

Impaired Emotional Regulation in Females with Post-Traumatic Stress Disorder after Experiencing Intimate Partner Violence

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Abstract. The growing awareness of mental health issues has brought trauma and its aftereffects to light, particularly post-traumatic stress disorder (PTSD). This paper emphasizes the gendered aspect of PTSD, namely the increased frequency of diagnosis in women who have been victimized by intimate partner violence (IPV). Emotion dysregulation has been identified as a difficulty experienced by many individuals who are diagnosed with IPV-led PTSD. By carefully examining recent studies, the research highlights the connection between PTSD symptoms and emotion dysregulation, clarifying the intricacies of positive and negative emotion regulation mechanisms in female IPV victims. The extent of the influence of positive emotion dysregulation on the severity of PTSD symptoms is still up for debate, whereas negative emotion dysregulation is found to be closely connected to more severe PTSD symptoms. Furthermore, the paper critically evaluates the efficacy of expressive writing as a promising approach to mitigate PTSD symptoms among IPV survivors. Lastly, the paper highlights the lack of inclusivity of subjects as a limitation. In sum, the paper accentuates the urgency of addressing IPV-led PTSD, advocating for tailored interventions that take the multifaceted emotional regulation challenges faced by victimized women into account.

Keywords: Post-traumatic stress disorder, intimate partner violence, emotion dysregulation.

1. Introduction

As mental health becomes a major concern to the human population today, attention has been brought to trauma. Discussion of trauma, now a relationship-bonding method between many, often leads to the spreading of awareness of post-traumatic stress disorder (PTSD). The PTSD diagnosis criteria includes the exposure to a traumatic event: death, serious injury, or sexual violence [1]. They must have also experienced at least one intrusion symptom. Recurrent and uncontrollable memories or dreaming of the traumatic event can be the symptoms of PTSD. Other symptoms include dissociative reactions (such as flashbacks), and the occurrence of physical reactions and/or psychological distress when the individual is exposed to cues that remind them of the trauma. Furthermore, the individual's avoidance of trauma-related stimuli, in addition to two or more negative alterations in cognitions and mood, are essential to the diagnosis of PTSD. It is noteworthy that the symptom(s), resulting from trauma rather than medication, substance use, or other illness, must last over a month and have functional significance based on Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) [1].

These symptoms are summarized to be failures of certain aspects crucial to the natural recovery process from trauma such as emotional engagement, extinction and inhibitory learning, and contextualization [1]. Confronting fear can indeed inflict maladaptive response among individuals as they have to recall the memory of trauma that they actively avoid due to the distress it may bring. This has prevented individuals from recognizing faulty perception of the event, thus their chance of being corrected is lost. The distress, supposedly, goes extinct as individuals become aware that trauma does not repeat simply due to reappearance of the associated stimulus according to inhibition theory of learning. However, when troubled by PTSD, one tends to overgeneralize fear to similar stimuli, and may require help from prolonged or cognitive behavioral therapies. These therapies may also be of use to individuals with PTSD as they would encounter dysfunction in contextualization, which is the ability in recognizing the difference between safety and danger. They may help individuals to alleviate hypervigilance or emotional numbing, which are both abnormal responses in inappropriate

situations. Treatment such as imaginal exposure to trauma has been proven to be successful in decreasing the experienced distress in the long run (in-between therapy sessions), although distress may be encountered at the moment due to coercive recalling of trauma [1].

A cognitive symptom included in diagnosis criterion in DSM-5 of PTSD, but not emphasized with intent, is emotion dysregulation, an individual's inability to manage their emotion. Both positive and negative emotion dysregulation are common among individuals troubled by the disorder [2]. Emotion regulation may be influenced by oneself or others, which are intrinsic and extrinsic respectively. Oftentimes, individuals tend to favor, thus increase, positive emotions (joy, love, etc.), over negative emotions (e.g., sadness, anger). On the other hand, there are also cases when these people would choose to decrease positive emotions and increase negative emotions in order to avoid associated consequences such as impulsion dyscontrol and inability to focus. Emotion regulation can be done either consciously or subconsciously depending on the situation that the individual is in. For example, one may attempt to hide their sorrow during a distressing conversation. This demonstrates one of the methods of emotion regulation, i.e., situation modification through the suppression of negative emotion. However, when an individual is troubled by emotion dysregulation, they may experience persistent negative emotion or inability to feel positive emotions. Additionally, they may get backfired as result of the regulation failure in forms of worsened mental state or physical health (e.g., increased cardiovascular disease risk) [2].

Although women are statistically more likely to develop PTSD than men, with a lifetime prevalence of 10% and up, there has not been sufficient gender-sensitive research conducted to investigate the triggers, impact, and effective interventions for the disorder specifically for women [3]. As the fifth edition of the DSM-5 from 2013 rearranged PTSD from the anxiety disorders category in DSM-4 to the new "Trauma- and Stressor-Related Disorders" chapter, the criteria for its diagnosis have been narrowed down to be more conditional [4]. Severe physical illnesses such as cancer are no longer considered as trauma. At the same time, the diagnosis has become less dependent on subjective self-reports [4]. However, these modifications to criteria may contribute to the decrease in qualification for PTSD diagnosis nationwide, potentially preventing women troubled by traumas from seeking treatment. Taking both the relatively scarce knowledge about IPV-led PTSD, especially in women, and its growing prevalence into account, this paper aims to document the current understanding of PTSD. Simultaneously, it targets to address the severity and urgency of the disorder on women under the influence of IPV and thus call for public attention. It also places the emphasis on emotional dysregulation experienced by those women, pointing out a potential direction of designing intervention methods today, i.e., treating PTSD symptoms through enhanced ability in regulating emotions.

2. Development of PTSD after IPV and the Role of Emotional Regulation

2.1. Risk Factors and Outcomes Associated with IPV

Trauma can be inflicted through a variety of ways; thus, it is often associated with many risk factors. Möller and colleagues chose to focus on the pre-assault (such as demographics and childhood sexual trauma) and assault-related variables (including relationship to the assailant) to determine the risk factors that may have contributed to the development of PTSD in 39% of female victims of sexual assault [5]. In their study, over 300 participants (18 to 59) who were victims of rape or attempted rape were initially given questionnaires on assault and other trauma related history at the baseline. 6 months later, 201 participants returned. Over seventy of them were diagnosed with PTSD, exceeding the amount of diagnosis on the initial baseline assessment. In addition to earlier (and childhood) victimization, pre-existing depression, group assault, and other risk factors, assault by an intimate partner, more so repeatedly, has found to be a more significant variable than assault by someone acquainted by the victim. This differentiates IPV-inflicted PTSD from other types, classifying women victimized by repetitive incidents of IPV as "high risk" group. The study also underscores the

importance of tailored interventions that address the complexities of intimate partner relationships [5].

Another risk factor associated with PTSD is the mood of the individual. Brown and colleagues claimed that while there is an established positive relationship between negative affect (NA, i.e., a range of distress that include various “aversive mood states”) and PTSD symptom severity, the relationship between positive affect (PA) and PTSD was unclear [6]. In their study, over 50 females who were diagnosed with PTSD self-reported PA and NA on Positive and Negative Affect Schedule–Expanded Form and their depressive symptoms were assessed. Relatively strong and positive associations between NA and PTSD symptom severity, re-experiencing symptoms, and avoidance symptoms (although this does not have statistical significance) were found, indicating that NA is a major predictor of PTSD related variables. However, PA did not show a significant impact on neither PTSD symptoms or clusters, which is conflicted with the hypothesis that joyful emotions and mood states should be able lessen the intensity and frequency of PTSD symptoms, as well as decreasing its comorbidity with Major Depressive Disorder. This may be due to its present yet insignificant existence when an individual undergoes symptoms of PTSD, so that even when they experience joy, the positive mood is insufficient in changing their overall negative mood state. As PTSD is likely to be chronic, it may also disable PA’s competency with other factors such as age that has found to be negatively correlated with the frequency or length of duration of trauma. In this case, one may grow to be more desensitized towards PA as they grow older. The association between PA and PTSD requires further investigation [6].

Despite the high prevalence of IPV and IPV-inflicted PTSD in women, there has not been enough knowledge on which personality traits could lead some women to develop PTSD (risk variables) or defend them from developing associated symptoms (resiliency variables) [7]. Carleton and colleagues have followed Miller and Resick’s work on the three personality-profile subtypes (internalizing, externalizing, and simple) that are exhibited by male and female veterans who have traumas of other varieties. To replicate the study in women exposed to IPV, the trauma experience, childhood experience, response to trauma, alcohol and drug abuse, and frequency of depressive symptoms of over 100 women (18 to 65 years) were assessed. They were also asked to report their personality features and change in behaviors due to complex-PTSD. The result shows consistency with previous studies on distinct features among the three subtypes, including the low comorbidity rate with other disorders and display of temperament within a normal range found in participants of simple subtype. This indicates that the simple subtype itself is a resiliency factor. On the other hand, while both the internalizing and externalizing groups scored high on comorbid pathology, self-harm, and unexpectedly for externalizing group, depression. The internalizing group also had high scores on depression, negativity, and avoidant-personality; the externalizing group is characterized by high score on aggression, impulsivity, and exhibitionism. Furthermore, the study suggests that these subtypes may provide implications to early intervention or assistance to victims in the externalizing and internalizing subgroups [7].

2.2. Emotional Regulation and PTSD

Stressful situations can temporarily disrupt emotion regulation in individuals who are otherwise mentally and emotionally healthy. As defined above, emotional dysregulation refers to difficulty in controlling one’s emotions. PTSD is linked to chronic emotion dysregulation, specifically challenges in regulating negative emotions and a heightened tendency to employ strategies of emotional suppression, as is often experienced by IPV survivors [8]. In the study performed by Ruork et al., participants (women with mean age of 37 years) were interviewed on the type of abuse they were subjected for a number of months to 10 years and more. The type of abuse experienced by most was psychological, and the rest were physical, sexual, or all of these combined. Participants were also asked to self-report their level of emotion dysregulation and PTSD symptoms on respective questionnaires. The result indicates a positive relationship between severity of PTSD symptoms and higher emotion dysregulation. However, the researchers did not identify any significant correlation

between the type of abuse experienced by the victim and differences in emotion dysregulation. Furthermore, the abuse type was also not associated with PTSD symptom severity. The result presents individuals' dysfunction in regulating emotions as a strong predictor for developing PTSD, thus PTSD, instead of the type of abuse. As a result, the study offers important insight to treating women who survived IPV as it directs future treatments to be focusing on addressing emotion dysregulation [8].

What makes distinguishes the dynamic of IPV from other forms of violence, and possibly contributes to its impact on PTSD severity, is that the act of violence is committed by a person trusted by the victimized individual [9]. To study the emotion regulation mechanism employed by women with IPV experience, 120 participants (mean age of 38.5 years) recruited by Muñoz-Rivas and colleagues were divided into three groups: victims with one report (VSR), victims with several reports by the same aggressor (VSRSA), and victims with several reports by different aggressors (VSRDA). Their self-reported emotion regulatory skill (on the Emotional Processing Scale/EPS-25) and childhood trauma were recorded. In the group of VSRDA, the rate of PTSD diagnosis was the highest in relation to the two other groups while there is no major difference in diagnosis rate between VSR and VSRSA. This result conveys IPV carried out by multiple aggressors could lead to higher possibility of developing PTSD in comparison to a single incident of IPV or several incidents by the same aggressor. The participants were further classified into three clusters (i.e., emotional overwhelm, avoidance/non-impoverished, and emotional regulated). The emotional overwhelm cluster obtained the highest scores across all factors (suppression, avoidance, unregulated emotion, impoverished emotional experience, and unprocessed emotions) of the EPS-25. Participants who belonged to this group were most likely to be diagnosed with PTSD with a 64% rate. They also tend to suffer from more severe symptoms, resolidifying the positive relationship between emotional dysregulation and PTSD symptom severity proposed by the previous study. The avoidance/non-impoverished cluster was likely to be diagnosed, but still exhibited a PTSD diagnosis rate of 27%. The emotional regulated cluster was the least on all aspects, suggesting that possessing average level of emotional regulation does not always signify absence of mental disorder in an individual. The study also infers that aggressors would be more likely to target the emotionally impoverished individuals (as they have lost control of emotion to a certain degree). The victimized women's decreased ability in detecting danger due to their heightened emotional distancing (i.e., the feeling of disengagement from others' emotions) may thus lead them to revictimization [9].

Although a number of research has been conducted to investigate negative emotion dysregulation and its relationship with PTSD, fewer is known about the positive emotion dysregulation (e.g., hyperarousal) and its association with the disorder, especially within the context of IPV. To determine the interrelation among all these aspects, Simpson and colleagues evaluated the exposure to trauma, recent frequency of three types of IPV, and PTSD symptoms of 354 women (19 to 75) [10]. The Difficulties in Emotion Regulation Scale-16 (DERS) and -Positive (DERS-P) were used to measure their negative and positive emotion regulation respectively. Through the research, significantly positive relationships were discovered between both positive and negative emotion dysregulation, and physical, psychological and sexual IPV. The statistics provide support for the impact of negative emotion dysregulation from all three types of IPV to PTSD symptom severity. This finding argues against previous studies by stating there is correlation between positive emotion dysregulation and PTSD symptom severity. However, no relationship between positive emotion dysregulation caused by psychological IPV and the severity of PTSD symptom was established. Overall, Simpson and colleagues' findings indicate that positive emotion dysregulation does play a major role in women's PTSD symptom severity, and thus the increase in either emotion dysregulations is likely to affect the intensification of severity. Strong emotions, particularly, can be overwhelming and in turn stimulate avoidance of both positive and negative emotions to cope. Consequently, PTSD symptoms are maintained and even worsened through emotion dysregulation. This may lead to the victimized women's higher tendency to be revictimized by IPV [10].

In a recent study, Weiss and colleagues further broke down the effect of positive emotion dysregulation and its overlap with negative emotion dysregulation among female victims of IPV with

PTSD [11]. All participants of this research had been victimized by their male partner with criminal IPV history. The difficulties they had with managing negative and positive emotions were measured through DERS and DERS-P respectively, and each scale are further specified into Accept (i.e., nonacceptance to positive emotions), Goals (i.e., the ability to stay engaged in goal-directed task), and Impulse. The study found relatively smaller (in comparison to DERS score), but still significant positive relationship between DERS-P and PDS (i.e., the scale measuring PTSD symptom severity) in general, indicating that more difficulty in regulating positive emotion is associated with more severe symptoms, which is consistent with previous studies. Furthermore, Accept, Goals, and Impulse scores of both DERS and DERS-P scores were accounted for change in symptom severity in the linear regression model. This result helped to identify risk factors related to both positive and negative emotion dysregulation for developing PTSD, which are difficulties with acceptance of positive emotion, goal-directed behavior engagement, and impulsivity control. Conversely, the victimized individuals may have increased difficulties with aspects due to higher PTSD symptom severity. Lastly, Weiss and colleagues' work challenged previous studies as it proposed a moderate correlation between positive and negative emotion regulation. Three types of dynamics of emotion regulation were present in individuals, which are 1) high levels of both types of emotion dysregulation, 2) high level of negative emotion dysregulation paired with low level of positive emotion dysregulation, and 3) low levels of both types. This points out a potential direction for developing treatment addressing the difficulty in regulating both negative and positive emotions among women victims of IPV simultaneously [11].

3. The Effectiveness of Treatment

There are certain effective methods of intervention for treating PTSD. From Procaccia and Castiglioni's study, expressive writing about one's traumatic experience has been found to be beneficial for managing psychological distress experienced by victims of IPV who diagnosed with PTSD [12]. In the study, women were assigned to two groups to either write expressively or neutrally about their traumatic experience. The two styles of writing differ in levels of emotion devoted to and displayed by the writing, where the former is deeper than the second. The results suggest that expressive writing is a cost-effective method with significant impact on reducing both depression and PTSD symptoms in female victims of IPV (e.g., avoidance). This can be explained through the active engagement in cognitive processing of the traumatic event during expressive writing in comparison to neutral writing. This aligns with the exposure therapy often employed to treat PTSD, which is also based on Cognitive Processing Theory, that aims to alleviate the intensity of the memory of the traumatic event. At the same time, cognitive processing also enhances individuals' ability to regulate negative emotions as they gradually become more desensitized to recalling the experience, easing the effort of confronting fear. Through expressive writing, individuals also tend to regain a sense of control lost due to the experienced by establishing meaning of it. The study's result is relatively inclusive as it addresses patients suffering from comorbidity between depression and PTSD. The study indicates that expressive writing has a meditating effect on symptoms associated with PTSD as it helps enhancing individuals' previously damaged ability to process negative emotions [12]. However, there is no significant benefit of positive emotion processing in treating such symptoms, which contradicts past research. Positive emotions being expressed more frequently might correspond to a reduced capacity to effectively manage trauma, which could lead to health issues associated with stress. Therefore, positive emotion expression may conceal avoidance and denial defense mechanisms, which is common among women traumatized by IPV.

4. Conclusion

This paper emphasizes the influential role of emotion dysregulation in PTSD among women victimized by IPV. The majority of studies support the claim that difficulty in regulating negative

emotion possesses a significantly positive relationship with PTSD symptom severity. However, the impact of positive emotion dysregulation and its relationship with PTSD symptom severity remains controversial. Its relationship with negative emotion dysregulation requires further investigation as well. To date, there have been interventions, such as expressive writing, developed to improve IPV victims' ability to regulate negative emotions. Witnessing the rapidly rising prevalence of IPV against women, all detrimental to their mental health, it would be impossible to decelerate the harmful trend unless society finally recognizes women's struggles as a pressing issue.

To achieve that, closing research gaps in the psychopathology domain is essential. While some studies aim to help women victimized by IPV as a whole by devising therapeutical intervention, the treatment's effectiveness on different groups of patients is neglected. For example, the studies ignored variation in personal background of the victim, such as the type of mental illness developed, the form of IPV experienced, etc. Overall, treatment devised to solve IPV-led PTSD in women is lacking. Solving existing debate on the effect of positive emotion regulation on women with IPV related PTSD may aid in the advancement of treatment development specifically tailored for the victimized population. These treatments would be able to address positive emotion dysregulation or both types of emotion dysregulation. Furthermore, while there is a greater number of research conducted on IPV by male partners, the effect of IPV against women by same-sex partners (e.g., lesbian, bisexual) or those involved in other forms of romantic relationship is greatly understudied. The inclusion of victimized women of all sexual orientations in studies would help combat social stigmatization and the marginalized groups of society would be able to benefit as a result.

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