

## Depression and Memory Narrative Type

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Research with autobiographical memories has distinguished between memory narratives of specific events and summaries of many events blended together. Depression has been associated with a reduced ability to retrieve and orally relate specific positive memories. This study explored the hedonic bias in memory through collection of written autobiographical memories from 90 nonclinical college students whose mood was assessed for depression. Participants with higher depression scores recalled significantly more summary memories in response to a request for a positive self-defining memory than did participants with lower depression scores. There were no significant differences in the number of single-event and summary memories when participants were asked for a negative memory. We used J. A. Singer and K. H. Moffitt's (1991–1992) scoring system to distinguish between summarized and specific memory narratives.

Autobiographical memories, which were earlier eschewed as unreliable and of questionable use in the study of psychology, are now viewed as valuable material by many psychologists. Reviews of the personological literature (Pervin, 1990; J. L. Singer & Kolligan, 1987; J. A. Singer & Salovey, 1993) indicated that autobiographical memories are increasingly being used to study personality processes and mood states.

Research in autobiographical memory has distinguished between memories of a single event and memories that are summaries of many events blended together (Barsalou, 1988; Brewer, 1986). Several experiments have associated the single-event versus summary memory distinction with the mood state of depression. Williams et al. have demonstrated that depressed psychiatric patients (Moore, Watts, & Williams, 1988; Williams & Scott, 1988) and suicide attempters (Williams & Broadbent, 1986) differ from controls in their capacity to recall specific memories of positive events. Unlike controls, depressed patients, when presented with positive cue words and asked to recall specific autobiographical memories, responded with significantly more general memories and required additional prompting from the experimenter to be able to respond with specific memories. There was less difference between depressed persons and controls when recalling memories in response to negative cue words.

J. A. Singer and Moffitt (1991–1992) developed standardized scoring guidelines with which to distinguish the specificity–generality dimensions of autobiographical memories. The scoring system offers a formalized and reliable method for distinguishing memory narratives as single event or summaries. Implementation of this systematic approach to identify differences in

memory narration and organization has not yet been used in conjunction with mood assessment.

The purpose of the present study was threefold: (a) to extend the exploration of the relation between depression and memory narrative type through the use of a systematic scoring system to differentiate memory specificity and generality; (b) to determine whether the relationships noted by Williams et al. exist in a nonclinical sample; and (c) to extend this investigation to written memories. On the basis of the previous research noted, we hypothesized that depressed participants would recall significantly more summary memories in response to requests for positive memories than would less depressed participants but would show little or no difference in retrieval of negative memories.

### Method

#### Participants

The participants in this study were 90 undergraduate students (29 men and 61 women) ranging in age from 18 to 43 years ( $M = 20.13$  years,  $SD = 4.29$  years) who were enrolled in introductory psychology courses at Connecticut College. Participants volunteered through the Psychology Department subject pool by signing up for a study advertised as an investigation of “personality and the self” and received experimental credits toward their introductory course in exchange for their participation.

#### Measures

*Multiple Affect Adjective Checklist-Revised (MAACL-R; Zuckerman & Lubin, 1985).* This was used to assess mood. The MAACL-R consists of 132 adjectives that yield five subscales of Anxiety, Depression, Hostility, Positive Affect, and Sensation Seeking. The state form of the scale was used, and participants were instructed to check the adjectives that described their feelings at the time they completed the checklist.

*Self-Defining Memory Task (Moffitt & Singer, 1994; J. A. Singer & Moffitt, 1991–1992).* Participants wrote autobiographical memories that were both personally significant and emotionally evocative. Participants received a request for either a positive memory or a negative memory.

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*Memory Rating Sheet* (Moffitt & Singer, 1994; J. A. Singer & Moffitt, 1991–1992). Participants indicated their current emotional responses to the memories by rating 12 emotions on a scale ranging from 0 to 6.

*Memory Narrative Scoring Guidelines.* Memory narrative type (summary vs. single event) was determined according to the classification system developed by J. A. Singer and Moffitt (1991–1992); raters were unaware as to which memories were written by participants in the high- and low-depression groups.

As described in their scoring guidelines, a single-event memory is a sequence of actions or images identifiable as a unique occurrence and located in a discrete moment of time in an individual's life. The hallmark of a single-event narrative is its specificity. In recounting a single-event memory narrative, the narrator provides, at least some distinguishing details (e.g., names and identities of participants, their dialogue, emotional responses, physical actions, clothing, physical location, or environment). Such details may be considered aids the narrator uses to enable the reader to image the narrative as a particular incident. The following is an example of a single-event memory from the scoring manual (J. A. Singer & Moffitt, 1991–1992):

My brother and I were playing in our family room. I knocked over a lamp by accident. When my dad came in and asked what happened, I lied. I was afraid and upset. My dad knew that I had lied, so he calmly explained to me that lying was bad and mentioned that his own father never lied. This made such an impression on me that I avoid lying at all times.

The defining feature of a summary narrative is its lack of a discrete connection to a particular moment in time. It locates events in larger time frames or blends unique events into an amalgam meant to represent all of its constituent experiences. If a single event is mentioned, it is mentioned only in passing, without specific detail or imagery, and is subsumed by a larger generalized narrative. The following is an example of a summary memory:

This memory is of playing baseball in a park near [my dad's] apartment in Cincinnati. My mother and father were divorced and Dad lived on the other side of town. I would not see him often but when I did they were powerful wonderful memories. My father would take me to a park [Wilson Park], a park donated to the city of Cincinnati by my great grandfather. . . . These games of baseball between the two of us will last forever.

### Procedure

Participants attended small-group sessions where they received a folder containing a consent form, the MAACL-R, the Self-Defining Memory Request, and the Memory Rating Sheet. One half of the requests were for positive memories, and the other half were for negative memories. They completed the tasks, in order, within a 15- to 20-min period. After completion of the tasks, participants turned in their folders and received experimental credits for their participation.

## Results

### High- and Low-Depression Groups

Participants were grouped as high or low in depressed mood by means of an approximated median split. The low-depression group consisted of 56.7% of the participants whose standardized depression scores on the MAACL-R ranged from 38 to 47. The high-depression group comprised those participants (43.3%) whose depression scores ranged from 49 to 149. According to the normative sample described by Zuckerman and Lubin (1985), participants in the present study's high-depres-

sion group scored above the mean for depression (with the exception of the 1 participant whose score was 49).

A chi-square analysis indicated that the distribution of high- and low-depression subjects did not differ significantly in the positive and negative memory request conditions,  $\chi^2(1, N = 90) = 0.05, ns$ . Within the low-depression group, 49% of the participants received a negative memory request and 51% received a positive memory request. For the high-depression group, 51% of the participants received a negative memory request and 49% received a positive memory request.

### Narrative Type

Results indicated 49 (54%) summary memories and 41 (46%) single-event memories. Interrater agreement by two raters was 87% ( $\kappa = 0.76$ ).

### Affective Responses to the Memories

On the basis of previous research (Moffitt & Singer, 1994), affective responses to the memories were summed to create composite variables. Positive affect was represented by summing and taking the mean of the responses to the adjectives *happy*, *interested*, and *proud*. The negative affect composite variable was represented by the mean of the raw score responses to the adjectives *angry*, *fearful*, *ashamed*, *disgusted*, *guilty*, *embarrassed*, and *contempt*.

A 2 (positive/negative memory request)  $\times$  2 (high-depression/low-depression mood) multivariate analysis of variance was conducted on the composite variables of positive affect and negative affect in response to the memories. Results indicated a significant group effect for memory request, Wilks's  $\lambda = 0.36$ ;  $F(2, 85) = 75.03, p < .0001$ , and no significant effects of depression or Depression  $\times$  Memory Request. Univariate analyses of variance conducted on the composite memory affect variables indicated that groups differed in positive affect associated with the memories,  $F(1, 86) = 113.60, p < .0001$ , and negative affect about the memories,  $F(1, 86) = 56.79, p < .0001$ . In response to the negative memory request, the mean for the composite negative affect was 2.30, and the mean composite positive affect was 1.53. Conversely, in response to the positive memory request, the mean for negative affect was 0.58, and the mean for positive affect was 4.07 ( $N = 45$  in both the negative and positive request condition).

### Depression and Narrative Type

A chi-square analysis comparing the number of single-event versus summary memory narratives in the low-depression versus high-depression conditions was conducted for both the positive and negative memory requests. Supporting the hypothesis, the chi-square analysis in the positive memory request condition was significant,  $\chi^2(1, N = 45) = 6.71, p < .01$ . That is, participants in the high-depression group recalled a greater percentage of positive summary memories (74%) than positive single-event memories (26%). Additionally, participants in the low-depression group recalled a greater percentage of positive single-event memories (65%) than positive summary memories (35%).

There were no significant differences between the number of single-event and summary memory narratives in the negative memory request condition,  $\chi^2(1, N = 45) = 0.07, ns$ . The percentages of single-event and summary memories according to depression and request are presented in Table 1.

### Discussion

This study represents the first independent replication of Williams et al.'s (Moore et al., 1988; Williams & Broadbent, 1986; Williams & Dritschel, 1988; Williams & Scott, 1988) earlier findings of increased generality in positive memories of depressed persons. Additionally, it demonstrated this phenomenon using a reliable scoring system that can be applied to written memories. Furthermore, it extends earlier findings to a non-clinical sample. When asked to recall and write positive autobiographical memories, participants with higher depression scores on the MAACL-R responded with a significantly greater number of summary memories than did participants with lower depression scores. Moore et al. have suggested that this tendency may represent a reduced ability of individuals in depressed moods to move from a more general level of personal memory representation to that of more specific personal information. Williams and Dritschel (1988) further argued that this deficit may be explained by the tendency of certain individuals to encode the affective aspects of situations selectively. As explained within a "descriptions" framework, affective encodings tend to be more general in nature, being stored as parts of a series or category. The lack of specific features at encoding and the subsequent unavailability of specific cues at retrieval reduce individuals' capacity to move from more generalized categories of positive memories to specific single events. In response to request for negative autobiographical memories, there were no significant differences. This latter finding is also consistent with those of Williams et al.

Although the utilization of a median split proved effective for the subsequent analyses in this study, the participants represented a rather narrow range of depressed mood rather than a clinically depressed population. The fact that significant differences emerged without the expanded range one might see in a clinical sample or if a depressed mood had been induced suggests that these effects may be quite robust. Future research with written memories could be undertaken using a clinically depressed population, a mood-induction group, and a control group. Effective mood manipulation would allow for exploration of state rather than trait differences in narrative type.

Table 1  
*Percentages of Single-Event and Summary Memories by Memory Request and Depression Group*

Depression	Memory request			
	Positive		Negative	
	Single event	Summary	Single event	Summary
Low	65	35	44	56
High	26	74	40	60

Note.  $N = 45$  for each memory request.

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