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10 Memory, Emotion, and Psychotherapy: Maximizing the Positive Functions of Self-Defining Memories

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Abstract

Emotional memories are likely to emerge across all forms of psychotherapies, whether during the initial history or over ensuing sessions. This chapter presents one such memory from a clinical case study, identifying it as an example of an extensively researched autobiographical memory – the self-defining memory. I review laboratory support for five key features of self-defining memories and then locate self-defining memories in a conceptual model of autobiographical memory and the self. Drawing on this model, the chapter demonstrates how self-defining memories can potentially serve directive, communicative, and self-regulatory functions for individuals. Linking this theory and research back to the clinical arena, I return to the previously discussed case study and illustrate how psychotherapeutic interventions can maximize emotional memories' positive functions.

All psychotherapies, regardless of orientation, require clients to recount the history of the presenting problem along with some general background of their lives. In the course of providing these details from the past, it is likely that clients will recall emotional memories that convey critical concerns or conflicts relevant to their current struggles (Pennebaker, 1995). This chapter focuses on the nature of these potent memory narratives and the role they occupy in the general personality of individuals, as well as the potential role they may play in insight and intervention in psychotherapy. Specifically, I address the functions that these emotional memories serve for clients and then place them in a conceptual framework based in personality and memory research. Having provided this theoretical context, I review research studies from my laboratory that demonstrate the functional role of emotional memories in

Lesson-learning, interpersonal communication, and mood regulation. Finally, I return to the clinical setting and illustrate how clients may avail themselves of these functions by enlisting their emotional memories as sources of growth and change in psychotherapy.

AN EMOTIONAL MEMORY DISCLOSED IN PSYCHOTHERAPY

To ground our discussion of emotional memories narrated in psychotherapy, I draw on the following memory from a female client, Tina (name and details changed to protect anonymity), who was undergoing couples therapy with her husband, James. Tina had a history of her own psychological difficulties, including an eating disorder, bouts of depression, and several obsessive-compulsive characteristics. Her tension with James centered on his perceived passivity and failure to "step up to the plate and take care of her and their children effectively." She questioned James's competence and in response he seemed withdrawn, tentative, and defeated. In expanding on her difficulties with James's shortcomings, she described the following memory of her father by way of contrast:

My dad was in the military and we moved nearly every year when I was growing up; sometimes we even moved two to three times in the same year. When my dad was home, he was our superhero and we all did everything we could to please him. In turn, he seemed to know all the answers and how to fix anything that needed fixing.

I remember one specific time when I sprained my ankle badly at school. That night my dad came home late and found me still in pain on the couch. He carried me to the car, brought me to get an ice cream cone, and had me singing with the radio on the drive home. I felt so safe when he tucked me into bed that night. It was almost like he had healed my ankle with magic powers. This memory reminds me of how much I like to have someone take care of me.

Tina's voice showed strong feeling as she recalled this vivid memory and it marked a powerful contrast to the many times that she felt disappointed by James's lack of assertiveness in their current relationship. Since she returned to this memory more than once over the course of the early sessions of the couples therapy, let us ask what functions the recollection of this kind of emotional memory might serve for Tina.

In recent work on autobiographical memory, David Pillemer (1992, 1998, 2003) and Susan Bluck (Alea & Bluck, 2003; Bluck, 2003; Bluck & Alea, 2002) have highlighted functional analyses of narrative memories (see also earlier articles by Bruce, 1989; Hyman & Faries, 1992). Bluck (2003) has particularly

emphasized three important functions of autobiographical memory: (1) *directive* (meaning-making, lesson-learning, problem-solving); (2) *social* (intimacy, teaching, empathy); and (3) *self* (self-continuity, self-esteem maintenance, emotion regulation). Any autobiographical memory might perform one or more of these functions, but clearly Tina's memory holds a particular power for her, given its emotional resonance and her repeated return to it over the course of therapy. Its centrality to significant themes in her relationships to others and in her own self-understanding heighten its power as a source of meaning-making, interpersonal communication, and emotion regulation.

Such touchstone memories can be considered *self-defining memories* and they have been the focus of my research efforts and clinical case studies for the past 15 years (Blagov & Singer, 2004; Moffitt & Singer, 1994; Singer, 1995, 2004; Singer & Moffitt, 1991-2; Singer & Salovey, 1993, 1996). In order to understand the influential functions of direction, communication, and emotion regulation that self-defining memories can perform, I offer a comprehensive description of self-defining memories and their role in the memory and self-system of the personality (Conway & Pleydell-Pearce, 2000).

CHARACTERISTICS OF SELF-DEFINING MEMORIES

In previous work, I have defined self-defining memories (SDMs) as consisting of five key characteristics: (1) vividness; (2) emotionality; (3) repetition; (4) linkage to similar memories; and (5) relationship to enduring concerns or unresolved conflicts (Singer & Moffitt, 1991-2; Singer & Salovey, 1993). Before reviewing each of these characteristics and empirical evidence for them, let us locate self-defining memories in the larger framework of autobiographical memory. Self-defining memories are autobiographical memories that are *declarative*, *episodic*, and *autonoetic* (see Nelson & Fivush, 2004, for their account of the critical features of autobiographical memory).

By *declarative* (Squire, 1995), I mean that they are conscious memories – memories that individuals are aware of having and that they can clearly see in their mind's eye. By *episodic* (Schacter, Wagner, & Buckner, 2000), I mean that they are of a specific event that is traceable to a defined moment or set of moments in time. However, although the majority of self-defining memories display this specificity and uniqueness of event status, individuals do vary in their capacity to recall specific events vs. more generalized or summary recollections. Singer and Blagov (2002) have developed a reliable and valid scoring system that differentiates single-event from summary memory narratives. These variations can be meaningfully linked to personality characteristics, including depression and defensiveness (Blagov & Singer, 2004). Finally, by *autonoetic* (Tulving &

Lepage, 2000), I draw on Tulving's distinction between one's knowledge of a past event and one's personal experience of having lived through the event as an active participant. While the first type of knowledge might include information one has read about or absorbed through the media, the second type of knowledge (i.e., autoeotic) requires the individual to retain a personal awareness of having actually experienced the event. When the past event is recalled, it is as if the self is reinserted into the narrative of the event.

Self-defining memories may also be considered a form of what Pillemer (1998) has defined as *personal memories*. Pillemer defines personal memories as memories of specific events that include a detailed personal account that contain sensory images. These accounts are linked to moments of insight or greater personal awareness and they are believed to be accurate renderings of the original events (in other words, the individual sees the memory as a reasonably veridical recreation of the past).

What distinguishes a self-defining memory from other types of personal event memories? Pillemer (1998) makes clear that the term "personal event memory" does not in and of itself imply that the memory is always of strong personal relevance and of an enduring nature. Over time specific personal event memories may diminish in affective intensity, and not all of these memories will remain accessible to conscious memory. Even taking into account those memories that persist over time due to strong imagery and emotion, not all of them are necessarily linked to central goals and thematic concerns of the personality.

For example, we can distinguish self-defining memories from one form of enduring and emotionally charged personal memory. *Flashbulb memories* (Brown & Kulik, 1977; Conway, 1995; Conway et al., 1994; Smith, Bibi, & Sheard, 2003) have been characterized as particularly vivid and accurate personal memories that are usually formed in response to dramatic and emotionally charged news (e.g., news of President Kennedy's assassination, the *Challenger* crash, September 11, 2001). The shock of learning of the event is presumed to set off a "now print" mechanism in the brain that preserves the details of the moment associated with the revelation in an almost iconic fashion (e.g., who you were with, clothes you were wearing, what activity you were doing, etc.).

Self-defining memories share a number of common characteristics with flashbulb memories. Both types of memories are vivid, emotional and are likely to return repeatedly to one's thoughts over time. However, flashbulb memories may also vary from self-defining memories in significant ways. For example, while I have a powerful memory of where I was when I heard the news of September 11, 2001, this memory has not continued to resonate in my thoughts except for when individuals ask me about my whereabouts during that day. In the same way I do not see my September 11 memory as particularly linked to a network of similarly themed memories about threat or

danger in my life (in a narrow sense, however, the memory is linked to other flashbulb memories that have captured my attention over my lifetime). Lastly, since I was not directly involved with the victims of the attacks on the World Trade Center or the Pentagon, and terrorism does not figure prominently in my personal life, I cannot say that my memory of September 11 connects to an enduring concern or unresolved conflict in my personality. This comparison of flashbulb memories and self-defining memories highlights the latter's emphasis on the linkage of the memory in question to thematic concerns that relate to one's sense of identity and self-understanding. Without this connection to longstanding themes of the personality, memories may be vivid, emotional, and highly accessible, but they will fall short of the self-defining criteria.

EMPIRICAL EVIDENCE FOR THE FIVE CHARACTERISTICS OF SELF-DEFINING MEMORIES

Since the introduction of the concept of self-defining memories, my colleagues and I have studied them through both clinical case studies and laboratory research. Clinical case studies have highlighted both the identification of these memory narratives in psychotherapy and their role in transference interpretations and more explicit cognitive-behavioral interventions, including guided imagery, role-playing, and reframing (Singer, 1997, Singer 2001, Singer, 2005a, 2005b; Singer & Blagov, 2004a, 2004b).

In laboratory studies, we have used the self-defining memory request (see table 10.1) to collect written narratives of self-defining memories.¹ In the typical study, we will collect from five to ten self-defining memories from a relatively large sample of undergraduate students (usually 100 or more participants). After recording their memories, each participant fills out rating scales from 0 to 6 for their current emotions about each memory (e.g., happiness, pride, anger, sadness, embarrassment, etc.). They also rate the vividness and importance of the memories on the same rating scales, and then indicate how many years ago the memory took place. Once the memories are collected, they may be scored for both structural features (single event vs. summary) and the degree to which they contain "integrative meaning" (self-reflective statements or life lessons). Scoring for structure and integrative meaning is accomplished through use of the *Classification System and Scoring Manual for Self-Defining Autobiographical Memories* (Singer & Blagov, 2002).

Empirical studies of self-defining memories conducted in my laboratory and by other investigators have provided support for the five characteristics that constitute the operationalized definition of self-defining memories.

Table 10.1 Self-defining memory task.

This part of the experiment concerns the recall of a special kind of personal memory called a self-defining memory. A self-defining memory has the following attributes:

- 1 It is at least one year old.
- 2 It is a memory from your life that you remembered very clearly and that still feels important to you even as you think about it.
- 3 It is a memory about an important enduring theme, issue, or conflict from your life. It is a memory that helps explain who you are as an individual and might be the memory you would tell someone else if you wanted that person to understand you in a profound way.
- 4 It is a memory linked to other similar memories that share the same theme or concern.
- 5 It may be a memory that is positive or negative, or both, in how it makes you feel. The only important aspect is that it leads to strong feelings.
- 6 It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song (happy or sad) you have learned by heart.

To understand best what a self-defining memory is, imagine you have just met someone you like very much and are going for a walk together. Each of you is very committed to helping the other get to know the "Real You." You are not trying to play a role or to strike a pose. While, inevitably, we say things that present a picture of ourselves that might not be completely accurate, imagine that you are making every effort to be honest. In the course of the conversation, you describe a memory that you feel conveys powerfully how you have come to be the person you currently are. It is precisely this memory, which you tell the other person and simultaneously repeat to yourself, that constitutes a self-defining memory.

On the following pages you will be asked to recall and write ten self-defining memories.

Vividness and emotionality

SDMs have a strong sensory quality, usually visual, for the participants who recall them. Over the past dozen years of collecting self-defining memories through written and oral protocols (Blagov & Singer, 2004; Moffitt & Singer, 1994; Singer & Moffitt, 1991-2), participants have provided mean vividness ratings of greater than 4.7 on a 0-6 point scale. In three experiments (432 participants), Singer and Moffitt (1991-2) found mean vividness ratings that ranged from 5.08 to 5.34; Moffitt and Singer (1994) obtained a mean vividness

of 4.74 from 117 participants; and Blagov and Singer (2004) calculated a 4.83 mean vividness rating based on 103 participants. Participants have described the memory as having the quality of a "movie inside their head" or a particularly evocative daydream.

Similarly, individuals indicate that these memories have the power to affect them emotionally not just in the past, but also at the very moment of recollection. For example, Singer and Moffitt (1991-2) found across three experiments that participants reported over 75 percent of memories to have a current positive or negative emotion rating of greater than 3 on a 6-point scale. Similarly, Moffitt et al. (1994), in a study of 90 participants, obtained mean positive emotion ratings of 4.07 on a 0-6 scale.

Repetition

The self-defining memory request stipulates that individuals recall memories that the individual has "thought about many times. It should be familiar to you like a picture you have studied or a song (happy or sad) you have learned by heart" (Blagov & Singer, 2004; Singer & Blagov, 2002; see table 10.1). In a recent study of SDMs about moments in which college summer interns experienced themselves as "rising to the occasion" (Singer et al., 2002), we explicitly asked participants how often they had thought about these memories in the six months since the events had occurred. On average, participants replied that they had returned to the memory between once a week and once a month during this time, while a few participants indicated they had thought about the memory on a daily basis.

Linkage to similar memories

SDMs, to the extent that they capture characteristic and significant aspects of individuals' self-understanding, are likely to be connected to a network of related memories that share similar goals, outcomes, and affective responses. In support of this assertion, Thorne, Cutting, and Skaw (1998) examined young adults' important relationship memories collected in two interviews over a six-month period. Participants were given license to recall the same or different memories on the second occasion. Raters coded both sets of memories for the predominant social motives (e.g., independence, affiliation, power) that emerged in the memory narratives. Regardless of whether the memories were repeated or unique over the two collection periods, Thorne and colleagues found a significant degree of thematic consistency in the social motives across the

memories. In other words, individuals tended to produce clusters of thematically linked memories that reflected similar interpersonal themes.

In related research, Demorest has been able to show that individuals possess emotional and interpersonal scripts that underline the basic plot structures of many of the narratives they recount (see the work of Tomkins, 1979, on script theory). When asked to generate memories or any other self-generated products of their imagination, individuals are likely to rely on these scripts to guide their imagery and narrative output. In an earlier study, Demorest and Alexander (1992) asked participants to recall important emotional memories from their lives. Raters then extracted the key emotional interpersonal scripts from these memories. A month later, participants returned to the laboratory and generated fictional stories from their imagination. Raters once again extracted scripts from this fictional material. In over 60 percent of the cases, the experimenters were able to match the scripts drawn from the actual autobiographical material to the scripts abstracted from the fictional stories. Demorest concluded that these fundamental scripted templates, which contain key information about cognition, emotion, and behavior, organize and help to shape important interpersonal material stored in memory.

More recently, Demorest and Siegel (1996) demonstrated that the language and imagery that B. F. Skinner used in his autobiography to describe early events from his life matched thematically with the same language and imagery that he used to describe rats' behavior in learning chambers in his first book on operant conditioning. Undergraduate raters were able to match the "thematic maps" extracted from these disparate passages, even when they were disguised and interspersed with a variety of other thematic maps extracted from various individuals' personal writings. The combination of Thorne's and Demorest's findings do indeed support the idea that memories and narrative material in general may be linked by a network of shared thematic and affective features.

Relationship to enduring concerns or unresolved conflicts

As stated earlier in this section, what truly distinguishes SDMs from other emotionally charged personal memories is the relationship of these memories to longstanding and developmentally central concerns and conflicts in individuals' lives. In two earlier studies (Moffitt & Singer, 1994; Singer, 1990), we demonstrated that individuals' current affective responses to memories were a function of the memories' relevance to the success or failure of important goals in their lives. These relationships were moderately strong (correlations in the 0.5–0.7 range) and held for both approach and avoidance goals. Interestingly, individuals who had higher percentages of avoidance goals than the rest of

the sample also tended to recall more memories about the non-attainment of their goals. In exploring this relationship, it was apparent that highly avoidant individuals recalled memories about the negative consequences of failing to avoid a dreaded outcome. Such memories seemed to serve as cautionary tales and provided reinforcement for their avoidant stances.

Many other researchers, when studying critically important self-defining memories, such as "turning point memories" or "peak experiences," have found a similar strong relationship between the thematic content of the memory and the dominant goals or social motives in the individual. For example, McAdams (1982; McAdams, Hoffman et al., 1996) has demonstrated repeatedly that power-oriented memories are connected to individuals' agentic motives, while intimacy-oriented memories link to communal motives in individuals. Thorne and Michaeleu (1996) identified a correlation between positive and negative relationship memories and respective levels of high and low self-esteem. Most recently, Sutin and Robins (2005), in a longitudinal study over four years, found consistent correlations between enduring personality characteristics and achievement and power motives as scored from self-defining memories. For example, individuals high in self-esteem (Rosenberg, 1965) and conscientiousness (Costa & McCrae, 1992) showed greater themes of achievement motivation in their memories, while individuals who scored high in narcissism on a Narcissistic Personality Inventory (Raskin & Terry, 1988) showed more evidence of power motivation in their SDMs.

To conclude this section, a range of studies over a 15-year period has demonstrated that SDMs are vivid, affectively intense, and return frequently to individuals' conscious thoughts. SDMs are linked to other memories that share underlying scripts and themes within the individuals' overall organization of mental content. Finally, these memories reflect the enduring goals and developmental concerns of personality.

LOCATING SELF-DEFINING MEMORIES IN A CONCEPTUAL MODEL OF AUTOBIOGRAPHICAL MEMORY RETRIEVAL

In recent efforts to describe the relationship of autobiographical memory to a larger network of self-relevant cognition, affect, and behavioral tendencies, Conway and colleagues (Conway & Pleydell-Pearce, 2000; Conway, Singer, & Tagini, 2004) have proposed an encompassing Self-Memory System (SMS). This system consists of three interlocking cognitive-affective subsystems: the Working Self, Episodic Memory System, and the Long-Term Self (see figure 10.1). These three components work together to allow individuals to pursue ongoing short-term goals, create records of this recent activity, and, when necessary,

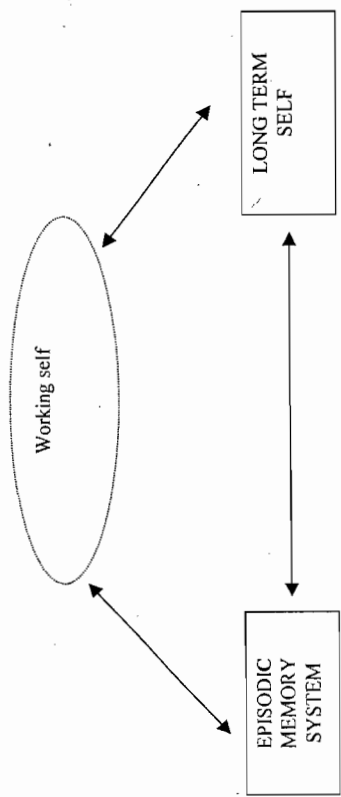


Figure 10.1 The Self-Memory System.

shift into a retrieval mode to draw on an autobiographical knowledge base and semantic information relevant to current task demands.

The working self consists of a complex hierarchy of goals relevant to a current activity. All are active, but vary in their degree of activation depending on the demands of the current task. In addition to the active goals, the working self includes self-images and plans associated with the goals within the particular hierarchy; these images and plans are not necessarily conscious, but may become so, as required by the goal progress. For example, if I am giving a talk at a research meeting, my working self will consist of a goal hierarchy related to the successful presentation of my material. These goals might include a desire to impress the audience, to be organized in the presentation, to be dynamic in the delivery, and to manage time appropriately. As I proceed with the talk, images of previous discussions of my research may be present, as might well-rehearsed strategies that I have learned about how to give emphasis to certain points or to skip others in the interest of time.

As the working self allows me to pursue these immediate goals, my Episodic Memory System is forming short-duration sensory-perceptual affective "summaries" of recent processing. As Conway, Singer, and Tagini (2004) explain, these brief summaries are necessary in order to orient the self as to what actions have been performed and where one stands in the movement toward goal completion. If we were not able to encode brief records of recent activity, we might be doomed to return repetitively to actions that we had already completed, and we would be unlikely to register any completion of a task in process. If I did not form a record of the fact that I displayed a particular figure during my talk, I might repeat the display of this same figure without any knowledge that I had just displayed it. On the other hand, these sensory records would accumulate and flood our cognitive system if we

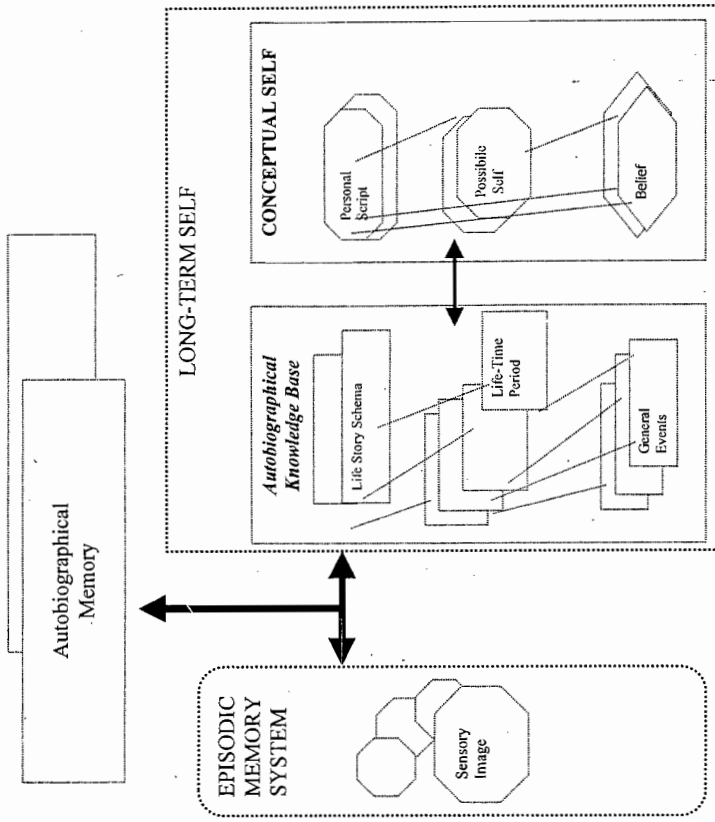


Figure 10.2 Generation of autobiographical memories.

retained every captured summary of ongoing activity. For this reason they are of relatively short duration and fade from permanence unless they are linked to conceptual structures in the Long-Term Self.

The Long-Term Self consists of two primary components: the Autobiographical Knowledge Base and the Conceptual Self (see figure 10.2). The autobiographical knowledge base contains three temporal units of the self that are aligned in a hierarchy of temporal duration and specificity. At the highest level of this knowledge base is the Life Story Schema (Bluck & Habermas, 2000). The Life Story Schema consists of our sense of the long view of our life and our associated assessments of it as a whole entity. For example, an individual may view her life as a "rags-to-riches" story or a "quest for meaning," or a "story of family devotion." The Life Story Schema takes the chapters and incidents of our life and collects them into a unified whole that provides a sense of purpose or coherence to these smaller units.

At the next level, we find Lifetime Periods, blocks of memory that are defined by distinct epochs or eras of our lives. For example, we might collect a series

of experiences under the heading my "college years" or "first job" or "first home." When searching for a specific event from one of these periods, we may often begin by generating this larger context and then proceeding to search for more detailed episodes from within this time period. Still at a more abstract level, but of briefer temporal duration, are General Events. General events encompass weeks, days, or even a few hours and are generally organized by activity or theme, such as "learning to swim," "favorite restaurants," or "turning-point moments."

In order to develop the categories and themes which define the different "bins" of autobiographical knowledge, the Autobiographical Knowledge Base interacts with the semantic units of the Conceptual Self. The Conceptual Self consists of non-temporal abstractions about the self that include attitudes, beliefs, scripts, possible selves, internal working models, and other schematic units. These various self-schemas both influence and are influenced by the autobiographical knowledge base. The products of their reciprocal influence are the relatively stable domains of the Long-Term Self, which highlight the most important temporal periods in an individual's life (e.g., "high school athletics," "work on first book," "early years of marriage," or "time as president of Rotary Club"), along with the dominant themes and concerns (e.g., mastery, intimacy, power).

As figure 10.2 depicts, this Long-Term Self interacts with the records formed by the Episodic Memory System to create the specific and detailed autobiographical memories that come to constitute our memory of our personal past. Episodic memories that share goal themes with the Autobiographical Knowledge Base and the Long-Term Self are likely to be processed more deeply within the overall Self-Memory System and to be retained as enduring memories.

Since we engage in multiple activities and goal pursuits over the course of every day, the usual mode of the Working Self is to inhibit retrieval and processing by the Long-Term Self. The Working Self holds enough motivational and historical information within activated goal hierarchies to function successfully without extensive search through the Autobiographical Knowledge Base or the Conceptual Self. For example, as long as my talk at the research meeting is proceeding smoothly, I have little need to draw on episodes of past talks. In fact, too much attention to complex or emotionally involving memories of previous presentations could distract me or throw me off from the rhythm and pace that I am currently achieving in making my remarks.

On the other hand, when goal activity is frustrated by an obstacle or sudden shift in circumstances (e.g., the LCD projector bulb burns out in the middle of my talk), we are likely to experience an intensified emotional response (see Oatley, 1992, for a theory of emotion based in goal disruption; also Levine & Pizarro, this volume). This emotional response dissolves the inhibitory relationship between the Working Self and the Long-Term Self, and the Self-Memory System shifts into a retrieval mode. If the goal in question is relevant

to a developmentally significant theme within the self-concept (e.g., with regard to my talk — mastery and achievement), then the memory search process will prime activation of conceptual structures and autobiographical memories relevant to this emotionally charged developmental goal. At such moments, self-defining memories with their compact linkage of emotion, thematic concerns, and concrete specific past experience are likely to be activated and dominate processing (e.g., suddenly, my memory of when I gave a talk in front of a hostile former professor surfaces and reminds me of how I must keep my cool under pressure). With the emergence of the self-defining memory in the processing sequence of the self-memory system, we are now ready to complete our exploration of the place of self-defining memories in a conceptual model of autobiographical memory.

Self-defining memories are integrative units of the personality that contain vivid images and thematic information about goals and conflicts in our lives. In the course of current goal pursuits, obstacles or challenges can activate recall of these memories as a means of providing a swift and schematic response to situational demands. Due to repetitive recall of these memories and their entrenched relationship to memories that share similar thematic content, the scripted sequences of cognition, emotion, and behavior underlying these memories tend to be rather simplistic and inflexible (for more elaboration on the nature of scripts underlying memories, see Tomkins, 1979).

Their reductive simplicity is clearly both a virtue and a vice. On the positive side, they provide an immediate tangible template for decision and action, based in a past concrete experience. When individuals are in a state of struggle and emotional arousal, this emphatic message diminishes ambiguity and allows for a quick and defined response. On the negative side, their schematic organization tends to disregard nuance and to press new situations into the narrow confines of older circumstances. For instance, in my research talk example, when the projector bulb burns out and I suddenly conjure up the memory of my hostile former professor in the audience, I may be misreading the potential responses of my highly sympathetic audience. Although the previous experience reminds me of my ability to triumph in adverse circumstances, it may also amplify my anxiety unnecessarily. In sum, self-defining memories take charge of processing during challenging situations for better or worse.

RETURNING TO TINA'S SELF-DEFINING MEMORY AND ITS FUNCTIONS IN HER LIFE

We can now return to Tina's memory and consider it in light of what we have established about the role of SDMs in the self-memory system of personality. When her husband James disappoints Tina, frustrating her central goal of

within a client's relationships that can be used as healthy touchstones and vehicles for conveying connection rather than discord.

LABORATORY EVIDENCE FOR POSITIVE SELF FUNCTIONS OF SDMS

One of the most important self functions that autobiographical memories can serve is emotion regulation. Tina was unfortunately taking a positive memory from her life and using it to highlight her current frustration. In this sense, rather than using personal memories to regulate or repair dysphoric states, Tina was engaging in a ruminative process of perpetuating her negative mood.

Josephson, Singer, and Salovey (1996) studied the process of mood repair by inducing negative moods in participants (using a montage of painful scenes from *Terms of Endearment*, a film in which a young woman, played by Debra Winger, dies of cancer) and then asking them to recall two consecutive autobiographical memories. All participants had previously filled out the Beck Depression Inventory. As hypothesized, participants who recalled a negative memory, followed by a positive memory, reported a more positive subsequent mood than individuals who recalled two consecutive negative memories. Even more importantly, individuals who recalled two negative memories in a row had depression scores that were almost twice as high as the individuals who recalled a negative-positive memory sequence. (Joormann and Siemer, 2004, recently found a similar difficulty in depressed individuals with regard to their ability to recruit positive memories to repair negative moods.) When we asked participants who followed a negative memory with a positive one why they had recalled their memories in that order, over 60 percent were able to articulate a conscious mood-repair strategy.

We concluded from these results that non-depressed individuals know how to use their personal memories to regulate their emotions and raise their spirits when they experience a temporary negative mood. Translating this finding into the therapeutic arena, therapists can play a clear role in helping their clients to identify SDMs that genuinely improve their moods. Once these memories are selected, clients can learn how to use imagery to enhance the positive emotions and thoughts associated with these mood-repairing memories.

PUTTING THIS ALL TOGETHER: TEACHING TINA THE POSITIVE FUNCTIONS OF SDMS

In my work with Tina's SDM, in the context of her couples therapy, we addressed the negative directive function that she assigned to this memory.

After identifying the ways in which her memory of her father led her to critical judgments of James, we looked at ways to slow down the memory retrieval process and insert questions (in individual therapy, transference interpretations can often be linked to the same thematic pattern that guides the memory; see Singer & Singer, 1992). For example, Tina trained herself to ask, "Is it always fair to compare James to my father?" or "What does James bring to our marriage that my father failed to bring to his?" Most importantly, Tina confronted the fundamental question of whether one could ever hope to be in control of every situation and circumstance in life. In acknowledging her own limits, as well as the limits of those whom she loved, she attached a new integrative message to her memory: "Although it would be wonderful to have a hero solve every problem, adult life is a lot more complicated than that." This new message, which she rehearsed in conjunction with her retrieval of the SDM, enabled her to show a great deal more patience with James. He rewarded this patience by withdrawing less and showing more confidence in asserting himself in the relationship.

One act of assertion that had strong positive effects for the couple was his suggestion that the family try some weekend camping trips in order to build some positive memories together. Tina was reluctant to try this new endeavor at first and showed a great deal of anxiety about James' planning and preparations for these excursions. However, much to her surprise, these trips were highly successful and revealed a major new area of common interest that they could share. As a result of this positive development, the couple now had a new set of highly supportive and affirming memories about positive time spent together. As a powerful example of the communicative function of SDMs, I urged them to recount the stories of their trips to friends and family members. In telling these memories to others and retelling them to each other, they were using their SDMs to build intimacy and expand a sense of empathic connection with each other.

Finally, Tina and I looked carefully at the ruminative and dysphoric effects secondarily evoked by her persistent return to the SDM of her ankle injury and her father's rescue. Despite its apparent positive ending, it failed to promote positive feelings inside her. Additionally, as she talked more about this memory, she also revealed how painful her father's frequent absences due to his military duty were to the family. In fact, in more traditional psychoanalytic terms, there may have been ways in which this memory served as a "screen" for more conflicted and negative feelings that Tina held inside her about her father and the family life he created. Far from reminding her of the joy of security, the memory may also have contained a wish that disguised a deeper frustration with being unable to control the comings and goings of her often-elusive father.

With the troubling aspects of this memory in mind, we agreed to embark on a two-part strategy (for other examples of this approach, see Singer, 2005b).

First, I taught Tina how to employ a traditional behavior therapy tactic of thought-stopping. Using a rubber band around her wrist (actually one of the "Live Strong" wristbands sponsored by Lance Armstrong to raise money for cancer), she gave herself a gentle snap whenever she began to dwell on this particular SDM (her "Don't Go There" memory). She then selected a highly positive and unambivalent SDM that she could consider her "Go-To" memory (she selected one of sitting around the campfire from one of the family's recent camping trips). Whenever she snapped her wrist to break the spell of the negative memory, she was supposed to summon up her "Go-To" memory of the camping trip and allow its imagery to fill her thoughts. With practice, Tina identified other SDMs that detracted from positive moods. She employed her thought-stopping procedure and then drew on an expanding repertory of "Go-To" memories to stabilize and lift her mood.

From all these exercises, we can see that the goal of therapy is not to banish or remove the influence of SDMs. As I have suggested in this chapter, they are an integral part of autobiographical memory and the larger self system. Indeed, they contribute substantially to our overall life story and sense of identity (McAdams, 2001; Singer & Blagov, 2004a, 2004b). However, as with any dynamic component of the personality, their presence can be beneficent or malevolent, depending on the use the individual makes of their influence.

CONCLUSION

Self-defining memories are integrative units of personality that link cognitive, affective, and motivational information together in highly imagistic and thematic "packages." They are particularly vivid, emotional, familiar, and well-networked memories that connect to the most enduring goals or unresolved conflicts from individuals' lives. Similar to other autobiographical memories, they can serve directive (e.g., lesson-learning), communicative (e.g., teaching and intimacy-building), and self (e.g., maintenance of self-coherence and emotion regulation) functions. Self-defining memories are likely to be recruited during periods of goal disruption or conflict. When emotional arousal is high and the demand for efficient processing is at a premium, self-defining memories are an immediate source of information and direction for the individual. A key goal for therapy with regard to these emotional memories is to ensure that they function in constructive rather than destructive ways. To achieve this end, therapists may work with clients to enhance the lesson-learning and meaning-making aspects of their memories. They may also help clients to work on the sharing of positive and relationship-affirming memories with intimate others. Finally, therapists can teach clients concrete strategies for distracting themselves from negative rumination about troubling memories, while helping them to focus

on positive self-defining memories from their lives. This chapter has drawn on theory, research, and practice to demonstrate the conceptual, empirical, and practical advances that the fields of cognitive psychology, personality psychology, and clinical psychology are making in understanding and harnessing the power of emotional memories. As neuroscience also makes significant inroads into the mapping of the biological correlates of memory retrieval, we can truthfully say that we are in the midst of a revolutionary era in the study of memory and emotion. By continuing to build bridges across the subdisciplines of psychology, including clinical psychology, we will be able to translate these advances into tangible benefits for scientific understanding and clinical application.

AUTHOR NOTES

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Figure 10.1 and Figure 10.2 were reprinted with permission from Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: correspondence and coherence. *Social Cognition*, 22, 491–529.

NOTE

- 1 Other recent investigators who have employed the self-defining memory request include Avril Thorne at the University of California-Santa Cruz, Richard Robins and Gina Sutin at the University of California-Davis, Brent Roberts at the University of Illinois-Urbana-Champaign, Lynn Angus at the University of Toronto, and Michael Conway and Wendy Wood at Concordia University.

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11

Trauma and Memory: Normal versus Special Memory Mechanisms

Gail S. Goodman and Pedro M. Paz-Alonso

Abstract

The influence of stress and trauma on memory has attracted considerable research attention in recent years. In this chapter, we first review some of the factors that affect memory generally and that have also been shown to play a critical role in the recollection of stressful and traumatic experiences. Also, memory for central versus peripheral information is discussed, as well as the main theoretical approaches used to enlighten the relations between negative emotional arousal and memory. Second, we review studies from our laboratory on memory for child sexual abuse, particularly as relevant to "lost memory," recovered lost memory, and accuracy of memory for childhood sexual trauma. Finally, the implications of normal versus special memory mechanisms on trauma and memory phenomena are discussed.

I don't wanna remember, and I don't wanna have to deal with it.

A victim of child sexual abuse (Goodman et al., 2003)

Even in the midst of a moment of panic, this scene struck me as particularly and memorably bizarre.

Matt Morrison, eyewitness ("Remembering Bloody Sunday," *The Irish People*, January 25, 1997)

These quotations capture some of the many issues that have attracted research interest in trauma and memory. Questions about the effects of trauma on memory abound because of their profound theoretical and applied importance. Such questions include: What factors and characteristics of a traumatic event contribute to making it highly memorable after, for example, 20 years? Does the emotion associated with an event lead to more durable memories? How accurate and malleable is human memory for trauma? Are there important individual differences, such as in psychopathology, that affect memory accuracy for distressing information? Is it possible to lose consciously accessible memory of