

How much information about the dreamer is in one dream report? An experimental study and its clinical implications

Michael Schredl, Katharina Ebert, Manuel Riede, & Lisa Störkel

Central Institute of Mental Health, Medical Faculty Mannheim, Heidelberg University, Germany

Summary. Working with dreams is a technique commonly used in psychotherapy. The present study showed that by presenting two different dreams from one dreamer differing estimations of the dreamer's personality results. The implication for clinical practice is that single dreams should not be over-interpreted regarding their meaning or what they may reveal concerning any pathology in the dreamer's state. In addition, the subtle effects of dream telling on the attitude and, thus, the therapeutic relationship, should be recognized. The present study is only the beginning of a project to study the effect of dream sharing on social interactions in everyday life and in the clinical setting in a more detailed way.

Keywords: Dream work, dream interpretation, dream sharing, personality

1. Introduction

The aim of clinical dream work is to relate the dream to the waking-life issues of the dreamer and to help him/her understand the underlying patterns and eventually change dysfunctional cognitions and behavior (overview: Pesant & Zadra, 2004). On the other hand, empirical dream research (Domhoff, 2011; Schredl, 2012; Strauch & Meier, 2004) has shown that dreaming is affected by waking life, the so-called continuity hypothesis of dreaming. Although the basic idea of these approaches is similar (finding connections between dreaming and waking life), the approaches are different: Whereas researchers study the effects of waking-life experiences on dreams, clinical dream work starts with the dream and goes backwards in time in order to relate the dream to waking-life issues of the dreamer.

How can this second approach be studied in a systematic way? Two studies (Fosshage & Loew, 1978b; Zane, 1971) used a qualitative approach by presenting a dream to different analysts. The dream of Zane's (1971) study was one reported by a male patient and included frightening feelings and seeing a big bald patch on the back of his head that was getting larger all the time. The four analysts linked this dream to different waking-life issues like latent homosexuality, rage, fear of losing control, and an identity crisis (Zane, 1971). The other study including analysts with different theoretical backgrounds also showed a considerable number of waking issues that were connected to the dream (Fosshage & Loew, 1978a).

In order to quantify the accurateness of interpretations, matching studies can be helpful. For example, DeDonato, Belicki, and Cuddy (1996) presented 75 judges 14 worst

nightmares of women who had been abused sexually in childhood and 14 worst nightmares of women without any history of sexual abuse in random order. On average, the judges classified 69.4% of the dreams correctly (chance probability: 50%), i.e., the dream did provide some information as to whether the dreamer had a history of sexual abuse or not (DeDonato et al., 1996). But it should be kept in mind that the correct matching was less than perfect, even though significantly above chance level. A simpler characteristic of the dreamer was chosen in the studies of Schredl, Schwenger, and Dehe (2004), Schredl (2008), and Schredl, Becker, and Feldman (2010): the dreamer's gender. Two-hundred dream reports were edited (e.g., girlfriend or boyfriend was altered to girlfriend/boyfriend) in order to minimize correct identification by formal dream characteristics, sorted in random order and presented to the two judges in each study. The accurate matching rate ranged from 57.5% to 68.0%, all statistically above chance (50%). But for a considerable number of dreams the judges were not able to determine whether the dream report was provided by a male or female dreamer. More complex characteristics have not been studied with this matching design.

The present study applied a paradigm that has never been used in dream research. The external judges were presented with two different dream reports of the same dreamer and were then asked to estimate the personality characteristics of the dreamer. The underlying idea was that the estimates should match quite nicely because dreaming is related to the dreamer's personality (Blagrove, 2007). On the other hand, if the external estimates differ considerably, the conclusion would be that one dream report does not allow valid inferences about the dreamer's personality.

2. Method

2.1. Participants

The sample included 60 psychology students (50 women, 10 men) with the mean age of 21.73 ± 3.00 yrs. The two subgroups (see procedure section below) did not differ in age (group 1: 22.29 ± 3.30 yrs. ($N = 28$) vs. group 2:

Corresponding address:

Prof. Dr. Michael Schredl, Sleep laboratory, Central Institute of Mental Health, PO Box 122120, 68072 Mannheim, Germany.
Email: Michael.Schredl@zi-mannheim.de

Submitted for publication: January 2015

Accepted for publication: March 2015

21.25 ± 2.68 yrs. (N = 32); $t = 1.3$, $p = .1848$) and gender (group 1: 25 women/3 men vs. group 2: 25 women/7 men; $\chi^2 = 1.3$, $p = .2472$).

2.2. Dream reports

For the purpose of this study, two dream reports of a male participant (age: 25 yrs., psychology student) from a large pool of dream reports (N = 1612) collected in a previous study (Schredl, Wittmann, Ciric, & Götz, 2003) were selected. The selection criteria were: they should be of comparable length and differ with regard to the self-rated negative emotions. Both dreams were rated with positive emotions but dream 1 (word count: 262 words) did not include any self-rated negative emotions. The dream plot is about a race which is won by the dreamer who also had the task to rescue a woman. After that he met with friends and his ex-girlfriend. He was happy to see her and they connect with each other. He proposes to her and is very happy because she wants to marry him. The second dream (word count: 321 words) included moderate negative emotions. The dreamer didn't catch the school bus and his friends did not wait. He was hurt. Finding another bus, he tried to follow them but driving the bus was difficult. He causes an accident resulting in a person being severely wounded. The dreamer has compassion with the wounded bus driver. The dream ended with a scene where the dreamer observes sexual activities of two women and three men. Even though he is fascinated, he felt embarrassed as one of the women pointed at him. As the participants kept a diary over a two-week period, the time interval between the dream occurrences was short.

2.3. Research instruments

First, the participants should evaluate the content of dream on a five-point rating scale: -2 = negative, -1 = somewhat negative, 0 = neutral, 1 = somewhat positive, and 2 = positive. The same rating scale was presented for estimating the feelings the participants thought the dreamer experienced within the dream.

Second, twenty-five items of the Big Five personality NEO-PI-R (Ostendorf & Angleitner, 2004) were presented; for each factor (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) five items. The items were selected regarding their practicability for external ratings. Example items were the following: "The dreamer often feels inferior compared to others. (N)", "The dreamer has strong emotional connections to his friends. (E)", "The dreamer has a strong imagination. (O)", "The dreamer would like to cooperate with other persons instead of competing with them. (A)", "The dreamer works hard to achieve his goals." Each five-point item was coded from 0 to 4, mean scores were computed (after reversing the respective items: two or three items per scale were inverted).

Third, nine items stemming from two scales of the SKI self-concept questionnaire (Georgi & Beckmann, 2004) were selected and presented. The "Ego strength vs. insecurity" scale consisted of five six-point scales ranging from "totally disagree" (value = 1) to "totally agree" (value = 6). An example item is: "The dreamer rarely ruminates about personal issues." Means were used in further analyses with higher values representing more ego strength. Items with a similar format were used for estimating "Assertiveness vs. Cooperation", for example: "The dreamer rarely assert himself."

Lastly, eight items were generated to allow the participants to estimate the current life situation of the dreamer like social support, friends, and family. Example items are: "The dreamer is well received from people around him." or "The dreamer is well integrated in his social network." or "The dreamer is within a difficult situation with his family." The six-point items were averaged. Cronbach's alpha of this newly constructed scale was $r = .825$ (N = 60).

2.4. Procedure

The study was carried out in groups meeting in the computer lab of the psychology institute. The participants received dream 1 (positively-toned dream) or dream 2 (dream without self-rated negative emotions). They were not informed that two dream reports were used in the study. After reading the dream, including the explanation that the dream report was provided by a young man, participants were asked to fill in the online questionnaire (see research instruments) that was constructed using the software provided by www.studentenforschung.de. The dreamer completed the NEO-PI-R during the time period that the dreams were recorded. Statistical tests were computed using the SAS 9.2 for Windows software package (SAS Institute Inc., Cary, NC, USA).

3. Results

Means and standard deviations of estimates regarding the content and the dreamer's emotions are depicted in Table 1. As expected, the positively-toned dream was rated much more positive compared to the negatively-toned dream. Participants reading the negatively-toned dream rated the dreamer higher on neuroticism and lower on ego strength, assertiveness and current life situation compared to participants reading the positively-toned dream; all findings are highly significant (see Table 1). Higher scores on extraversion and conscientiousness were reported by group 1 (positive dream) whereas group 2 (negative dream) rated agreeableness of the dreamer higher than group 1. For the "openness to experience" factor no significant difference was found.

As the dreamer completed the full version of the NEO-PI-R, the estimations means of the two groups could be compared to the data provided by the dreamer himself. The mean estimates of group 1 for neuroticism and openness to experiences are closer to the dreamer's scores compared to the estimates of group 2. On the other hand, the estimates of group 2 are closer to the dreamer's scores for extraversion and agreeableness. For conscientiousness, the dreamer's score is right between the estimates of the two groups.

4. Discussion

Overall, the findings indicate that reading two different dreams of the person yielded very different evaluations of his personality. One of the implications is that one dream report does not provide a lot of information about the dreamer. Before elaborating on clinical implications, the following section will focus on suggestions for studying this topic, i.e., inferring information about the dreamer from dreams in a more detailed and naturalistic way.

The setting of the present study was an artificial one: psychology students read a dream report and were asked to adjudge the dreamer's personality. As the participants were blind with regard to the study's design, i.e., they did

Table 1. Estimates of the two groups and the dreamer's scores of the Big Five personality dimensions

Variable	Group 1 (pos. dream)	Group 2 (neg. dream)	t-test (p-value)	Dreamer
Dream content	1.46 ± 0.64	-1.25 ± 0.44	t = 8.9 <.0001	
Dreamer's emotions	1.32 ± 0.82	-0.84 ± 0.88	t = 9.8 <.0001	
Neuroticism	1.62 ± 0.42	2.49 ± 0.51	t = -7.2 <.0001	1.80
Extraversion	2.52 ± 0.45	2.08 ± 0.42	t = 4.1 .0001	2.20
Openness to experience	2.23 ± 0.50	2.09 ± 0.46	t = 1.1 .2652	2.40
Agreeableness	1.82 ± 0.53	2.17 ± 0.35	t = -3.0 .0044	2.20
Conscientiousness	2.27 ± 0.47	1.77 ± 0.34	t = 4.8 <.0001	2.00
Ego-Strength	3.46 ± 0.63	2.55 ± 0.57	t = 5.9 <.0001	
Assertiveness	4.07 ± 0.66	2.70 ± 0.72	t = 7.2 <.0001	
Current life situation	3.98 ± 0.49	3.02 ± 0.55	t = 7.6 <.0001	

not know that different dream reports were used, possible biases due to demand characteristics had been minimized. However, the question arises as to how these evaluation processes happen in "real life". In addition, the dreams of a male dreamer were rated by female students. Unfortunately, the number of male participants was too small to allow gender-specific analyses. As Schredl et al. (2004) reported that female judges were more confident in their identifying women's dreams than men's dreams, it would be interesting to study whether gender stereotypic processes might have also played a role in this study.

In order to continue this line of research, two approaches might be fruitful to pursue. First, it would be interesting to learn how telling a dream affects the general picture one has of the person who is telling the dream. Dream sharing is quite common in students, in families and the general public (Olsen, Schredl, & Carlsson, 2013; Schredl, 2009; Schredl, Buscher, Haaß, Scheuermann, & Uhrig, 2013; Schredl & Schawinski, 2010). Even though the reasons for dream sharing (e.g., relieve in case of nightmares, entertainment; Curci & Rime, 2008) and the effects of dream sharing (Duffey, Wooten, Lamadue, & Comstock, 2004) have been studied, there is no published research on the effect of dream sharing on the person who listens, i.e., how this might alter the attitude towards the dreamer. It would thus be interesting to carry out studies in the field to investigate this effect being aware of the fact that different kinds of relationship between dream sharer and dream listener, e.g., romantic partners/couples, friends, acquaintances, or unfamiliar persons, would have a strong impact on the way how the dream affects the listener. The second research approach would be of interest to clinical practice.

Whereas there have been research on how dream work is helpful during the course of therapy and how it is evaluated by the dreamer and the therapist (Crook Lyon & Hill, 2004; Crook & Hill, 2003; Hill & Goates, 2004; Schredl, Bohusch, Kahl, Mader, & Somesan, 2000), it would be very interesting to study how the narration of a dream during a psychotherapy session affects the therapist's perspective on the client. In an experimental design, one could instruct clients to report the same dream or – as has been the case in the present study – to instruct one client to tell two different dreams to two different therapists. These approaches would help

to get a clearer picture about how telling a specific dream can affect the attitude towards the dreamer and, in consequence, the relationship between a dreamer and listener – in the clinical setting, the therapeutic relationship.

For the present pilot study, two dreams differing in emotional tone were selected on purpose. The agenda behind that was to optimize possible differences in the judgements. The participants' ratings clearly indicate that this manipulation was recognized, i.e., the positively-toned dream was rated much more positive than the negatively-toned one. Therefore, the differences in neuroticism, current life stress, and negative self-concepts are easily explained. Interestingly, there were also significant differences in other dimensions not directly targeted by selecting two specific dreams, e.g., extraversion, agreeableness, and conscientiousness. In the negative dream the dreamer has problems with his friends (not waiting for him), whereas a positive social interaction (with his ex-girlfriend) is present in the second dream, i.e. that might account for the higher rating of extroversion in the positive dream condition. The idea of rescuing someone (positive dream) might yield the higher rating of conscientiousness in this condition. Why the ratings of agreeableness were higher for the negative dream condition is not easily understood. It might be that the compassion with the wounded persons mentioned in the dream was responsible for that difference. In order to pursue the present study's paradigm further, one option would be to select two dream reports randomly and another – more promising option – would be to use more dreams of one dreamer in order to evaluate whether the personality estimates might converge if, for example, 20 dreams per condition were read by the external judges. Schredl (1998) has shown that due to the variability of dream content about 20 dreams per participant are necessary to obtain stable results; similar to the fact that a higher number of items presented in a questionnaire yielded more reliable total scores. Another direction for future research would be to look at waking fantasies in addition to dreams, i.e., studying whether different waking fantasies might also yielded different evaluations of the person's personality. Standardized procedures for eliciting waking fantasies in a systematic way are not easy to implement (cf. Strauch, 2004).

To summarize, the present study provided evidence that choosing a particular dream can affect the evaluation of the dreamer by the person who listens to the dream. The major implication for clinical practice is that single dreams should not be over-interpreted regarding their meaning or what they may reveal concerning any pathology in dreamer's psychological situation since different dreams offer very different views of the person's inner life. In addition, the more subtle effect of dream telling on the attitude and, thus, the therapeutic relationship, should be recognized. The present study is only the beginning of studying the effect of dream sharing on social interactions in everyday life and in the clinical setting in a more detailed way.

References

- Blagrove, M. (2007). Dreaming and personality. In D. Barrett & P. McNamara (Eds.), *The new science of dreaming - Volume 2: Content, recall, and personality correlates* (pp. 115-158). Westport: Praeger.
- Crook Lyon, R. E., & Hill, C. E. (2004). Client reactions to working with dreams in psychotherapy. *Dreaming*, 14, 207-219.
- Crook, R. E., & Hill, C. E. (2003). Working with dreams in psychotherapy: the therapists's perspective. *Dreaming*, 13, 83-93.
- Curci, A., & Rime, B. (2008). Dreams, emotions, and social sharing of dreams. *Cognition and Emotion*, 22, 155-167.
- DeDonato, A., Belicki, K., & Cuddy, M. (1996). Rater's abilities to identify individuals reporting sexual abuse from nightmare content. *Dreaming*, 6, 33-41.
- Domhoff, G. W. (2011). Dreams Are Embodied Simulations That Dramatize Conception and Concerns: The Continuity Hypothesis in Empirical, Theoretical, and Historical Context. *International Journal of Dream Research*, 4, 50-62.
- Duffey, T. H., Wooten, H. R., Lamadue, C. A., & Comstock, D. C. (2004). The effects of dream sharing on marital intimacy and satisfaction. *Journal of Couple and Relationship Therapy*, 3, 53-68.
- Fosshage, J. L., & Loew, C. A. (1978a). Comparison and synthesis. In J. L. Fosshage & C. A. Loew (Eds.), *Dream interpretation - A comparative study* (pp. 243-295). New York: Spectrum Publications.
- Fosshage, J. L., & Loew, C. A. (1978b). Introduction to 'dream interpretation'. In J. L. Fosshage & C. A. Loew (Eds.), *Dream interpretation - A comparative study* (pp. 1-5). New York: Spectrum Publications.
- Georgi, R. v., & Beckmann, D. (2004). *Selbstkonzept-Inventar : SKI* Bern: Huber.
- Hill, C. E., & Goates, M. K. (2004). Research on the Hill cognitive-experiential dream model. In C. E. Hill (Ed.), *Dream work in therapy: facilitating exploration, insight, and action* (pp. 245-288). Washington: American Psychological Association.
- Olsen, M. R., Schredl, M., & Carlsson, I. (2013). Sharing dreams: Frequency, motivations, and relationship intimacy. *Dreaming*, in press.
- Ostendorf, F., & Angleitner, A. (2004). NEO-PI-R - NEO Persönlichkeitsinventar nach Costa und McCrae - Revidierte Fassung (Vol. 44). Göttingen: Hogrefe.
- Pesant, N., & Zadra, A. (2004). Working with dreams in therapy: what do we know and what should we do? *Clinical Psychology Review*, 24, 489-512.
- Schredl, M. (1998). The stability and variability of dream content. *Perceptual and Motor Skills*, 86, 733-734.
- Schredl, M. (2008). Determining the dreamer's gender from a single dream report: a matching study. *International Journal of Dream Research*, 1, 23-26.
- Schredl, M. (2009). Sharing dreams: sex and other sociodemographic variables. *Perceptual and Motor Skills*, 109, 235-238.
- Schredl, M. (2012). Continuity in studying the continuity hypothesis of dreaming is needed. *International Journal of Dream Research*, 5, 1-8.
- Schredl, M., Becker, K., & Feldman, E. (2010). Predicting the dreamer's gender from a single dream report: a matching study in a non-student sample. *International Journal of Dream Research*, 3, 130-133.
- Schredl, M., Bohusch, C., Kahl, J., Mader, A., & Somesan, A. (2000). The use of dreams in psychotherapy: a survey of psychotherapists in private practice. *Journal of Psychotherapy Practice and Research*, 9, 81-87.
- Schredl, M., Buscher, A., Haaß, C., Scheuermann, M., & Uhrig, K. (2013). Gender differences in dream socialisation in children and adolescents. *International Journal of Adolescence and Youth*, 1-8.
- Schredl, M., & Schawinski, J. A. (2010). Frequency of dream sharing: The effects of gender and personality. *American Journal of Psychology*, 123, 93-101.
- Schredl, M., Schwenger, C., & Dehe, A. (2004). Gender differences in dreams: a matching study. *Counseling and Clinical Psychology Journal*, 1, 61-67.
- Schredl, M., Wittmann, L., Ciric, P., & Götz, S. (2003). Factors of home dream recall: a structural equation model. *Journal of Sleep Research*, 12, 133-141.
- Strauch, I. (2004). *Träume im Übergang von der Kindheit ins Jugendalter: Ergebnisse einer Langzeitstudie*. Bern: Hans Huber.
- Strauch, I., & Meier, B. (2004). *Dem Traum auf der Spur: Zugang zur modernen Traumforschung* (2. Auflage). Bern: Hans Huber.
- Zane, M. D. (1971). Significance of differing responses among psychoanalysts to the same dream. In J. H. Masserman (Ed.), *Dream dynamics* (pp. 174-177). New York: Grune & Stratton.