ASSUMPTIONS OF STUDENTS AND PSYCHOTHERAPISTS ABOUT MEMORY

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Summary.—The present study explored assumptions about memory in a Dutch sample consisting of 27 psychotherapists and 50 undergraduate students. Participants completed a questionnaire about memory and repression. Analysis indicated that a substantial proportion of the participants held assumptions about memory that are unrealistic in the sense that they do not meet a generally accepted standard among memory scientists. Although most respondents said that memory is not an accurate reflection of reality, metaphors provided by students and psychotherapists suggest that the reconstructive nature of memory was less well acknowledged.

In recent years, a number of authors (e.g., Lindsay & Read, 1994; Loftus, 1993) have expressed serious concerns about recovered memories that emerge during extensive psychotherapy in clients who present themselves with nonspecific symptoms, e.g., depression, low self-esteem, etc. These authors argue that such recovered memories may be pseudomemories, unintentionally suggested by therapists. Although systematic research is yet lacking, there is some evidence to support this position. To begin with, several researchers (e.g., Hyman & Pentland, 1996; Loftus, Coan, & Pickrell, 1996) have shown that it is possible to implant false childhood memories in normal subjects through misleading suggestions. Second, Goldstein and Farner (1993) presented some detailed case histories in which false memories were reported to originate from suggestions by therapists. Third, Yapko (1994, p. 60) asked a large sample of psychotherapists whether they knew "of any cases where it seemed highly likely that a trauma victim's trauma was somehow suggested by a therapist rather than a genuine experience." Almost one in five respondents said they knew of such cases.

Several authors (e.g., Lindsay & Read, 1994; Loftus, 1993; Yapko, 1994) have argued that some therapists have unrealistic assumptions about how human memory works and that this may contribute to the emergence of recovered memories. In this context, unrealistic assumptions are defined as assumptions that are not derived from a consensus among memory researchers (e.g., Zola, 1997). Especially those therapists who interpret amnesia for traumatic events in terms of repression or dissociation, maintain that normal memory processes do not apply to traumatic memory (e.g., Terr, 1994). For example, van der Kolk and van der Hart (1991) write about traumatic mem-

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ories: “these memories are fixed in the mind and are not altered by the pas-
sage of time, or the intervention of subsequent experience” (p. 440). The
assumption underlying such a claim is that traumatic memory is a reproduc-
tive instance with photographic characteristics. However, while empirical
evidence is yet scarce, it appears that traumatic memory, just like normal mem-
ory, is subject to distortion (Southwick, Morgan, Nicolaou, & Charney, 1997;
Wageman & Groeneweg, 1990).

As another example of an unrealistic assumption about memory, Yampas
(1994) found in his large-scale survey among psychotherapists that a substan-
tial proportion of the respondents believed that the inability to remember
events from early childhood indicates repressed trauma. This interpretation
ignores the well-documented fact that amnesia for preschool years, i.e., infant-
tile amnesia, is common (Howe & Courage, 1993). A third unrealistic as-
sumption is that repressed memories produce a variety of signs and symp-
toms (Terr, 1994), none of which is specific for sexual abuse. To be sure,
abuse victims who are aware of their experiences are more likely to suffer
from psychological and physical symptoms than control individuals who
were never abused (e.g., Moeller, Bachmann, & Moeller, 1993). However,
this does not necessarily imply that traumas of which victims are unaware
have a similar negative impact on well-being. A final problematic assumption
is that the reactivation of repressed memories is essential for symptom re-
duction (e.g., Sgroi, 1989). It has yet to be shown that recovery of traumatic
memories is therapeutically beneficial (Loftus, 1997; Loftus, Garry, & Feld-
man, 1994).

Surveys by Poole, Lindsay, Memon, and Bull (1995) and by Yampas
(1994) indicated that a considerable proportion of therapists hold at least
some of the assumptions described above. Since the Poole, et al. (1995) and
Yampas (1994) studies relied on British and/or North American samples, the
present study aimed at exploring beliefs about memory and repression in a
Dutch sample of licensed psychotherapists. Another issue addressed by the
current study is to what extent the assumptions described above are com-
mon among nontherapists. For example, Garry, Loftus, and Brown (1994) re-
ported that a large proportion of their sample of undergraduate students
had beliefs that favored the repression hypothesis. To explore this issue fur-
ther, we included undergraduate students in our survey.

Method

Participants

Students.—Fifty undergraduate students (3 men) in Health Sciences vol-
unteered to participate. Their mean age was 22.5 yr. (range 19-37). Two
students did not report their age and sex.

Psychotherapists.—A total of 27 licensed psychotherapists (14 men) with
formal training in psychology or psychiatry completed the questionnaire. Their mean age was 38.7 yr. (range 25–67). One psychotherapist did not specify age and sex. Ten psychotherapists worked from a psychodynamic or experiential perspective. Ten were behavioral or family therapists. Five worked from a perspective that was a combination of both, e.g., psychodynamic and behavioral. Two therapists said their therapy was eclectic.

Questionnaire

The questionnaire consisted of seven forced-choice ("yes," "no," "don't know") questions about repression and memory. Participants were asked whether (1) they believed in the existence of repression, (2) they thought that repressed memories cause psychological problems, (3) they believed that reactivation of repressed memories is essential for elimination of those problems, (4) they had autobiographical memories of their first two years of life, (5) they believed it at all possible that people have memories of their first two years of life, (6) they thought that memory is an accurate reflection of reality, (7) they felt that it is possible to suggest a memory of an event that in fact never happened, in such way that the person involved comes to believe that the pertinent memory is authentic. Responses that might indicate unrealistic assumptions about memory were summed. Thus, for each participant, the total number of "yes" responses was calculated. As the answers to Questions 4 and 5 were combined, the total score for memory assumptions ranged from 0 to 6, with high scores reflecting a set of assumptions that is currently under attack.

An eighth item in the questionnaire was open-ended. Subjects were asked to provide a metaphor that captures the essential features of memory ("memory is like . . ."). Three psychologists familiar with memory research and the recovered memory debate independently judged each metaphor in terms of whether it clearly indicated the belief that memory is a static and reproductive process, i.e., the belief that memories consist of accurate details that are flawlessly retained over long time periods (e.g., Loftus & Loftus, 1980; Zola, 1997). Metaphors were only classified as reflecting a photographic permanency view on memory if all three judges agreed in this respect.

Procedure

Participants were instructed that the questionnaire was not intended as a test of their knowledge, but as an exploration of their opinion about certain matters concerning memory. Students volunteered to complete the questionnaire during a health sciences course. Psychotherapists who participated in a postdoctoral training course filled in the questionnaire during a break. Traumatic memory was not an issue during this postdoctoral training. Completion of the questionnaire took about 10 minutes.
Table 1 gives an overview of the responses to the seven forced-choice questions.

### Table 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>Students</th>
<th>Therapists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>1. Repression exists&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Yes</td>
<td>94</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2. Repressed memories cause psychological problems&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Yes</td>
<td>90</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>3. Repressed memories should be reactivated&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Yes</td>
<td>60</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>4. Have memories of first two years of life</td>
<td>Yes</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>5. Having memories of first two years of life is possible&lt;sup&gt;d&lt;/sup&gt;</td>
<td>Yes</td>
<td>39</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td>6. Memory accurately reflects reality&lt;sup&gt;e&lt;/sup&gt;</td>
<td>Yes</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>84</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>7. Suggesting pseudomemories is possible&lt;sup&gt;f&lt;/sup&gt;</td>
<td>Yes</td>
<td>82</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Don't Know</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

<sup>a</sup>Therapists: 1 missing value.  
<sup>b</sup>Therapists: 2 missing values.  
<sup>c</sup>Respondents believing that repressed memories cause problems (students n=45; therapists n=21).  
<sup>d</sup>Respondents who answered "no" or "don't know" to the question whether they had memories of their first two years of life (students n=42; therapists n=24).  
<sup>e</sup>Students: 1 missing value, therapists: 2 missing values.

**Repression (Items 1, 2, and 3)**

A large majority of students (94%) and psychotherapists (96%) believed that repression exists. In addition, 90% of the students and 84% of the psychotherapists thought that repressed memories cause psychological problems. Of those who held this belief, 60% of the students and 43% of the psychotherapists also thought it necessary to uncover repressed memories to eliminate symptoms.

**Infantile Amnesia (Items 4 and 5)**

A minority reported to have autobiographical memories of their first two years of life (n=8 and 3 or 16% and 11% of the students and psychotherapists, respectively). Of the 42 students and 24 therapists who had no
early memories or who were not sure if they had such memories, 39% of the students and 50% of the therapists believed that it is actually possible that people have such early memories. More than a third of both samples (36% and 38% of students and therapists, respectively) were not sure about this possibility. Of the total sample, 48% of the students and 55% of the therapists either claimed to have early memories or believed having memories as early as the first two years of life is possible.

**Nature of Memory Processes (Items 6 and 8)**

A majority (84% of the students, 88% of the therapists) denied that memory is an accurate reflection of reality; however, inspection of the metaphors participants thought appropriate for memory (Item 8) indicated a somewhat different picture. That is, about half of the participants (54% and 44% of students and therapists, respectively) gave metaphors that, according to the unanimous view of the independent judges, indicated the belief that memories are static and reproductive in character after storage. Examples of these metaphors are “diary,” “computer,” “mirror,” or “videofilm.”

**Possibility of Suggesting Pseudomemories (Item 7)**

Eight-two percent of the students and 62% of the therapists believed that it is possible to suggest pseudomemories. Ten percent of the students and 23% of the therapists said that they were not sure if suggesting such memories is, indeed, possible. Thus, only a small minority of respondents believed that implanting pseudomemories is definitely not possible.

**Differences Between Students and Therapists**

Differences between students and therapists were evaluated with chi-squared tests. None of the differences between students and therapists reached significance. Mean total number of “yes” answers (with Items 4 and 5 combined) were 2.9 (SD=0.9) and 2.8 (SD=1.2) for students and psychotherapists, respectively. A t test showed no significant difference between the groups (t<sub>75</sub> < 1.0).

**Discussion**

In their review article, Garry, et al. (1994, p. 445) remarked that “there have been surprisingly few investigations of people’s beliefs about the cognitive psychology literature on memory.” The current study was a first attempt to describe metamemory concepts of Dutch psychotherapists and students. The findings suggest that nonempirical beliefs about memory are not uncommon among the students and therapists in this sample. A large proportion of respondents believed in repression and also thought that repressed memories cause psychological problems. To a somewhat lesser extent, respondents felt that repressed memories should be recovered to solve such problems. Moreover, despite the well documented fact that it is highly un-
common that memories go back to the first two years of life (e.g., Howe & Courage, 1993), approximately half of the respondents either believed that they had such early memories or believed this to be possible. A large proportion of the sample said that memory is not an accurate reflection of reality and that implanting pseudomemories is possible. Meanwhile, about half of the respondents provided metaphors that did not acknowledge the reconstructive nature of memory. At least two explanations for this discrepancy may be suggested. First, the assumption that events are not always accurately perceived would lead to a negative answer to the question whether memory accurately reflects reality. However, the metaphors provided were judged on whether they reflected the reconstructive nature of memory after storage. Thus, one interpretation of the present findings is that a considerable proportion of respondents view memories, once they have been stored, as unchangeable. A similar finding was reported in a prior survey of Loftus and Loftus (1980) among U.S. psychologists. The implication of such a "videorecorder" conceptualization of memory is straightforward: retrieved memories are seen as veridical copies of (perceived) external events. A second interpretation of why a sizeable percentage of respondents came up with reproductive metaphors of memory has to do with the fact that these metaphors are so easy to describe and that it is more difficult to find good metaphors which capture the dynamic features of memory (e.g., Koriat & Goldsmith, 1996; Zola, 1997).

All in all, the results of the current study are rather similar to the findings of previous surveys (Garry, et al., 1994; Poole, et al., 1995; Yapko, 1994) in showing that unrealistic assumptions about memory are not uncommon among therapists and undergraduate students. Concluding that a substantial proportion of therapists in our sample may search for hidden traumas in their clients would, of course, be an unacceptable overinterpretation of the data. For example, Poole, et al. (1995) found that, although 71% of their sample of psychotherapists reported using at least one memory recovery technique, only 25% of this sample showed a combination of views and practices that could be considered disquieting. Thus, although a substantial proportion of the therapists in the present sample hold views similar to those lying at the basis of memory-recovery techniques, no conclusions about their actual practices can be drawn. Note further that on the basis of the current data, one could also emphasize the other side of the coin, namely, the fact that a majority of the respondents acknowledged the possibility of implanting pseudomemories.

The present study was exploratory in nature and has several limitations. First, sample sizes were small. Second, in the questionnaire, we did not define the concept of repression. Yet, the precise meaning of repression is subject to extensive debate. For example, Erdelyi (1990) argued that many au-
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thors see repression strictly as an unconscious act. According to this author, repression can also be deployed consciously. Defined in this way, repression is a deliberate attempt to suppress unpleasant thoughts and memories, similar to cognitive avoidance. We have no way of knowing whether our respondents answered the questions with a similar definition of repression in mind. Asking subjects questions about a detailed case vignette describing repressed memories would probably provide a better research method (see also, Loftus, Weingardt, & Hoffman, 1993).

In conclusion, the results of the present study lend support to the notion that a fair number of psychotherapists as well as nontherapists hold unrealistic views about memory. If and how such views contribute to the occurrence of traumatic pseudomemories remains to be clarified.

REFERENCES


tions to memories that were previously repressed. Expert Evidence, 2, 51-59.


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