Published paper
Madill, A. and Holch, P. (2004) *A range of memory possibilities: The challenge of the false memory debate for clinicians and researchers.* Clinical Psychology and Psychotherapy, 11 (5). pp. 299-310.

Madill, A. & Holch, P. (2004). A range of memory possibilities: The challenge of the false memory debate for clinicians and researchers. Clinical Psychology and Psychotherapy: An International Journal of Theory & Practice, 11, 299-310.

A range of memory possibilities:

The challenge of the false memory debate for clinicians and researchers

Short title: The false memory debate

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The challenge of the false memory debate for clinicians and researchers

Abstract

The aim of this article is to present a succinct review and evaluation of the main areas of contention in the false memory debate and, from this basis, to suggest ways in which the best from both sides can be utilised. We examine the potential pitfalls of therapy in terms of the fallibility and suggestibility of autobiographical memory and therapists and therapeutic techniques as the architects of false memories. We then evaluate the case for false memory formation examining if some researchers hold misconceived views of psychotherapy, if experimental studies lack ecological validity, and the effect of trauma on memory. Finally, we explore how the potential pitfalls of therapy can be avoided in practice, reflecting on the usefulness of British Psychological Society guidelines, how clinicians can implement research findings, and how research on the false memory debate can be improved. We conclude that the way forward is researcher-clinician collaboration in the development of ecologically valid research paradigms.

Loftus and Ketcham (1994) cite many cases of adults who have emerged from psychotherapy with alleged recovered memories of child sexual abuse (CSA). Loftus (1993) and others (e.g., Lindsay & Read, 1994; Wakefield & Underwager, 1992) have become increasingly concerned that many recollections of CSA after a period of amnesia may be false memories, i.e., recalled episodes which did not transpire but in which the individual strongly believes (Brandon *et al*., 1998). Furthermore, they argue that false memories may be created iatrogenically through techniques employed during psychotherapy. This has led to concern that the reputation of the therapy professions is under threat due to the adverse publicity and legal claims against therapists (Farrants, 1998).

The question as to whether or not false memories can be created has become the subject of an often emotive, entrenched, and polarised debate between clinical and research psychologists. Counsellors and therapists tend to stress the impact of emotion on memory and advocate the view that traumatic memories can be repressed or dissociated from consciousness and recovered at a later date (Courtois 1999; van der Kolk & Fisler, 1995). Pivotal to the argument of researchers such as Loftus and Ketcham (1994), is the fallibility and suggestibility of memory for personal events. They question the concept of repression inherent in many psychotherapeutic and counselling approaches, highlighting the lack of experimental evidence for the theory and, by implication, challenge the view that forgotten memories of CSA can be recovered.

In this article we present a succinct review and evaluation of the main areas of contention in the false memory debate. We examine the potential pitfalls of therapy, evaluate the case for false memory formation, and reflect on how the potential pitfalls of

therapy can be avoided in practice. Finally, we suggest ways in which the best from both sides of the debate can be utilised arguing that the time is ripe for researcher-clinician collaboration in the development of ecologically valid research paradigms.

Potential pitfalls of therapy

A view held widely within psychotherapy and counselling is that adulthood distress can have its genesis in painful childhood experiences, such as CSA, and that successful adult functioning can be dependent on the working through of this trauma (Herman & Schatzow, 1987). Proposed sequelae include low self-esteem, anxiety, depression (Browne & Finkelhor, 1986; Terr, 1991), inability to form trustful relationships, self-critical, self-destructive characteristics (Cole & Putnam, 1992), eating disorders (Pope & Hudson, 1992), phobias, nightmares, fear of the dark, and sexual dysfunction (Bradshaw, 1992). However, although there is some supporting evidence, it is still not clear if CSA does have identifiable sequalae for adult victims which the skilled therapist can identify.

The idea of CSA as a potent antecedent of adult psychological dysfunction is not new. Freud (1896) was one of the first to infer pathological consequences from unwanted and inappropriate sexual contact in childhood and he believed that painful memories of CSA could be repressed into the unconscious and recovered later in therapy (Fancher, 1996). The seduction theory, as it came to be known, was, however, later retracted by Freud who rejected the presumed scale of CSA amongst the Viennese middle-class (Leahey, 1997). The ideas Freud raised remain controversial, particularly the existence of defence mechanisms to account for discontinuous memory. However, recent researchers have offered an account of phenomena associated with defence mechanisms such as

repression and dissociation within contemporary cognitive science (e.g., Brewin & Andrews, 1998).

Although Freud had no evidence for the base rates of CSA, recent surveys have identified the problem as substantial with adult survivors of CSA in the USA estimated at 20% of the female and 5-10% of the male population (Finkelhor & Dzuiba-Leatherman, 1994). This has raised concern that former CSA is a problem for many people, especially for those entering psychotherapy, and enhanced the profile of the phenomenon. Indeed, reluctance to discuss the subject has been reduced due to widespread media exposure; a move that has been applauded by the women's movement and child advocacy groups. However, controversy remains over the reliability of recovered memories of previous CSA. Psychotherapy often involves exploration of the client's past in order to create a fresh perspective on their experiences (Brown & Pedder, 1991). Disturbingly, it has been proposed that this process can lead a client to believe he or she was the survivor of CSA through the creation of false memories.

How fallible and suggestible is autobiographical memory?

At odds with the popular metaphor of memory as a video recorder, the majority of research suggests autobiographical memory, that is, gathered occurrences from an individual's personal history (Cohen, 1996), is highly fallible and suggestible (Lindsay & Read, 1994) and prone to hindsight bias (Conway, 1990). It seems we constantly weave our new perspectives into the past, enriching and reinterpreting our experience in order to develop an integrated personal narrative. Fundamental to the false memory thesis is that persons engaging in therapy are particularly predisposed to memory reconstruction and, in order "(t)o render meaningful their chronic psychological distress, some people may

come to believe that their problems arise from repressed memories of child sexual abuse" (McNally *et al*., 2001, p. 151).

Ethical experimental evidence has been sought to test if memory can become distorted through suggestion. For example, Loftus and Coan (reported in Loftus, 1993; Loftus & Ketcham, 1994) demonstrated how a false story from a significant other (e.g., brother or aunt) altered the recall of past events for five participants aged from eight to 42 years. The significant other told the participant that they had become lost as a child in a shopping centre. Participants accepted the story as part of their personal history and produced embellished memories of being scared, of the people they saw, and noises they heard. The mother of one of the preliminary participants, a fourteen year old boy, was able to confirm that a similar event had not actually occurred in his earlier childhood. Hence, there is evidence that a mildly upsetting event can be suggested to and accepted as authentic personal history by at least some people. The use of a significant other to describe the planted event may have influenced participants to believe that their memory was real because the story came from a reliable source and it has been argued that a therapist would not have the same impact (Pezdeck, 1994). However, clients can feel their therapist to be of extreme importance to them (Arthern & Madill, 2002) and it is conceivable that their influence may impact the suggestibility of clients in their care.

A notorious case of false confession is used by proponents of false memory as evidence that suggestion can be particularly potent for a vulnerable and confused individual. Ofshe and Watters (1994) describe the case of Paul Ingram who initially denied the charge of CSA instigated by his daughters. However, during questioning, which involved guided imagery, Ingram began to confess to more and more bizarre forms

of CSA including satanic ritual abuse. He even confessed to a fabricated allegation planted to test the validity of his confessions, indeed embellishing the story. The extent to which a police interrogation throws light on the process of therapy is questionable. However, although it seems unlikely that a health professional would knowingly assist in creating false memories, an exploratory therapeutic approach and certain therapy techniques may be unintentional antecedents.

Are therapists and therapeutic techniques architects of false memories?

Shobe and Schooler (2001) present seven case studies for which there is evidence of non-deliberate memory fabrication, within the context of psychotherapeutic treatment, of having been the victim of sexual abuse. The criteria used for establishing a reasonable claim for fabrication were; claims of satanic ritual abuse (for which the FBI has found no substantiating evidence), memories of events before the age of three (which people are typically unable to remember), and lack of physical or medical evidence where this would have been expected. Analysis of these cases led Shobe and Schooler to conclude that several mechanisms may be implicated in developing fabricated memories of sexual abuse within therapy. These include suggestion from the therapist, who is respected as a figure of authority, often to provide a rationale for a diagnosis of personality disorder, use of memory recovery techniques such as hypnosis, guided imagery, and dream interpretation, reinterpretation of past events which had not formerly been considered abusive, and information supplied in books and by the media.

Similarly, Loftus and Ketcham (1994) argue that, after repeated suggestion from the therapist, fragmentary, initially disbelieved ‘memories’ could eventually become more detailed and convincing to the client. Thus, how therapists assess clients in the early

stages of treatment may be crucial to the direction the therapy takes. The therapist has a range of information on which to make decisions about their client in order to assist them in meaningful change. For example, a treatment plan may be development through the clarification of the client's presenting problems and there may be extended exploration of the client's history (Cole & Putnam, 1992). However, there has been ample demonstration of a decision-making bias within psychotherapy (Pfeiffer *et al*., 2000).

(a) Illusory correlation and confirmatory bias

Chapman and Chapman (1967) demonstrated that believing a relationship exists between two variables increases the probability of identifying corroborating examples. A sample of students and clinicians were asked to link personality traits to performances on the 'draw a person test' (a projective personality test of limited validity open to ambiguous interpretation). It was found that if participants expected a relationship it was, in the main, perceived whether or not there was supporting evidence. For example, clinicians who believed the trait of suspicion could be detected from the way the figure's eyes were drawn saw a relationship even after disconfirming evidence (Myers, 1999). This phenomenon has ramifications for therapists who believe that previous CSA can be identified by a checklist of symptoms. Checklists are disturbingly broad in the symptoms attributed to previous CSA (Bradshaw, 1992) making the possibility of an illusory correlation between a given symptom and a suspicion of CSA a reasonable concern.

Closely related to the phenomenon of illusory correlation is the problem of confirmatory bias. For example, Snyder and Thomsen (1988) demonstrated that therapists could trigger extroverted behaviour in their clients through asking questions that facilitated clients to reflect on their extrovert qualities and, furthermore, that this shaped

the emphasis and direction of therapy. This study suggests that therapists may overlook evidence disconfirming their working assumptions while, through suggestion and demand characteristics (cues from therapist on what is expected), clients may start to supply information congruent with the clinician's theory. Indeed, confirmatory exploration methods have been found to be more evident for therapists who agreed with a hypothesis diagnosis (Strohmer *et al.,* 1990). Moreover, it has been shown that clinicians generally overestimate their own powers of intuition (Maddux, 1993) and that some will suggest to a client they were abused even if the idea has been strongly rejected by the client (Fredrickson, 1992).

Some therapeutic techniques used to explore the client's past are also implicated by false memory proponents as having the potential to distort memory. Loftus and Ketcham (1994) describe many case studies where women had no recollection prior to therapy of CSA and had to do considerable 'memory work' to retrieve events allegedly from the past. Memory work as described by Ceci and Loftus (1994) includes the techniques of hypnosis and guided imagery.

(b) Hypnosis

Hypnosis is sometimes advocated by clinicians as an appropriate aid to increase the amount of information a client can recall (Courtois, 1991; Spiegel, 1989). However, in many cases, the original aetiology of a memory induced in hypnosis cannot be identified and it is of concern that inaccurate memories may be produced (Lindsay & Read, 1994). For example, Whitehouse *et al.* (1991) found that participants who attempted to recall memories in both the hypnotic and waking states were later unable to differentiate if the memories were real or hypnosis-induced. In a review of the literature, McConkey and

Sheehan (1995) state that hypnosis is unreliable in revealing past memories due the suggestibility of the technique and lowering of memory monitoring criteria (what is accepted as a plausible memory) and that the dominant role taken by the therapist in hypnosis may also increase the possibility of influencing a vulnerable client to the extent that demand characteristics affect the content of the information gathered. Moreover, while hypnotic recall can increase the confidence with which memories are held, this is not an indicator of their authenticity and the amount of detail and emotional strength associated with a memory does not correlate with its accuracy.

(c) Guided imagery

Guided imagery is used by some therapists to help their clients process difficult memories. It is also used as an aid in the exploration of emotional themes and in the elaboration of thoughts and feelings (Gold, 1990). The client's imagination is facilitated by the therapist and involves the mental production of realistic or metaphoric events (Arbuthnott *et al*., 2001). It has been suggested that guided imagery could result in the creation of false memories through the potential distortion of historical memory for clients with vague recollections (Goff & Roediger, 1998). This was demonstrated in the Ingram case of false confessions described earlier (Ofshe & Watters, 1994). Indeed, recent research has shown how guidance through a short imagination exercise can influence the perceived authenticity of an event (Manning, 2000). Participants (n=276) were questioned about life events in childhood before and after an imagination exercise which focused on certain key incidents, e.g., breaking a window or being pulled out of water by a lifeguard. When questioned two weeks after this exercise, the confidence with which the imagined incidents were accepted as autobiographically authentic was

significantly greater than for control, non-imagined incidents. The concern of false memory proponents is that repetition of guided imagery scenarios for suspected CSA could lead to the acceptance of these events as facts (Loftus, 2001). However, this must be balanced against the finding that event implausibility has a protective effect against the acceptance of planted memories as real (Pezdek, Finger & Hodge, 1997).

Evaluation of the case for false memory formation

The experimental and anecdotal evidence presented above proposes mechanisms by which false memories of former CSA could be implanted inadvertently by therapists. Nevertheless, they do not provide concrete evidence that therapy is implicated directly in the creation of false memories as some researchers may hold a misconceived view of psychotherapy, their studies may lack ecological validity, and they may discount the effect of trauma on memory.

Do researchers have a misconceived view of psychotherapy?

It could be argued that some researchers have a narrow and misconceived view of psychotherapy as the making of analogies between much experimental work and the processes of therapy can imply that clients are the passive recipients of their therapist's manipulations. In contrast, to date, the most successful model of client-therapist interaction is based on alliance theory, developed within psychoanalytic literature (Bordin, 1979) but applicable to many common forms of therapy, in which mutuality between both parties in terms of goals, tasks, and bonds is considered paramount (Bergin & Garfield, 1994). Researchers may also assume that psychotherapy usually consists of lengthy psychoanalysis involving repeated suggestion (e.g., Loftus & Ketcham, 1994). However, in accordance with cost-effectiveness and accountability, public sector

psychotherapy is, on the whole, brief and can consists of as little as six to eight sessions with no more than 26 sessions on average (Koss & Shiang, 1994). Moreover, most therapists describe themselves as eclectic and hence utilising a range of different approaches (Lazarus & Fay, 1990). Another feature of contemporary psychotherapy is that it is often problem-focused with current symptoms of distress the target of treatment rather than traumatic memories themselves (Berliner & Briere, 1999).

On the other hand, in a survey of British and American doctoral-level psychotherapists and counsellors (Poole *et al*., 1995), 25% of participants considered recovering memories of CSA to be an important part of therapy and 71% reported they had used memory recovery techniques when they had suspected CSA. However, 90% thought clients could believe falsely that they had been sexually abused as a child, which could indicate appropriate caution. Even so, a wide range of symptoms were believed indicative of previous CSA, especially sexual dysfunction, relationship problems, low self-esteem, and depression. Most of these are common complaints and many argue that no well-defined post-CSA syndrome has yet been demonstrated (Beitchman *et al.*, 1992). Hence, with our knowledge of the dangers of illusory correlation, confirmatory bias, and certain memory recovery techniques, these findings could support the position that the creation of false memories in therapy is potentially widespread.

Do experimental studies lack ecological validity?

Obviously, conducting a study attempting deliberately to plant a false memory of former CSA is beyond ethical boundaries. However, experimental studies of false memory can still be criticised for their lack of ecological validity in failing to operationalise

adequately the clinical concept of repression, particularly in terms of the type of event examined.

The concept of repression is a highly controversial area. Many false memory proponents view the idea that memories can be repressed with a great deal of scepticism. Indeed, Loftus and Ketcham (1994) equate belief in repressed memories to a belief in God, in the sense that they argue both require a metaphysical leap of faith. They argue Freud intended repression to be used as a metaphor to describe the darkest corners of the human mind and that there is scant evidence for the literal interpretation that memories can be hidden from oneself. In fact, in an extensive review of the literature, Holmes (1995) concluded that after 60 years of research he could find "no controlled laboratory evidence supporting the concept of repression" (p.96).

The psychotherapy domain is brimming with examples that would correspond to descriptions of repression (e.g., Erdelyi & Goldberg, 1979) but clinical reports are rarely awarded a status above that of the anecdotal. However, can experimental investigations provide evidence that clinical examples of repression are not authentic? Experimental studies require operationalisation of theory that allows the manipulation and control of variables and statistical analysis of results. But such procedures and 'quantitative fetishism' (Segal, 2001) can reduce complex, clinical concepts to meaninglessness due to the destruction of ecological validity (Davis & Schwartz, 1987). For example, it is unlikely that experiments exploring differential recall of pleasant and unpleasant experiences (e.g., Holmes, 1970) or of completed and uncompleted tasks (e.g., Tudor & Holmes, 1973) operationalise repression in a way that would satisfy trauma researchers.

Moreover, generalising from small, non-clinical samples to a sub-set of therapy clients would seem perilous.

Pezdeck *et al.* (1997) conducted an experiment to study the false memory creation of an, arguably, ecologically valid event. Like Loftus (1993), these researchers studied the formation of a false memory of being lost in a shopping mall as a child but developed the paradigm by comparing this to the formation of a false memory of having had a rectal enema. For the majority of participants, it was found to be relatively difficult to create a memory of this latter event. It is possible that a story of having been lost is relatively easy to incorporate into a personal narrative because shopping malls are familiar places and being lost in one may seem plausible as many people will have witnessed, or heard accounts of, such events (Farrants, 1998). Proponents of recovered memories argue that, as with the story of the rectal enema, the experience of CSA would not be part of a person's script unless it had occurred and therefore not easily induced by a therapist (Pezdeck, 1994). However, the issue of CSA is discussed widely in the media and in popular books (Farrants, 1998) and this may enable adults to incorporate such events into their personal narrative.

An alternative way of investigating the existence of repression is to examine patterns in clinical data to determine if they are consistent with the theory of repression.

Studies put forward as putative evidence of repression of CSA include Herman and Schatzow's (1987) investigation of 53 women in an incest survivors group. Participants were divided into three categories; severe amnesia (no memory of CSA prior to therapy), partial amnesia (additional memories of CSA emerging during therapy), and no amnesia (memory of CSA always present with no additional memories emerging in

therapy). Consistent with repression theory, a correlation was found between the ‘severe amnesia’ group and earlier and more brutal types of abuse. However, Pope and Hudson (1995) point to the lack of corroboration obtained for CSA claims for over half of the participants. In addition, the mean age of the alleged abuse in this study was 4.9 years, indicating that a great proportion of the women remembered abuse from a developmental period known for its infantile amnesia. Infantile amnesia is common before the age of two and most people can recall only fragmentary memories before the age of five or six (Howe & Courage, 1993).

A project designed to obviate these problems was a prospective longitudinal study by Williams (1994). Female participants (n=129) were reported survivors of CSA in the 1970's but, when interviewed 17 years later, over one third (38%) did not remember the abuse and it was more likely to be forgotten if the perpetrator was a family member. A criticism of this study is the possibility that what was described as repression was, rather, a reluctance to discuss intimate matters (Loftus *et al.*, 1994). However, the women who discussed abortions, rape, and prostitution were no more likely to recall the previous incident of CSA than were women who did not disclose intimate detail. Even so, Pope and Hudson’s (1995) review considers Williams’ study to fall short of demonstrating that non-reporters exhibited amnesia for the index episode of abuse since no clarification interviews were performed.

Experimental studies are not intended as definitive proof that memories of previous CSA recovered through therapy have been created iatrogenically. Rather, they are evidence that autobiographical memory is fallible and that it is possible to create a false memory of childhood events. These findings must be of interest to therapists who

are working with vulnerable people engaged in the exploration of their past. There may be no definitive evidence that therapists and their techniques distort directly the memory of their clients. Nonetheless, the creation of a false memory through these means remains a potential threat. Although flawed, studies such as those reported above provide some support for the idea that some traumatic memories may become inaccessible, although the mechanism by which this transpires has not been demonstrated. The most recent work on CSA and recovered memory link it to post traumatic stress disorder (PTSD) and postulate the systems responsible.

Is traumatic memory different?

Recovered memory exponents argue that false memory researchers have a limited understanding of human traumatisation and its effects and it has been postulated widely that emotion can play a pivotal role in the quality and detail of memories. The Brown and Kulik (1982) flashbulb memory hypothesis is among many that argue for a special neural mechanism enabling incredible detail to be remembered. Flashbulb memories are said to be formed in people who witness a highly traumatic emotional and consequential event. It is hypothesised that the incident and circumstances surrounding it, such as how one learned of the event, are remembered in vivid detail as an adaptive response to protect against further danger. Evidence from cognitive neuroscience suggests that the effect of stress hormones on the amygdala and related structures in the limbic system at encoding could be responsible for the persistence of traumatic memories (LeDoux, 1996). However, the flashbulb memory hypothesis has been criticised by Neisser (1982) who argues that the ability to remember detail is enhanced as a function of an individual's

retelling of the story and has shown that subsequent planted false information can be incorporated into an individual's narrative and perception of an incident.

Many who experience trauma are fully aware of their ordeal and suffer intrusive flashbacks. However, an alternative, but less documented reaction may be a pattern of amnesia and dissociation of the traumatic event (Courtois, 1999). These two reactions are captured in the arousal and numbing phases associated with PTSD described by van der Kolk and Fisler (1995). Arousal typically involves distressing recollections, images, and flashbacks resulting in intense psychological distress. The numbing phase, in contrast, manifests in a desire to avoid reminders of the trauma and failure to recall certain facets of the trauma resulting in a general detachment from the events. Full or partial amnesia has been demonstrated in survivors of rape (Arrigo & Pezdek, 1997), war (Sargant, 1967), and concentration camps (Yehuda *et al*., 1997) and it is hypothesised that the overwhelming nature of the trauma may facilitate a dissociative response. The American Psychological Association (APA: 1996) states that the probability of developing PTSD multiplies as the extent of, and physical closeness to, the stressor increases. This would suggest that repeated CSA from a close relative could increase the likelihood of development of PTSD and its related effects on memory (Courtois, 1999). Moreover, cognitive neuroscience confirms that neuromodulators released during stress can have an enhancing or abating role on memory for events (Bremner *et al*., 1996). Lindsay and Read (2001) suggest that "different mechanisms may be involved in different kinds or senses of forgetting" (p.75) and it may be these that account for the paradoxical effect of forgetting repeated abuse when traditional cognitive models would predict the development of strong and readily accessible script memories.

We do not know the extent of the problem of potential false memory formation in therapy. However, although therapists may be aware of the potential pitfalls in the therapeutic exchange, a careful approach is recommended to circumvent the threat of false memory creation. Additionally, from the research cited, it seems that there is some evidence for the forgetting of traumatic material from the past and, summarising their findings in relation to authenticated retrieved memories of abuse, Shobe and Schooler (2001) suggest that some the following mechanisms may be at work; stress, dissociation, lack of schema, changes in context, and directed forgetting. A tentative acceptance that trauma does affect memory in ways that might resemble a repression mechanism poses a difficult problem for the clinician. At this time there is no reliable means of distinguishing false from real memories, although Davies (2001) considers that a hybrid pulling on the best of Criteria-Based Content Analysis (Raskin & Esplin, 1992) and the Judgements of Memory Characteristics Questionnaire (Sporer, 1996) may provide the basis for making such distinctions. However, both systems were developed to identify deliberate deception, and false memories, by definition, are believed to be true by the person holding them. Consequently, therapists have the unenviable task of remaining open to the possibility of recovered memory, while simultaneously avoiding false memory formation, with little means of differentiating between the two.

Avoidance of the potential pitfalls of therapy in practice

Volatile material can rock the foundation of a client's world and necessitates a unique responsibility for the therapist. As Berliner and Briere (1999) state; “Ultimately the clinician is faced with a technically challenging task: to facilitate the processing of traumatic memory while not significantly distorting or biasing it in the process” (p.14).

Furthermore, issues surrounding CSA cannot be shorn from the political arena. CSA is a highly emotive and controversial topic and its wider implications for society and for family structure must be considered. Real survivors of CSA may not be believed, perpetrators may hide behind the false memory debate, and some clients may believe falsely that they were abused as children. In short, there is a lot to lose, and professionals need to maintain the trust of the general public. In order to avoid the potential pitfalls of therapy in practice organisations such as the BPS have produced guidelines in relation to the false memory debate. However, there may also be more room for evidence-based practice and for practice-based evidence.

How helpful are the British Psychological Society guidelines?

BPS guidelines (1995) stress the need for therapists to tolerate a certain amount of ambiguity during the therapeutic process (see also the APA working party report; Alpert *et al.,* 1998). The guidelines suggest that therapists should be aware of a range of possibilities; memories may be accurate, metaphorically true, or false. This contrasts to the previous standpoint that clinicians should err on the side of belief so as not to damage the therapeutic relationship (Rosenfeld, 1979). BPS guidelines go further and suggest that it may be necessary for therapists to be open to the emergence of memories of trauma which were not immediately available to the client's consciousness. This appears an acceptance of the differential effects of trauma on memory and implies the possibility of a mechanism that can deny access to awareness.

Nevertheless, equilibrium is maintained in the BPS guidelines and therapists are encouraged to be aware of the dangers of suggestion and diagnoses gained from symptoms alone. This warning suggest that therapists should be aware of processes that

could lead to the formation of false memory and reflects the view that specific memory techniques are not obligatory in the recovery of trauma-based memories (Briere, 1996). Another important caveat is that therapists are made aware of the need to inform the client that what they recover may not be a true picture of the past (Berliner & Briere, 1999). Moreover, the draft extension to the guidelines (BPS, 1999) states that they both have to accept that the historical truth may never be known and counsels psychologists to avoid being drawn into a search for memories of abuse. This seems to be an acknowledgement of the lack of definitive research support for either side of the false memory debate. The APA working party (Alpert *et al*., 1998) agrees and highlights the lack of knowledge about the processes that lead to accurate or inaccurate recollections of childhood abuse.

Although balanced between the two poles, guidelines are notoriously difficult to implement and are open to interpretation. This may have implications for a therapist if legal proceedings were instigated. Indeed, draft guidelines from the BPS (1999) advising therapists to be aware of the likely impact of work on the client's family and on wider social networks is extremely ambiguous. Hence, the therapist may be involved in an ethical dilemma, possibly unearthing information that could devastate lives, without clear guidance on how to manage it.

How can clinicians implement research findings?

It is clear that illusory correlation and confirmation biases have the potential to affect assessment and decision making. To obviate the effects, practitioners must question their own beliefs throughout their development as a clinician (Pope, 1996). The scientist-practitioner model (SPM) of clinical psychology training (Barlow *et al.,* 1984) may help

avoid the pitfalls of cognitive heuristics by promoting an openness to disconfirmatory information through multiple hypothesis testing. The SPM may seem inaccessible to clinicians who view the approach as depersonalising the therapeutic process. However, although the SPM has been linked to positivism, the growing acceptance of discovery-oriented qualitative research has widened the appeal of the SPM and allowed the adoption of a reflective scientific approach to filter through to the other psychotherapeutic professions such as counselling (Corrie & Callanan, 2001).

From the evidence explored with regard to hypnosis as an aid to memory recovery, a prudent approach would seem sensible. Indeed, the APA working party on investigation of memories of childhood abuse endorses a cautious approach to the use of hypnosis as a memory recovery technique due to the serious risk of creating pseudo-memories (Alpert *et al.,* 1998; Lindsay & Read, 1994). Guidelines from the BPS (1995) agree and caution against the use of hypnosis as the confidence with which memories recovered in this way are held does not correlate with their reliability.

It seems clear that therapists must note the risks of memory distortion, but there are safeguards that could enable the continued cautious use of guided imagery in therapy. Arbuthnott *et al*. (2001) recommend the use of metaphorical imagery to avoid client confusion with real people and suggest that therapists should take care to distinguish between the terms ‘image’ and ‘memory’ when discussing the content of guided imagery in order to help clients distinguish between the two. However, it is also argued that the technique be used only as an adjunct to other therapeutic techniques and, if CSA is suspected, “it seems prudent to avoid using guided imagery as a memory-retrieval technique” (Arbuthnott *et al*., 2001, p.130).

Exploring the kind of individual differences involved in suggestibility, Hyman and Billings (1998) found that the tendency to report false memories for childhood events was correlated positively with scores on the creative imagination scale (CIS: Wilson & Barber, 1978) and the dissociative experiences scale (DES: Bernstein & Putnam, 1986). These findings suggest it may be pertinent to assess clients on the CIS or DES in order to have a baseline on which to judge a client's suitability for seemingly high-risk memory recovery techniques.

How can research on the false memory debate be improved?

The APA working party argues that "(w)e are fast becoming a collection of psychologies, each uninformed by the data and epistemologies of the others" (Alpert *et al*., 1998, p.939). Clinical case studies are accused of producing biased findings that are not generalisable while experimental paradigms are accused of over-simplifying clinical concepts and of producing findings of limited ecological validity. It is likely that the way forward in understanding will come from a collaborative approach between experimental psychologists and trauma-oriented practitioners allowing rigorous yet relevant projects to be developed (Bekerian & Goodrich, 1999).

Indeed, the common ground may be closer than was once thought. Perhaps surprisingly, there are similarities between Freud's conceptualisation of unconscious memory processes and contemporary models of memory. Power and Brewin (1991) argue that Freud's associative model of autobiographical memory, where a 'pathogenic nucleus' is formed from trauma experiences and memory associations and connections between nuclei developed (Breuer & Freud 1895/1974), is similar to present-day cognitive connectionist models. This is especially true of Rummelhart and McClelland's

(1986) model which describes elementary nodes connected together to form associations within a wider distribution (Eysenck & Keane, 1995). Hence, there is a possible foundation for an appreciation of different, but not opposing, approaches to the unconscious and memory.

Recently there have been moves toward collaboration with both researchers and clinicians willing to look at the positives from each other's side (Berliner, 1997; Lindsay & Briere, 1997). Clearly the aims for such research enterprises should be to reduce the incidence of iatrogenesis whilst still supporting trauma survivors. Lindsay and Briere (1997) suggest that further research is needed to determine which psychotherapeutic approaches pose the least risk of suggestion but are the most helpful for survivors of CSA. This is an area ripe for fruitful collaboration between cognitive and clinical psychologists. Although research collaboration is in the early stages, there are further questions that could be addressed in this way. For example, studies of false memory formation outweigh studies on false event rejection (Ghetti & Goodman, 2001). Discovering which factors determine the rejection of false events would be invaluable in order to develop a clinical model that reduces the effects of suggestibility. The debate also creates a demand for researchers to apply themselves to experiments that have more ecological validity. This can be aided by fostering a productive dialogue with clinicians who can identify which clinical phenomena require further study.

A recent research example has examined the conditions underlying the repression of memories (McNally *et al*., 2001). The hypothesis that an avoidant coping style would be associated with repression was explored through a directed forgetting or remembering trauma cue (word retrieval) paradigm. Although this research can be criticised for

utilising laboratory based trauma, e.g., words such as ‘incest’ or ‘molested’, which cannot be comparable directly to real trauma, the particular value of this research was the use of participants who had reported recovered memories of CSA. Although the hypothesis was not supported, an attempt to explore the cognitive mechanisms of repression with real trauma survivors must be applauded. In collaboration, researchers and clinicians can catalyse further development of our knowledge of the false memory debate and practice guidelines can be revised to accommodate new research findings.

Conclusion

Clearly there is a range of memory possibilities. The clinician needs to view each case as idiosyncratic and maintain an open, flexible, reflective, but circumspect approach. For the researcher, an opportunity awaits to be involved in ecologically valid, applied research projects. Psychology is a dynamic, wide-ranging, and evolving discipline and it is likely that the polarisation of views in the false memory debate has restricted knowledge exchange and impeded progress and the time is ripe for a productive dialogue between experimental and clinical psychologists.

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