Lack of precision, misleading implications, and ethical issues arising from the use of the label "false memory" for errors in word memory.

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Introduction

- The term "false memory" has been used to refer to suggestibility experiments in which whole events are apparently confabulated and in media accounts of contested memories of childhood abuse.
- Since 1992, psychologists have increasingly used the term "false memory" when discussing memory errors for details, such as specific words within word lists.
- Use of the term to refer to errors in details is a shift in language away from other terms used historically (e.g., "memory intrusions").
- We empirically examine this shift in language and discuss implications of the new use of the term "false memory".

Historical Use of the Term "False Memory"

- The term "false memory" initially gained prominence in reference to contested memories of childhood sexual abuse on family members. Article titles such as "You Must Remember This: How the Brain Forms False Memories" reflect this media frame (Beckett, 1996, p. 12).
- In the 1990s, the term "false memory" was introduced to the cognitive literature.

New Term for an Old Phenomenon: The Deese Paradigm

- Deese (1959) referred to this specific type of memory error as an "intrusion". The paradigm was designed specifically to elicit a specific type of memory error: intrusions of words that were related to a list of words presented in the laboratory.
- Deese's now classic study was not well cited and did not raise much attention at the time.

Re-discovering the Deese Paradigm

- Between 1992 and 1994, the media began to use the term "false memory" to focus on the inaccuracy of memories for abuse and the effects of false allegations of childhood sexual abuse on family members. Article titles such as "You Must Remember This: How the Brain Forms False Memories" reflect this media frame (Beckett, 1996, p. 12).
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Current Study

- In 1995, Roediger and McDermott reported on a new experiment that employed Deese's (1959) paradigm, but used new terminology to discuss the results.
- Participants were asked to learn a list of words (e.g., bed, night, tired) and later tested for recall of the list.
- Articles that did not use the term "false memory" to refer to errors in details involved suggestibility for, or confabulation of, entire events.
- Articles using the term "false memory" to refer both to errors in details and confabulations were included in the error in details tally.

Other Uses of the Term "False Memory"

- Non-empirical. Term is used to refer to the complexity and accuracy of memories for whole events (such as abuse).
- Susceptibility research. Term is used to refer to the apparent confabulations of entire events never actually experienced, but that were suggested in a laboratory task.
- We are not critiquing the use of the term "false memory" for suggestibility or confabulation research in which whole memories for entire events are allegedly implanted (however, for critical reviews of such studies, see Carstensen et al., 1993; Freyd, 1998; Gleave & Freyd, 1997; Pope, 1996, 1997).

Current Study

- We sought to assess the frequency of the use of the term "false memory" to refer to errors in details. The term "false memory" is used in empirical and non-empirical studies, and how the term was used was assessed to determine the extent of the generalization of the term.

Acknowledgments

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For related research, please visit http://www.du.edu/~deprinclas/lab.html or http://dynamic.csus.edu/about4.html

Method

- A Psycholinguistic search of title and abstract fields for journal articles using the keywords "false memory" and "false memories" was conducted for the time period 1992 to August 2003.
- Discrepant ratings between coders initially occurred in 28 of the 390 articles. These discrepancies were for 28 term usage ratings and 7 empirical status ratings.
- Articles cited in the inaugural Roediger and McDermott (1995) study of recall and recognition errors during the period of 1992 to August 2003 were used to weight the Cochrane database. This resulted in the detection of an additional 16 articles, increasing the total number to 396.

Coding Criteria

- Articles using the term "false memory/ies" to refer to errors in details were identified based on the following criteria:
  1. When the term referred to errors in recall for details or parts of events. For example, experiments in which participants erroneously recalled a word not previously presented in a list of related words (e.g., misremembering "bed" when sleep-related words had been presented) or experiments in which participants erroneously recalled a detail within a more complex stimulus (e.g., when shown a video of a store robbery, the participant erroneously recalled that the robber had her hands in her pockets at a certain point in the video).

Results

- Of the 397 articles collected, 219 (56.2%) were empirical reports.
- Approximately 70% of the empirical articles used the term "false memory/ies" to refer to error in detail.
- The majority of non-empirical papers (88%) used the term to refer to confabulation of an entire event.
- The majority of research articles that used the term "false memory/ies" to refer to errors in details were published in the Deese, Roediger and McDermott (DRM) paradigm, in which participants incorrectly recall or recognize having read a word from a previously presented list.

Table 1. Articles Rated by Type and Use of the Term "False Memories"

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<thead>
<tr>
<th>Term used to refer to errors in details</th>
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<th>Number of articles</th>
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<td>153</td>
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<td>66</td>
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<tr>
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Discussion

- Effects of term use on theory development
  - Errors in word learning (in which words similar to study words are incorrectly remembered) may or may not have much to do with confabulation of life events; however, the assumptions implicit in the language have inhibited a thorough comparison of these phenomena.
  - Thus, use of the term "false memory" to refer to distinct phenomena, (i.e., word learning errors and confabulation of life events) weakens theory development.
  - Many questions about memory errors remain unexplored and we applaud research in this area.
  - With the use of more precise and differentiated terminology for specific types of memory errors, theory development will thrive.

Conflating politics and science: Problems with the current use of "false memory" in cognitive tasks

- The new use of the phrase tactfully supports the notion that research on errors in memory unfolds a claim that false memories for traumatic events can be implanted into memory.

Ethical responsibility in data interpretation and use of scientific authority

- Scientists are awarded tremendous authority to define the scope of knowledge in any given field. With this authority comes both privilege and responsibility.
- Among the many ethical responsibilities facing scientists is the fair interpretation and representation of data to both colleagues and the public.
- The language chosen by researchers to describe, interpret and generalize findings sets the context for the interpretation by other researchers, the media and the public.
- In the specific case of the use of the term "false memory" to describe errors in details in laboratory tasks (e.g., in word learning tasks), the media and public are set up all too easily to interpret such research as relevant to "false memories" of abuse because the term is used in the public domain to refer to contested memories of abuse.

References