

AN ABSTRACT OF THE THESIS OF

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Recollection of autobiographical memory has been shown to be influenced by many factors. This study required subjects to focus their attention on either a favorable or unfavorable maternal parenting incident from their first 16 years in an effort to create a mood-inducing effect. The study was designed to be similar to information gathering techniques which are used in the clinical setting.

Subjects consisted of 133 undergraduate students (34 men and 99 women) at a small, midwestern university who were tested on two occasions. The first testing was identical for all groups, at which time they completed a mood assessment and the PBI. At the second testing a control group and two experimental groups were created. All groups completed a mood assessment. At the second testing one group was told to recall a time in their first 16 years when they were disciplined too harshly by their mother or stepmother; the second group recalled a time when they were unexpectedly praised by their mother or stepmother. The control subjects did not focus their attention on any

earlier parenting incident but were simply required to once again complete the PBI.

Analyses of variance were run on the pre- and post-treatment PBI care scale scores. Analyses of variance were also run on the pre- and post-treatment mood assessment scores. No significant differences were found between groups at either pre- or post-treatment.

The results indicate that focusing attention on either a favorable or unfavorable maternal parenting incident from childhood was not sufficient to significantly change the subjects' mood, or to cause them to change their evaluation of maternal care. Further study needs to be conducted before these results can be generalized to the clinical population.

AUTOBIOGRAPHICAL MEMORY AND
EVALUATION OF PARENTAL
BEHAVIOR

A Thesis

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the Division of Psychology and Special Education

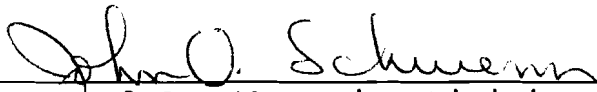
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CHAPTER 1

INTRODUCTION

Self-reported memories provide information routinely used in the clinical setting for both assessment and therapy. Several factors influence autobiographical recall, including the subject's mood (Clark & Teasdale, 1982), a desire to recall prior expectations as consistent with known outcomes (Katz, 1989), and responding to demand characteristics of the experimental setting (Bauserman & Rule, 1988). Autobiographical recall in the clinical setting usually is not tempered by these factors, rather the client just recalls either spontaneous or directed memories and gives details about them to the therapist. The recollection of parental behavior is frequently sought. This study was designed to determine whether the mere act of requiring subjects to provide details of either a favorable or unfavorable maternal parenting incident from childhood can change the level of parental bonding they had previously reported.

Autobiographical memory is a unique combination of memory which can persist even in individuals who have experienced organic trauma resulting in a significant loss of semantic memory (De Renzi, Liotti & Nichelli, 1987). Autobiographical memory has been defined as "a record of the experiences of a lifetime that go together to create ...[each individual] as a person" (Baddeley, 1990, p. 6).

One major influence in the recollection of autobiographical memories is mood state (Clark & Teasdale, 1982). Intentionally inducing a specific mood has been accomplished in the experimental setting by the use of techniques such as having subjects read lists of negative or positive affect laden statements (Velten, 1968), being subjected to an overtly favorable or unfavorable comment from the experimenter (Taylor, 1992) or by using a naturally occurring event such as receiving a graded mid-term exam (Parrott & Sabini, 1990).

Clark and Teasdale (1982) conducted a study taking advantage of a naturally occurring mood state. One of their goals was to determine if the tendency to retrieve sad memories when in an induced depressed mood was a real phenomenon or simply a response to the various techniques used to induce mood. They used as subjects 12 clinically depressed individuals who had significant variation during the day in the severity of their depression. Past personal recollections were gathered by presenting stimulus words to the subjects and asking them to recall and describe a life experience associated with each. The subjects were assessed twice, once when more depressed than the other. At the end of the second session, they were asked to rate the happiness or unhappiness of the memories twice, once according to how they felt at the time of each event, and then a current assessment. Negative events were more frequently recalled

when subjects were more severely depressed. Conversely, happy experiences were more likely to be retrieved when the subjects were less depressed. Additionally, subjects' assessment of past events tended to be more negative when their depression was severe.

The influence of mood specifically on the recollection of parents was studied by Lewinsohn and Rosenbaum (1987), who compared the recall of parental behavior by currently depressed persons, those not currently depressed but with a history of depressive episodes, those never diagnosed as depressed, and those who became depressed during the follow-up period of the study. Currently depressed individuals relative to the other groups reported significantly more negative parental behavior. Recall of parental behavior does not appear to be stable but changes based on the subject's mood as indicated by the similar ratings given by remitted depressives and the never depressed subjects. The possibility that sex influences recollection of parents was raised by the finding that females in contrast to males who became depressed during the study were more likely than the control group (never depressed) to report negative behavior.

The combination of physical pain and affect on the autobiographical recall of females has been studied by Eich, Rachman and Lopatka (1990). They wondered if the naturally occurring phenomenon of experiencing menstrual pain was sufficient to influence the retrieval of autobiographical

memories. Women who experienced pain during their menstrual cycle were tested when in pain and again when pain-free. On both occasions they rated their current affect and responded to cue words by providing autobiographical recollections. At the second testing, subjects were presented with the autobiographical recollections from both sessions and asked to rate the pleasantness/unpleasantness of the events at the time of their original occurrence. Results showed that pain impeded access to pleasant autobiographical memory, and promoted retrieval of unpleasant ones, but only when it was accompanied by unpleasant affect.

However, the priming quality of affect is mediated by whether or not recalling memories of a specific type will aid the subject in maintaining either a pleasant or useful mood (Taylor, 1992). Angry subjects having the opportunity to retaliate against their provoker recalled angry memories. Without the opportunity to retaliate, they tended not to recall angry memories.

Utility of a mood may also be evaluated in response to demand characteristics inherent in the experiment. Demand characteristics can include factors as subtle as the experimenter's attitude or as obvious as the instructions given to subjects (Christensen, 1991). Bauserman and Rule (1988) studied whether the experimenter displaying very little self-expression or affect or being warm and personable could influence subjects' content of early

memories. Warm experimenters received significantly more solitary memories, as rated on a scale measuring the interpersonal aspects of the memory. The scale was designed to measure the presence and importance of people in the memory, an indication of the social aspects of the memory. Warm experimenters, in contrast to cold communication style, also received memories with less vivid descriptive details.

Subjects can also respond to aspects of an experiment other than the experimenter. A desire to respond to demand characteristics such as producing memories congruent with an overtly induced mood has been revealed (Parrott & Sabini, 1990). When subjects were not aware that their mood was relevant to the study, mood-incongruent autobiographical memories were generated. According to Parrott and Sabini, "It therefore seems plausible that subjects will inhibit tendencies to recall memories incongruent to their mood under the conditions common to most laboratory investigations of mood and memory" (1990, p. 334).

In addition to the effects of mood and responding to demand characteristics, the beliefs and information available to subjects when they are requested to recall autobiographical information can affect memory. Subjects reconstruct memory so that it fits well with their current information and beliefs. Directed, in contrast to spontaneous, recall of specific parental behavior may prime semantic memory so as to skew subjects' current knowledge.

At the end of a professional baseball season, subjects were asked to recall their pre-season predictions of how they had expected the teams to be ranked. Even though they were directed to list their predictions exactly as they had been given prior to the beginning of the season, subjects tended to believe their expectations had been consistent with the actual outcome (Katz, 1989).

Similarly, students who were told the grade they obtained on a mid-term exam were asked to recall the grade they had previously predicted they would make (Conway, 1990). A significant number of students reported that their prior predictions were consistent with the obtained grade, when in fact they were not.

A recent study has shown an effect which could be attributed to either demand characteristics or reconstructing memory to be consistent with currently held belief. If providing details of a childhood parenting incident changes the subject's evaluation of maternal behavior, but does not change the subject's mood, it is possible that focusing on the specific memory has the effect of changing currently held belief and information. Loftus (1992) showed that adults could be deluded into believing that they had recovered a repressed memory from childhood. Subjects coached with general but erroneous information from family members recalled as part of their personal past a

fictitious incident and were even able to provide details about it.

Interaction between therapist and client in the clinical setting often requires the client to focus on favorable or unfavorable autobiographical memories. Asking clients to provide directed, as opposed to spontaneous, memories about incidents of abuse or maltreatment is a crucial but common part of therapy (Bruhn, 1992). However, directing the client's memory to a specific topic can possibly change mood, subsequently tainting additional recall. Access to autobiographical memory appears to be a function of a subjects' attitude and mood (Bruhn, 1990). Furthermore, autobiographical "incidents that mirror and substantiate our current perceptions and beliefs and 'overlook' or 'forget' incidents that are inconsistent with present beliefs" (Bruhn, 1992, p. 13) are the ones we recall.

By having subjects assess parental behavior, their subjective view of the nurturance exhibited by the parent is measured. In evaluating parental behavior, this important factor has consistently been found in many studies and has been defined by Parker, Tupling and Brown (1979) as parental involvement, or care, as opposed to indifference or rejection. In discussing this factor, they state, "Care has been identified theoretically, and supported

empirically by factor analytic studies, as the major parental dimension" (p. 8).

From the many studies that have shown various factors affecting autobiographical recall, none have determined whether the act of providing information about a particular memory can itself influence mood or in some other way result in a changed view of parental behavior. The current study determined whether the act of gathering information about specific memories, similar to what occurs in the clinical setting, caused such a change. One independent variable studied in this research was an attempt to induce mood change by requiring subjects to recollect, and provide detailed information about, either a favorable or unfavorable maternal parenting incident from childhood. It was hypothesized that if doing so created a demand characteristic, a mood effect, or influenced the subjects' expectations, a change would be produced in how they evaluated their mother's or stepmother's behavior. The second independent variable, sex, was manipulated because there is some empirical research indicating that women in contrast to men may report more negative parental behavior.

The present study tested the following hypotheses: 1) Asking subjects to recollect and reflect on a favorable or unfavorable memory of maternal parenting from childhood will produce a change in the evaluation of their mother's or stepmother's behavior in the same direction; 2) Women will

be more likely than men to show significant changes in their evaluation of maternal parenting behavior; and, 3) Women's and men's moods will be equally effected by reflecting on a favorable or unfavorable parenting incident.

CHAPTER 2

METHOD

Subjects

The sample for this study consisted of 133 volunteer undergraduates (34 men and 99 women) enrolled in seven Developmental Psychology classes at Emporia State University during the spring 1993 semester. Initially, only six of the seven classes were going to be used in this study. However, all seven classes were used in an effort to obtain sufficient numbers of male subjects.

Design

The present study had a 2 (sex: men or women) x 3 (recollection: favorable, unfavorable or none) between-subjects factorial design. Sex and recollection were the independent variables. Subjects were blocked on sex and, based on class membership, randomly assigned to one of the three recollection types. Two of the six classes were randomly assigned to each of the three recollection conditions. The seventh class was added, and assigned to the group not required to recollect a memory, in an effort to increase the number of men available for this study. The groups were divided as follows: Favorable recollection--Men; Favorable recollection--Women; Unfavorable recollection--Men; Unfavorable recollection--Women; None--Men; None--Women.

Subjects were tested on two occasions and only the results from those subjects who participated in both testing sessions were used. One dependent variable was the subjects' evaluations of maternal parenting behavior, using their scores on the maternal Parental Bonding Instrument (PBI) "care scale" (Parker, Tupling & Brown, 1979; see Appendix A). The other dependent variable was an assessment of mood at both testing sessions.

Materials

Consent form and demographic questionnaire. The consent form which was used (see Appendix B) described the intent of the study and was signed by all subjects prior to their participation in the study. The demographic questionnaire at the first testing requested information about the subjects' age, gender and the last four digits of their social security number. The demographic information requested at the second testing included education level and the last four digits of their social security number (see Appendix C).

Mood measures. Mood was assessed at the initial testing using a seven-point Likert type scale ranging from very happy (1) to very sad (7) (see Appendix B, Item 4). Mood was assessed during the second testing session using a modified version of the Wessman and Ricks (1966) Elation-Depression scale (see Appendix D) which contained 11

statements varying in affect intensity from very sad (1) to very happy (11).

Parental Bonding Instrument. The Parental Bonding Instrument (PBI; see Appendix A) is a 25-item questionnaire listing various attitudes and behaviors of mothers. It was modified to include stepmothers for this study. Each item is a statement of maternal behavior or activity and is answered by selecting one of the following responses: "very like, moderately like, moderately unlike, or very unlike" the subject's mother or stepmother. Twelve of the items (1, 2, 4, 5, 6, 11, 12, 14, 16, 17, 18 and 24) comprise the "care" scale and were used in the analysis of this study. The other 13 items comprise the overprotection scale and, although subjects completed those items, they were not used in the analysis of the results. The scales may be used separately (Parker, Tupling & Brown, 1979). The instrument uses the respondents' subjective report to assess their judgment of the maternal parenting they experienced during their first 16 years. The test-retest reliability for the maternal care scale, using Pearson correlation coefficient, is .79 (Arrindell & Gerlsma, 1990).

Memory Characteristics Questionnaire. Subjects completed a modified version of the Memory Characteristics Questionnaire (MCQ; Johnson, Foley, Suengas & Raye, 1988; see Appendix C). The questionnaire requires subjects to first remember a personal event of a specific nature and

then to rate their recollection by completing a seven-point Likert type scale for 38 items. Each of the 38 items was rated on one of 19 dichotomous choice scales, such as: dim--sharp, black/white---color, little/none---lot, vague---vivid. The age of each subject was delineated at the time of the original event on the final item of the MCQ.

Procedure

Subjects were tested twice, and only data from those subjects participating at both testing sessions were used. At the initial testing, all participants read and signed the informed consent form and completed the demographic questionnaire. Each subject then completed the PBI for his or her mother or stepmother as they recalled her from their first 16 years. The exact instructions given at the initial testing are shown in Appendix E. The same procedure was followed for all three recollection conditions at the initial testing.

The second testing session occurred two days later. All subjects first completed the demographic questionnaire. Those in the two experimental groups were asked to focus their attention on a maternal (mother or stepmother) parenting incident from their childhood. Subjects in Experimental Group 1 were told to recall a time when his or her mother or stepmother had unexpectedly praised the subject. Subjects in Experimental Group 2 were told to recall a time when his or her mother or stepmother

disciplined the subject too harshly. The event recalled by both groups was to have occurred during the subject's first 16 years. The group not required to recollect a memory was simply asked to complete the elation-depression scale and the PBI. The exact instructions given at the second testing session are shown in Appendix F.

To ensure that the subjects focused attention on the recollection task, they completed the MCQ. Subjects were given five minutes to complete the questionnaire. Following the MCQ's completion, they completed a modified version of the Wessman-Ricks (1966) Elation-Depression scale. Finally, each subject again completed the PBI for his or her mother or stepmother. The order of the 25 items on the PBI was randomly rearranged for the second testing.

CHAPTER 3

RESULTS

Using Parker, Tupling and Brown's (1979) scoring procedure for the care scale of the Parental Bonding Instrument (PBI), the range of scores is 0-36 for each subject with higher scores indicating greater remembered maternal care. The Likert-type mood assessment scale used at the pre-treatment session was scored with "1" representing "very happy" and "7" representing "very sad." The post-treatment assessment was the score from the Wessman-Ricks Elation-Depression Scale, with "1" representing the saddest mood and "11" representing the happiest mood.

Two separate 2 x 3 analyses of variance (sex: men or women) x (recollection: favorable, unfavorable or none) were performed on the PBI scores, one from each testing session. Two other 2 x 3 analyses of variance were performed, one each for the pre- and post-treatment assessment ratings of mood. Any post-hoc analysis would have been conducted using the Tukey procedure set at the .05 alpha level.

For the pre-treatment administration of the PBI, no statistically significant main effects or interaction were obtained (see Table 1). The means and standard deviations appear in Table 2. For the pre-treatment mood assessment, no statistically significant main effects or interaction

were obtained (see Table 3). The means and standard deviations appear in Table 4.

For the post-treatment administration of the PBI, no statistically significant main effects or interaction were obtained (see Table 5). The means and standard deviations appear in Table 6. For the post-treatment mood assessment, no statistically significant main effects or interaction were obtained (see Table 7). The means and standard deviations appear in Table 8.

From comparing Tables 2 and 6, the PBI care scores did not change in the expected direction. In scoring the PBI care scale a possible ceiling effect was noted in that 18 subjects scored their mother at the maximum possible score at both the pre- and post-treatment. These 18 subjects were removed from the analysis and a one-way analysis of variance by type of recollection was run on the remaining 115 subjects to determine if the treatment produced a significant effect on subjects whose maternal care ratings were not at the maximum rating possible on the scale. Table 9 shows the results of the one-way analysis of variance of the subjects at pre-treatment and Table 10 shows the results at post-treatment. As can be seen from Tables 9 and 10, no statistically significant effect was obtained at either pre- or post-treatment.

Table 1

Analysis of Variance for Pre-treatment Parental Bonding
Instrument Care Score by Sex and Recollection

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Sex	23.64	1	23.64	.68	.413
Recollection	81.94	2	40.97	1.17	.314
Sex by Recollection	52.85	2	26.43	.75	.472
Error	4,447.56	127	35.02		
Total	4,605.99	132	126.06		

Table 2

Means and Standard Deviations for Pre-treatment Parental Bonding Instrument Care Scale by Sex and Recollection

<u>Recollection</u>	<u>Sex</u>		
	Men	Women	Total
Favorable	<u>M</u> = 29.33	<u>M</u> = 31.30	<u>M</u> = 30.69
	<u>SD</u> = 5.09	<u>SD</u> = 4.51	<u>SD</u> = 4.81
Unfavorable	<u>M</u> = 30.85	<u>M</u> = 29.82	<u>M</u> = 30.11
	<u>SD</u> = 4.30	<u>SD</u> = 4.86	<u>SD</u> = 4.59
None	<u>M</u> = 27.33	<u>M</u> = 29.33	<u>M</u> = 28.96
	<u>SD</u> = 7.60	<u>SD</u> = 7.60	<u>SD</u> = 7.60
Total	<u>M</u> = 29.38	<u>M</u> = 30.03	---
	<u>SD</u> = 5.84	<u>SD</u> = 5.82	---

Table 3

Analysis of Variance for Pre-treatment Mood Assessment Score
by Sex and Recollection

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Sex	.57	1	.57	.45	.501
Recollection	1.76	2	.88	.70	.497
Sex by Recollection	3.52	2	1.76	1.41	.249
Error	158.86	127	1.25		
Total	164.71	132	4.46		

Table 4

Means and Standard Deviations for Pre-treatment Mood
Assessment Scores by Sex and Recollection

<u>Recollection</u>	<u>Sex</u>		
	Men	Women	Total
Favorable	<u>M</u> = 2.67	<u>M</u> = 2.78	<u>M</u> = 2.75
	<u>SD</u> = .99	<u>SD</u> = 1.22	<u>SD</u> = 1.11
Unfavorable	<u>M</u> = 3.15	<u>M</u> = 2.49	<u>M</u> = 2.68
	<u>SD</u> = 1.14	<u>SD</u> = .94	<u>SD</u> = 1.04
None	<u>M</u> = 3.00	<u>M</u> = 3.10	<u>M</u> = 3.08
	<u>SD</u> = 1.00	<u>SD</u> = 1.23	<u>SD</u> = 1.12
Total	<u>M</u> = 2.94	<u>M</u> = 2.81	---
	<u>SD</u> = 1.05	<u>SD</u> = 1.14	---

Table 5

Analysis of Variance for Post-treatment Parental Bonding
Instrument Care Score by Sex and Recollection

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Sex	22.32	1	22.32	.55	.461
Recollection	33.75	2	16.88	.41	.662
Sex by Recollection	10.63	2	5.32	.13	.878
Error	5,187.31	127	40.84		
Total	5,254.01	132	85.36		

Table 6

Means and Standard Deviations for Post-treatment Parental Bonding Instrument Care Scale by Sex and Recollection

<u>Recollection</u>	<u>Sex</u>		
	Men	Women	Total
Favorable	<u>M</u> = 29.50 <u>SD</u> = 5.50	<u>M</u> = 30.30 <u>SD</u> = 5.38	<u>M</u> = 30.05 <u>SD</u> = 5.44
Unfavorable	<u>M</u> = 30.08 <u>SD</u> = 4.41	<u>M</u> = 30.30 <u>SD</u> = 5.54	<u>M</u> = 30.24 <u>SD</u> = 5.01
None	<u>M</u> = 27.89 <u>SD</u> = 8.28	<u>M</u> = 29.72 <u>SD</u> = 7.84	<u>M</u> = 29.38 <u>SD</u> = 8.06
Total	<u>M</u> = 29.30 <u>SD</u> = 6.28	<u>M</u> = 30.07 <u>SD</u> = 6.35	--- ---

Table 7

Analysis of Variance for Post-treatment Mood Assessment
Score by Sex and Recollection

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Sex	.43	1	.43	.18	.672
Recollection	1.66	2	.83	.34	.710
Sex by Recollection	5.24	2	2.62	1.09	.341
Error	306.10	127	2.41		
Total	313.43	132	6.29		

Table 8

Means and Standard Deviations for Post-treatment Mood
Assessment Score by Sex and Recollection

<u>Recollection</u>	<u>Sex</u>		
	Men	Women	Total
Favorable	<u>M</u> = 7.58	<u>M</u> = 7.22	<u>M</u> = 7.33
	<u>SD</u> = 1.00	<u>SD</u> = 1.60	<u>SD</u> = 1.33
Unfavorable	<u>M</u> = 6.77	<u>M</u> = 7.49	<u>M</u> = 7.29
	<u>SD</u> = 1.36	<u>SD</u> = 1.94	<u>SD</u> = 1.67
None	<u>M</u> = 7.11	<u>M</u> = 7.15	<u>M</u> = 7.14
	<u>SD</u> = 1.54	<u>SD</u> = 1.33	<u>SD</u> = 1.44
Total	<u>M</u> = 7.15	<u>M</u> = 7.28	---
	<u>SD</u> = 1.32	<u>SD</u> = 1.64	---

Table 9

One-Way Analysis of Variance for Pre-treatment Parental
Bonding Instrument Care Scores by Recollection

<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between Groups	48.34	2	24.17	.721	.489
Error	3,755.61	112	33.53		
Total	3,803.95	114			

Table 10

One-Way Analysis of Variance for Post-treatment Parental
Bonding Instrument Care Scores by Recollection

<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Between Groups	7.52	2	3.76	.095	.910
Error	4,447.61	112	39.71		
Total	4,455.13	114			

CHAPTER 4

DISCUSSION

Evaluation of parental behavior is a topic which is often explored in therapy. The Parental Bonding Instrument developed by Parker, Tupling and Brown (1979) uses the individual's subjective perceptions to assess parents. Because unfavorable parental incidents, such as potential abuse or maltreatment, need to be discussed in therapy (Bruhn, 1992), the question arises whether gathering information of a negative nature induces mood which could skew an individual's recall and evaluation of parental behavior.

This study hypothesized having subjects reflect on either a favorable or unfavorable childhood maternal parenting incident would cause a change in their evaluations of maternal parenting. No such effect was found as there were no significant differences between the differing types of recollections at post-treatment.

It was also hypothesized women would be more likely than men to show significant changes in their evaluation of maternal parenting. Once again, as there were no significant differences between groups, this effect was not found.

The final hypothesis was men's and women's mood would be equally affected by reflecting on a favorable or

unfavorable maternal parenting incident from childhood. This hypothesis is supported to the extent that no significant differences in mood were found between groups at either pre- or post-treatment.

It was hypothesized the Unfavorable recollection group would produce lower PBI care scores and a sadder mood. Unfavorable recollection, men's mean care score was lowered by less than one point, and women's mean care score was raised by less than one point.

It was also hypothesized the Favorable recollection group would increase their ratings on the PBI care scale and produce a happier mood. Once again no consistent change in the PBI care scores was found. Favorable recollection, women's post-treatment mean score dropped by one point, whereas the men's mean score changed only slightly in the expected direction.

Given the failure to obtain any significant results, the question arises as to whether or not the task of recollecting a maternal parenting incident from childhood and completing the Memory Characteristics Questionnaire about a memory is a sufficient task to use as the treatment. It may not be sufficiently long (only five minutes) or involved enough to truly measure whether or not information gathering techniques could induce either mood change or a change in evaluation of parental behavior. The Velten mood-induction technique, for instance, requires 20 minutes of

administration time (Velten, 1968). At least for this particular population, undergraduate students at a small, mid-western university, evaluation of maternal parenting and mood both remained stable despite exposure to the treatment conditions.

To answer whether the act of information gathering about favorable or unfavorable parenting incidents has an effect on the recollection of autobiographical memories about parents, additional studies should be conducted with a clinical population and a more valid mood induction technique. The clinical population could differ from the subjects in this study by virtue of having harsher instances of maternal parenting to recall, and by having a more pessimistic overall outlook on matters, although this data was not collected from the subjects in this study and direct comparison cannot be made. The possible diversity of backgrounds is illustrated by the fact that one student in this study was unable to participate at the second testing as she simply could not recall any time during her childhood when she had been "disciplined too harshly." Further testing on subjects with a history of abuse, whether or not they had become part of the larger clinical population, would be informative.

Just as the Lewinsohn and Rosenbaum (1987) study indicated that currently depressed individuals were more likely than either non-depressed or remitted depressives to

recall negative parental behavior, it is important to know whether individuals in the clinical setting can easily be induced to a negative mood by the use of information gathering techniques which could affect their evaluation of parental behavior. If that were found to be true, a susceptibility to mood induction and/or unstable recollection of parental behavior would be shown to exist in the clinical population. Although no such susceptibility was found in this study, insufficient data exists to generalize these findings to the clinical population.

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APPENDIX A

This questionnaire lists various attitudes and behaviors of parents. Please place a checkmark in the appropriate column for the characteristics listed below, as they apply to how you remember your mother or your stepmother from your first 16 years.

	Very Like Her	Moderately Like Her	Moderately Unlike Her	Very Unlike Her
1. Spoke to me with a warm & friendly voice _____	_____	_____	_____	_____
2. Did not help me as much as I needed. _____	_____	_____	_____	_____
3. Let me do those things I liked doing _____	_____	_____	_____	_____
4. Seemed emotionally cold to me _____	_____	_____	_____	_____
5. Appeared to understand my problems and worries _____	_____	_____	_____	_____
6. Was affectionate to me _____	_____	_____	_____	_____
7. Liked me to make my own decisions _____	_____	_____	_____	_____
8. Did not want me to grow up _____	_____	_____	_____	_____
9. Tried to control everything I did _____	_____	_____	_____	_____
10. Invaded my privacy _____	_____	_____	_____	_____

	Very Like Her	Moderately Like Her	Moderately Unlike Her	Very Unlike Her
11. Enjoyed talking things over with me	_____	_____	_____	_____
12. Frequently smiled at me	_____	_____	_____	_____
13. Tended to baby me	_____	_____	_____	_____
14. Did not seem to understand what I needed or wanted	_____	_____	_____	_____
15. Let me decide things for myself	_____	_____	_____	_____
16. Made me feel I wasn't wanted	_____	_____	_____	_____
17. Could make me feel better when I was upset	_____	_____	_____	_____
18. Did not talk with me very much	_____	_____	_____	_____
19. Tried to make me dependent on her	_____	_____	_____	_____
20. Felt I could not look after myself unless she was around	_____	_____	_____	_____
21. Gave me as much freedom as I wanted	_____	_____	_____	_____
22. Let me go out as often as I wanted	_____	_____	_____	_____

	Very Like Her	Moderately Like Her	Moderately Unlike Her	Very Unlike Her
23. Was overprotective of me	_____	_____	_____	_____
24. Did not praise me	_____	_____	_____	_____
25. Let me dress in any way I pleased	_____	_____	_____	_____

I answered these questions about my: (choose one)
_____mother
_____stepmother

APPENDIX B

Consent Form and Demographic Questionnaire

Please read the following statement and if you are in agreement with all of the criteria, sign your name at the bottom of the paragraph where indicated.

I, _____, agree to participate in a study to be conducted by Cindy Lexow at Emporia State University. The purpose of this study is to assess recollection of maternal parenting behavior. I understand that my data are confidential and any use of them will protect my anonymity. I realize that I may withdraw from the study at any time.

Having fully read and understood the above statement, I hereby consent and agree to participate in this experiment.

Participant's signature

Complete the following:

1. Your age: _____
2. Your gender: _____ female; _____ male
3. Last four digits of your social security number: _____
4. Put an "x" at the appropriate point on the scale that corresponds to how you currently feel:
 very happy _____: _____: _____: _____: _____: _____: _____ very sad

APPENDIX C

Complete the following:

1. Your grade level: _____ Freshman; _____ Sophomore; _____ Junior; _____ Senior; _____ Graduate student

2. Last four digits of your social security number: _____

3. Put an "x" at the appropriate point on the scale that corresponds

to how you currently feel:

very happy ___:___:___:___:___:___:___ very sad

* * * * *

MEMORY CHARACTERISTICS QUESTIONNAIRE

Recall a memory from your first 16 years when your mother or stepmother [For experimental group one: "disciplined you too harshly"] or [For experimental group two:"praised you unexpectedly"]. Rate the memory of that event on each of the following scales at either extreme or at any point in between, whichever you feel is most accurate.

1. My memory for this event is:

dim ___:___:___:___:___:___:___ sharp

2. My memory for this event is:

in black & white ___:___:___:___:___:___:___ entirely in color

3. My memory for this event involves visual detail:

little or none ___:___:___:___:___:___:___ a lot

4. My memory for this event involves sound:

little or none ___:___:___:___:___:___:___ a lot

5. My memory for this event involves smell:

little or none ___:___:___:___:___:___:___ a lot

18. My memory for the year when the event takes place is:
vague____:____:____:____:____:____:____clear/distinct

19. My memory for the season when the event takes place is:
vague____:____:____:____:____:____:____clear/distinct

20. My memory for the day of the week when the event takes place is:
vague____:____:____:____:____:____:____clear/distinct

21. My memory for the hour when the event takes place is:
vague____:____:____:____:____:____:____clear/distinct

22. My memory of the event seems:
short____:____:____:____:____:____:____long

23. The overall tone of the memory is:
negative____:____:____:____:____:____:____positive

24. In this event I was a:
spectator____:____:____:____:____:____:____participant

25. At the time, the event seemed like it would have serious implications:
not at all____:____:____:____:____:____:____definitely

26. Looking back, this event did have serious implications:
not at all____:____:____:____:____:____:____definitely

27. I remember how I felt at the time when the event took place:
not at all____:____:____:____:____:____:____definitely

28. My feelings at the time of the event were:
negative____:____:____:____:____:____:____positive

29. My feelings at the time of the event were:
not intense____:____:____:____:____:____:____very intense

30. As I am remembering now, my feelings are:

not intense____:____:____:____:____:____:____very intense

31. I remember what I thought at the time:

not at all____:____:____:____:____:____:____clearly

32. This memory reveals (or says) about me:

not much____:____:____:____:____:____:____a lot

33. Overall, I remember this event:

hardly at all____:____:____:____:____:____:____very well

34. I remember events relating to this memory that took place in advance of the event:

not at all____:____:____:____:____:____:____yes, clearly

35. I remember events relating to this memory that took place after the event:

not at all____:____:____:____:____:____:____yes, clearly

36. Do you have any doubts about the accuracy of your memory for this event?

a great deal
of doubt____:____:____:____:____:____:____no doubt
whatsoever

37. Since it happened, I have thought about this event:

not at all____:____:____:____:____:____:____many times

38. Since it happened, I have talked about this event:

not at all____:____:____:____:____:____:____many times

Indicate your age, in years, at the time this event occurred:_____

APPENDIX D

WESSMAN-RICKS ELATION-DEPRESSION SCALE

Please read all the following statements, then circle the number that corresponds to how you feel now.

1. Utter sadness and gloom. Completely down. All is black and leaden.
2. Tremendously sad. Feeling terrible, miserable, "just awful."
3. Sad and feeling very low. Definitely "blue".
4. Spirits low and somewhat "blue".
5. Feeling a bit low. Just so-so.
6. Feeling neutral.
7. Feeling pretty good, "O. K."
8. Feeling very good and cheerful.
9. Happy and in high spirits.
10. Very happy and in very high spirits. Tremendous delight and buoyancy.
11. Complete happiness. Rapturous joy and soaring ecstasy.

APPENDIX E

The following instructions will be given to all subjects at the initial testing:

You are being asked to participate in a study assessing your recollection of maternal parenting behavior.

Completing the information requested in this study will take approximately five minutes. A second testing will occur later this week which will take about ten minutes of your time. If you are willing to participate, please sign the voluntary informed consent form which will be passed out to you. If you do not wish to participate, simply turn in the blank forms.

If you have chosen to participate, please wait until I tell you to begin. The first sheet is the consent form and requests various demographic information about you. All responses will be confidential and will be combined for analysis. No individual responses will be reported.

The next two pages are a questionnaire listing 25 statements about maternal attitudes and behaviors. Complete the questionnaire stating how each of those statements apply to your memory of your mother or your stepmother during your first 16 years.

When everyone has finished, I will collect the forms. Your participation is appreciated. Are there any questions? If not, please begin.

APPENDIX F

I. The following instructions were given to all subjects in the control group at the retesting:

"You are being asked to continue your participation in a study assessing your recollection of maternal parenting behavior. If you participated in this study at the last class session, please fill out the questionnaires I am passing out. As before, please complete the demographic information and then fill out the mood questionnaire and the 25 statements of parenting attitudes and behaviors as they apply to your recollection of your mother's or stepmother's parenting behaviors and attitudes during your first 16 years."

II. The following instructions were given to all subjects in experimental group one at the retesting:

"You are being asked to continue your participation in a study assessing your recollection of maternal parenting behavior. Please do not turn these over until you are told to do so. If you participated in this study at the last class session, please recall a memory from your first 16 years of a time when your mother or stepmother disciplined you too harshly. Once you have recalled a memory of this type, please fill out the questionnaire which asks you to rate various details of your recollection of the event. You will not have to divulge any of the content of the memory.

Please stop when you come to a blank sheet which follows question number 38. Do not continue past that point until you are instructed to do so. You may begin. (After five minutes have elapsed, instructions continue.) If you have not yet reached the blank sheet, please turn to it now. Rate your current mood on the first sheet which follows the blank page. Then, rate your recollection of your mother or stepmother, as you remember her from your first 16 years, on the 25 statements which are contained on the last two pages."

III. The following instructions were given to all subjects in experimental group two at the retesting:

"You are being asked to continue your participation in a study assessing your recollection of maternal parenting behavior. Please do not turn these over until you are told to do so. If you participated in this study at the last class session, please recall a memory from your first 16 years of a time when your mother or stepmother unexpectedly praised you. Once you have recalled a memory of this type, please fill out the questionnaire which asks you to rate various details of your recollection of the event. You will not have to divulge any of the content of the memory. Please stop when you come to a blank sheet which follows question number 38. Do not continue past that point until you are instructed to do so. You may begin. (After five minutes have elapsed, instructions continue.) If you have

not yet reached the blank sheet, please turn to it now.

Rate your current mood on the first sheet which follows the blank page. Then, rate your recollection of your mother or stepmother, as you remember her from your first 16 years, on the 25 statements which are contained on the last two pages."

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