

A STUDY OF AUTOBIOGRAPHICAL MEMORIES IN DEPRESSED AND NONDEPRESSED ELDERLY INDIVIDUALS

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ABSTRACT

An autobiographical memory task was used to study memory processes and depression in elderly individuals. Twenty-seven nondepressed and twenty-seven depressed elderly participants recalled thirty memories. Each memory was self-rated for happiness versus sadness and the degree of importance of the event at the time the event occurred (i.e., "then") and looking back on the event ("now"). Nondepressed participants perceived greater positive change in affective tone between "then" and "now" ratings. Depressed participants recalled more memories rated as sad "now" than nondepressed, and perceived negative and positive memories to become more neutral than nondepressed participants. These results are consistent with a mood congruence hypothesis, in that participants recalled more memories affectively consistent with current **mood**, and a self-enhancement view of reminiscing, such that recalling memories evaluated as happier was associated with less depression.

Studying the relationship between mood and memories for past events among elderly individuals is an important pursuit because such study among depressed people may increase our understanding of factors associated with depression in this population and because such study among nondepressed elderly can contribute to our understanding of healthy coping processes in the face of age-related losses. Processes and organization in memory have been implicated both **as**

playing an important role in contributing to depression and as forming coping resources in the face of negative events and circumstances. This article addresses aspects of memory for autobiographical events which are associated with depression and lack of depression.

Teasdale and his colleagues present a theory of reciprocal relationship between cognition and depression [1-5], based on Bower's semantic network model [6]. They suggest that depressed people have many memories of negative self-relevant experiences, and that their attention is more likely to be directed toward negative aspects of current experience. These cognitive processes encourage the person to interpret experiences more negatively and to expect negative things to happen in the future. **Because** of mood-congruent memory effects, **when** one depressing event or thought **occurs**, a person more easily accesses various **thoughts** and memories which were learned or active during previous depressed moods, and therefore the person will get caught in a cycle of thinking about the sad event, accessing memories of previously depressing events, and lose access to thoughts of anything which is not sad. This model posits that cognitions, including memories, exist **in** a semantic network composed of nodes and associations between nodes. A person's current mood activates specific associative networks, and current mood **is** likely to **be** negative when a person has experienced a meaningful loss. Rehm and Naus elaborate on Teasdale's model, proposing a self-structure composed of memories, facts, beliefs, feelings, and attitudes about the self existing in memory [7]. **Affect** is a salient feature of how memories **are** encoded, stored, and retrieved; access to a particular memory is facilitated **by** an affectively congruent emotional state. Depression is precipitated **by** negative personally-relevant events which increase access to depressive self-schemas, including sad memories. In depression prone people, negative self-schema **are** more easily accessed than in non-depression prone people because they are stronger, more extensive, and related to more concepts in memory. In non-depressed people, positive self-schemas are more extensive than negative ones, so following a negative personally-relevant event, access to memories will be redirected to positive memories.

Empirical research has documented an effect **of** increased accessibility of mood congruent memories. Studies have found that clinical depression or induced depressed **mood** is associated with increased latency to retrieve positive memories [3, 4, 8], decreased latency to retrieve negative memories [8], retrieval of fewer positive memories [2, 4, 5], and more negative memories [4, 5]. Few studies utilizing this research paradigm have been conducted with elderly participants. Hyland and Ackerman found that among normal participants, there was no **cor-**relation between the score on a mood measure and the proportion of pleasant versus unpleasant memories retrieved in response to a list of cue words [9].

Memories for personal events among elderly individuals have more often been looked at within the context of **life** review and reminiscence theories than in relation to depression. These theories propose ways **in** which an older person's

processes of **thinking** about memories will contribute to satisfactory completion of developmental **tasks** and to well-being. Erikson theorized that the task **in** old age is to come to an “acceptance of one’s one and only lifecycle as something that had to be and that, by necessity, permitted of no substitutions” [10, p. 268]; “the older **person** is to consolidate his understanding of the life he has lived, a process which includes a ‘mourning’ for the lost opportunities of each developmental stage” [11, p. 63]. Under favorable conditions this experience will create an integration of earlier stages, enabling the person to come to terms with death. Butler asserts that old age involves a naturally occurring process of reviewing one’s life, such that past experiences, especially unresolved conflicts, progressively return to **consciousness** [12]. Memories of these experiences can be reintegrated leading to **serenity** and wisdom. However, the more intense the unresolved conflicts, the **harder** it is to reintegrate the memories, and life review may lead to states such as despair and depression.

Molinari and Reichlin present a model of reminiscence as “psychological action,” proposing that reminiscence is a deliberately initiated action to consolidate **and** redefine the self-identity in face of experiences of aging which are **incompatible** with the person’s self-identity [13]. They suggest that **this** process establishes a **sense** of continuity with the self known in previous years. When **experiences** of aging have a negative impact on the person’s current sense of **self**, reminiscing about past experiences can redefine one’s **current sense** of self in light of past achievements. Other researchers have also proposed that thinking and/or talking about past events operate **as** an adaptive mechanism to help an older **person** **cope** with the losses of aging [14-18]. Recall of previous successful and positive experiences is thought to help **an** older person maintain self-esteem in the face **of** age-related lost abilities. Several forms of this adaptive reminiscence have **been** noted, but the one most often suggested by different writers corresponds to Molinari and Reichlin’s proposal, and will be discussed as “self-enhancement” reminiscence [17].

Several studies investigating the process of reminiscence and the efficacy of reminiscence therapy in elderly individuals have found a correlation between **reminiscing** and current mood or adaptation. It has been found that reviewing one’s past, particularly when positive in tone, was associated with decreased depression [14, 16], increased life satisfaction [19, 20], and other positive outcomes [15, 21, 22]. However, methodological weaknesses detract from the **strength** of some of these findings, and a number of other studies have found no **clear** relationship between reminiscence and adaptation.

Cognitive models of depression make certain implications for depression **in** elderly individuals. Given the hypothesis that negative self-relevant **experiences** will cause increased access to negative self-schema, it would be expected that **the** increased losses in later life would normally precipitate a depressive cycle. **Although** nondepressed people are expected to redirect their thoughts away from **negative** self-schema following a sad experience, if the elderly person experiences

many losses that have a negative, personally-relevant effect, it would be difficult for him/her to have the energy and opportunity to redirect thoughts away from negative self-schema. And yet, research finds that many elderly are not depressed. For example, Blazer, Hughes, and George, in a study of 1,304 community elderly persons, found that **only 27** percent reported depressive symptoms, including **only 2** percent who met DSM III criteria for dysthymia and 0.8 percent who met DSM III criteria for a major depressive episode [23]. Comparing prevalence rates across ages, Myers, Weissman, Tischler, Holzer, Leaf, Orvaschel, Anthony, Boyd, Burke, Kramer, and Stoltzman found that affective disorders were least frequent in people sixty-five years old and older, and most frequent in eighteen- to twenty-four-year-olds and twenty-five- to forty-four-year-olds [24]. An average across men and women from three different cities found that **5.7** percent of eighteen- to twenty-four-year-olds, **7.4** percent of twenty-five- to forty-four-year-olds, and **5.1** percent of forty-five- to Sixty-four-year-olds evidenced an affective disorder, while **2.5** percent of those sixty-five and older evidenced an affective disorder. Cognitive models of depression could be amplified using the hypothesis of the reminiscence literature to describe ways in which older people avoid depression despite loss experiences. One possible explanation for the low frequency of clinical depression among elderly individuals corresponds to the concept of *life review* proposed by Erikson and Butler. Psychologically healthy older people may actively alter the semantic network in which their negative memories are stored, connecting them to more positive concepts and self-schema, whereas depression prone older people may passively recall unaltered negative memories and slip into depression. A second explanation corresponds to self-enhancement reminiscing, similar to the hypotheses of Molinari and Reichlin [13] and Romaniuk and Romaniuk [17], such that when older people reminisce, some may think largely about positive memories, which would balance the attention paid to memories of conflicts and increase self-esteem. Third, memories for past conflicts may be stored in semantic networks relatively independent from current self-schema, and may not make a significant impact on one's self-concept.

In addition to providing a valuable model, cognitive research in depression also offers useful research methodologies with which to study of the relationship between reminiscing and well-being in elderly individuals. The present study used methods from research on the semantic network models to investigate the relationship between processes of recalling past events, and depression versus lack of depression among older people. The probability of retrieval and latency to retrieve different types of memories were used as measures of accessibility. Negative memories were expected to be less accessible to nondepressed people but more accessible to depressed people. First, it was hypothesized that nondepressed people would be quicker to retrieve positive than negative memories, that depressed people would be quicker to retrieve negative than positive memories, and that nondepressed people would be quicker to retrieve positive memories and slower to retrieve negative memories than depressed people. Second, it was

expected that **nondepressed** people would retrieve more positive and fewer negative memories **than** depressed people, nondepressed people would retrieve more positive than negative memories, and depressed people might retrieve more negative than positive memories. Third, it was expected that when recalling events which were negative at the time of occurrence, nondepressed people would report more events which were previously negative (“then”) but currently (“now”) felt to be less negative and/or less important to the self, while depressed people would rate experiences as more negative “**now**” than “then” because of current mood biasing evaluations. Fourth, it was expected that depressed people would rate negative events as more important to the self than nondepressed people.

METHOD

Participants

Participants were volunteers who responded to verbal announcements, written fliers, and staff recruitment in senior citizen retirement hotels. Sixty participants began the procedure; three became fatigued and refused to complete the study. Three additional participants were excluded because their score on the Folstein **Mini** Mental Status Exam fell below twenty-four, suggesting the presence of cognitive impairment [25]. The final sample consisted of fifty-four participants.

Participants were included in the depressed group if they scored eleven or above on the Geriatric Depression Scale (GDS) [26], and considered in the nondepressed group if they scored ten or below. The GDS is a thirty-item self-report questionnaire specifically designed for and validated on elderly individuals. Yesavage reports that a cutoff score of eleven has yielded **84** percent sensitivity and **95** percent specificity in correctly classifying normal and depressed elderly persons [27]. In his validation study, the depressed group consisted of mildly depressed elderly individuals (with an average of 3.4 R.D.C. criteria symptoms of depression) and severely depressed elderly individuals (with an average of **5.9 R.D.C.** criteria symptoms); his normal group consisted of normal community residing elderly individuals. Yesavage and his colleagues suggest that a score of eleven or greater indicates mild depression. Because one question on the GDS could be confounded with the dependent variables of this study (“Do you worry a lot about the past?”), this question was not used to contribute to a participant’s total **GDS** score. Sample GDS scores ranged from zero to twenty-five. Twenty-seven participants scored ten or less, and twenty-seven scored eleven or greater. Within the depressed group, the mean GDS score was **15.5** (standard deviation = 4.0), and within the nondepressed group, the mean GDS score was 6.2 (**SD**= 3.3).

Participants’ age, sex, ethnicity, marital status, self-rated health, number of health problems, types of medications, income, education, and (previous) occupation were compared between groups (see Table 1).

Table 1. Demographic Characteristics of Participant Groups

	Nondepressed	Depressed	Total Sample
Age	82.0 (7.1)	82.0 (5.3)	82.0 (6.2)
GDS score	6.2 (3.3)	15.5 (4.0)	10.8 (6.0)
MMSE score	26.8 (1.7)	26.6 (1.5)	26.7 (1.6)
income level	3.9 (2.0)	4.6 (1.5)	4.3 (1.8)
Years of education	12.8 (2.5)	13.7 (2.5)	13.2 (2.5)
Occupation rating	3.0 (1.1)	2.6 (1.1)	2.8 (1.1)
Number of losses	2.1 (1.9)	1.6 (1.6)	1.9 (1.7)
Self-reported health	3.6 (0.9)	3.0 (0.8)	3.3 (0.9)
Number of health problems	1.7 (1.6)	2.5 (1.6)	2.1 (1.6)
Number of medications	1.9 (1.8)	3.3 (2.5)	2.6 (2.3)

Age across the whole sample ranged between sixty-six and ninety-three years. The mean age did not vary between groups. There were forty-six women and eight men in the entire sample, with no group differences in the number of either sex. Marital status, ethnicity, income, years of education, and occupational ratings did not differ between groups. Over the whole sample, forty-four were widowed, five were divorced, four were married, and one was never married. The sample was almost entirely Caucasian (n = 53), with one participant of Asian descent. Occupational status was rated with the Hollingshead Occupational Rating scale. When participants were housewives and had not worked outside the home, their husband's occupational status was rated. The average occupational rating was 2.81, where level two includes business managers, proprietors of medium sized businesses and lesser professionals, and level three includes administrative personnel, proprietors of small independent business and minor professionals. The total number of losses experienced in the previous six months was assessed with a questionnaire asking for the presence or absence, and if present, the number of losses in eight categories. There were: change in residence, loss of financial resources, loss of occupation, personal illness or injury, illness or injury of family member or close friend, death of close family member, death of other family member or close friend, and loss by theft or legal problems. The total number of losses did not vary significantly between groups, and did not correlate significantly with depression.

The three measures of health status did vary between groups. Self-reported health was assessed on a five point scale: "very poor," "poor," "fair," "good," or "excellent." The depressed group, on the average, rated their health as fair,

whereas the nondepressed group rated their health as good. This difference was statistically significant ($T(52) = 2.24, p = .029$). Depressed people also had more specific health problems ($T(52) = -1.83, p = .073$) and were taking more medications ($T(52) = -2.22, p = .031$). This association between depression and health problems is consistent with the previous literature, which finds that impaired health is a significant correlate of depression [28, 29]. It was assumed that health would contribute significantly to depression, but not be a direct influence on memory processes, and that to factor out a health variable from the analyses would obscure meaningful effects of depression, so health rating was not statistically controlled in the analyses.

procedure

Participants read and signed a copy of the informed consent, which described that the study involved a two- to three-hour interview and procedure seeking to understand their mood and their recollection of events. They were orally administered demographic questions, the Mini Mental Status Exam, and the Geriatric Depression Scale. Following these assessment questions, the memory task was conducted. Eight questions were then asked to assess losses. Finally, participants were debriefed and given \$10.00 for participation, which they could choose to keep or have donated to a charity. The entire procedure was administered by the experimenter or a trained research assistant.

Memory Assessment Task

Participants were told that they would be read a list of words, and each time they heard a word, they were to try to remember a real life personal memory. They were told that when the experience came to mind, they were to inform the interviewer by raising their hand. Participants were told each memory should be real and specific, and should be one they could recall with some detail, i.e., one which occurred at a specific time and place. They were then asked to describe the memory briefly. A few of the participants' words were noted by the interviewer to be used later for the rating tasks. If a participant did not recall an experience within sixty seconds, this was noted and the next word presented. Three conditions for the type of memory were requested. In the "Unspecified Condition," similar to Clark & Teasdale [2] and Teasdale, Taylor, and Fogarty [4], the participant was asked to recall any experience in response to twenty-two words (two were used as practice trials). In addition, participants were asked to recall events which were sad at the time of the event in response to five prompt words and events which were positive at the time in response to five words, similar to Lloyd and Lishman [8] and Teasdale and Fogarty [3]. However, analyses comparing memories from these positive and negative conditions did not yield significant results, and will not be presented. Four alternate interview forms were prepared with the same words, each in a different random order. The words used as cues for retrieving memories

were chosen from lists used in other similar studies [2, 8, 9]. From these words, ones which were found to be rated as most extreme in pleasantness by Toggia and Battig's participants were eliminated [30]. Fairly neutral prompt words were expected to minimize inter-participant differences in the emotional meaning of different words. Words were also chosen on the basis of fairly high ratings on imagery and concreteness in order to increase the likelihood of eliciting specific rather than abstract general memories [30]. The words were: flower, swimming, train, dollar, hand, letter, **box**, church, shoe, table, sign, station, face, shop, animal, wall, scissors, pen, doctor, money, hair, boat, road, telephone, fire, school, tunnel, **street**, bell, **cooking**, stone, and sound.

After the entire list was presented, participants were reminded of each memory by being read the description noted by the interviewer. The person was first asked to rate the experience in terms of how happy or sad he/she felt when the experience occurred ("then") on a seven point scale from -3 (extremely sad) to 0 (neutral or not sad and not happy) to +3 (extremely happy). Second, the participant was asked to rate each experience in terms of how personally important the event was to him/her at the time ("then") on a three point scale from 0 (not at all) to 2 (very important). Third, the participant was asked to rate each experience in terms of how happy or sad he/she feels about it "now," looking back on the experience, on the same seven point scale. Fourth, the participant was asked to rate each experience in terms of how important it is to him/her "now." The procedure was tape recorded.

Latency between presentation of cue words and retrieval of memories was later timed from the tape recordings by a research assistant, blind to the hypotheses and depression ratings. They were timed to one-tenth of a second, using a stopwatch. When the participant raised his/her hand to indicate retrieval of the memory, the interviewer had said "ok," so that the coder knew when to stop the timing. When participants did not clearly indicate retrieval of the memory or did not respond with a specific memory, latency was not recorded.

RESULTS

Latency of Retrieval

Analyses were conducted comparing memories which had been self-rated as positive with memories self-rated as negative. A mixed design manova of the latency to retrieve memories which were rated as positive "then" and negative "then," compared across depression groups was not significant for the main effects of depression group (i.e., depressed versus nondepressed) ($F(1,48) = .54, p = .465$) or the interaction between depression and affect (i.e., positive versus negative) ($F(1,48) = .00, p = .961$). It was significant for the main effect of affect ($F(1,48) = 4.86, p = .032$), indicating that over both groups, people retrieved memories rated as positive slightly faster than memories rated as negative.

Table 2. Percentage of Memories Rated Positive and Negative “Then” and “Now”

	Nondepressed	Depressed	Total Sample
percentage of memories rated as positive “then”	44.1 (12.3)	40.7 (14.9)	42.4 (13.6)
percentage of memories rated as negative “then”	27.6 (14.2)	32.0 (18.3)	29.8 (16.4)
Percentage of memories rated as positive “now”	39.8 (17.6)	31.3 (14.2)	35.6 (16.4)
percentage of memories rated as negative “now”	12.2 (13.5)	22.6 (14.4)	17.4 (14.8)

probability of Retrieval

A priori hypotheses had proposed differences between how depressed and non-depressed participants viewed negative and positive memories “then” and “now.” The data were summarized into the percent of memories rated as sad (-3, -2, or -1), percent rated as neutral (0), and the percent rated as happy (+1, +2, or +3), as done by previous investigators for “then” and “now” ratings [2, 4, 31]. A mixed design manova was performed to test for between and within group differences on the variables of percentage of memories rated positive “then,” negative “then,” positive “now,” and negative “now.” This manova was significant at the .05 level for the main effect of time (“then” versus “now”; $F(1,52) = 68.46, p < .001$), affect (positive versus negative memories; $F(1,52) = 25.91, p < .001$), the two-way interactions between depression group and affect ($F(1,52) = 4.87, p = .032$), and between time and affect ($F(1,52) = 4.12, p = .047$) and the three way interaction between depression group, time of rating, and affect ($F(1,52) = 4.12, p = .047$). Simple main effects tested within the manova were used to investigate the nature of these interactions. Because the contrasts indicated by the *a priori* hypotheses were not all orthogonal, different sets of contrasts were specified. Table 2 presents the group means for the percentage of memories rated as positive and negative “now” and “then.”

The hypothesis that depressed people would retrieve more negative memories than nondepressed people was tested by investigating the nature of the interaction between depression group and affect, using simple main effect tests, holding time of rating constant. A significant difference was found in the percentage of negative memories between depressed and nondepressed groups for the “now” ratings ($F(1,52) = 7.45, p = .009$) only, and no significant differences between groups on negative memories then, or positive memories then or now. The difference between groups on positive memories “now” was nearly significant

($F(1,52) = 3.84, p = .055$). Depressed people retrieved more negative memories than nondepressed people when comparing their ratings for how they feel “now” looking back on their memories, but not when comparing their ratings for how they felt “then,” at the time of the event. The Pearson correlations found **similar** results, such that depression correlated significantly with more negative and fewer positive memories “now,” but not “then.” The correlation between depression score and percentage of negative memories was $r = .20, p = .071$ for “then” and it was $r = .39, p = .002$ for “now.” The correlations between GDS score and percent of memories rated as positive “then” was $r = -.15, p = .144$, and for memories rated as positive “now” was $r = -.27, p = .024$.

The hypothesis that nondepressed people would retrieve more positive than negative memories and depressed people might retrieve more negative than positive memories was tested by following the significant main effect of affect with a second set of simple effects, holding participant group and time of rating constant. The difference between the percentage of positive and negative memories for nondepressed people was significant both “then” ($F(1,52) = 11.29, p = .001$) and “now” ($F(1,52) = 38.25, p < .001$). The affect difference was not significant in the depressed group, and in fact the means are in the contrary direction. **All** participants gave more positive rated memories in both “then” and “now” ratings. The differences were significant for the nondepressed but not for the depressed participants.

Tests of simple interactions and main effects were used to investigate the nature of the hypothesized differences across time ratings. The time by affect by depression group interaction was due to a significant time by affect interaction in the nondepressed group ($F(1,52) = 8.25, p = .006$), but not in the depressed group ($F(1,52) = 0, p = 1.0$). In the depressed group, the percentage of both negative and positive memories changed from “then” to “now” approximately the same amount, whereas in the nondepressed group, there was a significant difference between “then” and “now” in the percentage of negative memories ($F(1,52) = 32.01, p < .001$) and not of positive memories ($F(1,52) = 3.29, p = .076$). In the depressed group, the percentage of both positive and negative memories decreased, so that more memories became neutral. In the nondepressed group, the percentage of negative memories decreased more dramatically and became neutral, while the percentage of positive memories remained fairly stable. These effects are depicted in Figure 1.

Mean Affect Ratings

Because the variables of percentage of memories rated as negative and percentage of memories rated as positive are **so** highly correlated, the above hypotheses were investigated using a variable which utilized the full range of information gained from the seven point affect rating scale. Instead of categorizing each memory into one rated as either positive, negative, or neutral, a mean affect rating

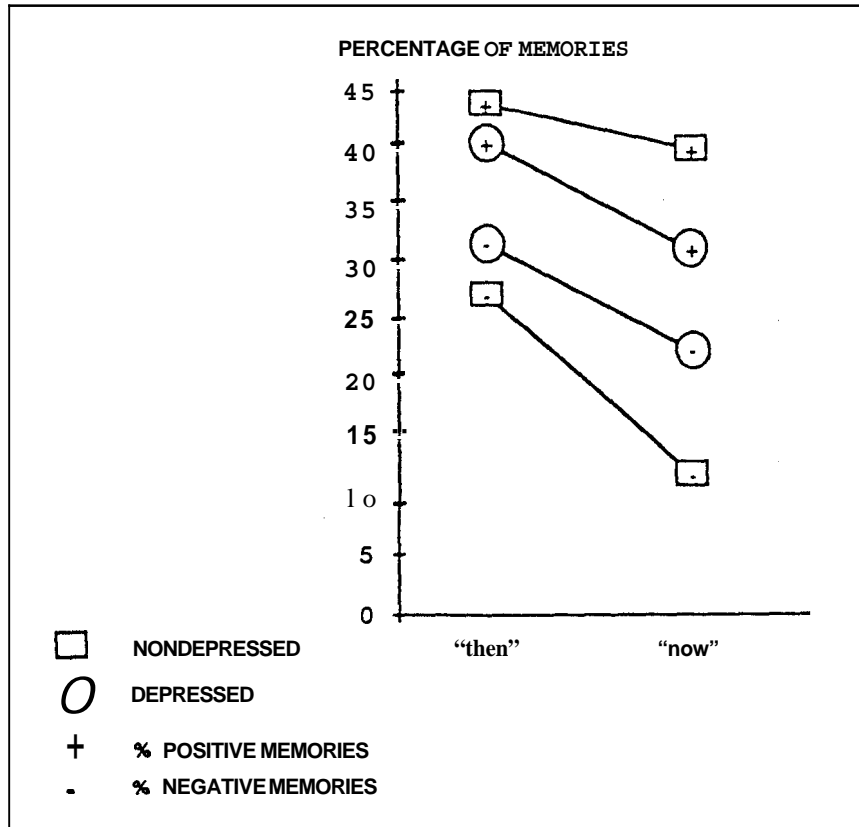


Figure 1. Percentage of memories rated as positive and negative, "then" and "now."

was calculated over all memories, for both the "then" and "now" ratings. For the purposes of these analyses, the rating scale used by the participants (from -3 to +3) was transposed into a scale with positive numbers (1 to 7). See Table 3 for the mean affect ratings over all memories, "now" and "then."

A manova comparing the mean affect ratings of memories between depressed and nondepressed groups yielded significant results for the main effect of group differences ($F(1,52) = 6.34, p = .015$) and the interaction between group and time ($F(1,52) = 5.24, p = .026$). The main effect of time rating was not significant ($F(1,52) = 3.47, p = .068$). The interaction is depicted in Figure 2. Tests of the simple main effects of this interaction found no difference between time ratings for the depressed people ($F(1,52) = .09, p = .764$) but did find a significant difference between "then" and "now" in the nondepressed people ($F(1,52) = 8.62, p = .005$). Thus, while depressed people's mean affective rating did not change

Table 3. Mean Affect Ratings "Then" and "Now"

	Nondepressed	Depressed	Total Sample
Mean affect of memories in the unspecified condition			
"then"	4.48 (0.62)	4.22 (0.83)	4.35 (0.73)
"now"	4.77 (0.59)	4.19 (0.59)	4.48 (0.65)

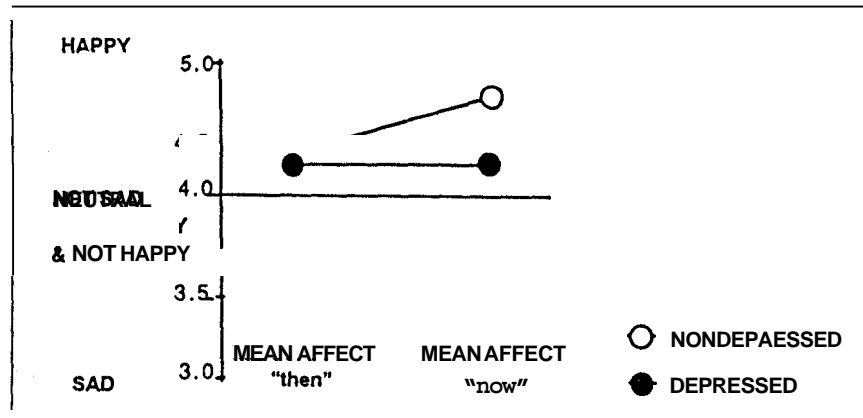


Figure 2. Mean affect ratings, "then" and "now."

between "then" and "now," on the average, nondepressed people's ratings became more positive.

Importance Ratings

It had been proposed that depressed people would rate negative events as **more** important to the self than nondepressed people. A **manova** comparing the importance of events rated **as** negative "then," positive "then," negative "now," and positive "now," between depressed and nondepressed groups, was not significant for the main effects or interactions.

DISCUSSION

Hypothesized differences in the probability of retrieving positive versus negative memories were partly supported. Depressed people retrieved more negative memories than nondepressed people, comparing their ratings for how they feel "now" looking back on their memories, but not when comparing their ratings for how they felt "then," at the time of the event. All people were found to retrieve

more memories rated as positive than negative both “then” and “now,” but these differences were significant only for nondepressed people. The difference in affect **was greater for nondepressed** than for depressed people. **On** the average, nondepressed people rated their memories as more positive “now” than when they occurred, **whereas** depressed people’s ratings did not change **significantly**. Depressed people’s percentage of negative and positive memories decreased equally, **whereas** nondepressed people’s percentage of negative memories decreased more significantly, and their percentage of positive memories decreased less. Hypothesized differences between depressed and nondepressed participants in accessibility of memories as measured by latency to retrieve positive and negative memories, were not substantiated.

The present finding that depressed people retrieved more memories currently felt to be negative than nondepressed people is consistent with the findings of Fogarty and Hemsley [31], Teasdale, Taylor, and Fogarty [4], Natale and Hantas [32], and Snyder and White [33]. Similar to Bower’s findings that in an elated mood more happy than sad events were recalled [6], this study found that nondepressed people recalled more happy than sad memories. However, contrary to Bower, this study did not find that when depressed, more sad events than happy were recalled. Bower had participants **rerate** events when in induced moods, and found that their evaluations were more consistent with current mood than original mood as recorded in a diary. This is consistent with this study’s findings that current mood was more consistent with current evaluations of past events than with evaluations of the affect at the time of the events.

The one study which also had participants rate their affect for how they felt then and now compared depressed patients at two different times of more and less depression [2]. The present study did not support Clark and Teasdale’s finding that when more depressed, depressed patients rated memories as more unhappy “**now**” and “then,” in that there was no significant difference between the “now” and “then” ratings of this study’s depressed people. The difference between the **findings** may be due to the fact that the depressed participants in this study were community dwelling elderly individuals, many of whom were only mildly depressed, whereas Clark and Teasdale studied clinically depressed patients. Age differences may also impact these findings. The elderly participants in this study have had more intervening time between the event and recall of the memory than Clark and Teasdale’s participants, and may have done more recoding of their memories than younger people.

When latency to retrieve memories was used as the measure of accessibility, this study did not support the hypothesis that depression increases access to negative memories, as was found by Lloyd and Lishman [8] and Teasdale and Fogarty [3]. Other studies have also failed to replicate mood differences on retrieval latency [2, 4]. Difficulty achieving an accurate measure of latency in this sample reduces the interpretability of these lack of findings. The participants did not consistently indicate retrieval of their memories nor initially provide specific

memories, and thus latency was difficult to measure accurately. The overall quicker latency to retrieve positive memories may be related to the use of a mildly depressed group rather than a clinically depressed sample.

The results of this study can be seen as consistent with mood congruent retrieval, because participants recalled more memories which were currently evaluated **as** affectively congruent with current mood. It is the affect of the reorganized memories which is more strongly associated with current mood. This is consistent with Teasdale's proposition that depressed people are more likely to direct their attention to negative current experiences. This study does **not** provide support for mood-state dependent retrieval effects, i.e., that events encoded in one state are most easily retrieved later when the person is in the same state [1, 6]. Participants' mood was not found to be strongly associated with the reported affective tone of the memory at the time of occurrence, and the affective tone of the event at the time is likely to be similar to the **person's** mood at the time the event was experienced [34]. Although this study is not longitudinal and therefore cannot make conclusions about changes over time, some hypotheses can be drawn which deserve further exploration. It may be that experiences are **organized** in memory tagged by current effective tone rather than original tone, and the current tone may have been recoded. The word "recoded" is intended **to** suggest that the original memory trace is elaborated by altering and reorganizing the affective links to the memory, not to suggest change in the original memory trace itself. When experiences have been recoded, memory may be searched by affect nodes, starting with the current affective tone of memories. The affective tone at the time the event occurred may be less salient once a memory has been recoded. Rehm and Naus suggest that repeated activation of memories would strengthen schema [7]. Perhaps memories which have been thought about more often, including those which have been recoded, have become more accessible because of repeated activation. It may not be that a person's mood increases access to memories of affectively similar events, but that mood increases access to memories of events which are currently evaluated in a way which is affectively similar to current mood, whether this is recoded affect or original affect if the experience has not been recoded. **This** suggests that it is the current evaluation of the past which differentiates depressed **and** nondepressed individuals.

The present findings are consistent with some of the previous findings of an adaptive function of reminiscence. The finding that less depression was associated with recalling more events currently felt to be happy, is consistent with those of Havighurst and Glasser [20] and Bortner and Hultsch [19]. Hyland and Ackerman's lack of correlation between mood and the percentage of pleasant versus unpleasant memories retrieved may have been due to less variation in **mood** than found in this sample, and/or lack of specification as **to** whether the participants were to evaluate the events for their affect at the time of the event or for how they felt currently looking back on the event.

This pattern of findings is consistent with the reminiscence theory of Molinari and Reichlin [13] and Romaniuk and Romaniuk [17]. Molinari and Reichlin suggest that the experiences of aging produce a negative impact on the current self, and that recall of past positive experiences can help an elderly person cope with aging. Reminiscence can help create a sense of continuity with the past and redefine the current self in light of the past, thus maintaining self-esteem. Romaniuk and Romaniuk proposed that reminiscing can perform a self-enhancement function, in that a greater connection with the past may be related to greater self-esteem. The data of the present study are consistent with the association between memory for events evaluated as positive and current lack of depression. Molinari and Reichlin's proposed use of reminiscence may not be occurring among depressed people. It may be that depression decreases the energy available to effortfully direct attention to past positive memories.

Erikson and Butler proposed life review as a natural developmental process wherein older people review and integrate past conflicts. Although clear conclusions about changes over time cannot be made, the finding that nondepressed people's memories were more positive for current than past evaluations lends support to a process of life review recoding in the nondepressed group. The finding that the nondepressed participants recalled more memories which were presently evaluated as positive, and they perceived that over time, their events were more positive than at the time of encoding the event, may be relevant to psychotherapy with elderly individuals. It is possible that increasing a person's focus on events evaluated as being happy and encouraging reworking of memories has a positive effect on mood.

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SOMEONE STOLE THE ROAD SIDE CAFE.. Please let me go into the lightness of belief.. the contact **of** outer spatial deliberation .. we count the enabling prophecies on one hand and court the fanciest new module with the other

He torqued a giant stick with big werk hands .. and amounted my clothes steaming and smoky amongst the licking flames ...All set **up** and drying like the **wildern**ess launder I intended to consort with.. came out with somethin like.. we 'll dry .. ~~for~~ em ..and smoke em... Robin's backwoods laundromat..

~~..... could be ..~~