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.¹

¹The third study (Singer & Schonbar, 1961), while primarily concerned with daydreaming, 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.
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, Ei, 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 MMPI profiles. Excluding three cases which one judge considered ambiguous (i.e., unratable), 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>
<thead>
<tr>
<th>Measure</th>
<th>Singer and Schonbar study</th>
<th>Present study</th>
</tr>
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<tbody>
<tr>
<td>Ego strength</td>
<td>- .59</td>
<td>-.26**</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.48</td>
<td>.23**</td>
</tr>
<tr>
<td>Repression</td>
<td>- .22</td>
<td>-.25**</td>
</tr>
<tr>
<td>MMPI L scale</td>
<td>.16</td>
<td>-.28*</td>
</tr>
<tr>
<td>MMPI Si scale</td>
<td>22</td>
<td>.00</td>
</tr>
<tr>
<td>Maladjustment</td>
<td></td>
<td>.08</td>
</tr>
</tbody>
</table>

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

There are several factors which might affect the results. For one, the study data were not the same population as that used by Siegel (1959) and by Singer (1956) in their studies. The subjects were primarily college undergraduates, and the training was different. The experience of the judges may have influenced their ratings of the MMPI profiles. However, the results of the present study are consistent with those of previous studies.

There are several significant differences between the present study and those of Singer and Welsh. The present study used a different population, and the training of the judges may have contributed to the differences. However, the results of the present study are consistent with those of previous studies.

The technique for measuring dream recall differed in some respects. The subjects estimated 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 due to conflict with the pre-undergraduate sample. The subjects estimated 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 due to conflict with the pre-undergraduate sample.

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Using the criteria of earlier, there were 15 pressors among the suit the RFDR for these students, as predicted, reporting more frequently that difference is significant for one-tailed, by the k (Siegel, 1956).

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TABLE 2

<table>
<thead>
<tr>
<th>Dream frequency</th>
<th>Number of sensitizers</th>
<th>Number of pressors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost every night</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Once/week or more</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Once/month or more</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>At least once in life</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
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Using the criteria of classification discussed earlier, there were 13 Sensitizers and 7 Repressors among the subjects. Table 2 presents the RFDR for these two groups. The Sensitizers, as predicted, reported recalling dreaming more frequently than the Repressors. The difference is significant at the .008 level, one-tailed, by the Mann-Whitney U test (Siegel, 1956).

### Discussion

There are several general differences between the present and the earlier studies which should be kept in mind in comparing the results. For one, the subjects are samples from different populations. Both Schonbar’s (1959) study and that of Singer and Schonbar (1961) used experienced teachers, both male and female, receiving additional graduate training. Berrien (1933) used 6 graduate students and 75 undergraduates, but does not report whether these were all male or a mixed group. The present study used male undergraduates of a limited age range.

The technique for assessing frequency of dream recall differed. In the present study, the subjects estimated it in a few moments while in the other three studies the subjects kept a daily count of their dreams over a fixed period of time.

Differences in statistical techniques should also be noted. Schonbar (1959) compared extreme groups, Singer and Schonbar (1961) dichotomized at the median, and the present study spread the subjects out over five groups on the basis of RFDR.

Despite these procedural differences, a number of the findings from these earlier studies have received additional support from the present experiment, viz., (a) the positive correlation of RFDR with measures of anxiety; (b) the negative correlation of RFDR with a measure of inhibition or repression; (c) the lack of correlation between RFDR and degree of maladjustment; and (d) the negative correlation of RFDR with measures of ego strength. The fact that these have been supported in a different subject population, using a different procedure, enhances their generality.

### Table 2

<table>
<thead>
<tr>
<th>Number of Sensitizers</th>
<th>Number of Repressors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
</tr>
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</table>

Singer and Schonbar’s (1961) findings with the L and Si scales receive no support from the present experiment. The correlation of the L scores with RFDR (−.28) is almost significantly negative, and that for the Si scale was essentially zero (.003). One possible explanation for this, aside from the general differences between the studies, lies in the fact that a very large number of correlations were computed in the Singer and Schonbar study, so that those for the L and Si scales may have resulted from chance variation. Only further experimentation can, of course, settle this question.

The overall results of the present and earlier studies strongly suggest that it is the anxious person, the Sensitizer, who recalls his dreams, while the more inhibited person, the Repressor, seldom recalls them. Although the number of subjects is too small for a formal analysis, inspection of the data suggests, however, that this statement should be qualified in terms of the absolute level of scores on the A and R scales. When the A and R scales are very high, the differences in RFDR between Repressors and Sensitizers seems to break down. It may be that the A scale, e.g., in the normal range, is measuring not so much “anxiety” in the usual sense of the term as a habit of introspection, a tendency to pay attention to internal stimuli. Further experimentation, with a large enough number of subjects to allow for some item analysis of the A and R scales, would be necessary to check on this speculation. A more direct measure of introversion tendencies would also be helpful.

### Summary

A group of 45 undergraduates completed the MMPI and a questionnaire concerning the frequency with which they recalled dreaming. Several findings of earlier studies, herein reviewed, were supported, viz., correlations of reported frequency of dream recall with (a) measures of anxiety, a positive relationship; (b) a measure of repression or inhibition, a negative relationship; (c) measures of degree of neuroticism or maladjustment, no relationship; and (d) measures of ego strength, a negative relationship. Two findings of these earlier studies were not sup-
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.

REFERENCES


(Received January 12, 1962)