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What if You Went to the Police and Accused Your Uncle of Abuse? Misunderstandings Concerning the Benefits of Memory Distortion: A Commentary on Fernández (2015)

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Abstract

In a recent paper, Fernández (in press) argues that memory distortion can have beneficial outcomes. Although we agree with this, we find his reasoning and examples flawed to such degree that they will lead to misunderstandings rather than clarification in the field of memory (distortion). In his paper, Fernández uses the terms belief and memory incorrectly, creating a conceptual blur. Also, Fernández tries to make the case that under certain circumstances, false memories of abuse are beneficial. We argue against this idea as the reasoning behind this claim is based on controversial assumptions such as repression. Although it is true that memory distortions can be beneficial, the examples sketched by Fernández are not in line with recent documentation in this area.

Keywords: False memory; Memory Distortion; Nonbelieved Memories; Adaptive Memory; Belief; Recollection

What if You Went to the Police and Accused Your Uncle of Abuse? Misunderstandings Concerning the Benefits of Memory Distortion: A Commentary on Fernández (in press)

In a recent paper, Fernández (in press) claims that under certain circumstances, distorted memories might be beneficial. Although we generally agree with the view that memory distortions can have positive consequences, we argue that the reasoning and examples used in Fernández's paper are not in line with recent documentation concerning the functions of memory and its illusions. In our view, the incorrect reasoning in his paper might contribute to misunderstandings in the field of memory (distortion), misunderstandings that might affect theory and practice altogether.

In this commentary, we articulate several points of contention concerning Fernández's (in press) speculations about the positive aspects of memory distortion. Specifically, we will first elaborate on the ambiguous and loose use of concepts (i.e., *belief* and *memory*) in his paper. Second, we will explain that his fictional example of fabricated memories of abuse being sometimes beneficial rests on flawed assumptions. Third and finally, we argue that Fernández's review of the benefits of memory distortion not only overlooked much of the literature in this area but also does not align well with recent evidence in this field.

Belief versus Recollection[1]

In the paper, Fernández (in press) frequently resorts to the concept of *belief* to explain the positive effects of memory distortion. We applaud the use of this concept in the context of memory. Whereas previous memory research has often focused on instances in which belief and recollection are confounded (Smeets, Merckelbach, Horselenberg, & Jelicic, 2005), an increasingly large corpus of empirical research reveals that belief and recollection are two

distinct concepts (Otgaar, Scoboria, & Mazzoni, 2014). *Recollection* refers to a mental re-experience accompanied by perceptual and emotional features that are perceived as indicative of the original experience (Brewer, 1996; James, 1890/1950; Rubin, 2006; Tulving, 1989). *Belief*, on the other hand, is a non-memorial judgment that is predominantly affected by social influences (Clark, Nash, Fincham, & Mazzoni, 2012; Mazzoni, Scoboria, & Harvey, 2010; Otgaar, Smeets, & Scoboria, 2013). Memory researchers often adopt the term *belief in occurrence* to refer to the truth value attributed to whether an event happened or not, regardless of whether the event is recollected (Mazzoni et al., 2010; Scoboria, Mazzoni, Kirsch, & Relyea, 2004).

The distinction between belief in occurrence and recollection for an event is crucial. The majority of memory research focuses on *believed memories*; that is, instances in which research participants have both a recollection of and a belief in the previous occurrence of an event. However, on other occasions, researchers report that they tapped into participants' recollections when in fact they measured their beliefs (see for an extensive discussion: Mazzoni & Kirsch, 2002; Scoboria et al., 2004). It is therefore relevant that memory scholars are aware of the precise intricacies underlying belief in occurrence and recollection and recognize the differences and commonalities between them.

In the paper by Fernández (in press), the concepts of belief and recollection are frequently used in an ambiguous manner thereby potentially confusing the memory field even further. Specifically, in our opinion, this author makes the following three mistakes. First, it appears that Fernández is assuming that in order to form a belief, one must first have a recollection. For example, Fernández argues (p. 2) that *"[h]aving a memory may allow the*

subject to form a belief about the past which has a certain instrumental value for her". Furthermore, he argues (p. 3) that *"[o]n the basis of my memory, I form the belief…"*.

However, research paints a different picture of the chronology of beliefs and recollections. According to the Nested Model proposed by Scoboria and colleagues (2004), in most instances, memory is nested within belief. The model stipulates that memory implies belief, thereby indicating that when a person recollects an event, he/she will have to – at least initially - believe in the occurrence of the event. So, it is not the case that beliefs are being formed after someone remembers an event, as the memory is already embedded in belief in the occurrence of the event. It is remarkable that the philosopher Fernández overlooked the point because the idea that beliefs are fundamental to – and indeed must precede – comprehension is essential in the work of Baruch de Spinoza (e.g., Gilbert, 1991), a primary author in the philosophical canon.

Second, besides espousing an ambiguous chronological order of belief and recollection, Fernández (in press) is not very sensitive – perhaps unintentionally – to various forms of beliefs: *Belief in occurrence* of an event and *belief in accuracy* of event (Scoboria, Talarico, & Pascal, 2015). The distinction between *belief in occurrence* and *belief in accuracy* is the difference between wondering whether an event occurred and whether an event is remembered in the way it occurred (Scoboria et al., 2015). To see how these types of belief are blurred in the paper, consider the following examples. Fernández (p. 3) writes phrases such as "*…believing in the content of that memory*" or "*…beliefs about her past".* The first obviously refers to *belief in accuracy,* while the latter is more in line with how *belief in occurrence* is viewed. In his paper, Fernández frequently employs the overall term "*beliefs*", without explaining what type of belief he is referring to. Although Fernández was probably unaware of the difference between these types of beliefs, differentiating between them is important. Recent research has shown that these

types of belief are distinct and can independently contribute to autobiographical remembering (Scoboria et al., 2015).

Third, Fernández (in press) suggests that some forms of beliefs are relatively stable and are difficult to undermine. For example, he writes that (p. 2) " *justified beliefs confer a certain stability upon them*." Again, it is unclear what type of belief the author specifically has in mind. Moreover, recent experimentation shows that belief in the occurrence of events can quite easily be undermined and can even lead to a phenomenon called nonbelieved memories (Otgaar et al., 2014). Nonbelieved memories refer to memories of events of which the belief that the event occurred is relinquished. Studies concentrating on nonbelieved memories demonstrated that when memories are challenged by confronting participants with external environmental output such as social feedback, about 20% of participants stop believing in the occurrence of the event while maintaining to have vivid recollections of the event (e.g., Clark et al., 2012; Mazzoni, Clark, & Nash, 2014; Mazzoni et al., 2010; Otgaar et al., 2013). This is obviously an exception to the Nested Model (Scoboria et al., 2004), although in these instances, people started with memories that were embedded in the belief that the memories referred to events that occurred to them.

For example, in one of our studies, we used a false memory implantation procedure to evoke nonbelieved memories (Otgaar et al., 2013). Specifically, children and adults were falsely told that they were on a hot air balloon ride in their childhood. After two interviews with a 1-week interval, participants created false memories of the event. However, after the last interview, participants were debriefed by telling them that the hot air balloon ride was not part of their autobiography. Following this, we measured their memory and belief for the false event. We found that a nontrivial minority (adults: 13%; children: 15%) of participants reported that they

did not believe in the occurrence of the false event, but still remembered details of the hot air balloon ride. Studies on nonbelieved memories are rapidly increasing using different paradigms (e.g., false memory implantation, doctored videos, imagination inflation) and together, their findings evidently show the ease with which belief can be undermined. All in all, in our view, Fernández (in press) conflates the concepts belief and recollection and describes them in a confusing and unhelpful manner that could potentially lead to a conceptual blur in the study of memory.

Fabricated Memories of Abuse

Fernández (in press) argues that under certain circumstances, fabricated memories of abuse can be beneficial. We must take umbrage at this remark as well as object strenuously to the reasoning put forward by Fernández. His line of argumentation conflicts with the extant literature on trauma, memory, and false memory. Consider Fernández'(p. 8) key example, which is a fictitious scenario: *"Let us imagine that, early in my childhood, I once witnessed my uncle giving a terrible beating to my mother; his sister. In fact, let us imagine that it was so early in my childhood that I am no longer able to recover that memory. Many years later, I invariably feel the desire to hate my uncle whenever I need to interact with him. Every time that I am in his presence, I realize that, quite simply, I want to hate the guy. This makes me ashamed of myself since, not being able to remember anything about the violent incident that I once witnessed, I cannot find anything particularly despicable about my uncle."*

In this hypothetical scenario, Fernández (in press) implicitly addresses several issues. Thus, he discusses failure to remember a traumatic incident that happened early in childhood. This refers to childhood amnesia, a phenomenon that has indeed been studied extensively (e.g., Howe & Courage, 1993; Gross, Jack, David, & Hayne. 2013). However, Fernández apparently

thinks that when no specific recollection of a traumatic event is available, negative feelings (e.g., hate against the uncle) are nevertheless retained somewhere and somehow influence behaviour in a decisive way. This is a variant of the controversial idea of repression (e.g., Piper, Lillevik, & Kritzer, 2008) whereby traumatic memories, although blocked from conscious awareness and being inaccessible for retrieval, might still affect someone's behaviour via implicit associations. This conceptualization has, however, been extensively criticized in the memory field and a recurrent point is that the empirical evidence for such dynamics are completely lacking (see e.g., McNally, 2005; Patihis, Lilienfeld, Ho, & Loftus, 2014).

Admittedly, some clinicians have proposed that a traumatic memory will be entirely organized on an implicit level and that the trauma can affect behaviour in other ways (e.g., negative feelings; van der Kolk, 1994). However, research has shown that implicit memories of trauma do not affect behaviour in solitude, but are accompanied by conscious, explicit memories of trauma. Also, the idea of repression is frequently confused with general (memory) well-known mechanisms and principles as ordinary forgetting, incomplete encoding, and non-disclosure of traumatic information (McNally, 2005). Most importantly, we contend that there is not even a trace of evidence to support the view that a traumatic event that has fallen prey to infantile amnesia may still later on guide behaviour due to implicit evaluations. We would argue that the burden of proof is on the shoulder of those – like Fernández – who come up with such eccentric scenarios. Of course, scenarios may be hypothetical, but they must have some empirical merits, otherwise we are left with science fiction.

Building on his eccentric Uncle-scenario, Fernández (in press) goes on to stipulate why fabricated memories might be beneficial. He writes (p. 8): "*[c]onsider, now, the fabricated memory wherein I represent my uncle as molesting me while I was a child. Fabricating this*

memory would provide me with a reason which, in my view, entitles me to hate my uncle. And this, in turn, would allow me to experience hate towards him without any harm to my own self-concept. Thus, it seems that, in this scenario, my fabricated memory of abuse is beneficial despite being distorted." We find this reasoning far from compelling, if not straight out naive. Although false memories might be beneficial for retaining a positive self (Conway & Loveday, in press), a next step in the Uncle-scenario could be that the person takes his false memory so seriously that he goes to the police and files an official accusation. It looks like Fernández ignored the history of the field he is writing about. That people may act upon false memories, even to the point that they are willing to share them with representatives of the law has been described in the 19th century hypnosis literature (see, for an example, Rosen, Sageman & Loftus, 2004). In the 90's, the legal implications of false memories and how they can devastate innocent people served as the major impetus for more recent research on false memories (Loftus, 1995). Since that time studies have documented time and again that false traumatic memories can lead to similar emotional responses as true memories of trauma, the implication of which is that fabricated memories of abuse are not beneficial at all (McNally et al., 2004). The point here is that such false memories of abuse, precisely because they are experienced as extremely painful and feel like an authentic memory, may be acted upon and may result in criminal proceedings against innocent people (e.g., Howe, 2013; Loftus & Davis, 2006).

What are the Benefits of Memory Distortion?

The fictitious scenarios sketched by Fernández (in press) do not convincingly demonstrate that memory distortions are beneficial, but we acknowledge that the issue of whether there are benefits to having memory distortions is a legitimate one. The older psychiatric literature provides case descriptions of patients who were misinformed by their therapists about

the details of aversive life events they had experienced in such a way that the patients came to remember a less dramatic version of these events. A case in point is the 19th century French psychiatrist Pierre Janet, who, according to historian Hacking (1995, p.196) "fooled his patients" in a therapeutic fashion by using misinformation tactics. While his patients may have benefitted from their false memories, a treatment approach based on positive misinformation would be considered ethically unacceptable today.

Apart from this historical example, there is recent laboratory research highlighting that under some conditions, memory distortions might yield positive effects such as increased problem solving (e.g., Howe, Garner, Dewhurst, & Ball, 2010; Howe, Garner, & Patel, 2013). For example, Howe and colleagues (2010) presented adult participants with lists containing associatively-related words (e.g., web, insect, bug, fly) known to effectively evoke false memories (i.e., spider). After the list presentation, participants received a memory test and were then confronted with compound remote associate task (CRAT) problems. In this problem-solving task, participants were shown three words (e.g., widow, bite, house) and they had to come up with a single word linking all words with each other. Importantly, the non-presented words of the associatively-related lists served as the solution to some of these CRATs. The principal result was that when participants produced false memories, CRAT problems were solved more frequently and significantly faster relative to when problems were not primed by these associatively-related lists. This phenomenon has been replicated using child samples (Howe, Garner, Charlesworth, & Knott, 2011) and generalized to verbal proportional analogy problems (Howe, Threadgold, Norbury, Garner, & Ball, 2013). Also, recent work has shown in the laboratory context that false memories of words that were related to survival-related situations

(e.g., death) served as better primes for solving CRATs than neutral false memories (Howe et al., 2013). We were surprised that this work was not cited by Fernández.

We have recently extended this line of research and examined whether false memories might have beneficial outcomes on a task linked to intelligence (Otgaar, Howe, van Beers, van Hoof, Bronzwaer, & Smeets, in press). Participants were presented with negative and neutral associatively-related wordlists. After receiving a memory test, participants were involved in a perceptual closure task in which they viewed degraded (presented and non-presented) stimuli that became clearer over time. This task was similar to subtests of intelligence in which people receive degraded stimuli and have to indicate what the stimuli represent (e.g., Luteijn & Barelds, 2004). Identifications referring to false memories were significantly faster than those based on true memories, which suggests that false memories may serve a priming function.

Collectively, these studies show that under some conditions, false memories can encourage performance on secondary tasks related to problem solving and intelligence. Likewise, Dewhurst, Thorley, Hammond, and Ormerod (2011) showed that memory distortions were related to creativity. Also, Howe (2011) and Schacter, Guerin, and St. Jacques (2011) argued that many false memories are the result of imaginative processes, ones that give us the opportunity to simulate future events, ones that might be vital for our survival. This view indicates that our memory is flexible at being able to remember the past, interpret the present, and simulate future events all of which are indicative of an extremely adaptive memory system. This adaptive flexibility comes at a cost: It is susceptible to memory errors that can arise because of the potential confusion between what we imagined and what is reconstructed from memory.

Implications and Conclusions

The arguments and hypothetical examples used by Fernández (in press) can have some unfortunate practical implications. Fernández states that negative feelings might linger for years after someone has forgotten a traumatic event. If one would take this position seriously, then this could affect settings in which therapists treat children and adults with alleged horrendous experiences. Therapists might come to believe that when children (or adults) have certain "strange" feelings without any explanation for them, the origins of these feelings or signals might be traced back to sexual abuse that has been forgotten. However, research clearly demonstrates the risks of false positives when using such signals to assess whether someone has been abused (e.g., Kendall-Tackett, Williams, & Finkelhor, 1993). Placing a confidence in these signals might lead therapists to falsely interpret certain "symptoms" as being the result of sexual abuse and they then might ask suggestive questions to "uncover" whether a patient has forgotten history of abuse. Unfortunately, this approach may give rise to false memories of childhood abuse (see Loftus, 1996; Howe, 2013; Patihis, Ho, Tingen, Lilienfeld, & Loftus, 2013).

The idea that fabricated memories of abuse can sometimes be beneficial is debatable. Although we agree that memory distortion may have under some conditions positive carry-over effects to performance on other tasks, we strongly argue that fabricated memories of abuse do not fall under these conditions. Some clinicians still use certain therapies (e.g., memory recovery, hypnosis, dream interpretation) to help patients with their alleged trauma history. However, as noted, these techniques might actually fuel the formation of false, but not true memories (Howe, 2013; Patihis et al., 2013). Ideas put forward by Fernández might cause therapists to carry on with their questionable techniques despite the fact that these techniques could catalyze memory distortion.

To conclude, in the present commentary, we have illustrated that the paper by Fernández (in press) employs concepts such as belief and recollection in an ambiguous manner. We disagree with Fernández about the argumentation and examples put forward to support his view on memory distortion. Of course, it is vital that "new" ideas about memory, including the benefits of memory distortion, be raised but they should be grounded in theory and empirical arguments. If not, speculation about traumatic memories could lead to misunderstandings about how memory works. Even worse, such misunderstandings might be embraced in clinical settings in which more serious damage could result than that which emerges from mere theoretical confusion.

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Footnote

[1]In the present paper, we will mainly use the term “recollection” instead of “memory”. The reason is that memory (or autobiographical memory) stands for the entire experience of recalling events happening to the self in the past (Scoboria et al., 2014). Fernández (in press) probably used the term “memory” to refer to “recollection” or the mental re-experience of an event.