*, *21*(6), 858-876. https://doi.org/10.1080/13218719.2014.918067.

Onderko, K. (2020). What is Trauma? Retrieved from https://integratedlistening.com/what-is-trauma/.

Oshodi, Y., Macharia, M., Lachman, A., & Seedat, S. (2016). Immediate and long-term mental health outcomes in adolescent female rape survivors. *Journal of Interpersonal Violence*, *35*(1-2), 252–267. https://doi.org/10.1177/0886260516682522.

Rape, Abuse & Incest National Network. (2020). *About RAINN*. RAINN. https://www.rainn.org/about-rainn.

Rape Crisis Center. (2020). *About The Rape Crisis Center*. The Rape Crisis Center Las Vegas. https://rcclv.org/.

Resick, P. A., Nishith, P., Weaver, T. L., Astin, M. C., & Feuer, C. A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology*, *70*(4), 867-879. https://doi:10.1037/0022-006x.70.4.867.

Resick, P. A. (1993). The psychological impact of rape. *Journal of Interpersonal Violence*, *8*(2), 223–255. https://doi.org/10.1177/088626093008002005.

Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., & Walsh, W. (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress*, *5*(3), 455-475. https://doi.org/10.1002/jts.2490050309.

Schouten, K. A., Niet, G. J., Knipscheer, J. W., Kleber, R. J., & Hutschemaekers, G. J. (2015). The effectiveness of art therapy in the treatment of traumatized adults: A systematic review on art therapy and trauma. *Trauma, Violence, & Abuse*, *16*(2), 220-228. https://doi.org/10.1177/1524838014555032.

Schwartz, M. D., & DeKeseredy, W. S. (1997). *Sexual assault on the college campus : the role of male peer support*. CA, USA: Sage Publications.

Scott, J. C., Matt, G. E., Wrocklage, K. M., Crnich, C., Jordan, J., Southwick, S. M., Krystal, J. H., Schweinsburg, B. C. (2015). A quantitative meta-analysis of neurocognitive functioning in posttraumatic stress disorder. *Psychological Bulletin, 141*(1), 105-140. https://doi.org/10.1037/a0038039.

Sexual Assault. (2020). https://www.rainn.org/articles/sexual-assault.

Smith, M. E. & Kelly, L. M. (2001). The journey of recovery after a rape experience. *Issues in Mental Health Nursing*, *22*(4), 337-352. https://doi.org/10.1080/01612840118791.

Snyder, C. R., & Pulvers, K. M. (2001). Dr. Seuss, the Coping Machine, and "Oh, the Places You'll Go". In C. R. Snyder (Ed.), *Coping with Stress: Effective People and Processes* (pp. 3-29). NY: Oxford University Press. https://doi:10.1093/med:psych/9780195130447.001.0001.

State of Nevada. Department of Public Safety. (2018). *Uniform Crime Reporting: 2017 Report*. https://rccd.nv.gov/uploadedFiles/gsdnvgov/content/About/UCR/Crime%20in%20Nevada%202017%20(FINAL).pdf.

The Criminal Justice System: Statistics. (2020). https://www.rainn.org/statistics/criminal-justice-system.

Ullman, S. E., & Peter-Hagene, L. (2014). Social reactions to sexual assault disclosure, coping, perceived control, and PTSD symptoms in sexual assault victims. *Journal of Community Psychology, 42*(4), 495-508. https://doi:10.1002/jcop.21624.

Ulloa, E., Guzman, M. L., Salazar, M., & Cala, C. (2016). Posttraumatic growth and sexual violence: A literature review. *Journal of Aggression, Maltreatment & Trauma*, *25*(3),

286-304. https://doi:10.1080/10926771.2015.1079286.

United States. Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Injury Prevention and Control. (2016). *National Intimate Partner and Sexual Violence Survey (NISVS): General Population Survey Raw Data, 2010*. Retrieved from https://doi.org/10.3886/ICPSR34305.v1.

United States. Department of Health and Human Services. Centers for Disease Control and Prevention. (2020, January 30). *Violence Prevention: Sexual Violence Resources*. https://www.cdc.gov/violenceprevention/sexualviolence/resources.html.

United States. Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. (2020, September). *Criminal Victimization, 2019* by R.E. Morgan & J.L. Truman. (Research in brief) Retrieved from the Department of Justice website: https://www.bjs.gov/content/pub/pdf/cv19.pdf.

United States. Department of Veterans Affairs. (2018, August 10). *Cognitive Processing Therapy for PTSD*. https://www.ptsd.va.gov/understand_tx/cognitive_processing.asp.

Victims of Sexual Violence: Statistics. (2020). https://www.rainn.org/statistics/victims-sexual-violence.