

Presleep self-suggestion and dream recall: A single-subject study

Timothy A. Storlie

Associated Counselors and Psychotherapists, USA

Summary. Dreaming is a universal human experience. Despite this universality, dreams are easily forgotten and home dream recall frequency varies considerably among persons and from within one person from night to night. Investigation into the dream recall process remains a core issue in the field of dream research. Studies suggest that dream recall can be affected by presleep conditions and that presleep suggestions can influence dream content. This single-subject A/B experiment was conducted to test the hypothesis that dream recall would be enhanced using presleep self-suggestion. The results showed no increase in dream recall during the self suggestion period,. More research needs to be done before this question can be answered with any degree of confidence.

Keywords: dream recall, dream recall frequency, presleep suggestion

1. Introduction

Dreaming is a universal and frequent human experience. Everyone dreams regardless of culture, gender, or age. Historically and cross-culturally people have attempted to understand, explain and utilize their dreams in order to improve their daily lives. They have often looked to dreams out of curiosity and for entertainment; for personal guidance, problem solving, divination and healing; for philosophical insights and creative inspiration; and for scientific breakthroughs. Dreams are highly valued, religious phenomena in nearly all of the world's religious traditions (Bulkeley, 2001; Doniger & Bulkley, 1993; Krippner, Bogzaran, & Carvalho, 2002).

Research suggests that dreams can also be clinically significant and serve as a useful adjunct to psychotherapy (Hill, 2003; Hill, Rochlen, Zack, McCready, & Dematatis, 2003; Rochlen, Ligiero, Hill, & Heaton, 1999). Just as art, dance, and music therapy have been recognized as therapeutic, dream work is also seen as a way of promoting self-discovery, encouraging emotional expression, and as an aid to improving overall mental health. For some, the practice of dream work offers fresh methods for confronting fears or learning how to feel, recognize, accept, and appropriately express emotions.

Despite the seeming universality of dreaming, dreams are easily forgotten and home dream recall frequency varies considerably among persons and within one person from night to night (Schredl, Lahl, & Goritz, 2010; Schredl & Reinhard, 2007). For clinicians to utilize a client's dream material in therapeutic sessions, the client must first be able

to recall his or her dreams. Investigation into the dream recall process is a core issue in the field of dream research (Beaulieu-Prevost, & Zadra, 2007; Schredl, Wittmann, Ciric, & Gotz, 2003). More than 100 studies have been published on dream recall (Beaulieu-Prevost & Zadra, 2005). Several studies have found a positive correlation between people's attitudes toward dreams and dream recall frequency (Cernovsky, 1984; Schredl & Doll, 2001). Attitudes toward dreams seem to be the most consistent predictor of dream recall, e.g., individuals with more positive attitudes toward dreaming tend to recall dreams on a more regular basis.

Research also suggests that dream recall can be affected by presleep conditions and that presleep suggestions can influence dream content (Cohen, 1974; Koninck & Brunette, 1991; Nikles, Brecht, Klinger, & Bursell, 1998). This study was designed to explore the influence of presleep suggestion on dream recall.

2. Method

The most important criteria in the selection of a research method is whether the method under consideration will help answer the question posed (Robson, 2002). For this experiment, I used a single-subject A/B design. This is a simple "before and after" quasi-experimental design using a non-probability sample N=1. The dependent variable is dream recall. The independent variable is presleep self-suggestion.

2.1. Experimental Indicators

Dream recall was operationalized in both phases using three indicators. The advantage of using multiple indicators is its utility for increased opportunity to detect any changes in the dependent variable. Three indicators were employed. First, the memory that a dream had occurred was recorded as either "Yes" or "No," and in order to compare results between phases A and B, each "Yes" response was assigned a value of 1 point. Second, the feeling that a dream had occurred was recorded as either "Yes" or "No," and in order to compare results between phases A and B, each "Yes" response was assigned a value of 1 point. Third, the amount of dream

Corresponding address:

Timothy A. Storlie, Associated Counselors and Psychotherapists, 108 SE 124th Avenue, #17, Vancouver, WA, USA, 98684

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detail that could be consciously recalled was rated as either “very little recalled” (assigned a numerical value of 1 point) or “some detail recalled” (assigned a numerical value of 2 points) or “substantial detail recalled” (assigned a numerical value of 3 points).

2.2. Experimental Measures

Dream recall (the dependent variable) was measured in phase A and phase B utilizing the following procedures: upon awakening each morning, the participant (myself) remained in bed lying still and for a period of 3-5 minutes, attempted to recall as many dreams as possible, in as much detail as possible, and immediately recorded details in a dream journal. If I had no conscious recollection of dreaming, I also recorded whether or not I felt a dream had occurred.

During phase A of this experiment, baseline data was collected according to the above instructions over 11 consecutive days. On day 12, phase B was initiated and the intervention was employed for an additional 11 consecutive days. The intervention (the independent variable) was presleep self-suggestion, which was defined as lying in bed just before falling asleep with my eyes closed, mentally repeating “I remember my dreams” for approximately five minutes or until sleep occurred, whichever came first.

The total hours of sleep during the baseline phase A were 81 hours. The average number of hours of sleep per night during baseline phase A was 7.36. The total number of hours asleep during the intervention phase B was 80.5 hours. The average hours of sleep per night during the intervention phase B was 7.3.

3. Results

3.1. Phase A

During the baseline phase A, I recorded 11 feelings that a dream had occurred. Each feeling that a dream had occurred was assigned a value of 1 point for a total of 11 points. Eight actual dreams were recorded for an average of .72 dreams recalled per night. Of the 8 actual dreams recalled, 3 dreams were rated “very little detail recalled.” Each dream in this category was assigned a value of 1 point for a total of 3 points.

Three dreams were rated “some detail recalled.” Each dream in this category was assigned a value of 2 points for a total of 6 points. Two dreams were rated “substantial detail recalled.” Each dream in this category was assigned a value of 3 points for a total of 6 points. The total points assigned for phase A were 26.

3.2. Phase B

During the intervention phase B, I recorded 11 feelings that a dream had occurred. Each feeling that a dream had occurred was assigned a value of 1 point for a total of 11 points. Six actual dreams were recorded for an average of .54 dreams recalled per night. Of the 6 actual dreams recorded, 2 dreams were rated “very little detail recalled.” Each dream in this category was assigned a value of 1 point for a total of 2 points. Zero dreams were rated “some detail recalled.” Each dream in this category was assigned a value of 2 points for a total of 0 points. Four dreams were rated “substantial detail recalled.” Each dream in this category

was assigned a value of 3 points for a total of 12 points. The total points assigned for phase B were 25 points.

4. Discussion

In this experiment, I used a single-subject A/B design to test the hypothesis that dream recall would be enhanced using presleep self-suggestion. Results of phase A were given a numerical value of 26. Results of phase B were given a numerical value of 25. As the numerical ratings across phases were nearly identical, the hypothesis that presleep suggestion would enhance dream recall was tentatively rejected. Although the amount of dream material consciously recalled was slightly greater during the intervention phase, the total number of dreams consciously recalled during intervention was less than baseline.

There are numerous variables that might impact conscious dream recall. The research process I used can be easily duplicated to explore other possible variables. For example, if the mental states conducive to recalling dreams are similar to being asleep, as suggested by Stross and Shevrin (1967), then it would seem reasonable that lying still after first awakening could contribute to dream recall—but for how long? This is one variable that could be tested in future research.

Other testable variables include: participant gender and age; presence or absence of a sleeping partner; level of reported sleep comfort, e.g., fit of blankets, pillow, mattress, temperature of the sleeping area, presence of adequate ventilation such as an open window or not; presence of sleep apnea, pain, or other medical conditions; presence of inside or outside noises; current weather conditions; time of going to sleep/time of awakening and number of hours slept; number of nocturnal awakenings; use of medications and supplements; elapsed time since last meal was eaten prior to sleep; presleep activity, e.g., visiting, watching television, sexual activity; whether participant awakens via alarm clock or naturally; means of recording remembered dreams; interest in dreams throughout the day; mental rehearsal of dream recall during waking hours; and wording of presleep suggestion.

4.1. Advantages and Limitations of Method

The main advantage of the A/B design lies in its easy set-up, flexibility, and simple administration (Morgan, 2009; Ray, Barrio Minton, Schottelkorb, & Brown, 2010; Tate, McDonald, Perdices, Togher, Schultz, & Savage, 2008). It can also provide quick feedback to clinicians, researchers, and participants.

The chief limitation of this design is a lack of external validity. Other shortcomings are its vulnerability to threats of internal validity and the use of participant self-report for data collection. Self-report is highly vulnerable to bias.

4.2. Closing

Sigmund Freud believed dreams were clinically significant (Kaplan & Sadock, 1998). I agree. Yet, in order for clinicians to utilize a client's dream material in therapeutic sessions, the client must first be able to recall his or her dreams. Can presleep self-suggestion enhance dream recall? More research needs to be done before this question can be answered with any degree of confidence.

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