

## SOME MANIFEST CHARACTERISTICS OF RECALLERS AND NONRECALLERS OF DREAMS

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Dreaming, most psychologists agree, is a universal experience. Research with electrically recorded eye movements during sleep led Dement and Kleitman (1957) to conclude that "periods of . . . dreaming . . . are an intrinsic part of normal sleep" (p. 345), and that all people dream several times a night.

Although it is likely that everyone dreams, many people report that they do not. The fact, then, that many persons have little or no recall of dreams raises interesting questions. What are the distinguishing characteristics of persons who do, or do not, report that they dream?

The present research was undertaken to examine some correlates of dream recall. Some hypotheses were drawn from Ramsey's (1953) review of the literature on dreaming—that frequent recallers of dreams are younger, more intelligent, and more often women than men. Other hypotheses were derived from psychoanalytic theories (Fromm, 1951; Hadfield, 1954) which hold that the dream makes possible an internal communication prohibited during consciousness because of the anxiety it would evoke. Two alternative propositions were put to test: that manifest anxiety is positively related to the recalling of dreams, or that nonrecallers and frequent recallers are both more anxious than a less extreme group.

The informal observation that many psychoanalytic patients become progressively better able to remember dreams leads to the following question: to what extent is this because remembering is "the thing to do" under the circumstances, and to what extent because it implements their motivated search for self awareness? Manifest needs were selected from those defined by Edwards (1954), and the

following predictions made. If conformity is the determining factor, then people who recall dreams when it is asked for or expected of them might be expected to have high needs for achievement, deference, and authority, and a low autonomy need; if, on the other hand, a search for self awareness motivates dream recall, recallers might be expected to have high needs for endurance, intraception, and succorance.

### Procedure

The Ss were 42 teachers and school guidance counselors who were students in a six-week graduate summer course in parent counseling. There were 15 white women, 13 Negro women, and 14 white men. Information concerning age was collected in terms of five-year intervals; taking midpoints, the age range was from 22 to 52 years, with the mean at 33.8 years. Men and women did not differ significantly in age, but only 32% of the women were or had been married, in contrast to 62% of the men.

On the first day of class a personal data form was distributed. These sheets contained code numbers, which were thereafter the only identifications on material submitted for the study. Each S was given a printed booklet containing a detailed instruction sheet and 28 perforated pages.

The instructions stated that one page was to be submitted each day for 28 days, containing a record of all dreams or experiences of dreaming while asleep during the preceding 24 hours. Ss were told to write the dreams as completely as possible, including incongruities, vague impressions, and the like; they were told how to report associations or clarifi-

cations so as not to contaminate the dream report itself. Feelings during and after the dream were to be recorded; Ss were also instructed to indicate whether the dream occurred while falling asleep, at an indeterminate time, or just before waking, or if it woke them during the night. Dreams were to be written immediately upon waking in the morning, or on waking from a nap.<sup>1</sup>

Each report sheet contained a short reminder of some of the more important instructions. The rest of the page was blank so that the dream could be recorded. At the bottom of each sheet Ss could check, if appropriate, "No dreams in this interval," "Aware of having had dream but can't remember content," or "Above (recorded dream) is all I remember, but I know there was more." Each S submitted a page every day. In tabulation, an S was credited with having remembered a dream if he could remember any fragment of content. Although some Ss reported more than one dream during a single report period, frequency of recall was defined for this study as the number of report periods in which one or more dreams were recalled.

During the second week of the experiment the Edwards Personal Preference Schedule (1954) was given to the Ss to complete at home. Early in the fourth week the IPAT Anxiety Scale (Cattell, 1957) and a 20-word vocabulary test (Thorndike, 1942) were administered in class. Briefly, the Edwards is an inventory of paired statements, matched for social acceptability, in which the forced-choice scores correspond to a need system based on the work of H. A. Murray. The IPAT Anxiety Scale is a 40-item questionnaire based on factor analysis of a number of measures, and yielding split-half reliabilities of .84 and .91 on different populations; validity studies have also yielded positive results. The multiple-choice vocabulary test was derived from the IER Intelligence Scale CAVD; it correlates .50 with a general intelligence factor among a sample of adult males (Thorndike, Norris, & Morrill, 1952) and .62 with the 1916 Binet

administered to hospital patients (Miner, 1952).

### Results

In all, 1176 reports were collected, of which 215 contained dreams. The range of individual recall frequency was from 0-19 days; the mean frequency was 5.1, the median 4.0, indicating that half the Ss recalled dreams only 14% of the time or less. Fifteen Ss recalled dreams only once or not at all; these constitute the Nonrecallers. Thirteen of the Ss recalled dreams 25% of the time or more; these constitute the Recallers. The Recallers consisted of four men and nine women, of whom four were Negroes; the Nonrecallers contained five men and ten women, of whom five were Negroes.

*Sex and race.* The mean frequency of dream recall for men was 4.57, and for women 5.39; while in the predicted direction, the difference (measured by *t* test) was not significant. The mean for Negro women was 5.0, for white women 5.73, a nonsignificant difference. There was no sex difference in the constituency of the two groups.

The means and standard deviations of the Recallers and Nonrecallers were computed on all variables; the differences between the group means were measured by *t* tests. Table 1 presents these data. When a difference was significant, the point biserial correlation is also presented to indicate the degree of relationship between the variable and dream recall. All comparisons are for the two extreme groups only.

*Age and manifest needs.* As Table 1 reveals, age is not related to frequency of dream recall. Of the manifest needs, the only significant difference was for succorance; five of the other six hypothesized differences were in the predicted direction, but were insignificant. It seems most economical to conclude that the difference in succorance was a chance finding, and that there is no relationship between these needs as tested and recalling or not recalling dreams.

*Intelligence and manifest anxiety.* Table 1 reveals that Recallers were significantly higher than Nonrecallers both in intelligence and in anxiety. The mean anxiety score of the middle group ( $N = 14$ ) in dream recall was 27.07,

<sup>1</sup> The detailed instruction sheet has been deposited with the American Documentation Institute. Order Document No. 6015, remitting \$1.25 for microfilm, or \$1.25 for photocopies.

Table 1  
 Mean Differences Between Recallers and Nonrecallers in Age, Vocabulary, Manifest Needs,  
 Manifest Anxiety, and Contentless Recall

Variable	Recallers ( <i>N</i> = 13)		Nonrecallers ( <i>N</i> = 15)		<i>t</i>	<i>p</i> <sup>a</sup>	<i>r</i> <sub>pbs</sub>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Age, years	36.84	13.13	34.33	7.94	.72	n.s.	—
Vocabulary	15.15	3.46	12.53	3.91	1.79	.05	.35
Manifest anxiety							
Total	34.92	9.05	25.40	9.86	2.81	<.01	.48
Overt	18.38	6.67	11.46	5.66	2.86	.01	.50
Covert	16.54	3.08	13.93	5.40	1.46	n.s.	—
Self sentiment <sup>b</sup>	6.38	2.68	5.00	2.76	1.19	n.s.	—
Ego strength <sup>b</sup>	5.00	1.88	2.06	2.08	3.77	<.01	.59
Guilt proneness	11.38	3.16	9.13	3.44	1.79	n.s.	—
Ergic tension	8.08	3.39	6.40	3.14	1.28	n.s.	—
Manifest needs <sup>c</sup>							
Achievement	14.54	3.73	13.86	2.98	.51	n.s.	—
Deference	15.62	3.91	13.64	3.04	1.43	n.s.	—
Exhibitionism	10.00	4.19	12.72	2.79	— <sup>d</sup>	—	—
Autonomy	10.77	2.83	11.36	3.02	.51	n.s.	—
Intraception	19.23	4.14	18.86	3.30	.25	n.s.	—
Succorance	14.53	4.07	11.07	5.18	1.87	.05	.35
Endurance	14.62	5.69	14.57	5.10	.02	n.s.	—
Contentless recall	8.85	3.19	1.87	2.75	5.79	.001	.75

<sup>a</sup> One-tailed tests were applied to the predicted differences, two-tailed tests to the subcategories of manifest anxiety and to contentless recall.

<sup>b</sup> High scores indicate low self-sentiment and ego strength.

<sup>c</sup> For these variables, *N* = 14 for Nonrecallers, as one S did not complete the schedule.

<sup>d</sup> Hypothesis not confirmed; hence, difference not tested.

falling between rather than below the means of the Recallers and the Nonrecallers; any test, then, of the hypothesis that this group would have lower mean anxiety than the extreme groups is unnecessary. However, in order to determine whether the relationship between the variables was significant over the whole distribution, the correlation ratio was computed and equaled 4.53, significant at better than the .05 level. It may be concluded that there is a positive relationship between manifest anxiety and dream recall.

#### Discussion

The findings of this study are, of course, limited because of the relatively small number of Ss in each of the groups. Nevertheless, some of the findings are comparable to those of some earlier studies, and, where there are discrepancies, other factors may be respon-

sible, such as methodological differences and the fact that the present sample is somewhat older than many of the other samples, as well as more homogeneous in occupation and more heterogeneous in race. That the intelligence and educational levels of the group were relatively high—the mean vocabulary score of the present sample was 13.84, equivalent to approximately the 90th percentiles of other groups tested (Hagen & Thorndike, 1955) and to the 73rd percentile of the ACE (Miner, 1957)—limits the generality of the findings, but does not significantly differentiate this sample from previous samples in related studies.

There was a striking variation from day to day in the number of people recalling dreams; the range was from 2 to 17 a day. A study of the Recallers' daily variations revealed that there was no significant trend for different

days of the week. Coefficients of correlation were also computed between the number of nocturnal dream reports from the Recallers each day and the average temperature, humidity, and humiture for the corresponding period (10:00 p.m. to 7:00 a.m.);<sup>2</sup> the correlations were .16, .01, and .06, respectively. Previous studies have not accounted for either individual or group variability in recall over time. The present study has eliminated certain factors, but leaves the observation unexplained.

The greatest deviation from earlier findings is that neither sex (McElroy, 1952; Middleton, 1942) nor age (Kleitman, 1939) was associated with ability to recall dreams. In view of this discrepancy, the present sample was compared with those of Middleton (1933; 1942) to determine whether recall productivity itself differed to any great extent. In spite of the fact that Middleton's findings were based on responses to a questionnaire requiring no documentation, the percentages of his Ss reporting experiences of dreaming and frequent or very frequent dreaming are in fairly close agreement with percentages of the present sample reporting at least one dream, or being categorized as Recallers, respectively. Compared with reports by Kleitman (1939), the present sample was not atypical in the percentage stating that they never dream. The finding that Recallers score higher in verbal intelligence confirms earlier findings (Ramsey, 1953), although the relationship was not a major one; the fact that dream reports were written, thus posing greater demands both motivationally and operationally upon the less verbally adept, suggests that, notwithstanding the earlier findings, the relationship may be partly artifactual.

The results concerning the more dynamic factors of manifest needs and manifest anxiety raise interesting theoretical questions, particularly with respect to the unknown relationship between manifest and covert manifestations of the same characteristic. The need variables, for example, were initially thought of in two categories. In the first, thought of

as situational, it was predicted that individuals who had needs to do well (achievement), to "show off" (exhibitionism), and to please authority (deference and low autonomy) might be motivated to recall dreams because it was a classroom instructor who was asking them to do so; in a more pervasive motivational category, it was predicted that people with stronger needs to understand themselves (intraception), to seek help (succorance), and to stick with problems (endurance) would be found among the frequent Recallers, in accordance with the theory that remembering dreams offers a unique opportunity for insight (Fromm, 1951), creativity (Murphy, 1947), and problem solution (Hadfield, 1954). The negative findings leave open the question raised initially concerning the motivation for increased recall of dreams during psychoanalytic therapy. It may be that the instrument used is not a valid one, or that needs with the names and characteristics studied here are related to dream recall but not at the manifest level.

Similarly, the finding that manifest anxiety plays a substantial role in dream recall can mean either that anxious people are more urgently pressed to resolve the conflicts that dreams theoretically illustrate, that they have more such conflicts, or that persons who have erected fewer barriers between themselves and awareness of their anxiety are also more fully in touch with the rest of their internal experience and, hence, recall dreams more frequently. The latter view receives some support from the fact (Table 1) that the groups differed in overt but not covert anxiety, and that they did not differ in unresolved tensions (ergic tensions), but that the Nonrecallers were more able to "control and express" them realistically (Cattell, 1957, p. 5).

The high correlation between remembering dreams and the contentless recall of dreaming also supports the view that low dream recall, and possibly low manifest anxiety, is related to repression. While it is obvious that, in order to recall dreams, one must experience dreaming, it does not necessarily follow that those who do not recall dreams would also not remember dreaming, especially since the latter is an "easier" task, and the two categories were mutually exclusive. It seems

<sup>2</sup> These data were obtained from the United States Weather Bureau. Humiture is a comfort-discomfort measure obtained by averaging temperature and humidity for a given time period.

likely that the almost absolute lack of recall of dreaming itself is due to factors associated with repression or control, and that it is therefore symptomatic of a more general lack of awareness of ongoing internal processes.

### Summary

Forty-two graduate students in education turned in reports on recalled dreams every day for four weeks. They also completed the Edwards Personal Preference Schedule, the IPAT Anxiety Scale, and a short multiple-choice vocabulary test. On the basis of the frequency with which they recalled dreams, subjects were divided into a group of Recallers and a group of Nonrecallers. By means of *t* tests applied to differences between the means of the subgroups on the variables tested, the following conclusions were reached:

1. Men and women do not differ in frequency of dream recall. Small sample size may be a factor here, since the nonsignificant difference was in the predicted direction.

2. Dream Recallers are not younger than Nonrecallers within the age range covered in this study.

3. Dream Recallers are more intelligent than Nonrecallers.

4. There is a positive relationship between manifest anxiety and frequency of dream recall. The findings also suggested that the difference between Recallers and Nonrecallers was in overt rather than covert anxiety, and that, although they do not differ in unresolved tensions, Recallers have less ego strength than Nonrecallers.

5. There is no relationship between the frequency of recalling dreams and manifest needs for achievement, deference, exhibitionism, intraception, succorance, endurance, or autonomy.

6. There is no relationship between diurnal variations in dream recall and variations in temperature, humidity, or humiture.

7. Contentless recall of dreaming is positively related to recall of dreams.

The study was based upon the assumption that dreaming is a universal process. On the basis of the present findings, variations in ability to recall dreams or dreaming were discussed in terms of a repressive factor operating most successfully in total Nonrecallers. Attention was called to the limitations of the study.

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