A comparison of memory for homicide, non-homicidal violence, and positive life experiences

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Abstract

Defendants commonly claim amnesia for their criminal actions especially in cases involving extreme violence. While some claims are malingered or result from physiological factors, other cases may represent genuine partial or complete amnesia resulting from the psychological distress and/or extreme emotion associated with the perpetration of the crime. Fifty Canadian homicide offenders described their memories of their homicide, a non-homicide violent offense, and their most positive adulthood life experience. Self-reported and objective measures of memories for these events revealed that homicides were recalled with the greatest level of detail and sensory information. Although dissociative tendencies were associated with a self-reported memory loss, objective measures of memory quality did not reflect this perceived impairment, suggesting a failure of meta-memory. Recollections of positive life events were superior to those of non-homicidal violence, possibly due to greater impact and meaning attached to such experiences. Findings suggest that memory for homicide typically is enhanced by the powerful emotion associated with its perpetration.

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1. Non-homicidal violence, and positive life experiences

Defendants commonly claim partial or complete amnesia for their criminal actions (e.g., Gudjonsson & MacKeith, 1983; Kopelman, 1995; Porter, Birt, Yuille, & Hervé, 2001; Roesch & Golding, 1986; Schacter, 1985; Pyszora, Barker, & Kopelman, 2003; Taylor & Kopelman, 1984). The frequency of claims of amnesia has been found to vary according to crime type and severity. For example, Taylor and Kopelman (1984) examined the frequency of such claims in a sample of 203 men concerning both violent and non-violent crimes. Overall, 10% of the offenders claimed amnesia and all claims concerned violent offences.

In addition, the frequency of amnesia claims increased with the severity of the violence, most commonly (26%) occurring in homicide cases.

There is no doubt that some amnesia claims in forensic settings are malingered for various reasons, such as to avoid self-incrimination. However, in other cases claims appear to be based on genuine amnesia (for example, some offenders fully confess to the offence and plead guilty but maintain amnesia; see Porter et al., 2001) possibly resulting from the psychological distress and/or extreme emotion associated with the perpetrated crime or substance abuse. For example, cases of domestic abuse sometimes feature a spouse who admits but cannot recall a violent assault against his/her partner during a fit of rage. Such cases, referred to as “red-outs,” are believed to be a form of state-dependent memory associated with experienced rage, and not malingered or related to other causes of amnesia (Swihart, Yuille, & Porter, 1999). One form of functional amnesia (occurring in cases in which malingered and a physical basis for the amnesia are ruled out) involves the forgetting of a specific incident following an event that is psychologically traumatic (Schacter, 1986), relevant in the legal context. According to the Diagnostic and Statistical Manual of Mental Disorders (APA, 2000), a sub-type of such “dissociative amnesia” is circumscribed amnesia, wherein the individual is unable to recall some details of the traumatic event, in this case the perpetration of extreme violence. Porter et al. (2001) argued that circumscribed
amnesia for the commission of violence may be related to both dissociative states and state-dependent memory.

The likelihood of dissociative amnesia clearly is related to the affective reaction occurring at the time of the offense. Cooper and Yuille (2007) found that planned violence was recalled better overall (and more vividly) than unplanned or reactive violence. Interestingly, higher levels of positive emotion experienced by instrumentally violent offenders during the offence were associated with more vivid and detailed memories of the event. It was theorized that the planning/rehearsal of the crime and the relative emotional calm during its perpetration contributed to the enhanced memory (or looking at it another way, the lack of rehearsal and powerful emotion clouded the memories of the reactive offenders). The other dominant explanation for dissociative amnesia in offenders concerns state-dependent memory; encoding of the event during extreme emotional arousal may result in difficulty recalling the event during baseline affective functioning (Swihart et al., 1999).

There is still debate over the effect of trauma on memory, with two conflicting perspectives dominating the literature. The first, the traumatic memory argument, argues that trauma typically has a negative impact on memory; traumatic memories are fragmented, less coherent and less detailed than memories for other life events (Herman, 1992; Van der Kolk & Fisler, 1995). Neurological studies of retrograde amnesia suggest that complete or partial forgetting of severely stressful and emotionally traumatic events are associated with elevated levels of norepinephrine and cortisol. While cortisol binding to the amygdala (further facilitated by norepinephrine) can facilitate memory consolidation, cortisol hippocampal binding can interfere with memory retrieval for aversive events (Hurlemann et al., 2007). The cortisol influx associated with prolonged, repetitive and severe trauma can even result in hippocampal atrophy and profound amnesia (Joseph, 1999). It appears, however, that some level of amnesia may serve as a protective factor against the subsequent development of PTSD as found in a sample of motor vehicle accident victims (Flesher et al., 2001). Due to individual differences in baseline cortisol levels, however, the same traumatic experience may be recalled very differently by involved individuals due to differential cortisol secretion and buildup during memory formation (Joseph, 1999). Thus, while some affected people cannot recall the event, others cannot forget.

Accordingly, the trauma superiority argument suggests that trauma typically enhances the quality of an individual’s memory and, as a result, traumatic memories are remembered in detail, continuously, vividly and coherently (Porter & Birt, 2001; Shobe & Kihlstrom, 1997). Porter, Taylor and ten Brinke (2008) proposed an evolutionary model for traumatic memory characteristics such that negative emotion enhances memory, leaving a lasting and detailed memory to inform the best course of action in similar future situations. Results of studies examining the memory of concentration camp survivors (Wagenaar & Groeneweg, 1990), witnesses to a homicide (Yuille & Cutshall, 1986), and sexual assault victims (Peace, Porter, & ten Brinke, 2008) have supported the trauma superiority argument. A longitudinal study by Porter and Peace (2007) further supports the notion that the trauma can enhance memory. Participants described and rated their memories of traumatic incidents (see also Evans, Ehlers, Mezey, and Clark (2007a) specifically considered aspects of memory in a sample of 105 young offenders convicted of a serious violent offence. They found that 46% reported experiencing intrusive and unwanted memories of the incident, while another 36% indicated a substantial level of rumination about the incident. In summary, these findings lead us to predict that perpetrators of extreme violence will generally maintain a consistent and detailed memory of the experience, and, in fact, may spend an inordinate amount of time recalling the incident, especially when its perpetration is experienced as “traumatic” for the perpetrator.

While it has become clear that trauma is generally well recalled, there is also considerable evidence that individuals with dissociative tendencies, in particular, may be susceptible to (real and/or perceived) memory failures. In Porter & Peace’s (2007) longitudinal study, participants with high dissociative tendencies were likely to report inconsistent details of their traumatic experience over time although their memories remained highly detailed in general. In a study of memories for (clearly traumatic) sexual assault, dissociation was related to self-reported deficits in memory quality for the sexual assault and claims of memory repression (Peace et al., 2008). These reports, however, may be related to their heightened suggestibility and the popularity of “repression” in popular culture. A study of individuals reporting recovered memories of childhood sexual abuse found that these (generally highly dissociative) individuals appeared to overestimate instances of prior forgetting (Geraets et al., 2006). Similarly, dissociative individuals appear more likely to adopt false memories of traumatic events in the face of suggestive questioning (Porter, Birt, Yuille, & Lehman, 2000). As such, there is considerable evidence that dissociative individuals report inferior memory qualities for traumatic events but less to suggest that their memories are, objectively, poorer than the general population (Giesbrecht, Lynn, Lilienfeld, & Merckelback, 2008).

2. The present study

The purpose of the current investigation was to examine perpetrators’ memory for their homicide offence relative to another violent offence and a positive life experience. One of the limitations of many previous studies of memory for crime is that there has been no “control group” of memories among the same participants to allow a more refined consideration of the influence of powerful emotion on memory and to control for individual differences. The current investigation is, to our knowledge, the first to examine verbatim accounts of offenders’ recollections to determine whether the memory for the homicide differs from other autobiographical “control” events.

3. Method

3.1. Participants

Fifty participants were recruited from the population of approximately 150 federal male offenders currently incarcerated in Atlantic Canada for homicide (manslaughter, first or second-degree murder). Participants were recruited from Springhill Institution in Nova Scotia (n = 18), and Dorchester Penitentiary (n = 21) and Atlantic Institution (n = 11) in New Brunswick. The mean age of participants was 39.5 years (SD = 9.2, range 22–55 years). Participation in the study was completely voluntary and no compensation was provided for participation.

3.2. Materials

3.2.1. Impact of Event Scale (IES)

The IES (Horowitz, Wilner, & Alvarez, 1979) was used to permit a measurement of the presence and level of traumatic symptoms related to each event described by the offender. The IES is a 15-item self-report questionnaire that asks participants to indicate how frequently they have experienced each item on a 0 (not at all) to 5 (often) scale. Responses on the IES are combined to provide scores on two subscales, intrusion and avoidance, and a total score, with higher
scores indicating a greater impact of the event. The IES has excellent psychometric properties (Horowitz et al., 1979).

3.2.2. Memory Assessment Procedure (MAP)

To examine the characteristics of each the memory reports, the MAP (Porter et al., 1999; Porter & Birt, 2001) was used. The MAP includes both a subjective component completed by participants (EMS, described next) and an objective, presentation-specific component that is rated by coders. The objective component of the MAP was used in the present study to evaluate a number of characteristics including the number of words and details in each description. After each interview was transcribed, the free-recall portion of each memory report was assessed by two naïve coders. Inter-rater reliability was examined by comparing the number of details recorded by each of the coders on all memory reports.

3.2.3. Emotional Memory Survey (EMS)

The EMS is the subjective component of the MAP, including ten questions relating to their memory for an event, and was completed by all participants for each recalled event. The EMS asks participants to rate a variety of statements on how frequently they occur on a 7-point Likert scale ranging from 1 (never/not at all) to 7 (extremely/many times). Items include the level of anxiety/stress experienced at the time of the event, degree of intoxication at the time of the event, how frequently they have thought about the event since its occurrence. In addition, participants are asked to provide information about their perspective in the memory (e.g., observer versus participant), sensory experiences associated with the memory, whether their memory for the event had changed over time and whether there had ever been a time during which they could not recall the event.

3.2.4. Dissociative Experiences Scale (DES)

The DES (Bernstein & Putnam, 1986) is a 28-item self-report questionnaire that was used to examine the extent to which participants had dissociative tendencies. Items on the DES include common dissociative experiences along with more severe dissociative experiences and participants are asked to rate each item in terms of how frequently it happens to them (0–100% of the time, 10% increments). A total score is generated, with higher scores being related to greater dissociative tendencies and scores above 30 being used to indicate the possibility of a dissociative disorder. The DES has been shown to have good reliability, internal consistency, and construct validity (Carlson & Putnam, 1993).

3.3. Procedure

Participants were first asked about any history of head trauma or substance abuse. Participants were then asked to recall their homicide offence, another serious violence offence (e.g., assault, sexual assault), and their most positive personal experience in adulthood (order counterbalanced). Interviews were conducted based on the Step-Wise Interview protocol (e.g., Yuille, Marxsen, & Cooper, 1999; Yuille, Hunter, Joffe, & Zaparniuk, 1993). In the first phase of the interview, participants were asked to provide a detailed description of the event without interruption by the interviewer. The second phase of the interview began when participants indicated that they could not recall any additional details. Participants were then asked to elaborate on details they had mentioned in their free narrative (e.g., “You mentioned ———, could you tell me more about that?”). In the final phase of the interview, participants are asked specific questions, where necessary, to clarify information that had been reported earlier. Following each event description, participants were asked to complete the EMS and the IES. After participants had described each of the three events, they were asked to complete the DES. This protocol was repeated for each of the three events (homicide, non-homicide offence, and positive event) with the order being counterbalanced across participants. Each interview was audiotaped to allow for transcription of the reports.

4. Results

4.1. MAP reliability check

An inter-rater reliability check was conducted on the amount of detail component of the Memory Assessment Procedure (MAP, Porter et al., 1999) to ensure that details were being coded consistently between coders across the three memory types. Correlations indicated that detail coding was reliable between raters for homicide, non-homicide, and positive experiences, with correlations ranging from .80 to .92 (all p’s < .001).

4.2. Self-reported & qualitative memory characteristics

Self-reported memory characteristics were assessed using the EMS. Offenders were more likely to endorse being unable to at some point in their life recall the homicides (32.7%) than either the non-homicides (11.5%) or positive events (13.5%), p < .05. Offenders reported an “observer” perspective (viewing themselves in the memory) with the same frequency in homicide and positive life event memories, but less often in the non-homicidal violence memories (63.5%, 63.5% and 51.9%, respectively), p < .001. Offenders also rated their levels of stress, intoxication, discussions, thoughts, memory vividness, quality of memory, and number of sensory components associated with each event (see Table 1 for descriptive statistics).

In order to examine variations in the characteristics of memory as a function of event type, a repeated-measures multivariate analysis of variance (MANOVA) was conducted with memory type as the within-subject independent variable and EMS self-reported memory characteristics (i.e., talking/thinking about event, vividness, memory quality, sensory details) as the dependent measures. This analysis revealed an overall effect of memory type, F(10,30) = 3.5, p < .01. Follow-up ANOVAs indicated differences in frequency of talking about (F(2,78) = 4.8, p < .05) and thinking about (F(2,78) = 16.9, p < .001) the event, and in the sensory components reported (F(2,78) = 7.4, p < .001). Specifically, pair-wise comparisons indicated that non-homicide violence incidents were discussed less frequently than both homicides (p < .005) and positive events (p < .05). Similarly, offenders reported that they had thought about the homicide offences the most, followed by positive events and non-homicides (all means significantly differing, p < .05). Analysis of sensory components indicated that positive events and homicides were associated with more sensory details from each of the five senses than non-homicides (p < .01). Pair-wise comparisons did not reveal any significant differences between groups on self-rated levels of memory vividness and quality (see Table 1 for descriptive statistics).

A repeated-measures ANOVA was conducted using self-reported ratings of stress as the dependent measure, and yielded a significant main effect of memory type, F(2, 76) = 17.45, p < .001. Specifically, homicides were associated with higher self-reported levels of anxiety/stress (M = 5.77, SD 2.13) than non-homicides (M = 4.15, SD = 2.14) and positive events (M = 3.05, SD = 2.31).

To investigate qualitative variations in the amount of detail and length of memory reports, a repeated-measures MANOVA was

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1 Of the N = 50 participants, 25 reported previous incidents of some form of head trauma, ranging from mild sports-related injuries to motorcycle accidents. A series of correlations with self-reported and qualitative memory characteristics did not reveal any significant negative influence of previous injury, p > .05.

2 Pearson correlations suggested that self-reported level of intoxication was unrelated to levels of stress for any event, p > .05. Thus, intoxication levels were not considered as a covariate in this analysis.
Table 1

Means (and standard deviations) for self-reported (EMS) and qualitative (MAP) memory characteristics.

<table>
<thead>
<tr>
<th>Memory characteristics</th>
<th>Homicide</th>
<th>Non-homicide</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported Anxiety/stress</td>
<td>5.8 (2.1)</td>
<td>4.7 (2.1)</td>
<td>3.2 (2.3)</td>
</tr>
<tr>
<td>Degree of intoxication</td>
<td>5.0 (2.4)</td>
<td>3.6 (2.4)</td>
<td>1.8 (1.8)</td>
</tr>
<tr>
<td>Talked about event</td>
<td>4.5 (2.0)</td>
<td>3.4 (1.7)</td>
<td>4.2 (2.4)</td>
</tr>
<tr>
<td>Thought about event</td>
<td>6.1 (1.5)</td>
<td>3.8 (1.9)</td>
<td>5.1 (2.1)</td>
</tr>
<tr>
<td>Vividness of memory</td>
<td>5.4 (1.9)</td>
<td>5.6 (1.5)</td>
<td>5.7 (1.8)</td>
</tr>
<tr>
<td>Quality of memory</td>
<td>5.4 (2.0)</td>
<td>5.3 (1.9)</td>
<td>5.7 (1.8)</td>
</tr>
<tr>
<td>Sensory components</td>
<td>2.5 (1.5)</td>
<td>1.9 (1.4)</td>
<td>2.9 (1.6)</td>
</tr>
<tr>
<td>Qualitative Amount of detail</td>
<td>630.6 (712.4)</td>
<td>186.7 (196.5)</td>
<td>195.1 (214.7)</td>
</tr>
<tr>
<td>Word count</td>
<td>1412.6 (1591.4)</td>
<td>433.8 (479.2)</td>
<td>355.9 (416.0)</td>
</tr>
</tbody>
</table>

Conducted with memory type as the independent variable. The MANOVA was significant (F(4,36) = 4.36, p < .01) and revealed that memory reports for homicide were more richly detailed (F(2,78) = 16.2, p < .001) and lengthier (F(2,78) = 18.3, p < .001) than both non-homicide and positive memories (see Table 1). Non-homicide and positive memory reports did not differ in level of detail (ps > .05).

4.3. Impact of intoxication on amnesia and overall memory quality

A repeated-measures ANOVA, with self-reported intoxication level as the dependent variable, revealed a significant main effect of memory type (F(2, 80) = 26.52, p < .001) such that homicides were associated with the greatest degree of intoxication (M = 5.00, SD = 2.49), followed by non-homicides (M = 3.66, SD = 2.41) and positive events (M = 1.83, SD = 1.82, ps < .01). Thus, the impact of intoxication on reports of memory loss was examined. A series of correlations did not reveal any significant associations between degree of intoxication and reports of amnesia for the homicide or non-homicide, ps > .05.3 When self-reported levels of intoxication were statistically controlled (using multiple regression on reports of amnesia for each memory, followed by a repeated-measures ANOVA on residuals), rates of amnesia across memory type remained significant, F(2, 80) = 58.54, p < .001. As above, homicides were associated with the greatest rate of amnesia reports, significantly higher than non-homicides and positive events (ps < .05). Further, level of intoxication was negatively associated with reported memory quality of homicides and non-homicides, r(49) = −.29, p < .05 and r(44) = −.297, p = .05 respectively.

4.4. Traumatic stress, dissociation, and memory

The three event types were associated with significant differences in terms of their level of personal impact as reflected by IES scores. Homicide offences were associated with the highest mean total IES ratings (M = 35.4, SD = 17.0) relative to non-homicide (M = 14.9; SD = 13.2) and positive experiences (M = 16.6, SD = 13.9), F(2,72) = 34.3, p < .001. Accordingly, homicides also were associated with the highest mean level of intrusive (M = 19.5, SD = 9.8) and avoidant (M = 15.9, SD = 10.8) symptomology, F(2,72) = 23.4, p < .001 and F(2,72) = 25.6, p < .001, respectively. Follow-up analyses indicated that non-homicides and positive experiences only differed significantly on the mean level of intrusion, r(39) = 3.0, p < .005, with greater intrusion for positive (M = 7.5; SD = 7.5) than non-homicide (M = 4.8, SD = 7.0) memories. For homicide offences, IES total scores were positively correlated with more thoughts about the event (r(49) = .56, p < .01), greater vividness (r(49) = .29, p < .05), higher quality (r(49) = .30, p < .05), and more total sensory components (approached significance, r(49) = .28, p = .05). That is, higher levels of traumatic stress associated with the homicide appeared to enhance several aspects of memory for the event. For non-homicide offences, higher IES total scores were associated with more thoughts about the event (r(44) = .45, p < .01), but unrelated to other self-reported or objective characteristics. Similarly, positive events with a higher “impact” were positively correlated with more discussions (r(45) = .37, p < .05) and thoughts (r(45) = .39, p < .01) about the experience.

The relation between level of dissociation and self-reported memory characteristics was examined using the DES. The overall mean DES score was 17.4 (SD = 14.6; range 1.4–79.3) with 7 (13.5%) offenders scoring over the suggested clinical cut-off of 30, indicating the presence of potential dissociative tendencies and/or disorders. When DES scores were analyzed as a continuous variable, dissociation was positively related to how often offenders discussed their homicide offences (r(49) = .34, p < .05). With respect to non-homicides, dissociation was positively correlated with periods of not remembering the event (r(44) = .36, p < .05) and experiencing changes in the memory over time (r(44) = .34, p < .05). Higher DES scores were associated with endorsement of the “switching” (between participant and observer) perspective in memory (r(43) = .37, p < .05). Dissociation then was analyzed as a dichotomous variable (DES scores: low < 30; high ≥ 30), and a repeated-measures mixed MANOVA with memory type (within-subjects) and dissociation (between-subjects) as the independent variables and memory characteristics as the dependent measures was conducted. In this model, there was a main effect of memory type (F(10, 29) = 2.2, p < .05) and a main effect of dissociation approached significance (F(5, 34) = 2.4, p = .061). Specifically, univariate tests indicated that overall, memory vividness (F(1, 38) = 4.6, p < .05) and quality of memory (F(1, 38) = 4.4, p < .05) were lower for high DES offenders. This effect was consistent across homicide, non-homicide, and positive events.

5. Discussion

While some violent offenders are motivated to feign memory loss to avoid self-incrimination and/or to suggest a lack of criminal intent (Merkelbach & Christianson, 2007), genuine impairments of memory may occur due to a variety of psychological factors, including dissociation and state-dependent effects, as well as potentially from physiological factors. When attempting to discriminate genuine and malingered amnesia in forensic contexts, professionals must evaluate the self-reported amnesia claim concerning the violent crime. The current study was one of the first to examine both subjective and objectively-coded aspects of violent offenders’ memories for a homicide, and to consider these qualities in relation to other crime and non-crime experiences reported by the same offender participants. It has recently been suggested that considering both the subjective and objective characteristics of traumatic and emotional memories would be highly beneficial for increasing knowledge regarding memory for these type of events (e.g., Sotgiu & Mormon, 2008).

Similar to previous samples of violent offenders, offenders surveyed here reported a high level of memory impairment for murder specifically, even though they had nothing to gain from such reports in a confidential research interview conducted after their conviction for the incident. About a third (32.7%) indicated that they had been unable to recall important aspects of the homicide event at some point since its occurrence, a rate of amnesia significantly higher than for non-homicidal violence and positive life events. Paradoxically, memories for homicide generally were “superior” to memories for the other events, in accordance with the trauma superiority argument which suggests that negative emotional arousal may enhance memory for the event, leading to more detailed and vivid...
recollections (e.g., Porter & Peace, 2007). As expected, offenders considered their participation in homicide to be more stressful, anxiety provoking and associated with more PTSD symptoms (e.g., intrusion, avoidance) than non-homicide crimes or positive experiences, affective states that were associated with superior memories in terms of both self-ratings and objective coding of the reports. Higher levels of self-reported emotional impact for homicides were associated with subjective reports that the memories were of higher quality, greater vividness, and had more sensory components. The latter finding was consistent with other recent studies that have found a high level of sensory recall for individuals who have committed a violent crime (e.g., Evans et al., 2007a,b). Additionally, the homicide narratives were, on average, over three times more detailed than those concerning non-homicide offenses or positive experiences. The relative superiority of memory for homicide persisted despite a greater level of intoxication than during either non-homicides or positive incidents. How could memories for homicide concurrently appear so fragile and powerful? A possible explanation is that the offenders were “misremembering their past memory failures” concerning the homicide given the widespread credibility attributed to the notion of repression for traumatic experiences. Reports of historical amnesia for the murders and self-reported lower quality memories in the absence of objective evidence were closely associated with dissociation. The contradictory subjective and objective measures of homicide memories might be attributed to perceived memory fragmentation – a failure of meta-memory – particularly among dissociative individuals. Kindt and van den Hout (2003) found that highly dissociative observers of a graphic film were likely to report disruptions in memory when asked to rate their recollection of the film after a delay. Objective performance on memory tasks, however, did not corroborate the perceived memory failure, relative to low dissociation participants. More recently, Oathes and Ray (2008) examined emotional processing in a group of participants and found that despite contradicting self-report, there was no behavioural or neuropsychological evidence to suggest that individuals who scored high on dissociation had any type of deficit in initially attending to, or encoding, emotional stimuli. The authors speculated that any subjective report of memory loss for the emotional event by high “dissociators” may actually have been prompted by subsequent processing. As such, self-reported memory failures in highly dissociative offenders may not accurately reflect their actually high quality recollections of trauma.

Interestingly, positive events were reported as better recalled than non-homicide offenses. Positive experiences were associated with a greater impact than other offenses and were recalled with a greater number of self-reported, sensory details. Although one might expect the presumably negative, non-homicide offense to be recalled well based on the trauma superiority argument, these offenses appear to have had relatively limited impact on the lives of offenders in our sample. Rated as less personally significant than homicides and positive experiences, these offenses may have been considered “routine” or “normal” for these individuals and as such, were associated with little emotion or afterthought, leading to a poor memory for the event. In contrast, the homicide and positive experiences were likely “out of the ordinary” for these individuals; rated as highly influential and often recollected, these events were relatively well recalled. The memory for homicide appears to have been further enhanced by the effect of increased trauma, calling into question the impact to which physiological changes resulting from increased stress actually directly impair memory recall. A recent study by Rubin, Boals, and Bernstein (2008) found that stressful memories were actually more frequently remembered and were associated with less fragmented recall.

When interpreting these results, it is important to keep in mind one important limitation associated with this research. The lack of definitive ground truth prevented us from examining the accuracy of the offenders’ memories, and some offenders are likely to distort their accounts even in a research interview. For example, Porter and Woodworth (2007) found murderers almost always exaggerate the reactivity of their homicides (when their self-reports and the official reports are compared). Nonetheless, our findings generally supported the trauma superiority effect such that homicides – especially homicides described as having a high traumatic impact – were recalled with superior self-reported and objective characteristics. Although dissociative tendencies were associated with self-reported deficits in memory for homicide, these reports may be attributed to a failure of meta-memory given that the objective qualities of homicide memories were not diminished. While this is certainly theoretically intriguing, there are a number of applied implications of these results as well. These findings have potential implications for mental health and legal professionals attempting to assess the veracity of self-reported memory deficits for an offense by the accused. For example, it would appear that some offenders who report memory issues may present an inaccurate estimate of their memory deficit for reasons unrelated to any malicious intent (such as avoidance of culpability) and more related to erroneous subjective interpretation of his/her recollection of the event. A more detailed, objective examination of the memory characteristics is a better strategy to ascertain the presence of any true memory deficit. From a treatment perspective, it may also be beneficial to explore discrepancies between perceived level of memory deficit and objective features of recall with the individual reporting memory impairment. In general, relative to memories of a less serious offence and a positive experience, murder is recalled with a high level of detail, vividness, and sensory elements by perpetrators who may hold a perception that the event is, or ought to be difficult to remember – a fascinating failure of meta-memory that clearly warrants further study.

References


