

## FREQUENCY OF DREAM RECALL AND SOME PERSONALITY MEASURES

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This paper will review three studies in which reported frequency of dream recall (RFDR) has been correlated with the results of psychological tests, and report an experiment whose results are relevant to them.

Berrien (1933) had 75 undergraduate and 6 graduate students, taking an introductory psychology course, write down their dreams upon awakening for 14 consecutive days. At the end of this period, 69 of the subjects took both the Thurstone Personality Schedule (Thurstone & Thurstone, 1930) and the Colgate B2 Psychoneurotic Scale (Laird, 1925), while 12 subjects were able to take only the latter. None of the test scores had significant correlations with (a) the percentage of nights on which the subjects recalled dreaming, (b) the average number of dreams per night, or (c) the average number of clearly recalled dreams per night. Berrien concluded that frequent dreaming is not an indication of neuroticism or maladjustment.

Schonbar (1959) had 42 male and female graduate students, enrolled in a summer school education course, write down their dreams upon awakening for 28 consecutive days. The subjects were then divided into two extreme groups: 13 Recallers, who reported dreaming on 7 or more nights during the study, and 15 Nonrecallers, who reported dreaming only once or not at all in that time. Among other tests, the IPAT Anxiety Scale (Cattell, 1957) was taken by all the subjects. The results of concern here, in terms of point biserial correlation coefficients, are presented in the first column of Table 1. The RFDR has a high, positive correlation with scores on the anxiety measure, and a high, negative correlation with scores on the Ego Strength subscale of the IPAT.<sup>2</sup>

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<sup>2</sup>This latter correlation is given as +.59 in Schonbar's (1959) report, but as higher scores on this

The third study (Singer & Schonbar, 1961), while primarily concerned with day-dreaming, does report data pertinent to the recall of nocturnal dreams. As in Schonbar's (1959) study, 44 male and female graduate students, enrolled in a summer school education course, wrote down their dreams upon awakening for a period of one month. All subjects took the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1951). The second column of Table 1 presents the tetrachoric correlation coefficients of several MMPI scales with RFDR. Anxiety, as measured by the Welsh A scale, is positively correlated with RFDR.

The present study was designed to see whether the above relationships would obtain in a different population under somewhat different conditions. An hypothesis, formulated from the perceptual defense literature (Postman, Bruner, & McGinnies, 1948; Siegman, 1956; Stein, 1953; Truax, 1957), was also tested, viz., that "Sensitizers" would report recalling dreaming more frequently than "Repressors." These terms are used in the sense defined by Altrocchi (1961):

Repressors are defined as those who tend to use avoidance, denial, and repression of potential threat and conflict as a primary mode of adaptation; sensitizers are defined as those who tend to be alerted to potential threat and conflict, to respond more readily with manifest anxiety, and to use intellectual and obsessive defenses (p. 528).

The operational technique for defining Sensitizers and Repressors in this study is described later, and is similar to that used by Chance (1957), Van de Castle (1958), and Wallach (in press).

### METHOD

The subjects of this study were undergraduates at the University of North Carolina, who took the introductory psychology course in the fall of 1960.

IPAT subscale represent less ego strength, -.59 has been used in Table 1 for increased clarity.

TABLE 1  
CORRELATIONS OF REPORTED FREQUENCY OF DREAM  
RECALL WITH VARIOUS PERSONALITY MEASURES

Measure	Schonbar	Singer and Schonbar study	Present study
Ego strength	-.59		-.26**
Anxiety	.48	.23	.21**
Repression		-.22	-.25**
MMPI <i>L</i> scale		.16	-.28*
MMPI <i>Si</i> scale		.22	.00
Maladjustment			.08

\* Statistically significant at approximately .10 level, two-tailed.  
\*\* Statistically significant at approximately .05 level, one-tailed.

Of the students taking the course, 47 had taken both the MMPI, administered on a voluntary basis earlier in the course, and filled out a questionnaire concerning their dreams. The questionnaire asked the subjects to estimate, on a five-point scale, described later, how often they recalled dreaming, and how often they experienced color, sound, touch, taste, and smell in their dreams. Two of these subjects, a female and a married male, were dropped from the study in order to have the entire sample consist of unmarried males. The age range of the 45 remaining subjects was 18 to 22, with the median at 19.

The MMPI data used in this study consisted of the scores on the *L*, *Si*, Barron Ego Strength (*Es*), Welsh *A*, and Welsh *R* scales (see Welsh & Dahlstrom, 1956, and Dahlstrom & Welsh, 1960, for descriptions of these scales). Two MMPI measures were employed to estimate the degree of neuroticism or maladjustment of each subject. One of these was the number of *T* scores equal to or greater than 70 on all the standard clinical scales (*Hy*, *D*, *Hy*, *Pd*, *Pa*, *Sc*, *Pt*, and *Ma*) except *Mf*: the greater the number of scales above this cutoff value, the greater the degree of maladjustment. A second measure consisted of clinical judgments by three psychologists, who independently rated each profile as Normal, Maladjusted, Seriously Maladjusted, or Ambiguous (i.e., unable to classify). The profiles had the *L*, *F*, and *K* scales, as well as the clinical scales one through zero, plotted, but did not have scales *A*, *R*, or *Es* plotted. The categories were not explicitly defined; each psychologist used them as he normally would in evaluating a college student.

The subjects were divided into Sensitizers and Repressors on the basis of the difference between their scores on the *A* and *R* scales, disregarding the absolute value of these scores. If a subject's score on *A* was 10 or more *T* points higher than his score on *R*, he was classified a Sensitizer, while if this difference was in the opposite direction (*R* greater than *A* by 10 or more *T* points), he was classified a Repressor.

RESULTS

The following frequencies of dream recall were reported, in each of the following categories, as they were defined on the questionnaire: 1 subject reported never having recalled dreaming in his life; 5 subjects, at least once in their life; 12 subjects, at least once per month; 24 subjects, at least once per week; and 3 subjects, practically every night.

Column 3 of Table 1 presents the correlations of RFDR with the various measures of this study. The figures are rank-order correlation coefficients, corrected for ties. Scores on the *A* scale are positively correlated with RFDR, while scores on the *R*, *Es*, and *L* scales are negatively correlated with RFDR. Neither the *Si* scale nor the number of clinical scales with scores of 70 or higher show any correlation with RFDR.

The three judges showed a significant amount of agreement in rating the MMI profiles. Excluding three cases which one judge considered ambiguous (i.e., unrateable), the rank-order correlation coefficients, corrected for ties, between the three pairs of judges, were .80, .82, and .85, giving an overall Kendall coefficient of concordance (Siegel, 1956) of .88, which is significantly different from chance at the .001 level. The Kruskal-Wallis analysis of variance (Siegel, 1956) was used to test the relationship between RFDR and degree of maladjustment. The relationship was insignificant, both when only those subjects to whom all three judges gave identical ratings were used (28 subjects), and when the judges' ratings for each subject were averaged.

TABLE 2  
REPORTED FREQUENCY OF DREAM RECALL  
FOR SENSITIZERS AND REPRESSORS

Dream frequency	Number of sensitizers	Number of repressors
Almost every night	2	0
Once/week or more	7	1
Once/month or more	4	5
At least once in life	0	0
Never	0	1

Using the criteria of earlier, there were 13 repressors among the sensitizers, as predicted, requiring more frequent than the difference is significant one-tailed, by the *M* (Siegel, 1956).

DISCUSSION

There are several differences between the present and earlier studies which should be kept in mind. For one, the subjects were from different populations (1959) study and that of Schonbar (1961) used experienced male and female, received no special training. Berrien (1961) students and 75 undergraduates did not report whether they were in a mixed group. The present study was of undergraduates of a liberal arts college.

The technique for recording dream recall differed. In the present study the subjects estimated the frequency of dream recall and checked one of five categories while in the other three studies the subjects kept a daily count of dream recall for a fixed period of time.

Differences in statistical methods also be noted. Schonbar (1961) used extreme groups, Singer (1959) dichotomized at the median, and the present study spread the subjects on the basis of RFDR.

Despite these procedural differences, the number of the findings in the present study, viz., the relation of RFDR with (a) the positive correlation of RFDR with a measure of inhibition and (b) the negative correlation of RFDR with a measure of inhibition, lack of correlation between RFDR and degree of maladjustment; correlation of RFDR with ego strength. The fact that the results reported in a different study using a different procedure are generally similar.



ported, viz., positive correlations of reported frequency of dream recall with (a) scores on the Lie scale of the MMPI; and (b) scores on the Social Introversion scale of the MMPI. In addition, subjects classified as Sensitizers report recalling dreaming significantly more frequently than those classified as Repressors.

Differences in the methodology of this and earlier studies are discussed. The Sensitizer-Repressor difference and the positive correlation of the Welsh A scale of the MMPI with reported frequency of dream recall were felt to reflect a tendency to introspection and rumination rather than anxiety in the usual sense of the term.

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