

# Beds in dreams

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Summary. According to the continuity hypothesis, one would expect that the sleep surroundings (bed, bedroom, etc.) occur within dreams. In the present study, 1612 dreams of 425 participants, mostly psychology students, were analyzed. Beds are quite prominent in dreams (7.20%) but it was often not the dreamer's bedroom and an activity not related to sleep. Up to now it is an open question as to what waking life experiences bed dreams are based, e.g., only emotionally salient experiences (although erotic activity in the bed was also relatively rare in this study). Future diary studies could elicit the factual bed and bedroom in which the dreamer sleeps and also measure attitudes towards sleep as some persons are fond of sleeping whereas, for others, sleep is loss of time.

Keywords: Dreaming, beds, continuity hypothesis

#### 1. Introduction

According to the continuity hypothesis of dreaming (Hall & Nordby, 1972), dreams reflect waking life (for reviews see: Schredl, 2003, 2012a). Sport students dream more often about sports (Erlacher & Schredl, 2004) and music students about music (Vogelsang, Anold, Schormann, Wübbelmann, & Schredl, 2016), depending on the time they spent with these activities during the day (Schredl & Erlacher, 2008; Schredl & Hofmann, 2003). Interestingly, thus far, empirical studies have not looked at a very obvious activity, namely sleeping in one's own bed. Hall and Van de Castle (1966) found that 4.10% of their students' dreams (N = 1000) included a bed but they did not analyze whether it was the dreamer's own bed or what activities were involved.

The present study investigated the frequency of beds in dreams. Furthermore, it was of interest to determine whether or not the dreamer's own bed and/or bedroom were dreamed about and what kind of activity was related to the bed. Based on the continuity hypothesis, we expected that sleeping in one's own bed in one's own bedroom should occur quite frequently as this is an everyday activity.

#### 2. Method

### 2.1. Participants

Overall, 425 persons (361 women and 64 men, mostly psychology students) with a mean age of 23.40  $\pm$  5.41 years (range: 16 to 61 years; two missing values) participated in the present study. The participants reported 1612 dreams with a mean dream length of 155.3  $\pm$  130.1 words.

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#### 2.2. Dream content analysis

The dream reports (analysis unit: all dreams of one night) were scored regarding the occurrence of beds (Yes/No). The interrater reliability for this scale was  $\kappa = 0.64$ . If beds were present, the following three categories were rated: own bed (Yes, No, not specified) ( $\kappa = 0.55$ ), dreamer's bedroom (Yes, No, not specified) ( $\kappa = 0.74$ ), and activities (seeing a bed without interacting (only coded if no interaction), sleeping/ waking up/plan to sleep, erotic activities, bed used for lying, sitting, etc., being awake, and other activities ( $\kappa$ = 0.63). based on the social behavior of the dream ego (the dreamer acting within the dream). When extraversion couldn't be assessed (e.g., short dream reports), 0 was coded. Then, a second rating measure was introduced with the instruction to estimate the extraversion of the dream ego despite sufficient information. This was done because a relatively small number of dreams did allow the extraversion based on explicitly mentioned social behavior of the dream ego.

#### 2.3. Procedure

The dream reports were typewritten, randomized and coded by an external judge for the presence of beds. The analysis unit were all dreams reported in the morning and dream length was determined as number of words (excluding all non-dream related information). A second rater coded independently a subsample of 288 dreams. The subset of bed dreams was coded by two raters independently along the three categories in order to compute interrater reliability coefficients (Cohen's kappa). Chi-square tests were used for comparing frequencies.

#### 3. Results

Overall, 116 dreams with at least one bed (7.20% of all 1612 remembered dreams) were found. In three dreams, two different beds were coded (N = 119 beds). A total of 136 activities were coded since two bed-related activities were found in 15 dreams and one dream included three bed-related activities. The 116 bed dreams were reported by 100 participants (23.53% of 425 participants), two reported three bed dreams, 12 two bed dreams, and the other participants one bed dream.



Table 1, 119 Beds in 116 bed dreams.

Category	Bed	Bedroom
Dreamer's bed/bedroom  Not specified	32 47	26 20
Not the dreamer's bed/bedroom	40	73

Whether the bed or the bedroom was the dreamer's is depicted in Table 1. Of the 100 participants with bed dreams, 32 reported a bed dream including their own bed and 36 reported bed dreams with a bed not their own. This difference comparing whether the participant has bed dreams with his own bed versus having bed dreams with beds not his own was not significant (Sign rank test: M = -2, p = .7122). Twenty-six participants reported of having a bed dream featuring their own bed room, whereas 62 reported at least one bed dream in which the bedroom was not their own (one participant reported 3 of those dreams, 6 participants two, and the remaining participants one dream). The difference between reporting bed dreams regarding the bedroom (own bedroom vs. bedroom not belonging to dreamer, e.g., apartments of other persons, hotels) was significant (Sign Rank test: M = -18, p < .0001).

The distribution of bed-related activities is presented in Table 2. Whereas just seeing a bed and using a bed for sitting and lying (while being awake), the bed within these dreams was comparatively rarely used for sleeping and/or erotic activities. Other activities were being in a hospital bed and receiving medical care (N = 4), talking about beds (N = 4), making beds (N = 3), and sitting beside a bed (N = 3). The following activities occurred once each: Flying with the bed, being attacked, being killed, hiding under the bed, jumping with a bike on the bed, putting a child to bed, playing something in the bed, moving the bed, bringing breakfast to someone lying in a bed.

#### 4. Discussion

The main finding of the study indicates that, at least in diary dreams, 7% of all remembered dreams contain beds and this finding is thus in line with the continuity hypothesis of dreaming (Schredl, 2003), i.e., that dream content reflecting topics that are relevant to the dreamer. However, only in a minority of dreams, beds are clearly identified as the dreamer's own bed in the dreamer's own bedroom; this is in line with other studies (Fosse, Fosse, Hobson, & Stickgold, 2003; Malinowski & Horton, 2014) that dreams rarely replay episodic memories of the waking life including all the details (e.g., location). Moreover, sleeping/waking up is also a relatively rare topic.

From a methodological viewpoint, it has to be considered that the findings are based purely on coding by external judges, i.e., therefore the relatively high number of unspecified beds (in many of these cases one could assume that it is not the dreamer's bed because it is specified as a hotel room or an unfamiliar apartment). In order to decrease this percentage adding specific questions about the bed and the bedroom would be helpful. However, in the present study, the participants were not familiar with the research topic and, thus, not biased to reported bed-related details,

Table 2, 136 bed-related activities in 116 bed dreams

Category	N =
Seeing a bed	41
Sleeping/waking up	25
Erotic activities	11
Sitting/lying on the bed (awake)	35
Other activities (hospital procedures, talking about beds, making beds, putting a child into a bed, etc.)	24

which might be a problem if those topics were probed every morning.

The low percentage of bed-related activities regarding sleeping/waking up compared to the total number of bed dreams was not expected. One might speculate that everyday activities, repeating over and over again in a similar way, are not often incorporated into the dreams; for example, glasses worn every day occurred only in 1% of the dreams of a short-sighted person (Schredl, 2012b). The relatively high occurrence of foreign bedrooms (hotels, etc...) might indicate that emotional involvement might be an important factor, since being on the road, spending an exciting holiday is much more salient than sleeping in one's own bed. As not only waking-life activities are reflected in dreams but also concerns (Domhoff, 2011), it would be very interesting to study whether persons who are preoccupied with sleep (common in patients with insomnia) dream more often about beds and sleeping.

To conclude, beds are fairly prominent in dreams but, up to now, it is an open question as to what kind of waking life experiences this is based on, e.g., only emotionally salient experiences (although erotic activity in the bed was also relatively rare in this study). Future diary studies could elicit the factual bed and bedroom in which the dreamer sleeps and also measure attitude towards sleep as some persons are fond of sleeping whereas, for others, sleep represents a loss of time.

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