

PTSD after sexual assault: gender-attributed differences in causes, symptoms, and interventions

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Abstract:

Sexual assault tends to lead to post-traumatic stress disorder (PTSD), with significant gender differences in its causes, symptoms and treatment. Women are more likely to experience severe anxiety and depression due to the sensitivity of the hypothalamic-pituitary-adrenal (HPA) axis. Influenced by social expectations, men typically experience shame and self blame, leading to underreporting and lack of social support. In terms of symptoms, females exhibit depression and anxiety, while males exhibit anger and aggressive behavior. Females respond better to treatment with cognitive behavioral therapy (CBT) and exposure therapy (PE) due to their ability to express emotions. Social support plays a crucial role in rehabilitation, which highlights the need for gender-specific interventions. At this stage, this study has some shortcomings due to the incomplete study of gender-specific victims and the lack of inclusion of other cultural contexts. Future research should optimize treatment based on gender differences, explore the impact of this phenomenon on transgender individuals if possible, and take cultural contexts into consideration in order to increase understanding and improve rehabilitation strategies for all victims.

Keywords: Sexual assault, PTSD, Trauma, Gender

1. Introduction

Sexual assault, as a serious traumatic event, often results in patients experiencing Post-Traumatic Stress Disorder (PTSD). The discussion in this study will be based on the findings of the relevant literature in recent years, specifically including gender differences in the causes, symptom, and treatment of PTSD as a

result of sexual assault. This study will focus mainly on PTSD, as there are fewer studies on Post-Traumatic Stress Syndrome (PTSS) that have been published on this particular topic.

According to the American Psychiatric Association (APA), PTSD is a severe mental health condition that may develop after an individual has experienced or witnessed a traumatic event, which may include

wars, natural disasters, major accidents, terrorist attacks, sexual assaults, domestic violence, etc.

The American Psychological Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) outlines the diagnostic criteria for PTSD, which includes four main syndromes:

First, Intrusive Memories: Repetitive, involuntary, and distressing memories, flashbacks, or nightmares of traumatic events. These intrusive thoughts often bring the trauma back to the present, causing great distress.

Second, Avoidance: Trying to avoid reminding oneself of traumatic thoughts, feelings, conversations, activities, places, or people. This may also include emotional numbing and alienating others.

Third, Negative Changes in thinking and mood: this may involve negative beliefs about oneself or about the world, constant feelings of fear, terror, anger, guilt or shame, diminished interest in important activities, and feelings of alienation or disconnection from others.

Fourth, Altered Arousal and Responsiveness. This includes being easily startled, feeling tense or "on edge," difficulty sleeping, and angry outbursts. Hypervigilance and overstated fright responses are also common.

It is worth noting that to be diagnosed with PTSD, these symptoms must persist for more than a month and cause significant distress or impairment in social, occupational, or other important areas of functioning. The importance of this issue cannot be ignored. Currently, research on PTSD due to sexual assault focuses on the following aspects: the psychological and physiological mechanisms of trauma, the effects of different treatments, and the impact of social support on recovery. However, as it stands, most studies have focused on female victims, while relatively few studies have been research on male victims. However, there is growing evidence that male victims display different coping patterns and psychological symptoms than women when facing sexual assault trauma, and not only that, the number of male victims is far more underestimated by the society. Therefore, there is a need to conduct research on it, to compare and analyze the differences between the sexes. Hypothesizing that there may be significant differences between the sexes of sexual assault victims in terms of the causes, symptoms, and treatment outcomes. Through this literature review, it is hoped that existing studies can be systematically summarized to reveal the important role of gender in PTSD caused by sexual assault, and to help clinicians and researchers develop more effective intervention strategies.

2. Causes

2.1 Physiological Factor

Physiological aspects of gender differences significantly influence the incidence and severity of PTSD following sexual assault. Research has shown that women have a more sensitive hypothalamic-pituitary-adrenal axis (HPA axis) than men, which makes them more at risk for strong emotional reactions when facing trauma, resulting in exacerbation of PTSD symptoms (Olf, 2017). Specifically, abnormal responses in the HPA axis may cause women to be more susceptible to anxiety, depression, and mood swings in the aftermath of trauma, which are important symptomatic manifestations of PTSD.

2.2 Psychosocial Factors

Gender differences in psychological responses also significantly influence the occurrence and manifestation of PTSD. Women typically experience more intense feelings of fear and helplessness after sexual assault, and they are more likely to be viewed as victims, which exacerbates the psychological trauma (Ding, 2024). Conversely, men are more inclined to feel shame and self-blame because society generally expects men to appear strong and confident, which makes it more difficult for men to accept and cope with their victimhood (Kline et al., 2021).

These manifestations are influenced by social and cultural factors. Female victims are more willing to seek social support, which helps them to alleviate trauma and reduce the incidence of PTSD (Flynn, 2022). However, societal expectations of masculinity make male victims more reluctant to report sexual assaults for fear of being perceived as weak or not manly enough, which increases their risk of feeling shame and self-blame, which in turn increases the probability of PTSD (Essid, 2022).

Additionally, the type and level of social support varies by gender. Women are more likely to have access to emotional support and understanding, whereas men often lack an effective support network due to self-segregation, which further exacerbates their trauma reactions and PTSD symptoms (Ullman & Filipas, 2005). Therefore, social and cultural expectations influence not only the victim's trauma response, but also their healing process in the aftermath of trauma. In summary, a combination of physiological and psychosocial factors lead to significant gender differences in the causes of PTSD. These differences not only affect the occurrence of PTSD, but also have a profound impact on symptom presentation as well as the treatment and recovery process.

3. Symptoms

Female sexual assault victims typically experience a range of emotional and psychological symptoms, primarily including depression, anxiety, and trauma re-experiencing. Depressive symptoms manifest as persistent sadness, loss of interest, and feelings of helplessness, while anxiety symptoms may include nervousness, restlessness, and excessive worry (Tannahill et al., 2021). Female victims typically exhibit more pronounced mood swings, so they are more likely to seek and receive psychotherapy and as a result are able to enter the recovery process more quickly compared to male victims. (O'Doherty et al., 2023).

In contrast, male victims may exhibit some anger and aggressive behavior in addition to the core symptoms of PTSD, which also encompasses introverted anger. (Galovski et al., 2013). Male victims often choose to remain silent for fear of social stigmatization, and this silence not only prevents them from receiving the support and understanding they deserve, but also further increases their psychological distress, making the problem more complex and difficult to resolve (Ullman & Filipas, 2005). This disparity in responses leads to the possibility that PTSD symptoms in male victims may be misdiagnosed or overlooked, especially if they exhibit substance abuse or other unhealthy coping mechanisms. Due to the similarity in presentation and the current neglect of male victims, these symptoms may be incorrectly attributed to other mental health issues.

4. Treatment

4.1 Traditional Treatment

Traditional treatment can include psychotherapy as well as medication. Psychotherapy is the core of PTSD treatment, and commonly used methods include cognitive behavioral therapy (CBT) and exposure therapy (PE). The efficacy of these methods varies to some extent among victims of different genders. According to the APA's explanation, CBT therapy will often involve efforts to change thought patterns. For example, identifying the thinking distortions that are creating problems and reassessing them in light of reality. Or learning to develop greater confidence in one's abilities, etc. In more cases as well, the psychologist will work with the patient in a collaborative manner to better understand the problem and develop treatment strategies. Exposure therapy is designed to help people face their fears and is often conducted as a whole exposure therapy to help break patterns of avoidance and terror.

In the case of CBT and PE, studies have shown that female victims typically exhibit higher efficacy when

treated with CBT and PE. This may be due to the fact that females are more inclined to express emotions and actively participate in the treatment process, factors that contribute to improved outcomes (Cusack et al., 2016). Men may have a more difficult time confronting and processing traumatic memories while undergoing PE, which may affect the outcome of the treatment (Sripada et al., 2013). CPT is a type of cognitive-behavioral therapy that is specifically designed to address PTSD. Notably, studies have found that female victims typically experience significant reductions in PTSD symptoms when treated with CPT, and especially perform well in processing negative cognitions and emotions associated with trauma (Khan et al., 2020). This may be related to female strengths in emotional processing and social support seeking.

In terms of medication, different genders do not seem to show significant differences in treatment outcomes.

4.2 Treatment Combined with Social Factors

First, is social support, which plays a key role in PTSD recovery. Research has shown that female victims typically have access to more emotional support, which is important for their psychological recovery (Ullman & Filipas, 2005). In contrast, male victims may have difficulty seeking help due to societal expectations, and thus the provision of social support requires special attention in treatment.

Second, psychological support and emotional support for male victims. Male victims often face challenges with emotional expression and support-seeking during the treatment process. Effective psychological support and emotional support methods may include building trusting relationships, providing a safe environment for emotional expression, and encouraging positive coping strategies (Jakupcak et al., 2006). In addition, treatment programs for men should focus on enhancing self-efficacy and social functioning to help them better recover. For example, customized treatment programs for gender-specific challenges specifically address feelings of shame related to social stigma and internalization. (Shepp et al., 2020)

5. Future Expectation

5.1 Gender-specific Support Systems

Creating gender-specific support systems is extremely important to effectively responding to PTSD. Victims of different genders exhibit different needs and coping strategies when dealing with trauma, so providing appropriate gender-specific support and resources can be very helpful. In the case of male victims, they often face greater resistance to expressing their emotions and seeking help.

Therefore, it is helpful to establish specialized psychological support systems that provide a safe environment and trusting relationships to encourage them to express their feelings and seek help. This can be done by training counselors to be more sensitive to the needs of male victims and to provide targeted emotional and psychological support. Alternatively, specialized support groups for male victims could be provided to offer a safe space for sharing and healing. All of these approaches may better assist men in accessing psychological support.

5.2 Impact of Gender Stereotypes

The negative impact of gender stereotypes on victims cannot be ignored. Stereotypes not only add to the psychological burden of victims, but may also lead to additional barriers when they seek help. Many scholars have already studied the negative effects of this phenomenon. Therefore, reducing gender bias and victim blaming should also be the key focus of our future efforts.

6. Conclusion

As a result of the above discussion, we can conclude that there are significant differences in the causes, symptoms, and treatment outcomes of sexual assault victims by gender. The differences we have discussed include the fact that women tend to be more susceptible to developing PTSD due to the abnormal responses and emotional processing of the HPA axis, whereas men may face greater challenges in coping with trauma due to social expectations and suppression of emotional expression. A number of nuances are also included, but in general, understanding these gender differences is critical to developing effective interventions. The only way to better assist gender-diverse victims in restoring their lives is through the targeted design and implementation of psychotherapeutic and social support systems.

As far as future research is concerned, researchers can focus on a number of areas. Firstly, for the existing psychological treatments, their effects on victims of different genders can be further verified, and ways to optimize these treatments according to gender differences can be explored to improve the treatment effects. Secondly, the differences in physiological mechanisms between genders can continue to be studied to provide more references. Furthermore, are these results still valid for transgender people? Would the traumatic event have a greater negative impact on the victim if they were transgender? Finally, gender differences may manifest themselves differently in different cultural contexts. Future research can further expand the scope of the study by making cross-cultural comparisons. Further advancing the understanding of

gender differences. All these aspects can further improve the treatment strategies for PTSD and better help more victims to recover their mental health.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Pearson.
- American Psychiatric Association. (2023). *Cognitive behavior therapy*. *Apa.org*. <https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral?clearcache=true>
- American Psychological Association. (n.d.). *Post-traumatic stress disorder*. *Https://Www.apa.org*. <https://www.apa.org/topics/ptsd/>
- American Psychological Association. (2017). *What is exposure therapy?* American Psychological Association. <https://www.apa.org/ptsd-guideline/patients-and-families/exposure-therapy>
- Cusack, K., Jonas, D. E., Forneris, C. A., Wines, C., Sonis, J., Middleton, J. C., Feltner, C., Brownley, K. A., Olmsted, K. R., Greenblatt, A., Weil, A., & Gaynes, B. N. (2016). *Psychological treatments for adults with posttraumatic stress disorder: A systematic review and meta-analysis*. *Clinical Psychology Review*, 43, 128–141. <https://doi.org/10.1016/j.cpr.2015.10.003>
- Ding, Y. (2024). *Psychological harm, causes and response to sexual assault of females in developing country*. *Transactions on Social Science, Education and Humanities Research*, 5(Vol. 5 (2024)), 298–304. <https://doi.org/10.62051/gqff1d62>
- Essid, E. (2022). *The Impact of Sexual Assault Type on Sexual-Risk Taking, Self-Blame, and Relationship Satisfaction* (Order No. 28963471). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (2628868452). <http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/dissertations-theses/impact-sexual-assault-type-on-risk-taking-self/docview/2628868452/se-2>
- Flynn, J. A. (2022). *Long-Term Health Outcomes for Adult Women Who Experienced Sexual Assault* (Order No. 29069131). Available from ProQuest Dissertations & Theses Global. (2822187302). <http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/dissertations-theses/long-term-health-outcomes-adult-women-who/docview/2822187302/se-2>
- Galovski, T. E., Blain, L. M., Chappuis, C., & Fletcher, T. (2013). *Sex differences in recovery from PTSD in male and female interpersonal assault survivors*. *Behaviour Research and Therapy*, 51(6), 247–255. <https://doi.org/10.1016/j.brat.2013.02.002>
- Jakupcak, M., Osborne, T., Michael, S., Cook, J., Albrizio, P., & McFall, M. (2006). *Anxiety sensitivity and depression: Mechanisms for understanding somatic complaints in veterans with posttraumatic stress disorder*. *Journal of Traumatic Stress*, 19(4), 471–479. <https://doi.org/10.1002/jts.20145>
- Khan, A. J., Holder, N., Li, Y., Shiner, B., Madden, E., Seal,

- K., Neylan, T. C., & Maguen, S. (2020). How do gender and military sexual trauma impact PTSD symptoms in cognitive processing therapy and prolonged exposure? *Journal of Psychiatric Research*, 130, 89–96. <https://doi.org/10.1016/j.jpsychires.2020.06.025>
- Kline, N. K., Berke, D. S., Rhodes, C. A., Steenkamp, M. M., & Litz, B. T. (2018). Self-Blame and PTSD Following Sexual Assault: A Longitudinal Analysis. *Journal of Interpersonal Violence*, 36(5-6), NP3153–NP3168. <https://doi.org/10.1177/0886260518770652>
- O'Doherty, L., Whelan, M., Carter, G. J., Brown, K., Tarzia, L., Hegarty, K., Feder, G., & Brown, S. J. (2023). Psychosocial interventions for survivors of rape and sexual assault experienced during adulthood. *The Cochrane Database of Systematic Reviews*, 2023(10), CD013456. <https://doi.org/10.1002/14651858.CD013456.pub2>
- Olf, M. (2017). Sex and gender differences in post-traumatic stress disorder: An update. *European Journal of Psychotraumatology*, 8(sup4), 1351204. <https://doi.org/10.1080/2008198.2017.1351204>
- Shepp, V., O'Callaghan, E., & Ullman, S. E. (2019). Interactions with offenders post-assault and their impacts on recovery: A qualitative study of sexual assault survivors and support providers. *Journal of Aggression, Maltreatment & Trauma*, 29(6), 1–23. <https://doi.org/10.1080/10926771.2019.1660443>
- Sripada, R. K., Garfinkel, S. N., & Liberzon, I. (2013). Avoidant symptoms in PTSD predict fear circuit activation during multimodal fear extinction. *Frontiers in Human Neuroscience*, 7. <https://doi.org/10.3389/fnhum.2013.00672>
- Tannahill, H. S., Fargo, J. D., Barrett, T. S., & Blais, R. K. (2021). Gender as a moderator of the association of military sexual trauma and posttraumatic stress symptoms. *Journal of Clinical Psychology*, 77(10), 2262–2287. <https://doi.org/10.1002/jclp.23162>
- Ullman, S. E., & Filipas, H. H. (2005). Gender differences in social reactions to abuse disclosures, post-abuse coping, and PTSD of child sexual abuse survivors. *Child Abuse & Neglect*, 29(7), 767–782. <https://doi.org/10.1016/j.chiabu.2005.01.005>