

Research Design Paper:
Investigating Memory Biases and Errors in Child Abuse Victims with PTSD

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Introduction

Child abuse is a deeply pervasive issue with consequences that often extend into the lives of survivors long after the traumatic experiences have taken place. Post-Traumatic Stress Disorder (PTSD) is a significant concern in the context of child abuse resulting in various cognitive and emotional disturbances. This research paper aims to delve into the intricate world of memory biases and errors within child abuse victims diagnosed with PTSD, shedding light on how traumatic experiences impact the memories of survivors and ultimately alter their recollection of past events.

Child abuse (encompassing both physical, emotional, and sexual abuse, as well as neglect) is a traumatic experience that often leads to long-lasting psychological consequences. Many survivors of child abuse experience PTSD, a mental health condition characterized by symptoms such as intrusive thoughts, negative alterations in mood and cognition, and avoidant behavior related to the traumatic event. Notably, the nature of memory and its potential biases and errors in child abuse victims with PTSD is a topic that helps us to better understand why victims behave in a certain way.

Memory biases and errors are inherent human phenomena that can significantly influence how individuals recall and interpret events. In the context of child abuse survivors with PTSD, these biases and errors may play a pivotal role in shaping their recollection of traumatic experiences. One example is confirmation bias, a cognitive phenomenon grounded in our tendency to selectively remember and interpret information in alignment with pre-existing beliefs and emotions. This bias involves the selective processing and storage of information, ultimately shaping perceptions and recollections. Additionally, memory's susceptibility to external influences is a complex facet to consider, exemplifying the malleability of recollections

through leading questions, suggestive therapeutic techniques, or generally well-intentioned yet potentially distorting influences. Understanding the interaction between emotion and memory during recall is also critical, as heightened emotional states may either strengthen memory details or lead to fragmentation, affecting the coherence of chronology. This study seeks to uncover the science underpinning these cognitive phenomena, shedding light on their profound impact on child abuse survivors with PTSD, with implications for therapy and legal proceedings.

The central research question for this study is: How do child abuse victims with PTSD experience memory biases and errors related to their traumatic experiences, and what are the potential implications of these phenomena for therapy and legal considerations? By scrutinizing the interaction between memory biases, errors, and the traumatic experiences of child abuse survivors with PTSD, this study seeks to offer insights that can inform therapeutic interventions, legal proceedings, and support systems for these survivors, ultimately contributing to a better understanding of their complex journey towards healing and justice.

Literature Review

Impact of Trauma on Memory Processes

Understanding the intricate relationship between memory biases and errors in child abuse victims with post-traumatic stress disorder (PTSD) requires a comprehensive review of existing literature. Research in this field consistently demonstrates the profound impact of traumatic events on memory processes (Otgaar et al., 2017). Traumatic experiences, especially in individuals diagnosed with PTSD and depression, give rise to memory aberrations, which are notable characteristics that extend to the formation of false memories (Otgaar et al., 2017).

In the context of child abuse survivors with PTSD, memory aberrations become significant factors shaping the recollection of traumatic experiences. One such cognitive phenomenon is confirmation bias, rooted in the selective processing and storage of information aligned with pre-existing beliefs and emotions (Otgaar et al., 2017). This bias contributes to the shaping of perceptions and recollections in child abuse survivors, influencing how they remember and interpret events related to their traumatic experiences.

Additionally, the susceptibility of memory to external influences is a complex facet that adds another layer to the understanding of memory biases and errors in child abuse victims with PTSD. This susceptibility exemplifies the malleability of recollections through various factors, such as leading questions, suggestive therapeutic techniques, or well-intentioned yet potentially distorting influences (Otgaar et al., 2017). These external influences underscore the need to unravel the intricate science behind cognitive phenomena, shedding light on their profound impact on the memories of child abuse survivors with PTSD.

Key Findings from Academic Journals

To delve deeper into the understanding of memory biases and errors, the current study draws upon key findings from three academic journals. The first article, by Goodman et al. (2011), explores false memory formation in adolescents and adults with histories of child sexual abuse. The study unveils the complexity of memory processing, indicating that individuals with PTSD may develop false memories related to trauma, further emphasizing the need for a nuanced investigation into memory phenomena.

The second article by Otgaar et al. (2017) delves into the drivers of false memories in psychopathology, making a compelling case for associative activation. This research provides insights into the underlying mechanisms contributing to memory aberrations in individuals with

PTSD, laying the groundwork for understanding how traumatic experiences may lead to distorted recollections.

The third article, conducted by McGuire et al. (2021), offers a longitudinal investigation of children's trauma memory characteristics and their relationship with PTSD symptoms. This study not only contributes to the understanding of memory processes in child abuse survivors but also aligns with the current research's focus on assessing memory biases and errors over time.

Integration with the Experiment

The integration of these findings into the proposed research is pivotal for a comprehensive examination of memory biases and errors in child abuse victims with PTSD. The study's multifaceted approach, encompassing a diverse age range and utilizing memory assessments, experimental investigations, and clinical assessments, aligns with the need to capture the nuances and complexities highlighted in the literature.

The memory assessment component, involving participants' detailed recall of traumatic experiences, directly corresponds to the explored phenomena of intrusive memory, memory fragmentation, and memory suppression outlined in the academic journals. Additionally, the controlled experiments, examining suggestibility, source memory errors, and memory distortion, align with the experimental components in the literature, enhancing the understanding of vulnerabilities and intricacies of memory in this population.

The longitudinal clinical assessments in the proposed research mirror the approach taken by McGuire et al. (2021), providing insights into the dynamic nature of memory biases and their connection to the progression of PTSD. Furthermore, the study's exploration of trauma-focused therapy and memory-focused interventions resonates with the broader implications suggested by the literature for therapeutic interventions and legal considerations.

In summary, the literature review sets the stage for the research by elucidating the profound impact of trauma on memory processes, emphasizing the need for a nuanced investigation. The integration of key findings from academic journals provides a theoretical foundation that directly informs the design and methodology of the proposed study, enhancing its potential to contribute to a better understanding of memory biases and errors in child abuse victims with PTSD.

Methods

In order to delve into the intricate world of memory biases and errors, my research adopts a comprehensive mixed-method approach. This multifaceted investigation comprises several distinct yet interconnected components, each designed to offer a comprehensive understanding of how memory processes influence the experiences of child abuse survivors.

In striving for a comprehensive understanding of memory biases and errors within child abuse survivors affected by Post-Traumatic Stress Disorder (PTSD), this research is tailored to focus on a diverse age range. The study aims to recruit a specific and diverse sample of 100 child abuse survivors diagnosed with PTSD, encompassing a varied age demographic. Participants, ranging from adolescence to adulthood, will be sourced from clinical facilities, advocacy organizations, and support groups, ensuring representation across different age cohorts. The inclusion of a broad age spectrum, spanning from teenage survivors to older adults, aims to capture the diverse nuances and developmental considerations that could impact memory processes and the experience of PTSD symptoms across different life stages. By considering these age variations, the study anticipates a nuanced understanding of how memory biases and errors manifest and evolve within the context of different age groups affected by child abuse-related PTSD, offering insights into the varying cognitive and emotional processes at

different life stages. This approach allows for a more comprehensive and age-sensitive examination of the multifaceted nature of memory within child abuse survivors affected by PTSD across different developmental periods.

The memory assessment component of the study would involve asking participants to recall and describe their traumatic experiences in as much detail as possible. This memory retrieval process is critical, as it provides insights into how these individuals remember and articulate their past trauma. Furthermore, participants will complete self-report measures, which allow us to gauge the presence and intensity of intrusive memories, memory fragmentation, and memory suppression. This information helps us better comprehend the intricacies of memory experiences among child abuse survivors with PTSD, offering valuable insights into their cognitive and emotional processes.

Controlled experiments form a significant part of the research paradigm. These experiments aim to directly investigate memory biases and errors. I'd employ various tests to explore suggestibility, source memory errors, and memory distortion, with a specific focus on how trauma-related cues affect the memory recall of child abuse survivors. This experimental component enhances our understanding of the vulnerabilities and intricacies of memory among this population and how external cues can influence their recollection of traumatic events.

Lastly, the research would extend into the realm of clinical assessments. I recognize that memory biases and errors do not exist in isolation but are intimately connected to PTSD symptoms and overall functioning. With this in mind, I'd assess the participants at multiple time points to track changes in their symptoms over time. This longitudinal approach provides insights into the dynamic nature of memory biases and their connection to the progression of PTSD. Moreover, this study explores the impact of trauma-focused therapy and memory-focused

interventions on reducing memory biases and errors, with the ultimate goal of improving the well-being and therapeutic outcomes of child abuse survivors with PTSD.

In sum, this comprehensive mixed-method research approach provides a holistic exploration of memory biases and errors within the context of child abuse survivors with PTSD. By recruiting a diverse sample, conducting memory assessments, experimental investigations, and clinical assessments, I aim to unveil the multifaceted nature of memory in these individuals.

Expectations

Extensive studies in the field have highlighted various patterns in memory processing among individuals affected by trauma, especially those with PTSD resulting from child abuse. Building upon these established findings, my research anticipates a multifaceted range of memory biases and errors prevalent among child abuse survivors with PTSD. I expect to encounter recurring instances of intrusive memories, where traumatic experiences resurface involuntarily, impacting daily life and well-being. Moreover, memory fragmentation, where recollections are disjointed or incomplete, is anticipated, reflecting the complex and often fragmented nature of traumatic experiences. Additionally, I anticipate instances of memory suppression (where individuals consciously or unconsciously push distressing memories away) to influence our participants ability to recall specific details or sequences of events. The severity of these memory challenges is expected to coalesce with the intensity of PTSD symptoms, indicating a strong association between memory biases and the manifestation of post-traumatic stress. Furthermore, I hold the expectation that interventions targeting these memory biases will lead to enhancements in memory recall and a subsequent alleviation of PTSD symptoms. This hypothesis is rooted in the belief that addressing these memory issues could potentially alleviate

the psychological distress associated with traumatic memories, fostering an improvement in the overall well-being of survivors.

Potential Issues

The study anticipates multifaceted challenges inherent in exploring the delicate territory of traumatic memory recall among child abuse survivors. One crucial concern is the potential distress participants may experience when recollecting traumatic events. The emotional and sensitive nature of such recollections requires careful handling to ensure participants' psychological well-being. To address this, the study prioritizes and ensures continuous access to mental health support for participants throughout the research process. Ethical considerations surrounding the retrieval of traumatic memories are of great importance. This necessitates the implementation of robust ethical protocols and informed consent measures to safeguard the rights of the participants. Additionally, assessing the accuracy of traumatic memories is a significant challenge due to the subjective and sometimes fragmented nature of these recollections. To address this challenge, the study will employ rigorous methodologies and validation techniques to enhance the validity of the data. The focus on participant safety and psychological well-being throughout the study is not only an ethical imperative but a fundamental aspect of responsible research in this sensitive area. This approach underscores the study's commitment to conducting research in a manner that is both scientifically sound and considerate of the well-being of the participants involved.

Explanations of Revisions

Overall, I received five comments from my peers that critiqued my work—in order to be thorough, I will address each in chronological order. My first draft received three reviews, the

first just addressing that I had yet to complete my Literature Review section which, in revising, I obviously completed. The second reviewer suggested categorizing the survivors in the study based on type of abuse, rather than generalizing it. While I appreciated this input, I found that sorting participants based on the type of abuse they faced would not alter the efficiency of my proposed experiment. In addition, I didn't think it would make the controlled element of my study any more effective than I found it to already be. The last comment I received on my first draft asked for the demographics of my sample participants to be narrowed down and further specified. I found this to be a particularly helpful critique that I utilized, allowing me to refine my Methods section to be as niche to the central research as possible. Because my research draws from multiple perspectives varying across ages and types of abuse, I was not able to be as thorough as my critiquer probably would have liked. However, I was able to add a segment clarifying *why* my participants' demographics were able to vary so much. The two comments I received on my Presentation addressed concerns pertaining to the quality of my video rather than the paper itself—varying from the addition of pictures in my PowerPoint or the inclusion of bullet points (which if I were able to go back and re-record, I would have included).

References

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