

Work-Related Dreams as Related to Job and Life Satisfaction in Hairdressers

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Summary. Empirical studies largely support the continuity hypothesis of dreaming. The present study investigated the frequency and the emotional tone of dreams of hairdressers. A relationship was found between daytime mood (job satisfaction) and dream emotions. Low life satisfaction, on the other hand, was related to a heightened frequency of work-related dreams. It would be promising to study persons with different professions (stressful and demanding jobs) in order to study the effect of work-related variables and dreaming.

Keywords: Continuity hypothesis; Hairdressers; Work-related dreams; Stress; Dream emotions

1. Introduction

The continuity hypothesis of dreaming states that waking-life experiences are reflected in dreams (Schredl, 2003). Since wage earners spend a considerable amount of time per week with their work, one would expect that work-related dreams occur quite often. Indeed, representative surveys in Germany showed that over 20% of the participants reported work-related dream themes during the past month (Schredl & Piel, 2005). There was a significant gender difference, i.e. men reported work-related dreams more often, reflecting the waking-life situation with higher rates of employed men. Interestingly, this study also showed an increase of work-related dreams from 1956 to 2000 in men and women which might be explained by increased stress associated with the job. In a sample of students who earned extra money, a positive relationship was found between the time spent working and the number of work-related dreams ($r = .460$, $p = .003$; $N = 44$; Schredl & Hofmann, 2003) supporting the claim of the continuity hypothesis.

Interestingly, studies investigating the direct relationship between parameters related to work like stress level or job satisfaction and work-related dreams have rarely been carried out. A previous study investigated 81 Swiss truck drivers (Schredl, Funkhouser & Arn, 2005-06). Whereas the correlation coefficients between time spent with driving per week and subjective stress levels and the amount of driving dreams failed to reach significance, long distance truck drivers and those who slept away from home reported more driving-related dreams. The effect of the working life

on dreams was stronger if everyday life was more affected by the job. Moreover, subjective stress and job satisfaction correlated with the emotional tone of the driving dreams; high stress levels and low job satisfaction were associated with negatively toned dreams.

The present study investigated the frequency and the emotional tone of hairdressers' dreams. It was hypothesized that the amount of time spent working as a hairdresser in waking life is positively correlated with the frequency of work-related dreams and, secondly, that the emotional tone of the dream is related to the emotions associated with their profession by the hairdressers.

2. Method

2.1. Participants

The sample included 87 Swiss hairdressers (all women) whose ages ranged from 17 to 72 years (mean age: 30.9 ± 13.8 yrs.). They have been working for 1 to 50 years (mean 12.9 ± 12.4 years).

2.2. Dream questionnaire

The self-developed questionnaire comprised items about socio-demographic variables (age, gender) and professional experience (hours of working per week, stress associated with working, job satisfaction and global life satisfaction). The rating scales (stress/satisfaction) were five-point Likert scale (1 = not stressed/satisfied to 5 = very stress/satisfied).

Dream recall frequency was measured by a seven-point rating scale developed by Schredl (2002a). Its retest reliability is high ($r = .85$; Schredl, 2004). In order to obtain units of mornings per week, the scale was recoded using the class means (0 → 0, 1 → 0.125, 2 → 0.25, 3 → 0.625, 4 → 1.0, 5 → 3.5, 6 → 6.5). The eight-point scale (0 = never to 7 = several times a week) measuring the frequency of work-related dreams was focused on a major part of the hair-

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dressers' job, namely talking with customers. Other aspects like using scissors, hair cutting were not included. This eight-point scale was also recoded using the class means (0 → 0, 1 → 0.042, 2 → 0.083, 3 → 0.25, 4 → 1.0, 5 → 2.5, 6 → 4.0, 7 → 18.0) in order to obtain units of work-related dreams per month. In addition, participants were asked to estimate the percentage of their dreams that included their work and the overall emotional tone of their work-related dreams (-1 = predominantly negative, 0 = neutral/balanced, +1 = predominantly positive).

2.3. Procedure

The hairdressers were approached by the third author in hairdressers' shops of a town (Thun) located in the German-speaking part of Switzerland. To ensure confidentiality, most participants received the questionnaire with a pre-addressed, stamped envelope which they sent to the second author.

3. Results

3.1. Work parameters

The means of time spent working and of the rating scales regarding stress, job satisfaction and life satisfaction are depicted in Table 1. The range of time spent working is large (9 to 56.0 hours per week). Overall, the estimates of job and general life satisfaction are positively toned whereas the average of the stress ratings lies in the low-range of the scale.

3.2. Dream variables

The mean dream recall frequency was 3.40 ± 1.84 . If this is recoded into mornings with dream recall per week, the hairdressers remembered dreams about twice a week (see Table 1).

The mean of the work-related dream scale was 1.76 ± 1.81 . If recoded into dreams per month, the hairdressers remembered about one work-related dream every other month (see Table 1). If they were asked how many dreams include talking with customers, the mean percentage amounted to 3.6% (see Table 1). Combining dream recall frequency (units per week) and frequency of work-related dreams (units per month), the computed percentage is roughly comparable (6.5%); a finding that underlines the validity of the subjective estimates. On average, the global emotional tone of the work-related dreams was slightly positive (see Table 1).

3.3. Correlation between waking and dream

In Table 2, the correlations between the waking measures and the dream variables are depicted. Dream recall frequency declines with age and the duration of professional life. The frequency of work-related dreams, on the other hand, was associated with the duration of professional life and life satisfaction. The lower life satisfaction was the higher the frequency of work-related dreams. The emotional tone of the dreams was related – in the expected way – to job satisfaction and life satisfaction, both coefficients marginally significant. More positively toned dreams were reported by older hairdressers. Overall, the pattern did not change if age was partialled out, e.g. $r = -.293$ (life satisfaction – frequency of work-related dreams).

Table 1. Working and dream variables of the total sample ($N = 87$).

| Variable | Mean ± SD |
|--|-------------|
| Workweek duration (hours) | 38.9 ± 9.1 |
| Subjective stress | 1.97 ± 0.92 |
| Job satisfaction | 4.63 ± 0.63 |
| Life satisfaction | 4.23 ± 0.82 |
| Dream recall frequency (per week) | 1.90 ± 2.16 |
| Dreams of work (per month) | 0.53 ± 1.62 |
| Work-related dreams (percent) | 3.62 ± 4.97 |
| Emot. tone of work-related dreams ¹ | 0.08 ± 0.47 |

Note. ¹ $n = 59$

4. Discussion

Overall, the findings indicate that there is a relationship between work-related dreams and the waking-life of the participants. The frequency of work-related dreams was inversely related to life satisfaction and the emotions of work-related dreams are correlated with the job and life satisfaction. Thus, the study lends some support to the continuity hypothesis. Topics which might explain the relatively small correlation coefficients will be discussed in the following.

First, methodological issues have to be considered. The number of work-related dreams was elicited with a questionnaire item and, thus, relied on the memory capacity of the participants to recall how often they dreamed about work. Schredl and Erlacher (2008) applied a similar scale to elicit the percentage of sports dreams and the figures were comparable to a previous study (Erlacher & Schredl, 2006) using dream diaries and dream content analytic methods to assess the number of sports dreams. Furthermore, Schredl (2002b) reported moderate correlations between general emotional tone of the dreams (retrospective rating scale) and the emotional tone of diary dreams recorded over two weeks. In addition, the balanced emotional tone is also in line with the research of positive and negative emotions in diary dreams (Schredl & Doll, 1998). These findings indicate that the methodological issues (using retrospective measures for measuring frequency and emotional tone of work-related dreams) are not likely to have biased the results. Age as a possible confounding variable (large age range of the sample) did not affect the correlation coefficients in a marked way.

Regarding dream recall frequency, the present sample reported higher figures than the truck drivers (1.90 per week compared to 0.94 per week; cf. Schredl, Funkhouser & Arn, 2005-06). This can easily be explained by the gender of the participants since women tend to recall dreams more often than men (Schredl & Reinhard, 2008). On the other hand, the percentage of work-related dreams was considerably smaller in the hairdressers compared to the truck drivers who completed a similar questionnaire (3.6% vs. 16.8%). First, the questionnaire item did only ask for one aspect of the hairdressers' job, talking to the customer. Although this seems a major part of the work, the percentage of work-related dreams might have been higher if other aspects like cutting hair were also included. This was not done be-

Table 2. Correlations between work-related dreams and waking variables.

| Variable | Frequency of dream recall | Frequency of work-related dreams | Percent of Work-related dreams | Emotional tone of work-related dreams |
|---------------------------|---------------------------|----------------------------------|--------------------------------|---------------------------------------|
| Age | -.248* | .196 | .009 | .236 ⁽⁺⁾ |
| Professional life (yrs.) | -.272* | .272* | .066 | .214 |
| Workweek duration (hours) | -.053 | .039 | .106 | .112 |
| Subjective stress | .074 | .004 | .036 | -.096 |
| Job satisfaction | -.184 ⁽⁺⁾ | .064 | -.032 | .199 ⁽⁺⁾ |
| Life satisfaction | .019 | -.340** | -.317** | .173 ⁽⁺⁾ |

Note. ⁽⁺⁾ $p < .10$, * $p < .05$, ** $p < .01$

cause of comparability to the truck driver sample where the question was aimed at the amount of driving and not at, for example, talking to colleagues, the boss, refueling the truck. In order to look into the continuity between work and dreaming it would be interesting to expand the present study and elicit all work-related dream topics and relate them to the amount of time spent with the corresponding activity in waking. Another possible explanation for the low percentage of work-related dreams might be the low stress levels and high job satisfaction (mean: 4.63 in respect to the upper limit of 5) reported in this sample compared to what the truck drivers reported. This might also explain why significant correlations between frequency of work-related dreams and job associated variables have not been detected (restricted variance in the waking-life variables). Also, the non-significant correlation between workweek duration and number of work-related dreams (or percentage of work-related dreams) might be explained by salience factors, the daytime experience is not strongly associated with intense emotions (stress, dissatisfaction) and, thus, the chance of being incorporated into subsequent dreams decreases (cf. Schredl, 2006). Therefore, it would be promising to study persons with high stress related to their jobs. The truck drivers' results also indicate that dreaming is most strongly affected if the job interferes with normal daily routines, i.e., long-distance drivers who have to sleep in their truck and not at home reported work-related dreams more often. So it would be interesting to study professionals whose job affects their daily routines strongly, e.g. flight attendants, shift-workers.

The positive correlation between the number of years spent in the profession and the frequency of work-related dreams seems plausible in the view of the continuity hypothesis since the longer time span would increase the chance of incorporating work-related topics since dreams – especially dreams from the second part of the night – also include experiences of the more distant past (cf. Schredl, 2003). It is not clear why the percentage of work-related dreams were not related to professional history because the decreasing dream recall frequency should yielded a larger effect in that variable. Achte, Malassu and Saarenheimo (1985) reported that 22.5% of 75-year-old people still have

work-related dreams, more than half of them as nightmares (tools were lost, tasks could not be completed). In an illustrative example, the man, a former shop owner, reported dreams where all the goods in his store were mixed up and he wasn't able to sell anything. These dreams clearly reflect the problems he had in the last period of working prior to retiring caused by medical illnesses and memory problems (Achte et al., 1985).

A very interesting finding is the negative relation between life satisfaction and the frequency of work-related dreams. Assuming continuity between waking thoughts and dreaming, this might reflect that persons who are not satisfied with their life in general spend more time thinking about work, i.e. use their jobs which are associated with high satisfaction as some kind of compensation for discontentment in private life. This finding indicates that problems that are not related to work (family, partnership, friends, health, etc.) might affect work-related dreams and, thus, it would be desirable to include such measures into future studies. Schredl, Schäfer, Weber and Heuser (1998), for example, reported that health problems were related to dreams about health issues in patients with insomnia.

Regarding dream emotions, the marginally significant correlation coefficients between job satisfaction and emotional tone of the work-related dreams were of smaller magnitude than those obtained in the truck driver study; again likely related to the restricted range of stress levels and job satisfaction. The positive relation favors the continuity hypothesis. To summarize, the results of the present study indicate that there is a relationship between work-related variables, life satisfaction in general, and dreaming so it would be very promising to study the continuity between waking and dreaming in persons with different professions. The questionnaire method that has the advantage of not making excessive demands on the professionals should nevertheless complemented by diary studies in order to learn more about how work stress is reflected in dreams.

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