Dissociative symptoms and how they relate to fantasy proneness in women reporting repressed or recovered memories

Elke Geraerts a,*, Harald Merckelbach a,b, Marko Jelicic a, Elke Smeets a, Jaap van Heerden c

a Department of Experimental Psychology, Maastricht University, P.O. Box 616, 6200 MD, Maastricht, The Netherlands
b Faculty of Law, Maastricht University, Maastricht, The Netherlands
c Department of Neurocognition, Maastricht University, Maastricht, The Netherlands

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Abstract

Women with repressed or recovered memories have raised levels of dissociative symptoms. There are two interpretations of this. One emphasizes the defensive function of dissociation, while the other emphasizes the overlap between dissociation and fantasy proneness. This study aimed to investigate these two interpretations. Women with repressed (n = 16), recovered (n = 23), and continuous memories (n = 55) of childhood sexual abuse (CSA), and control participants (n = 20) completed measures of self-reported childhood trauma, depressive symptoms, trait anxiety, dissociation, and fantasy proneness. Women reporting repressed, recovered, and continuous CSA memories did not differ in self-reported childhood trauma, depression, and trait anxiety, but all scored significantly higher on these measures than the control group. However, contrast analyses revealed that women reporting repressed and recovered CSA memories also scored higher on dissociation than did those reporting either continuous CSA memories or no history of abuse. Our results further revealed that women who report CSA memories, whether repressed, recovered

* Corresponding author. Tel.: +31 433882468; fax: +31 433884196.
E-mail address: E.Geraerts@Psychology.Unimaas.NL (E. Geraerts).

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or continuous, have raised fantasy proneness levels. Hence, we found no support for the idea that dissociative symptoms can be fully accounted for by fantasy proneness.

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1. Introduction

The idea that experiences may be so traumatic that victims deal with them in an avoidant-dissociative way has a long tradition in psychiatry and psychology (e.g., Brewin, 2003; Terr, 1994). This repressive or dissociative style would enable people who have experienced childhood sexual abuse (CSA) to disengage attention from aversive memories, which, in turn, would result in inaccessibility (i.e., amnesia) and sometimes subsequent recovery of these memories (Harvey & Herman, 1994). Accordingly, many authors have argued that amnesia for trauma and subsequent recovery of genuine traumatic memories are relatively common among clinical populations (e.g., Andrews et al., 1999; Brewin, 2003; Brown, Schefflin, & Whitfield, 1999). From a different point of view, the existence of repression, amnesia, and recovery of traumatic memories has been questioned because of the lack of solid evidence for these concepts (e.g., Ceci & Loftus, 1994; Kihlstrom, 2004; McNally, 2003; McNally, Clancy, Barrett, & Parker, 2004b; Roediger & Bergman, 1998). For example, McNally et al. (2004b) hypothesized that people may forget about their abuse since CSA episodes were not experienced as traumatic at the time of occurrence. It is possible that people did not recognize it as sexually abusive until after having thought about it much later in adulthood. Hence, their failure to think about these experiences cannot be considered as instances of forgetting trauma. Furthermore, skeptics have warned that memories may be susceptible to distortions (Schacter, 1999) and that therapeutic interventions such as hypnosis, dream interpretation, journaling, and imagination—intended to recover memories of CSA—may unintentionally foster pseudomemories of CSA (Loftus, 2003; Loftus & Ketcham, 1994).

In a series of studies, McNally, Clancy, and their colleagues (e.g., McNally, 2003; McNally, Clancy, & Barrett, 2004a; McNally, Clancy, Schacter, & Pitman, 2000; see also Geraerts, Smeets, Jelicic, van Heerden, & Merckelbach, 2005; Geraerts, Smeets, Jelicic, van Heerden, & Merckelbach, in press) explored whether women reporting repressed or recovered CSA memories are characterised by different clinical symptom levels and personality traits relative to women who report having always remembered their abuse. The authors found that women with repressed or recovered CSA memories scored higher on measures of dissociation than those reporting either continuous CSA memories or no abuse history (McNally et al., 2000). This finding is consistent with the dissociative traumatic amnesia view that repressed and recovered memories are typical for victims who react with an avoidant-dissociative coping style to their aversive memories. However, McNally et al. (2000) also noted that women with repressed and recovered memories scored higher on a measure of absorption than women with continuous CSA memories or no CSA history. Absorption is a close cousin of fantasy proneness (Kihlstrom, Glisky, & Angiulo, 1994) and there is good evidence that these related traits have a genetic loading (Bergeman et al., 1993; Jang, Paris, Zweig-Frank, & Livesley, 1998). This makes it difficult to conceptualize them in terms of
a defensive reaction to traumatic experiences. Accordingly, this particular aspect of the McNally et al. (2000) study is more consistent with the skeptic position that holds that people high on fantasy proneness are more likely to develop pseudomemories.

In the current study, we collected data about self-reported trauma, depression, anxiety, dissociation, and fantasy proneness in various subgroups of women. More specifically, our sample consisted of women who said that they had repressed their CSA memories, women who said that they had recovered their CSA memories, women who said they had never forgotten their CSA memories, and control women who said that they had no history of CSA. We tested a prediction flowing from the dissociative traumatic amnesia view, namely that women with repressed or recovered memories have higher dissociation levels than women with continuous CSA memories or control women. We also tested an implication of the skeptic position, namely that women with repressed or recovered memories score higher on fantasy proneness than the other subgroups.

2. Method

2.1. Participants

Following the procedure of McNally et al. (2000), we recruited participants through advertisements in local newspapers. In these advertisements, we invited women to come to our lab when they (a) firmly believed they had been sexually abused as a child, but had no memories of this, (b) had recovered CSA memories, (c) had a history of sexual abuse which they had never forgotten or (d) had no history of sexual abuse. The women were told that the research project was about childhood sexual abuse and personality. The study was approved by the standing ethical committee of the university.

After providing written informed consent, a semi-structured memory interview was conducted in order to classify participants into one of the groups. Individuals reporting recovered, repressed, and continuous CSA memories were asked whether they had obtained information from others (e.g., sibling) or had physical evidence (e.g., letters, medical records) that could validate their CSA memories. When participants could furnish the name of a corroborator, this person was contacted by EG.

2.1.1. Repressed memory group

The repressed memory group involved 16 women (mean age = 43.9 years, SD = 6.8) who believed that they had been sexually abused as a child, but had no explicit autobiographical memories of CSA. These women cited a diversity of symptoms they thought indicated a history of CSA (e.g., relationship problems, depressive symptoms, eating disorders). Some reported vague feelings of nervousness when they were near certain relatives who, they believed, might have abused them. It was, of course, impossible for us to determine whether they had been abused. The term ‘repressed memory’ describes their belief.

2.1.2. Recovered memory group

The recovered memory group consisted of 23 women (mean age = 41.6 years, SD = 10.9) who said they had previously forgotten and subsequently recalled memories of CSA. Eight participants...
(35%) had recovered memories of CSA during psychotherapy. Most of the other women in this group recovered memories of CSA after having been exposed to certain cues (e.g., a friend who tells about CSA experiences, the birth of their own child). Only one participant could give corroborative evidence for the abuse, namely a statement of the perpetrator himself. However, in most cases, women lost contact with their families after having confronted them with recovered CSA memories.

2.1.3. Continuous memory group

The continuous memory group comprised 55 women (mean age = 43.1 years, SD = 14.4) who said that they had never forgotten their abuse. Nineteen (35%) provided the name of a person who could corroborate the abuse (e.g., a sibling who had been abused at the same time, the perpetrator himself). One participant gave us a court document that stated that her father had been indicted for sexually abusing her. Some women in this group indicated that witnesses who could provide evidence for the CSA had deceased.

2.1.4. Control group

The control group comprised 20 women (mean age = 41.5, SD = 12) who said that they had, neither during childhood, nor during adulthood ever been sexually abused.

2.2. Self-report scales

The Childhood Trauma Questionnaire (CTQ; Cronbach’s alpha = .82; Bernstein et al., 2003) is a widely used self-report scale of traumatic childhood events. The short form consists of 25 items that address five areas of childhood maltreatment, namely emotional, physical, and sexual abuse, and emotional and physical neglect. Each area is represented with five items. Items are rated on 5-point scales anchored one (never) and five (very often). Scores are summed to obtain a total CTQ score, with higher scores reflecting higher levels of self-reported childhood trauma.

The Beck Depression Inventory (BDI; Cronbach’s alpha = .81; Beck & Steer, 1987) is a 21-item self-report scale focusing on the behavioural manifestations of depression. Items are rated on 4-point scales (range: 0–3) and scores are then summed to obtain a total BDI score, with higher scores indicating higher levels of depression.

The Manifest Anxiety Scale (MAS; Cronbach’s alpha = .91; Taylor, 1953) was administered to measure trait anxiety. It contains 50 dichotomous (yes/no) items. Higher total scores reflect higher trait anxiety.

The Dissociative Experiences Scale (DES; Cronbach’s alpha = .92; Bernstein & Putnam, 1986) is a 28-item self-report measure that asks respondents how often they experience dissociative symptoms like derealization and depersonalization. Items are scored on 100-mm Visual Analogue Scales (VASs: 0 = never; 100 = always). Scores are averaged across items to obtain a total DES score (range 0–100), with higher scores indicating higher dissociative tendencies.

The Creative Experiences Questionnaire (CEQ; Cronbach’s alpha = .79; Merckelbach, Horselenberg, & Muris, 2001) is an index of fantasy proneness. The CEQ includes 25 dichotomous (yes/no) items that cover experiences related to daydreaming, imagining, and intense fantasizing. Yes-answers are summed to obtain a total score (range: 0–25), with higher scores indicating higher levels of fantasy proneness.
2.3. Statistical analyses

We conducted separate one-way Analyses of Variance (ANOVAs) and follow-up contrast analyses to compare the various subgroups with each other. Also, we computed Pearson product-moment and partial correlations between the various measures.

3. Results

Table 1 shows demographic and psychometric data for the subgroups in our sample. One-way ANOVAs revealed that subgroups did not differ significantly in age or educational level: both $F$’s (3, 110) < 1.0, ns. However, ANOVAs indicated that there were significant group differences for each self-report scale. Post-hoc tests (LSD) showed that women with recovered, repressed, or continuous CSA memories scored higher on childhood trauma (CTQ), depressive symptoms (BDI), trait anxiety (MAS), and fantasy proneness (CEQ) than control women reporting no history of abuse (all $t$’s > 3.7, all $p$’s < .001). Furthermore, both the repressed and recovered memory subgroups reported more dissociative symptoms (DES) than the continuous memory group and the control group (all $t$’s > 2.1, all $p$’s < .03).

The dissociative traumatic amnesia view that repressed and recovered CSA memories reflect a dissociative coping style implies that women with such memories should score higher on the DES than women with continuous CSA memories and control women. To test this implication, we applied contrast weights of 1, 1, −1, and −1 to the repressed, recovered, continuous, and control subgroups, respectively. The difference was highly significant, which supports the dissociative traumatic amnesia view, $t(110) = 4.65, p < .001$, effect size $r = .42$.

The skeptic position implies that women with repressed and recovered memories score higher on fantasy proneness (CEQ) than women with continuous CSA memories or no history of abuse. Analysis with contrast weights of 1, 1, −1 and −1 to the repressed, recovered, continuous, and control subgroups, respectively, yielded a non-significant difference: $t(110) = 2.8, p > .05$, effect size $r = .24$. As can be seen in Table 1, the recovered and the continuous memory groups had

<table>
<thead>
<tr>
<th>Measure</th>
<th>Repressed n = 16</th>
<th>Recovered n = 23</th>
<th>Continuous n = 55</th>
<th>Control n = 20</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>43.9 (6.8)</td>
<td>41.6 (10.9)</td>
<td>43.1 (14.4)</td>
<td>41.5 (12.0)</td>
<td>.18</td>
<td>.91</td>
</tr>
<tr>
<td>Education (level)</td>
<td>5.4 (1.7)</td>
<td>5.1 (1.5)</td>
<td>4.7 (1.8)</td>
<td>5.5 (1.8)</td>
<td>1.2</td>
<td>.31</td>
</tr>
<tr>
<td>CTQ</td>
<td>35.3 (10.3)</td>
<td>39.9 (9.9)</td>
<td>37.2 (11.3)</td>
<td>25.5 (4.4)</td>
<td>8.6</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>BDI</td>
<td>14.5 (7.6)</td>
<td>16.4 (11.6)</td>
<td>13.4 (9.0)</td>
<td>6.3 (4.5)</td>
<td>5.2</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>MAS</td>
<td>25.1 (8.0)</td>
<td>23.2 (8.0)</td>
<td>23.8 (9.9)</td>
<td>14.1 (5.1)</td>
<td>6.5</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>DES</td>
<td>31.5 (11.6)</td>
<td>30.1 (19.4)</td>
<td>22.2 (12.6)</td>
<td>12.9 (9.0)</td>
<td>7.4</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>CEQ</td>
<td>9.4 (5.2)</td>
<td>7.7 (2.8)</td>
<td>8.2 (3.6)</td>
<td>4.2 (3.5)</td>
<td>6.5</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Standard deviations are in parentheses.
Educational level varies on a scale from 0 (no primary school) to 8 (university degree).
similar CEQ levels \([t(76) < 1.0]\), while both groups had higher scores than the control group \([t's > 3.7, p's < .001]\).

For the whole sample \((n = 114)\), the correlation between self-reported childhood trauma (CTQ) and dissociation (DES) was .36 \((p < .01)\), while that between fantasy proneness and DES was .43 \((p < .01)\). The correlation between self-reported childhood trauma and fantasy proneness was .34 \((p < .01)\). The overall correlation between trait anxiety and DES was .45 \((p < .01)\). The link between self-reported childhood trauma and dissociative experiences remained significant, even if the contributions of fantasy proneness were partialled out: \(r = .24 (p < .01)\). Likewise, the correlation between self-reported childhood trauma and fantasy proneness remained significant when corrected for the contribution of dissociative experiences: \(r = .22 (p = .016)\).

4. Discussion

The purpose of this study was to examine differences in dissociation and fantasy proneness between women reporting repressed, recovered, continuous, and no memories of child sexual abuse. Our main findings can be summarised as follows. First, women reporting repressed, recovered, and continuous CSA memories did not differ from each other in terms of self-reported childhood trauma, depression, and trait anxiety. However, relative to the control group, women in the three CSA subgroups had significantly higher scores on all these measures. Thus, our data show that CSA experiences—in whatever form they are presented—are accompanied by raised anxiety and depression scores. Note that mean scores on the BDI of the subgroups reporting CSA suggest borderline clinical depression. This pattern is consistent with recent research indicating that the onset of depressive symptoms can be predicted by CSA (Kendler, Kuhn, & Prescott, 2004). The raised trait anxiety levels in the CSA reporting subgroups, which can be compared with previously studied clinical samples (e.g., McNally et al., 2004a), are also consistent with the idea that aversive environmental factors rather than genetic factors determine trait anxiety (e.g., Eysenck, 1992). As well, dissociation (DES) scores of the three subgroups reporting CSA were higher compared to controls and came close to DES scores that have been previously found for clinical samples like patients with borderline personality disorder (Merckelbach, à Campo, Hardy, & Giesbrecht, 2005; Van Ijzendoorn & Schuengel, 1996).

Second, in accordance with the dissociative traumatic amnesia view, women with repressed or recovered CSA memories had more dissociative symptoms than women with continuous CSA memories or control women. Our findings replicate those of McNally et al. (2000), who also found that women with repressed or recovered memories are characterised by dissociation levels that exceed those of women with continuous CSA memories.

Third, unlike the McNally et al. (2000) study, we found no evidence for the skeptic position that the pattern of dissociative symptoms in women with repressed, recovered, or continuous CSA reports is perfectly paralleled by their fantasy proneness levels. Rather it appears that women who report CSA memories, whether repressed, recovered or continuous, have raised fantasy proneness scores. Thus, whereas women reporting recovered or repressed CSA memories had more dissociative symptoms than women with continuous CSA memories, they were not more fantasy prone. This implies that fantasy proneness cannot fully explain differences in dissociative symptoms across the various CSA groups. Some authors (Merckelbach & Muris, 2001) have argued that
fantasy proneness may compromise the accuracy of self-reports and that high fantasy proneness levels are typical for those reporting recovered or repressed memories.

Although our correlational data show that there is a considerable overlap between dissociative symptoms and fantasy proneness—which replicates earlier findings (e.g., Merckelbach, Muris, & Rassin, 1999; Rauschenberger & Lynn, 1995)—they do not lend support to the assumption that heightened fantasy proneness is a typical feature of people reporting recovered or repressed memories. However, it should also be noted that partial correlations suggested that fantasy proneness plays a role in the link between self-reported trauma and dissociation. That is to say, partialling out the contribution of fantasy proneness led to a smaller, albeit still significant correlation between trauma and dissociation. At minimum, this suggests that apart from trauma, fantasy proneness contributes to dissociation.

The fact that all subgroups reporting childhood abuse experiences had raised fantasy proneness levels is consistent with the idea that early aversive events might foster this trait (e.g., Lawrence, Edwards, Barraclough, Church, & Hetherington, 1995) and it might also help to explain why people with a history of trauma exhibit a heightened susceptibility to manipulations eliciting memory illusions (e.g., Bremner, Shobe, & Kihlstrom, 2000).

To sum up, our data show that women with repressed or recovered memories of childhood sexual abuse resemble in many respects women who say that they have always remembered their abuse experiences. That is, women with repressed or recovered memories are as depressed and anxious as are women with continuous memories and they have similar levels of fantasy proneness. Accordingly, we feel that arguments against the plausibility of repressed and recovered memories can not be founded on this type of psychometric data. In this study, dissociative symptoms constitute the only dimension in which women with repressed or recovered memories differ from women with continuous memories. It is tempting to speculate about the meaning of this. The traditional dissociative traumatic amnesia interpretation is that repression and subsequent recovery of traumatic memories reflect an avoidant-dissociative style of coping with aversive experiences (e.g., Brewin, 2003). Another interpretation, that is not necessarily incompatible with the dissociative traumatic amnesia view, is that dissociative symptoms reflect a general lack of cognitive control (e.g., Merckelbach et al., 1999). It is conceivable that through this lack of cognitive control, people come to confuse the reinterpretation or reevaluation of a traumatic memory that has always been accessible with its recovery (see for a detailed analysis, Schooler, 2001). This particular scenario would explain why women with repressed, recovered, and continuous memories of abuse are very much alike in terms of clinical parameters, except for dissociative symptoms. Clearly, this interpretation warrants further study.

References


