

Dream recording frequency in psychology students

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Summary. Previous research has indicated that dream recording frequency is associated with openness to experience and also low conscientiousness. Although psychology students are likely to be interested in topics like dreaming, systematic studies about their dream recording behavior have not been carried out. In this analysis, the dream recording frequencies of 409 psychology students was compared to the dream recording frequencies of a population-based sample (N = 1742) using the same 8-point rating scale. The findings indicated that psychology students record their dreams more often than the population-based survey participants – differences in dream recall frequency were statistically controlled. From a methodological viewpoint, dream researchers have to be careful when generalizing their findings based on samples of dream journalists who show specific trait characteristics that are different compared to the general population. From a theoretical viewpoint, it would be interesting to learn more about the motives as to why individuals keep dream journals.

Keywords: Dream recording, Dream recall frequency, psychology students

1. Introduction

Recording dreams in the morning directly upon awakening on a regular basis has been described as an arduous task (Garfield, 1973; Nelson, 1888). As these long dream series provide a unique data base for studying longitudinal changes (Domhoff, 2003; Schredl, 2018), the question arises as to who are the persons who record their dreams outside a research setting. In a large population-based sample, about 17% of the participants stated that they had recorded a dream at least once; 2% recorded their dreams at least once a week (Schredl, Berres, Klingauf, Schellhaas, & Göritz, 2014). A longitudinal study in a similar sample over a two-year period indicated that dream recording is a stable behavior (Schredl & Göritz, 2020). The factors associated with dream recording are dream recall frequency, openness to experience, and low conscientiousness (Schredl & Göritz, 2019). Whereas the associations with dream recall frequency and openness to experience seems plausible, the negative correlation between conscientiousness and dream journaling frequency warrants a closer look – since self-discipline, necessary for getting out of the warm bed to record dreams, is a facet of conscientiousness (Shirayev, 2017). However, conscientiousness is also positively correlated with academic performance (e.g., Arbabi, Vollmer, Dörfler, & Randler, 2015) and professional success (e.g., Yang, Kim, & McFarland, 2011), which suggests that persons with low conscientiousness are more likely to focus on topics that are not related to career and academics. For psychology

students, topics like dreaming are likely to be more relevant compared to students with other majors; for example, in a two-week dream diary study psychology students recorded more and longer dreams than sport students (Erlacher & Schredl, 2004). Moreover, on average, psychology students reported higher openness to experience scores (Vedel, 2016) which would fit in the picture of increased dream recall frequency (Schredl & Göritz, 2017) and increased dream recording frequency (Schredl & Göritz, 2019) found in non-student samples with broad age range. However, studies addressing the question whether psychology students record their dreams more often are lacking.

The present study compared dream recording frequency reported by psychology students with dream recording in a population-based sample. It was expected that psychology students record their dreams more often than the comparison sample.

2. Method

2.1. Participants

Of the 444 persons who participated in the study of Schredl (2020), 409 were psychology students. Their mean age was 22.84 ± 4.03 years (range: 18 to 48 yrs.). In order to control for possible effects of educational levels, only the subgroup of the original sample (Schredl et al., 2014) who completed 12 to 13 years education (“Hochschulreife”) – as this education is required for studying psychology – were included. This subsample (N = 1742) consisted of 1004 women and 738 men. The mean age was 43.71 ± 14.72 yrs. (Range: 18 to 92 yrs.).

2.2. Research Instrument

Dream recall frequency was measured with a seven-point scale (coded as 0 = never, 1 = less than once a month, 2 = about once a month, 3 = about 2 to 3 times a month, 4 = about once a week, 5 = several times a week, 6 = almost

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Submitted for publication: August 2020

Accepted for publication: September 2020

DOI: 10.11588/ijodr.2020.2.75354

every morning) with a high retest reliability ($r = .756$; Schredl et al., 2014).

For eliciting the frequency of recording dreams, an eight-point rating scale was presented (“How often do you record your dreams?” 0 = never, 1 = less than once a year, 2 = about once a year, 3 = about two to four times a year, 4 = about once a month, 5 = two to three times a month, 6 = about once a week, 7 = several times a week). The retest reliability of this scale was $r = .765$ (Schredl et al., 2014).

2.3. Procedure

The psychology students were recruited for a study entitled “Sleep, dreams and personality” from the Universities of Mannheim, Heidelberg, and Landau and received course credits or a small reimbursement in cash. The questionnaires were collected after a two-week study period. For the online sample, a link for the study including the two items was sent to all members (about 10,000 at that time) registered within the www.wisopanel.net panel. Of the participants that responded from April 18th, 2014 to April 29th, 2014 only those with 12 to 13 yrs. education were included. This panel consists of German speaking persons with heterogeneous demographic backgrounds who are interested in online studies.

The SAS 9.4 software package for Windows (SAS Institute, Cary, North Carolina, USA) was used for statistical analyses. To analyze the effect of socio-demographic variables, group variable (psychology students vs. online sample) and dream recall frequency on frequency of recording dreams ordinal regressions (cumulative logit analyses) were applied. Effect sizes for each variable included in the ordinal regression were computed using Chi-Square values according to the formula given by Cohen (1988).

3. Results

The distributions of dream recall frequencies of the two samples are depicted in Table 1. Most of the participants (almost 60% in both samples) remembered dreams at least once a week. Dream recall was significantly higher in the student sample compared to the online sample (see Table 2). In addition, dream recall frequency decreased with age, and women tended to report higher dream recall than men (see Table 2).

Comparing the frequency of dream recording depicted in Table 3, the student group reported that they recorded dreams more often than the online sample (see Table 4).

Table 1. Dream recall frequency (psychology students and online sample)

Category	Psychology students (N = 406)	Online sample (N = 1742)
Almost every morning	16.75%	10.45%
Several times a week	39.41%	30.37%
About once a week	26.60%	19.00%
About 2 to 3 times a month	10.84%	14.58%
About once a month	3.69%	8.27%
Less than once a month	2.22%	12.00%
Never	0.49%	5.34%

Table 2. Ordinal regression for the dream recall frequency (N = 2148)

Variable	SE	χ^2	p	Effect size
Age	-.2074	36.5	<.0001	0.474
Gender (1 = female, 0 = male)	.2030	35.0	<.0001	0.410
Group (1 = Psych, 0 = Online)	.0884	15.2	.0084	0.180

SE = Standardized estimates

Keep in mind that dream recall frequency, gender, and age were statistically controlled. Dream recall frequency was associated with dream recording frequency and the women tended to record their dreams more often than the men – again this effect was controlled for the gender difference in dream recall frequency. Age was not related to dream recording frequency.

4. Discussion

The findings of the present study indicated that psychology students indeed record their dreams more often compared to a population-based sample. They also recalled their dreams more often but this difference was statistically controlled via regression analysis in testing the group difference in dream recording frequency. In addition, dream recall frequency – as has been reported previously (Schredl et al., 2014; Schredl & Göritz, 2020) – was associated with dream recording frequency; and women tended to record their dreams more often than men.

The major methodological issue that has to be considered is related to sample selection. Estimates regarding the total number of psychology students at the three universities at the time of the study suggest that almost all psychology students participated. On the other hand, the population-based sample showed a bias in the direction of more high recallers compared to representative samples (Schredl et al., 2014). That is, the findings might have been even more pronounced if psychology students were compared to representative samples. Secondly, there was no information about the professions of the participants of the population-based sample. As participants with interest in surveys – often with psychological topics – were registered in the [wisopanel.net](http://www.wisopanel.net) panel, one might expect that the percentage

Table 3. Frequency of recording dreams (psychology students and online sample)

Category	Psychology students (N = 406)	Online sample (N = 1742)
Several times a week	1.72%	0.75%
About once a week	0.74%	1.15%
Two or three times a month	4.19%	1.49%
About once a month	5.91%	1.61%
About two or four times a year	13.30%	4.13%
About once a year	6.90%	2.70%
Less than once a year	13.79%	6.72%
Never	53.45%	81.46%

Table 4. Ordinal regression for the dream recording frequency (N = 2148)

Variable	SE	χ^2	p	Effect size
Age	-.0267	0.5	.4797	0.031
Gender (1 = female, 0 = male)	.1356	16.6	<.0001	0.177
Dream recall frequency	.3134	75.4	<.0001	0.382
Group (1 = Psych, 0 = Online)	.2007	43.5	<.0001	0.288

SE = Standardized estimates

of psychologists might be higher compared to the general population. Again, if that's the case, it would have worked against the hypothesis.

A substantial number of psychology students (about 46%) have recorded their dreams at least once vs. 18% in the population-based sample. Interestingly, the difference in the percentages of frequent dream recording (once a week or more often) is quite small (2.46% vs. 1.90%); the major difference occurred for the irregular dream recording (less than once a year to two to three times a month). Psychology students should also show higher dream recall frequencies (small effect size) but this group difference was statistically controlled for in the regression analysis. The question is whether the academic study of psychology might require recording dreams; although Rizzolo (1922) recorded 100 of his own dreams as data basis for his master's thesis, such data are for today's empirically oriented master's theses in psychology not appropriate; typically moderate to large samples have to be studied and analyzed. Even within the psychology curriculum, dreaming only plays a minor role; often just briefly mentioned in the context of sleep in the biological psychology class. In addition, psychotherapy training in Germany starts typically after the master's degree, i.e., being in psychotherapy – which often increases dream recall (Schredl, Bohusch, Kahl, Mader, & Somesan, 2000) – as part of the training can also be ruled out as possible explanation. Another possibility might be that students in general have more time to do such things such as dream recording, e.g., not having to get up so early in the morning. The findings of Erlacher and Schredl (2004) comparing sport students with psychology students would argue against this. Moreover, zero correlation between dream recording frequency and age does not support the idea – as there are also younger persons – probably students – in the population-based sample. It would be very interesting to carry out qualitative studies to learn more about the motivation of psychology students to record their dreams.

To summarize, the findings indicated that a substantial percentage of psychology students have recorded their dreams at least from time to time. From a methodological viewpoint, dream researchers have to be careful to generalize from findings based on samples of dream journalists since this study and other studies (Schredl & Göritz, 2019, 2020) indicate that these individuals show specific characteristics (high openness to experience, low conscientiousness, and maybe more factors). For example, the analyses of Fogli, Maria Aiello, and Quercia (2020) included more than 24,000 dreams reported by about 500 dreamers; however, some hypotheses were tested based on just a single dream series. From a theoretical viewpoint, it would be interesting to learn more about the motives as to why individuals keep dream journals.

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