IJODR

Being naked in dreams: Analysis of a long dream series

Michael Schredl

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

Summary. Some theorists claimed that dreams show mainly features of primary consciousness but lack the characteristics of secondary consciousness like self-reflection, abstract thinking, and metacognition. One approach to this question is to study dreams in which the basic pattern of the dream involves higher-order consciousness processing. In a dream series of 12,159 dreams, the topic of "being totally or partially nude" was analyzed since the associated shame/embarrassment is a result of the dreamer's worries about what others might think of him or her (theory of mind). About 1.08% of the dreams included this topic, showing a large variability regarding the content. Overall, the findings offered strong support against the views that dreams are single-minded or mainly characterized by primary consciousness processes. Studying typical dreams that include – almost per definition – secondary consciousness processes as main feature and, thus representing the tip of the iceberg, is a promising approach toward clarifying the cognitive capabilities within dreams.

Keywords: Dream content, Typical Dreams, Being naked, Secondary consciousness

1. Introduction

Dreaming is defined as subjective experiences that occur during sleep (Schredl, 2018). Some theorists (Hobson, 2009; Hobson & Voss, 2011) have claimed that dreams show mainly features of primary consciousness (perceptions, emotions) but lack the characteristics of secondary consciousness such as self-reflection, abstract thinking, and metacognition. This line of thinking has been challenged by empirical findings showing that theory of mind-related processes (Kahn & Hobson, 2005) and high-order cognition like evaluating, metacognition (Kahan & LaBerge, 2011) can be found in dreams. One methodological issue in dream research is related to the fact that dream content analytic findings are often based on dream reports coded by external judges (Domhoff, 1996; Hall & Van de Castle, 1966). That is, these findings depend on the ability and instructions given to the participants to report the dream experience after awakening as fully as possible (Schredl, 2010), e.g., if the participant is focusing on reporting the dream action, higher-order cognitive processes might occur but simple do not show up in dream reports unless specific probing via questionnaires are performed (Kahan & Claudatos, 2016). Another option for investigating secondary consciousness in dreams is to focus on dream themes that inherently rely on secondary consciousness features, e.g., dreams of being partially or totally naked, as the dreamer often feels shame and thinks about what others might think of him or her (Freud, 1900/1991). Typical dream in this context means that the dream theme is experienced by a substantial per-

centage of the general population (Mathes & Schredl, 2014). Freud reported a dream of his own to illustrate the topic: "I was very incompletely dressed and was going upstairs from a flat on the ground floor to a higher story. I was going up three steps at a time and was delighted at my agility. Suddenly, I saw a maidservant coming down the stairs – coming towards me, that is. I felt ashamed and tried to hurry, and at this point, the feeling of being inhibited set in: I was glued to the steps and unable to budge from the spot." (Freud, 1900/1991p. 335-336) The dream has almost a nightmarish character (being paralyzed) and Robert and Zadra (2014) found several nightmares with being naked as the distressing feature. Freud (1900/1991) speculated that these dream types reflect early childhood memories because young children manifest the desire to exhibit, so such dreams could relate to suppressed and forbidden wishes from childhood. On the other hand, Freud (1900/1991) also mentioned that children who undress themselves in social situation are scolded and, thus, one might speculate as to whether the feeling of shame or embarrassment in the dreams of being naked or inappropriately dressed is related to super-ego issues. Myers (1989) emphasized his observation (already addressed by Freud) that in these dreams the onlookers don't react to the nakedness of the dreamer and speculated whether or not those dreams reflect the child's attempts to gain love and attention from indifferent parents – unsuccessful attempts because it is not working in the dream.

Despite the interesting theme being clearly linked to secondary consciousness features, research into the phenomenology of dreams of being naked is scarce. The Typical Dream Questionnaire included the items "Have you ever dreamed of being inappropriately dressed?" and "Have you ever dreamed of being nude?" and there is data from different countries (USA, Japan, Canada, Germany, Hong Kong/China) showing that, in Western countries, 32.5% to 43.0% of the participants stated that they have dreamed about being inappropriately dressed and similar percentages concerning the topic of being nude (Griffith et al., 1958; Nielsen et al., 2003; Schredl et al., 2004; Yu, 2008). Interestingly, the figures for a Jordan student sample are much lower: 18.4%

of the participants have had a dream of being inappropriately dressed and 16% of being naked. This indicates cultural differences as the Japanese sample also showed lower percentages than the US American sample (Griffith et al., 1958). In a diary dream sample (N = 1612 dreams), 3.41% of the dreams included being inappropriately dressed and 1.43% of being naked (Mathes & Schredl, 2014); the figures for a most recent dream sample (N = 2853) were lower: 1.11% (being inappropriately dressed) and 0.45% (being nude) (Mathes et al., 2014). These empirical data support the notion that a substantial percentage of the population experiences these dream types in which reflecting on what other persons think (secondary consciousness) is basic.

The present analysis of a long dream series (N = 12,139 dreams) aimed at studying the frequency and phenomenology of dreams of being partially or totally naked, e.g., the intensity of experienced emotions, the setting (familiar vs. unfamiliar), social context (known persons or strangers), the reaction of the dream characters to the situation, and, lastly, how the dreamer copes with the situation, e.g., putting some clothes on.

2. Method

2.1. Participant and dream diary

The male participant started to keep an unstructured dream diary from the age of 22, with the first dream recorded on September 5, 1984. For the present analysis, all 12,159 dreams recorded between the first dream and December 31, 2015 (the current status of digitalized and coded dreams) were included. The mean length of the dreams was 136.85 ± 85.54 words.

2.2. Procedure

Dream reports were originally hand-written but were then typed and entered into a database (Alchera 3.72, created by Harry Bosma, www.mythwell.com) by the dreamer himself. This database permits the assigning of keywords to the dreams, a task that was also carried out by the dreamer. Each dream was coded by the dreamer while typing the dreams for being partially or totally nude in inappropriate situations, e.g., in the street, in a public building, at home with non-family members present. In a second step, the dreamer classified these dreams according to the emotion related to the fact of being nude (strong negative emotion, mild negative emotion, neutral/no emotions mentioned, positive), the degree of nakedness (totally nude, lower body uncovered, upper body uncovered, partially nude (unclear how), wearing something non-clothing like, e.g., a blanket, wearing only underpants), familiarity of the setting (familiar, unfamiliar), familiarity of the dream characters (familiar persons, strangers, both), reaction to nudity from other dream characters (yes, no), solution (waking up, putting on some clothes, no solution/scene shift).

The Alchera software provides a word count for each dream report. Reports included only dream experience-related words and all redundancies, e.g., repetitions that occurred in writing down the dream in the morning were excluded. The analysis unit was an individual dream report. The data were exported into an Excel spreadsheet (Microsoft) and the descriptive data analysis was carried out using the SAS 9.4 software package for Windows (Cary, North Carolina, USA).

3. Results

Overall, 1.09% of the dreams included some form of nudity. The average word count of these 132 dreams was 193.23 ± 113.72 words. In about half of the dreams the dreamer was totally nude (see Table 1). In the other dreams, the dreamer was only partially and/or inappropriately dressed. Being naked in the dream was not associated with strong negative emotion (or waking up from the dream) but in about one third of the dreams nakedness was accompanied by some kind of embarrassment and/or shame (see Table 1). Interestingly, in two dreams being naked was even associated with positive emotions. In the first dream, the dreamer had dinner with work-related persons, all were naked and it was cool to be naked. In the second dream, the dreamer was jogging naked outside, accompanied by a funny feeling of the dangling penis.

In about half of the dreams, the dreamer put on some clothes to terminate the nakedness situation but almost equally often the dream action shifted, being naked was not part of the dream anymore (see Table 1). This could be total scene shifts or focusing on other topics and the nakedness was no longer important.

In most of the dreams, the setting was unfamiliar to the dreamer, only 18 dreams (13.64%) took place in a setting familiar to the dreamer: work place (N = 9), former hometowns including the school the dreamer attended (N = 6), the current home town (N = 2), and one city the dreamer knows. In only seven dreams (5.30%) with the nakedness topic, only persons familiar to the dreamer were present in the dream (colleagues in 5 dreams, former school mates in 2 dreams). In 34.09% of the dreams were familiar and unfamiliar persons, but the majority of nakedness dreams only features unfamiliar persons (57.58%). A small number of dreams (N = 4; 3.03%) included no persons at all – even though persons could have shown up in the dream.

In a small percentage of the nakedness dreams (13.64%), explicit reactions of other dream characters to the nakedness of the dreamer occurred (see Table 2). Several reactions were negative, e.g., derogatory remark or fear of being kicked out, whereas other reactions are more neutral, e.g.,

Table 1. Characteristics of the dreams with nudity (N = 132)

Characteristics	N =	Percent
Type of nudity		
Totally nude	70	53.03%
Lower body uncovered	25	18.94%
Upper body uncovered	10	7.58%
Partially nude (unspecified)	8	6.06%
Wearing something non-clothing like	4	3.03%
Wearing only underpants	15	11.36%
Associated emotions		
Strong negative emotion	0	0.00%
Mild negative emotion	41	31.06%
Neutral/No emotions mentioned	89	67.42%
Positive emotions	2	1.52%
Resolution of the situation		
Waking up	0	0.00%
Thematic and/or scene shifts	63	47.73%
Putting clothes on	69	52.27%

children looking at the penis. One reaction (sister covering the dreamer's nakedness) was even helpful.

Dream example: "A big house with a lot going on, a public event. I'm naked and run to the room where my clothes are. My penis is slightly erect and dangles when I walk. I worry a little whether people mind if I walk around naked. In the room I put on my black underpants, I prefer being dressed to being naked. …"

4. Discussion

The findings of this single-case study based on a long dream series indicate that being totally or partially naked occurred in about 1% of the dreams. This first study looking at this typical dream theme more closely indicates that the topic shows a marked variability, even positive emotions associated with nakedness (not only shame and embarrassment). Given the substantial percentage of persons who experience dreams of this kind (Schredl, 2019) and the fact that there are other typical dream themes like examination dreams (Arnulf et al., 2014; Schredl, 2017) that include reflecting on possible thinking (negative evaluation) of other persons within the dream, one can conclude that secondary consciousness processes might be much more common in dreams than previously postulated (Hobson & Voss, 2011).

The main limitation of the study is the fact that all dreams were provided by a single, male dreamer. One would expect even higher variability regarding the emotions, reactions etc. in the nakedness dreams in a large sample, for example, the dreamer never had a nightmarish version of this dream type like Freud (Freud, 1900/1991) and others (Robert & Zadra, 2014) did. Moreover, individuals who kept dream diaries regularly showed higher scores of openness

Table 2. Nakedness dreams with reactions of other dream characters (N = 13)

No.	Content
T00161	Several old men gawking, dreamer asks them whether they have no penis
T00611	Being in a pub, someone is alerting security, worrying about being kicked out
T02382	The dreamer's mother is recognizing the nakedness
T05538	Woman takes off her clothes because she thinks the dreamer (being naked) is interested in sex
T05743	Woman backs up because dreamer approaches her naked (fear)
T09067	Sister of the dreamer covers dreamer with her wide dress
T09743	Someone is commenting on the fact that the dreamer is only partially dressed
T09753	Other person makes a snappy comment about nakedness of the dreamer
T09950	Former school mate makes derogatory remark about nakedness of the dreamer
T10163	Children looking curiously at his penis
T10215	Somebody brings to the dreamer's attention that his penis is not covered
T10628	Woman (later man) tries to get a glimpse of the dreamer's penis
T10998	Two gay men comment on the visibility of the dreamer's penis

to experience and lower scores of conscientiousness than those who do not (Schredl & Göritz, 2019), i.e., it would be very valuable to expand this pilot study to a larger, population-based sample in order to study the spectrum of being naked dreams in its fullness. It would have also been very interesting to measure Theory of Mind and self-reflection abilities of the dream journalist as these traits might influence the self-reflection and reflecting on possible thoughts of others within the dream.

Even though a stringent protocol, i.e., a structured dream diary forms, would be preferable, the analysis of long series of spontaneously recorded dreams offers several advantages (Schredl, 2018): (1) the dream journalists were not aware of the purpose of the study or event of the fact that their dreams will be analyzed quantitatively. Research has indicated that specific probing questions after recording dreams, e.g., regarding music topics, yielded much higher percentage of music dreams compared to other studies (Olbrich & Schredl, 2019; Uga et al., 2006). The idea is that instructions can focus the participant on the topic and s/he might dream more often about it due to giving the music topic more attention. (2) Typically durations of dream diary studies range between two and six weeks, as the motivation of recording dreams each morning "just" for scientific purposes declines very rapidly (Schredl, 2018), i.e., dream journals offer a unique opportunity to collect a large number of dreams from one participant and, thus, get a more complete picture of the variability of specific themes.

The frequency of nakedness dreams of 1.08% is somewhat lower than the typical dreams themes of being inappropriately dressed (3.41%) and being nude (1.43%) in a sample of diary dreams reported by students (Mathes & Schredl, 2014) but comparable to the percentage found in most recent dreams in a sample with a larger age range (Mathes et al., 2014). Given the cultural difference in the prevalence of the typical dream themes of being nude and/or inappropriately dressed, one would expect that the inter-individual differences in the frequency of those dreams might be considerable. This type of study would require a quite large number of dreams per participant.

In about half the dreams, the dreamer is fully naked while, in the rest of the dreams, partially but inappropriately dressed. Especially in the dreams with negative emotions (feeling shame or being embarrassed in about one third of the dreams), the presence of secondary consciousness processes seems obvious: these negative emotions occur because the dreamer is imagining negative evaluations – even though outspoken negative evaluations are very rare. In the above dream example the dreamer is engaged in Theory of Mind processes, thinking about whether other persons present in the dream might be offended by his nakedness.

In contrast to the observation of Freud (1900/1991) and Myers (1989), sometimes dream characters respond to the dreamer's nakedness. Most often, the reactions are not as negative as the dreamer might have anticipated (see Table 2); only three dreams include negative aspects, like derogatory remarks or threat of being kicked out. Most of the dreams with partial or total nakedness take place in an unfamiliar setting and with unfamiliar persons. Whereas it seems plausible that one would not feel embarrassed at being naked around the family and/or partner, being naked in familiar places like the hometown or the work place might even increase the feeling of being embarrassed. To study the relationship between familiarity of the setting and/or the

dream characters and feelings of shame/embarrassment in more detail, larger samples of nakedness dreams are necessary. For this dreamer, the nakedness or being inappropriately dressed was resolved in more than half of the dreams (putting on clothes) whereas in other dreams the scene or focus of the dream action shifted, that is, nakedness was not part of the dream anymore. It would be very interesting to study nightmarish forms of these dreams, i.e., with the negative emotion of shame/being embarrassed so strong that the dreamer wakes up from his or her dream.

A very interesting topic for future research is the questions as to how these dreams relate to the waking life of the dreamer. As most (or all) persons do not run around naked in public places like inner cities or their work place, these dreams surely do not replay current waking life experiences. Freud (1900/1991) speculated that these dreams might be related to childhood experiences but as he also remarked children do this playfully and do not experience shame or embarrassment. Another option would be the metaphoric (Malinowski & Horton, 2015) or emotional continuity (Hartmann, 2011) between dreaming and waking; that is that the dream is not related to the topic nakedness in waking but to the emotions of shame and embarrassment occurring within other contexts. Garfield (2001) suggested that nudity in dreams is a metaphor for feeling emotionally exposed. Based on the basic pattern of the dreams, one might formulate it even more generally; these dreams might be related to worries about what other persons think about oneself if one does not behave in the usual, customary way. Studies relating the frequency and intensity of shame and embarrassment feelings in waking life and the frequency of dreams of being naked (and feel shame/embarrassment within the dream) would help to support this line of thinking.

Studying the topic of "being totally or partially nude" in dreams offered strong support against the views that dreams are single-minded (Rechtschaffen, 1978) or mainly characterized by primary consciousness processes (Hobson & Voss, 2011) – given that the this topic is very likely the tip of the iceberg with the reflection of what other persons in the dream might think being very obvious whereas in other dreams the Theory of Mind processes are not central to the dream but still very important, e.g., in social interactions (Kahn, 2019). Future dream content analytic studies should rely on skilled dream reporters (Kahan, 2012) and elaborated self-report measures (Kahan & Claudatos, 2016) in order to demonstrate the extent that secondary consciousness processes play a role in dreaming.

Acknowledgement

References

Arnulf, I., Grosliere, L., Le Corvec, T., Golmard, J.-L., Lascols, O., & Duguet, A. (2014). Will students pass a competitive exam that they failed in their dreams? Consciousness and Cognition, 29, 36-47. https://doi.org/https://doi.org/10.1016/j.concog.2014.06.010

Domhoff, G. W. (1996). Finding meaning in dreams: a quantitative approach. Plenum Press.

Freud, S. (1900/1991). The interpretation of dreams (Org.: Die Traumdeutung). Penguin Books.

Garfield, P. L. (2001). The universal dream key: The twelve most common dream themes around the world. Cliff Street Books.

Griffith, R. M., Miyagi, O., & Tago, A. (1958). The universality of typical dreams: Japanese vs. Americans. American Anthropologist, 60, 1173-1179. https://doi.org/10.1525/aa.1958.60.6.02a00110

Hall, C. S., & Van de Castle, R. L. (1966). The content analysis of dreams. Appleton-Century-Crofts.

Hartmann, E. (2011). Continuity? Yes, Emotional Continuity. International Journal of Dream Research, 4, 77. https://doi.org/10.11588/ijodr.2011.2.9154

Hobson, J. A. (2009). REM sleep and dreaming: towards a theory of protoconsciousness. Nature Reviews Neuroscience, 10(11), 803-813. https://doi.org/10.1038/nrn2716

Hobson, J. A., & Voss, U. (2011). A mind to go out of: Reflections on primary and secondary consciousness. Consciousness and Cognition, 20, 993-997. https://doi.org/10.1016/j.concog.2010.09.018

Kahan, T. L. (2012). Cognitive expertise and dreams. In D. Barrett & P. McNamara (Eds.), Encyclopedia of sleep and dreams: The evolution, function, nature, and mysteries of slumber (pp. 135-139). Greenwood.

Kahan, T. L., & Claudatos, S. (2016). Phenomenological features of dreams: Results from dream log studies using the Subjective Experiences Rating Scale (SERS). Consciousness and Cognition, 41, 159-176. https://doi.org/10.1016/j.concog.2016.02.007

Kahan, T. L., & LaBerge, S. P. (2011). Dreaming and waking: Similarities and differences revisited. Consciousness and Cognition, 20, 494-514. https://doi.org/10.1016/j.concog.2010.09.002

Kahn, D. (2019). Social influence: Theory of mind and self-reflection. In R. J. Hoss & R. P. Gongloff (Eds.), Dreams: Understanding biology, psychology, and culture - Volume 2 (pp. 355-358). Greenwood.

Kahn, D., & Hobson, J. A. (2005). Theory of mind in dreaming: awareness of feelings and thoughts of others in dreams. Dreaming, 15, 48-57. https://doi.org/10.1037/1053-0797.15.1.48

Malinowski, J. E., & Horton, C. L. (2015). Metaphor and hyperassociativity: the imagination mechanisms behind emotion assimilation in sleep and dreaming. Frontiers in Psychology, 6, 1132. https://doi.org/10.3389/fpsyg.2015.01132

Mathes, J., & Schredl, M. (2014). Analyzing a large sample of diary dreams - How typical are typical dreams? Somnologie, 18, 107-112. https://doi.org/10.1007/s11818-013-0653-6

Mathes, J., Schredl, M., & Göritz, A. S. (2014). Frequency of typical dream themes in most recent dreams: An online study. Dreaming, 24(1), 57-66. https://doi.org/10.1037/a0035857

Myers, W. A. (1989). The traumatic element in the typical dream of feeling embarrassed at being naked. Journal of the American Psychoanalytic Association, 37(1), 117-130. https://doi.org/10.1177/000306518903700106

Nielsen, T. A., Zadra, A. L., Simard, V., Saucier, S., Stenstrom, P., Smith, C., & Kuiken, D. (2003). The typical dreams of Canadian university students. Dreaming, 13, 211-235. https://doi.org/10.1023/B:DREM.0000003144.40929.0b

Olbrich, K. I., & Schredl, M. (2019). Music and dreams: A review. International Journal of Dream Research, 12(2), 67-71. https://doi.org/10.11588/ijodr.2019.2.64480

Rechtschaffen, A. (1978). The single-mindedness and isolation of dreams. Sleep, 1, 97-109. https://doi.org/10.1093/sleep/1.1.97

Robert, G., & Zadra, A. L. (2014). Thematic and content analysis of idiopathic nightmares and bad dreams. Sleep: Journal of Sleep and Sleep Disorders Research, 37(2), 409-417. https://doi.org/10.5665/sleep.3426

Schredl, M. (2010). Dream content analysis: Basic principles. International Journal of Dream Research, 3, 65-73. https://doi.org/10.11588/ijodr.2010.1.474

Schredl, M. (2017). Pass or Fail? Examination dreams in a long dream series [Electronic]. International Journal of Dream Research, 10(1), 69-74. https://doi.org/10.11588/ijodr.2017.1.34578

Schredl, M. (2018). Researching Dreams: The Fundamentals. Palgrave Macmillan.

Schredl, M. (2019). Typical dream themes. In K. Valli & R. J. Hoss (Eds.), Dreams: Understanding biology, psychology, and culture - Volume 1 (pp. 180-188). Greenwood.

Schredl, M., Ciric, P., Götz, S., & Wittmann, L. (2004). Typical dreams: stability and gender differences. Journal of Psychology, 138, 485-494. https://doi.org/ 10.3200/JRLP.138.6.485-494

Schredl, M., & Göritz, A. S. (2019). Who keeps a dream journal? Sociodemographic and personality factors. Imagination, Cognition and Personality, 39(2), 211-220. https://doi.org/10.1177/0276236619837699

Uga, V., Lemut, M. C., Zampi, C., Zilli, I., & Salzarulo, P. (2006). Music in dreams. Consciousness and Cognition, 15, 351-357.

Yu, C. K.-C. (2008). Typical dreams experienced by Chinese people. Dreaming, 18, 1-10. https://doi.org/10.1037/1053-0797.18.1.1