Autobiographical Memory Deficits of Victims of Childhood Abuse

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Overview of Memory Deficits Associated with Childhood Trauma

With an increasing number of recovered memories of childhood sexual abuse (CSA) during psychotherapy being reported, questions about the effects of childhood abuse on adult victims have arisen. Recent research has investigated these reports and examined the validity of recovered memories and the specific ways in which memory is affected (Nachson, 2000; e.g. Edwards, Fivush, Anda, Felitti, & Nordenberg, 2001, as cited in Johnson, Greenhoot, Glisky, and McCloskey, 2005; Johnson, Greenhoot, Glisky, and McCloskey, 2005). Researchers are currently investigating whether child abuse can lead to childhood memory deficits in adult victims, and two important debates have moved to the forefront of this research.

The most popular issue in this area is whether childhood memories can be repressed and recovered later in life. The recovered memory hypothesis suggests that CSA victims have repressed traumatic memories by removing them from conscious memory and moving them to unconscious memory from which they can later be recovered (e.g. Briere and Conte, 1993, as cited in Nachson, 2000). Many studies have found that victims of CSA do repress memories of these events and the memories can be later recovered. Briere and Conte (1994, as cited in Nachson, 2000) found that 59% of clinical clients who had experienced sexual abuse during childhood had no memory of these events. However, evidence from other studies contradicts this hypothesis. The false memory hypothesis these events have never occurred; instead, false memories have been created through the suggestibility of the psychotherapist based on interview questions and techniques (Brown, 1996; Ofshe and Watters, 1994; as cited in Nachson, 2000). Researchers who support the false memory hypothesis also argue that failure to confirm reports of CSA and the progression of normal forgetting detracts from the validity of recovered
memories accounts (Kihlstrom, 1996; Loftus, 1993; Loftus et al., 1994; Ofshe and Watters, 1994; Pope and Hudson, 1995b; Schacter, 1996; as cited in Nachson, 2000).

Another popular issue argues whether traumatic experiences from childhood or more proximal experiences contribute to memory deficits. Many studies have reported that childhood experiences of trauma and abuse may cause memory impairments in adults (e.g. Kuyken and Brewin, 1995, as cited in Johnson, Greenhoot, Glisky, and McCloskey, 2005). This hypothesis suggests that memory deficits result from a defense mechanism to control affect (Williams, 1995, as cited in Johnson, Greenhoot, Glisky, and McCloskey, 2005). This defense mechanism has been developed from early experiences of childhood trauma and abuse. Although studies have reported that childhood trauma and abuse may lead to memory deficits, memory can also be impaired by concurrent experiences (Johnson, Greenhoot, Glisky, and McCloskey, 2005). Events that are currently occurring in an individual’s life may detract from cognitive resources that may otherwise be used to recall memories (Kuyken & Brewin, 1995, as cited in Johnson, Greenhoot, Glisky, and McCloskey, 2005). There are also reports indicating that decreased cognitive activity and intrusive thoughts due to psychopathological disorders, such as post traumatic stress disorder and depression, can also produce memory deficits (McNally, Lasko, Macklin, & Pitman, 1995, as cited in Johnson, Greenhoot, Glisky, and McCloskey, 2005). These reports suggest that proximal circumstances and current cognitive functioning can lead to difficulty retrieving memories.

Over the past several years, researchers have attempted to resolve these two issues using experimentation. Despite these attempts, the research has not produced sufficient evidence to settle either of these issues. Current research is now investigating how childhood abuse affects specific areas of memory. The studies discussed in this review examined the influence of
childhood abuse exclusively on autobiographical memory. Autobiographical memory is a person’s memory for events that are specific to his or her past experiences (Goldstein, 2008). The memories are not only a recollection of a personal event or fact, but they also have spatial, emotional and sensory components which make them rich and complex. By studying autobiographical memory, researchers can determine whether memory deficits for specific life events result from experiences of childhood violence and abuse and can consider other possible factors.

*Autobiographical Memory of Adults Reporting Childhood Sexual Abuse*

An important topic of research in this area is whether individuals reporting childhood violence experience memory deficits, suggesting that memory repression occurs in these individuals. McNally et al. (2006) examined whether adults who reported specific memories of CSA, recovered memories of CSA, or believe they have experienced CSA demonstrate a deficit in recalling childhood autobiographical memories during a cued recall test. Each participant was then interviewed about their memories of sexual abuse and classified into one of four groups. The continuous memory group contained participants who reported remembering instances of CSA. The recovered memory group was composed of participants who had reported recovering memories of CSA that were forgotten. The repressed memory group contained participants who believed that they had experienced CSA. The control group was participants who reported no sexual abuse. Sexual abuse was defined as sexual contact by an individual at least five years older than the participant. In the autobiographical memory test, the participant was presented with a series of words on cards and was told to report a specific personal memory to the presented word (McNally et al, 2006). The cues were either positive (e.g. happy, love) or negative cues (e.g. fear, angry). The cue was shown to the participant and read by the
experimenter, and then the participant was told to report either a memory from childhood (before age 13) or from adulthood (after age 13). Each memory was tape recorded, limited to one minute, and later scored for its specificity.

There is one possible confound that immediately threatens the basis of this experiment. Some participants that were used in this experiment reported that they believed they experienced CSA, recovered memories of CSA, or remember being sexually abused. However, none of the cases of repressed, recovered, or continuous sexual abuse were actually confirmed. It cannot be concluded that all of the individuals placed in these groups have been victims of childhood sexual abuse, but the authors have assumed that these reports are true for the sake of the experiment. If these reports of sexual abuse never happened, then the experiment is not testing the effect of CSA on autobiographical memory. It is also likely that at least some of the participants have reported false memories of CSA that never occurred. Although the authors address this issue, they include it as an afterthought at the end of the paper and fail to acknowledge the significant impact it could have on their results.

The results of this study did not indicate any clear pattern in autobiographical memory deficits among the groups that had reported CSA (McNally et al., 2006). The control group did report a greater number of specific memories than the other three groups, but this result was not statistically significant. The repressed memory group retrieved significantly less specific memories from childhood than the control group. McNally et al. simply conclude that these results are inconsistent with the recovered memory hypothesis. Although the results do not support this hypothesis, the authors could provide more information about the subjects’ reports of CSA to oppose the false memory hypothesis. The authors could interview subjects who have reported experiences of CSA of beliefs about experiencing CSA to assess the likelihood that the
memories were falsely created. The continuous memory group could be asked about their first memories of CSA, specific memories of CSA, and if there is any documentation or person available to confirm these reports. The recovered memory group could be asked to detail the specific circumstances when they recovered the memories CSA. The repressed memory group could be asked when they first believed that they had experienced CSA and how this belief has developed over time. There are also some possible explanations for the obtained results that can be explained by the false memory hypothesis. One explanation may be that memories may have been lost due to forgetting that occurs naturally with age. The age of the participants was not reported by the authors, and it may also be an influential factor. Memories decay over time, so older individuals would experience more difficulty retrieving a childhood memory. If the participants in the control group are younger than the participants in the other three groups, the control group may be able to retrieve a greater number of specific memories because they experienced childhood more recently. However, if the ages of the groups were similar, then the normal progression of forgetting would not explain the differences among groups. It would be beneficial for the authors to report the ages of the participants so that normal forgetting can be excluded as possible cause for the results.

Correlations among Autobiographical Memory, Abuse, and Depression

Another current area of research investigates whether past events of childhood abuse or more proximal events cause difficulty in recalling autobiographical memories. Johnson, Greenhout, Glisky, and McCloskey (2005) conducted a longitudinal study to determine how important childhood experiences and recent experiences are to predicting deficiencies in autobiographical memory. They also evaluated how symptoms of depression can affect memory recall. Child participants between the ages of 6 and 12 years old were collected for testing at
Year 1, and they were tested again between the ages of 12 and 18 years old at Year 6. The participants consisted of an abuse group of children exposed to spousal abuse or physical child abuse and a control group of children not exposed to childhood violence. At Year 1, children were questioned about the type of abuse that they had witnessed or experienced (e.g. pushing, hitting, biting) and the frequency with which they had observed the abuse in the past year. The mothers of the children were also interviewed to confirm the events reported by the children. At Year 6, the adolescents and others were again interviewed using the same procedure used in Year 1. After the interview, the adolescents were tested to measure current depressive symptoms and completed a paired-associates recall task. An autobiographical memory test was also conducted at Year 6 where they were asked to give a specific memory from childhood from a presented cue. The cues were positive, negative, or neutral, and participants were given 3 minutes to recall as many specific memories as possible to each cue. The memories were audiotaped and scored for their specificity, valence to the cue, length of the memory, and the number of prompts required from the interviewer.

The methodology used in this study was well constructed to limit the number of possible extraneous and confounding variables. The authors conducted a much more throughout investigation of the violent circumstances of the participants and analysis of the reported memories than the McNally et al. study. In the current study, they have confirmed the violent acts reported by each child with the mother and have limited the reported events to the past year. This allows them to be more certain that the reports are accurate and reflective of the current events in the child’s life. They can also exclude the false memory hypothesis from possible explanations of the results, so any memory deficits can be explained by actual events. The authors have also added more criteria for evaluating the reported memories, which allows them
to more accurately determine the nature of the memory deficits. By looking at the patter of where the memory deficits occur, the authors may be able to make more specific conclusions about the influence of both proximal and childhood experiences on autobiographical memory.

Johnson, Greenhout, Glisky, and McCloskey (2005) found that adolescents who reported more childhood abuse and violence required more prompting by the interviewer to elicit memory recall. The adolescents who reported more recent domestic violence provided more unspecific memories, shorter memories, and fewer negative memories. They also found that adolescents exhibiting depressive symptoms reported fewer specific memories than nondepressed adolescents. The general results of this experiment suggest that difficulties in recalling autobiographical memories are more strongly associated with proximal events and circumstances than with childhood events. Performance on the paired-associates task was not reflective of depression, domestic violence, or autobiographical memory scores, which suggests that the deficits in autobiographical memory recall are not caused by general memory deficits. The authors report that these results tend to support the theory that autobiographical memory deficits result from an individual’s attempts to regulate emotion and affect. One possible problem with this study is the possible overlap between the age groups at Year 1 and Year 6. The oldest participants at Year 1 were the same age as the youngest individuals at Year 6, which may have caused some errors in the results. If this study was conducted again with a more narrow range of ages at each year, then the results may be more significant and applicable to current research because variability within the groups would be decreased. The autobiographical memory task used in this study was limited to memories from childhood, so it would also be interesting to examine the participants’ recall of more recent autobiographical memories. The authors could determine whether memory deficits are limited to memories specifically from childhood or
include more recent memories. By considering when the participant experiences domestic violence and in which time period memory deficits are more frequent, researchers could better understand how violence exposure may impair memory. It would also be beneficial to the study to test participant again at Year 11. This additional test would help determine how autobiographical memory deficits have changed in relation to the participant’s circumstances.

**Future Studies in Autobiographical Memory Deficits**

Many studies have contributed to the wealth of knowledge about the impacts of childhood violence and abuse on autobiographical memory. However, with this new information also come many new questions that must be answered. Many other factors have been discovered that may be important to consider when testing for autobiographical memory deficits. McNally et al. (2006) limited childhood abuse to CSA in their study, while Johnson, Greenhoot, Glisky, and McCloskey (2005) considered many areas of childhood abuse. Future studies could be conducted to investigate how different types of abuse, such as sexual abuse compared to domestic violence, lead to different deficits in autobiographical memory. Participants that are at different stages of development when they first experience abuse can be used in new studies to consider how developmental different may influence memory. Adolescents who experienced childhood abuse and adults who experienced spousal abuse as a young adult can both be tested for difficulty recalling autobiographical memories from the time of the abuse. If these groups exhibit similar memory deficits, then development can be excluded as a possible influential factor. Both studies discussed in this review used the same autobiographical memory test, so it would be beneficial to create new ways of testing for deficits other than one word cues. The cues used in these studies could have possibly been biased, and repeating these studies with another autobiographical memory test could suggest where the results of these studies may be
inaccurate. Researchers have not yet learned everything there is to know about how and why autobiographical memory deficits occur. By studying these possible factors, they can better understand the information that is currently present and expand their knowledge on complex relationship between autobiographical memory and traumatic experiences.
References


The Relations Among Abuse, Depression, and Adolescents’
Autobiographical Memory

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This study examined the relations among early and recent experiences with abuse, depression, and adolescents’ autobiographical memory in a longitudinal study of family violence. Participants’ (N = 134) exposure to violence was documented when they were 6 to 12 years old and again when they were 12 to 18 years old. The second assessment included measures of depression and autobiographical memory for childhood experiences. Memory problems were more consistently related to current circumstances than childhood abuse history. For instance, depressive symptoms were associated with increased rates of “overgeneral” childhood memories. Recent exposure to family violence predicted more overgeneral memories, shorter memories, and lower rates of negative memories. The patterns suggest that adolescents currently stressed by depression or family violence might strategically avoid the details of past experiences to regulate affect.

This study examines the intersection between exposure to different forms of abuse, symptoms of depression, and adolescents’ memories for childhood experiences. This work is motivated by reports in the clinical literature that many adults who have experienced childhood trauma report periods of amnesia for childhood (e.g., Edwards, Fivush, Anda, Felitti, & Nordenberg, 2001; Herman & Schatzow, 1987). Consistent with these findings, research using more objective measures of autobiographical memory, or memory for one’s past experiences, provides evidence that both childhood trauma history and psychopathology are associated with general autobiographical memory disturbances in adults and adolescents (e.g., Brittlebank, Scott, Williams, & Ferrier, 1993; Kuyken & Brewin, 1995; Park, Goodyear, & Teasdale, 2002). The explanations for these associations, however, are unclear. Some hypotheses focus on the role of early experiences, arguing that memory disturbances reflect a cognitive style that develops as a method for controlling affect in response to repeated negative events (Williams, 1995). In contrast, other explanations emphasize the influence of more proximal or concurrent conditions; for example, intrusive thoughts due to psychopathology or traumatic experiences might deplete cognitive resources and thus interfere with memory functioning (Kuyken & Brewin, 1995). These explanations lead to different predictions about the relative importance of early versus more recent circumstances in autobiographical memory dysfunction. Yet to date, no studies have examined both developmental history and recent events as predictors of autobiographical memory functioning. This issue is important not only scientifically but clinically because therapeutic efforts often involve discussing past experiences, and problems with memory predict the severity of depressive symptoms and the outcome of therapy (Evans, Williams, O’Loughlin, & Howells, 1992; Wahler & Afton, 1980).
Autobiographical memory specificity in adults reporting repressed, recovered, or continuous memories of childhood sexual abuse

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Some psychotherapists believe that adult survivors of childhood sexual abuse (CSA) are characterised by memory deficits for their childhood. Using the Autobiographical Memory Test (AMT), we asked nonabused control participants and participants who reported either continuous, recovered, or repressed memories of CSA to retrieve a specific personal memory in response to either positive or negative cue words from either childhood or adolescence/adulthood. The results indicated that participants who believed they harboured repressed memories of abuse tended to exhibit the greatest difficulty retrieving specific memories from their childhood. Neither posttraumatic stress disorder (PTSD) nor major depression was related to diminished memory specificity.

According to some psychotherapists (e.g., Harvey & Herman, 1994), many adults who experienced childhood sexual abuse (CSA) have difficulty recalling events from their early years. Indeed, some experts on dissociative disorders assert that vague memory for one's childhood is a sign that one may harbour repressed memories of early trauma (e.g., Loewenstein, 1991).

In this study, we tested whether adults reporting either continuous or recovered memories of CSA, or who believe they harbour repressed memories of CSA, experience difficulty retrieving specific memories from their childhood. To accomplish this aim, we used the Autobiographical Memory Test (AMT; Williams & Broadbent, 1986). The AMT requires participants to retrieve a specific personal memory in response to cue words (e.g., happy). A specific memory is one referring to an event that lasted no longer than one day (e.g., “I was very happy on the day my daughter was born”), whereas nonspecific

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