# STABILITY OF EARLY RECOLLECTIONS AND THEMATIC APPERCEPTION STORIES<sup>1</sup>

### ELEANOR B. HEDVIG

Community Child Guidance Center, El Monte, California

Previous research on early recollections (ERs) permits these conclusions: (a) ERs are not innocuous memory fragments, but are significantly related to adult personality characteristics (4, 6, 8). (b) They may serve as a projective test (7, 10). (c) When used in this way, they differentiate certain clinical groups (3, 5).

The present investigation attempts to discover whether changes take place in ERs as a result of experimentally manipulated experiences. Specifically, the study was designed primarily to test the stability of ERs following the manipulation of two variables, experiences of success-failure and of hostility-friendliness, and to compare the results with those obtained from Thematic Apperception Test (TAT) stories collected under the same conditions. While fantasy productions such as TAT stories will reflect recent emotional stimuli, such as success or failure (9) and hostility (2), it was predicted that ERs will show more stability, since they refer to what the individual considers a factual experience. The assumption that ERs will remain stable under changes of experimental conditions does not preclude the observation by Adler and by Dreikurs that ERs will change when a person changes his entire outlook on life, as, e.g., in successful psychotherapy (1, p. 257).

The hypotheses tested were: (a) Experiences of success and failure will not significantly influence ERs, although they will significantly influence TAT stories. (b) Experiences of hostility and friendliness will not significantly influence ERs, although they will significantly influence TAT stories.

Accordingly two experiments were conducted and the results analyzed for thematic content of the ERs and TAT stories.

### Метнор

Subjects. A total of 360 Ss, 180 males and 180 females, were tested in the course of the study. They were undergraduate students in introductory psychology classes.

<sup>&</sup>lt;sup>1</sup>Based on the author's Ph.D. dissertation completed at Northwestern University in 1960 under the direction of Dr. Lee Sechrest.

Materials. The experimental materials included two lists of 40 five-letter anagrams. The anagrams used on both lists were the same, but the difficulty of each list was determined by manipulating the order of letters. Ss tested under the success condition received an easier list of words, while those tested under the failure condition were given more difficult anagrams to solve. A typed list of ana-

gram solutions was prepared on a  $3\frac{1}{4}$ " x 4" slide and presented to Ss on a screen. Six TAT cards, Numbers 1, 2, 3BM, 4, 6BM, and 14 were converted to  $3\frac{1}{4}$ " x 4" slides and shown on a screen to one-half the Ss in each experiment. The cards were selected to depict family scenes including children and adults. They were considered varied enough to elicit stories which ranged in mood from very pleasant to

very unpleasant.

Procedure. Ss were assembled in 41 groups that varied from 5 to 17 in size. They met for periods of 30 to 75 minutes. The groups were assigned to a random array of 12 experimental conditions. These 12 conditions were: ERs or TAT stories were written (a) after experience of success, failure or neutral experience (6 conditions); or (b) after experience of hostility, friendliness, or neutral experience conditions (6). There were in the end 30 Ss, 15 males and 15 females, in each of the 12 conditions. A fuller description of the conditions follows.

(a) Ss tested under the success condition were given the easy 15-minute anagram task first. Included in the instructions was a statement that the anagram test was taken from a group of tests used in measuring the general intelligence and leadership qualities of undergraduate college students. After completion of the test, Ss were asked to compute their own scores. They were then told that successful students were able to complete 20 or more anagrams. Any Ss who failed under

these conditions were later eliminated from the group.

Following collection of their papers, one-half the Ss were given 20 minutes in which to write six of their earliest memories. They were asked to report the age and emotions connected with each experience and to rate each story on a 5-point

scale as very pleasant, pleasant, neutral, unpleasant, or very unpleasant.

The other half of the Ss were told to write stories about the six TAT cards. They were also asked to rate each story on a 5-point scale from very pleasant to

very unpleasant.

Ss tested under the failure condition were given a difficult anagram list and were told that successful students had completed 35 or more anagrams accurately. All but a few Ss failed under this condition; those who passed were eliminated from the group. One-half of the Ss wrote six ERs while the other half wrote six TAT stories.

Two control groups wrote ERs and TAT stories, respectively, after complet-

ing an anagram task which was introduced with neutral instructions.

(b) In the second experiment, the hostility-friendliness dimension was manipulated by the behavior of male Es. Ss in the hostility condition were met by a very hostile, arrogant E. He prefaced the reading of instructions by directing the group to pay close attention to instructions, remarking that other psychology students had not followed directions carefully and had ruined experiments. Similar remarks included the warning to behave like adults and not like adolescents. Standardized instructions for writing six ERs or six TAT stories were

Ss tested under the friendliness condition encountered a very pleasant, friendly male E. His remarks included the following statements: "Good afternoon. It is always a pleasure to work with psychology students. They are always able to follow instructions very well and thus help to insure the success of the experiments in which they participate."

Groups tested under control conditions were given neutral instructions by a

Thematic content analysis of both ERs and TAT stories was performed by the investigator. The size of the task made it impossible to get assistance. There were 2160 memories or stories to be analyzed, 180 for each of the 12 conditions. This large number, on the other hand, made it unlikely that the investigator would be influenced by the hypothesized outcome of the study.

Nine major themes were selected as relevant to the first experiment, and five themes were chosen for the second experiment. The presence or absence of these themes was tabulated for all Ss. Three criteria were used in scoring a theme as present: (a) it appeared as the central topic in the memory or story; (b) it was directly related to the central character or characters; (c) it was stated directly rather than implied by the S. The themes are listed below.

## RESULTS

Affective tone. Ss' own pleasantness ratings were used because Pearson product-moment correlations between affective ratings of ERs by Ss and three judges were .77 to .92. Analyses of variance of pleasantness ratings assigned by Ss to ERs and TAT stories revealed no significant differences as a result of the major experimental conditions, success, failure, hostility, and friendliness. Ss in all conditions rated TAT stories higher in unpleasantness than early recollections. This was considered, in part, a reflection of the particular stimuli used for the TAT responses.

Because of this failure, further analysis was undertaken. Two random samples of 60 Ss each were chosen from ER and TAT groups. Scores of odd and even ERs were added separately for each S. A correlation of the odd-even scores of the ER group resulted in a Pearson r of .017. The same procedure followed for the TAT group, yielded a Pearson r of .146. There was then no internal consistency among the six ERs or TAT stories each S wrote. Indeed, there were likely to be both pleasant and unpleasant themes, regardless of the previous experimental condition.

Thematic content. For the success-failure experiment, the following major themes were selected for the content analysis, to include positive and negative reactions: need-achievement, sibling rivalry, accident or illness, conflict with parents, parental hostility, incurring or expressing hostility, positive sibling relationships, positive parental relationships, and positive relationships with others.

Results indicated that only the need-achievement theme significantly differentiated the various experimental groups. Two median tests were computed for the frequency of this theme, one for the TAT groups, the other for the ER groups. As Table 1 shows, participation in the failure TAT condition resulted in 11 Ss having a greater number of need-achievement themes than the common median, compared to 2 and 5 Ss for the other conditions. The obtained  $\chi^2$  of 8.76 was significant at the .02 level of confidence. However, the experimental conditions did not differentiate ER groups, the  $\chi^2$  of .938 not being

TABLE I.	MEDIAN TESTS FOR NEED-ACHIEVEMENT THEMES IN (a) TAT GROUP	s
1112	AND (b) ER GROUPS	

	Experimental condition				
	success	neutral	failure	Total	
	(a) TAT grou	$ps^1$			
No. of Ss with need-achieve- ment themes—		•			
more than common median of 1	2	5	11	18	
fewer than common median	28	25	19	72	
Total	30	30	30	90	
	(b) ER group	$s^2$			
No. of Ss with need-achieve- ment themes—					
more than common median of o	6	8	5	19	
fewer than common median	24	22	25	71	
Total	30	30	30	90	

 $<sup>^{1}\</sup>chi^{2} = 8.76$ ; df = 2; p < .02.  $^{2}\chi^{2} = 0.94$ ; df = 2; .50 < p < .70.

significant. These results clearly indicate that the experience of failure significantly increased the production of need-achievement themes in TAT stories, but not in ERs.

For the *friendliness-hostility* experiment, the themes selected for their ability to reflect reactions to the experimental conditions were: aggression, hostility, death, conflict, and unhappiness. Combining aggression and hostility themes for each group revealed significant differences in the TAT groups, as seen in Table 2. The obtained  $\chi^2$  of 6.57 was significant at less than the .05 level of confidence. Among the ER groups no significant differences were found ( $\chi^2 = 0$ ).

Thematic analysis also showed that TAT groups differed significantly in their inclusion of themes of unhappiness. A median test indicated that such themes were mentioned most frequently by Ss tested under hostile conditions, next in frequency by those seen under neutral conditions, and least often by Ss tested under friendly conditions ( $\chi^2 = 7.27$ ; df = 2; .02 < p < .05). However, the theme of unhappiness appeared too infrequently in ERs to warrant a statistical test.

The results of the content analysis thus provide at least partial confirmation of the hypotheses that experiences of (a) success-failure,

Table 2. Median Tests for Hostility and Agression Themes in (a) TAT Groups and (b) ER Groups

	Experimental condition				
	friendly	neutral	hostile	Total	
	(a) TAT groups <sup>1</sup>				
No. of Ss with hostility and agression themes—	( ) 5 1				
more than common median of I	IO	II	19	40	
fewer than common median	20	19	ΙΙ	50	
Total	30	30	30	90	
	(b) ER groups	2			
No. of Ss with hostility and agression themes—					
more than common median of 1	8	8	8	24	
fewer than common median	22	22	22	66	
Total	30	30	30	90	

 $^{1}\chi^{2} = 6.57$ ; df = 2; .02  $^{2}\chi^{2} = 0$ .

and (b) hostility-friendliness do not significantly influence ERs, but do significantly influence TAT stories.

Emotional terms. As an additional source of data, Ss were asked to report the emotions connected with each memory. The six most frequently used emotional terms (grouping synonyms), were fear, happiness, excitement, anger, unhappiness, and pain. Median tests were then performed to determine whether the frequency of emotional terms was influenced by the experimental conditions. Analysis for the term excitement indicated that "successful" Ss used this term with significantly greater frequency than "unsuccessful" and control Ss  $(\chi^2 = 6.91; df = 2; .02 . However, in the second experiment, this term appeared with significantly greater frequency among Ss in both friendly and hostile conditions as compared with control Ss <math>(\chi^2 = 7.19; df = 2; .02 . Thus it appeared that Ss in experimental conditions felt more emotional arousal than Ss in neutral conditions.$ 

# SUMMARY AND CONCLUSIONS

A total of 360 college students wrote down either their early recollections (ERs) or Thematic Apperception Test (TAT) stories

under various experimental conditions: (a) after experience of success, failure, or neutral experience (6 conditions); or (b) after experience of hostility, friendliness, or neutral experience (6 conditions). There were 30 Ss, 15 males and 15 females, in each of the 12 conditions.

Thematic content analysis of both ERs and TAT stories supports the initial hypotheses that experimental experiences of (a) successfailure, and (b) hostility-friendliness immediately preceding the writing down of ERs or TAT stories, do not significantly influence the former, but do significantly influence the latter.

ERs were thus found to have greater stability than the TAT. This stability of ERs provides additional support for their clinical validity as a projective technique in revealing permanent personality characteristics.

## REFERENCES

- I. Dreikurs, R. Minor psychotherapy: a practical psychology for physicians. Trans. Acad. psychosom. Med., 1958, 5, 253-260.
- 2. Feshbach, S. The drive-reducing function of fantasy behavior. In J. W. Atkinson (Ed.), *Motives in fantasy, action and society*. Princeton, N. J.: Van Nostrand, 1958. Pp. 160-175.
- 3. Friedman, J., & Schiffman, H. Early recollections of schizophrenic and depressed patients. J. Indiv. Psychol., 1962, 18, 57-61.
- 4. Friedmann, Alice. Early childhood memories of mental patients. J. Child Psychiat., 1952, 2, 266-269.
- 5. Jackson, Marilyn, & Sechrest, L. Early recollections in four neurotic diagnostic categories. J. Indiv. Psychol., 1962, 18, 52-56.
- 6. Kadis, Asya L., Greene, Janet S., & Freedman, N. Early childhood recollections, an integrative technique of personality test data. *Amer. J. Indiv. Psychol.*, 1952, 10, 31-42.
- 7. LIEBERMAN, MARTHA G. Childhood memories as a projective technique. J. proj. Tech., 1957, 21, 32-36.
- 8. McCarter, R. E., Tomeins, S. S., & Schiffman, H. M. Early recollections as predictors of Tomkins-Horn Picture Arrangement Test performance. J. Indiv. Psychol., 1961, 17, 177-180.
- 9. McClelland, D. C., Clark, R. A., Roby, T. B., & Atkinson, J. W. The effect of the need for achievement on thematic apperception. In J. W. Atkinson (Ed.), Motives in fantasy, action and society. Princeton, N. J.: Van Nostrand, 1958. Pp. 64-82.
- 10. Mosak, H. H. Early recollections as a projective technique. J. proj. Tech., 1958, 22, 302-311.