

EARLY RECOLLECTIONS AS PREDICTORS OF TOMKINS-HORN PICTURE ARRANGEMENT TEST PERFORMANCE

ROBERT E. McCARTER
Educational Testing Service

HAROLD M. SCHIFFMAN
Philadelphia Psychiatric Hospital

SILVAN S. TOMKINS
Princeton University

Adler was the first to use a patient's earliest memory as a standard diagnostic tool (1, pp. 71-92). He argued that it often reveals in great clarity the style of life, the most salient permanent features of an individual. Systematically, this diagnostic tool would seem to belong among the projective techniques. The method of its use as such has been presented in some detail by Mosak (5) who also gives a fairly complete review of the literature with 56 references up to 1956. Mosak named the technique "early recollections" (ER), a usage which we shall follow here.

While considerable clinical evidence regarding the validity of ER has accumulated, only few experimental studies to this effect have been conducted. Ansbacher (2) found significant relationships between certain ER characteristics and scores on the Maslow Security-Insecurity Scale. Pattie and Cornett (6) demonstrated that children living in slums or mountain regions have fewer pleasant ERs than children reared in modern urban communities. Moreover, "memory pessimism" and emotional maladjustment are significantly related in the case of the former but not of the latter. Karon (4) found that certain kinds of ER are related to Gough scores and the Allport-Vernon Study of Values. He also showed that idiographic predictions based on ER are more valid than nomothetic predictions based on it.

Kadis, Green and Freedman (3) were probably the first to use ER in conjunction with another projective technique, the Thematic Apperception Test. They obtained teachers' descriptions of 20 private high school girls with regard to (a) "pursuance of tasks" and (b) "relationship to teachers." Three judges then matched ten TAT stories from each girl for each of the two characteristics as described by the girl's teachers. When ERs were added to the TAT protocols, correct matchings for both characteristics increased. Interestingly, with reference to the results from the present study, matchings of all 3 judges improved significantly for "pursuance of tasks," whereas matchings for "relationship to teachers" improved significantly in the case of one judge only.

To validate the ER technique further, the present study uses certain ER characteristics to predict performance on a variety of scales of the Tomkins-Horn Picture Arrangement Test (PAT) (7). The general hypothesis was that this could be done with better-than-chance accuracy. The ER characteristics and the PAT performances for the prediction of which they were used are shown in the first two columns of Table 1, grouped according to the four content areas of the PAT.

METHOD

The PAT. The PAT consists of 25 plates of three simple, cartoon-like drawings, presented in a round-robin arrangement at angles of 120 degrees to minimize position set. The subject is instructed to indicate the order for the three drawings "which makes the best sense." Scoring is based on those responses that are rare (frequency less than 5%) among persons of the *S*'s age, IQ, and educational level, the rationale being that *S*'s uncommon responses will be diagnostic for him. Construction of the PAT was inspired by the Thematic Apperception Test and by the authors' observation that personality factors seemed to affect performance on the Picture Arrangement subtest of the Wechsler scales.

Subjects. The *Ss* were 75 male students enrolled in 3 laboratory sections of introductory psychology at Princeton University.

Procedure. Each section of students was tested separately. At the beginning of the testing, *Ss* were instructed to write their ERs on a sheet of paper. Then they took the PAT. Both records were identified by numbers to permit matching the two; but *Ss*' anonymity was safeguarded.

The PAT protocols were machine scored. Meanwhile the principal investigator studied the ERs and estimated from the ER alone how each *S* had performed on each set of PAT keys. Then the estimated, predicted PAT performances were compared with the actual, obtained PAT performances.

RESULTS AND DISCUSSION

Table 1 shows the χ^2 values of the PAT scores predicted from ER characteristics, and the correlations between predicted and obtained PAT scores. Seven of the 19 predictions were significantly better than chance, and in 8 of the remaining 12 predictions the results were in the expected direction. The other 4 predictions did not deviate at all from pure chance.

The seven significantly correct predictions are in descending order of certainty: strong superego in work orientation, inertia in work orientation, sociophilia, high-activity level of expression, phantasy level of expression, superego in social orientation, and low general work orientation. These variables appear to have two factors in common: degree of activity, and social interest.

Regarding content areas as wholes, work orientation was predicted with the greatest degree of certainty, followed by levels of expression, and social orientation. These results are quite in agreement

TABLE I. CHI-SQUARE VALUES OF 19 PREDICTIONS FROM ER CHARACTERISTICS TO PAT SCORES, GROUPED ACCORDING TO 4 CONTENT AREAS; AND CORRELATIONS BETWEEN PREDICTED AND OBTAINED PAT SCORES ($N = 75$ MALE COLLEGE STUDENTS)

ER characteristics	PAT scales	χ^2	signif. P values	r
Social Orientation ^a				
S not alone	Sociophilia	6.751	.005	.471
S alone	Sociophobia	0.004		.003
S acts aggressively	Aggression	2.166		.267
Food or sickness mentioned	Dependency	0.219		.085
Affective tone change	Lability	0.000		.000
S disciplined or physically endangered	Superego	3.981	.02	.311
Optimism-Pessimism ^b				
Extreme pleasantness	Optimism	1.411		.215
Extreme unpleasantness	Pessimism	0.000		.000
Levels of Expression ^c				
No person or animal present	Phantasy	5.951	.01	.443
Experience of pain, or life danger	Strong affect	0.303		.099
Mild mental annoyance	Weak affect	1.471		.220
Pain and pleasure implied	Labile affect	1.648		.233
No feeling or event emphasized	Graded affect	0.000		.000
Perseverence against opposition	High activity	6.156	.01	.449
Sickness, S receiving kindness, or being inactive	Passivity	1.798		.244
Work Orientation ^d				
S initiates activity, stresses difficulty	High gen. work orientation	0.874		.170
S is aggressive, sick, dependent, pained	Low gen. work orientation	2.757	.05	.302
Same as preceding	Inertia	8.527	.003	.529
Socially oriented task, sensitivity to others	Strong superego	8.755	.002	.537

^aGrand $\chi^2 = 21.10$; df = 6; P = .002

^bGrand $\chi^2 = 2.94$; df = 2; P = .10

^cGrand $\chi^2 = 26.34$; df = 7; P = .0002

^dGrand $\chi^2 = 28.00$; df = 4; P = .00002

with those of Kadis *et al.* (3), described above. Optimism-pessimism could not be predicted at all from the ERs. While this finding was surprising to us, it accords with the results reported by Waldfogel (8) and by Pattie and Cornett (6). Presumably an optimism-pessimism factor is present in ERs, but the relationship between this factor and optimism and pessimism as measured by personality tests is non-monotonic.

We may conclude that, using PAT performance as the criterion, ER is a valid method of personality appraisal. It is most valid for appraising degree of activity, including work, and is also valid for appraising social interest.

SUMMARY

In a study with 75 male college students, performance on the Tomkins-Horn Picture Arrangement Test (PAT) was to a considerable degree successfully predicted from earliest recollections (ERs). The PAT content area of work orientation was most accurately predicted, followed by levels of expression, and social orientation; optimism-pessimism could not be predicted. The various PAT keys for which scores were predicted with significant accuracy seem to be largely functions of activity and social interest. This study then validates ER for the appraisal of these two functions.

REFERENCES

1. ADLER, A. *What life should mean to you* (1931). New York: Capricorn, 1958.
2. ANSBACHER, H. L. Adler's place today in the psychology of memory. *J. Pers.*, 1947, 15, 197-207.
3. 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.
4. KARON, B. P. The significance of earliest childhood memories. Unpublished bachelor's thesis, Harvard Univer., 1952.
5. MOSAK, H. H. Early recollections as a projective technique. *J. proj. Techn.*, 1958, 22, 302-311.
6. PATTIE, F. A., & CORNETT, S. Unpleasantness of early memories and mal-adjustment of children. *J. Pers.*, 1952, 20, 315-321.
7. TOMKINS, S. S., & MINER, J. B. *The Tomkins-Horn Picture Arrangement Test*. New York: Springer, 1957.
8. WALDFOGEL, S. The frequency and affective character of childhood memories. *Psychol. Monogr.*, 1948, 62 (4), 1-39.