Dreams of core family members in a long dream series

Michael Schredl

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

Summary. Dream persons are a major 'ingredient' of dreams. Close persons like partners and family members were found in about 10% to 30%. In the present analysis of a dreams series (N = 8420 dreams; recorded over a period of 23 yrs.) of a male dreamer, members of his core family were present in 19% of all dreams. There was a slight decrease in frequency over the years, reflecting the changes in waking-life context and maybe the increasing time interval between dream and childhood (time period with the most intense contact to the core family members). Interestingly, the quality of the interaction with the father was becoming more positive in the course of the dream series; possibly a reflection of the process of self-development. The present study demonstrates that long dream series offer a unique opportunity to study the long-term effects and changes of close relationships on dream life. It would be very interesting to study in larger samples questions like whether the emotional quality of the waking-life relationship with the family members affect their frequency within dreams and whether the frequency and interaction between dreamer and core family member change over time.

Keywords: Dream series, mother, father, siblings, continuity hypothesis

1. Introduction

Next to the dreamer himself/herself, in most dreams other characters can be found (Hall & Van de Castle, 1966; Nielsen, 2012), often reflecting social interactions of the dreamer in waking life (Paul & Schredl, 2012; Schweickert, 2007). Generally it is assumed that the closer the person is to the dreamer in waking life the more often this person occur in the dreams, for example, the romantic partner of the dreamer is on average present in 20% of the dreams (Schredl, 2001; Schredl, Desch, Röming, & Spachmann, 2009; Uslar, 2003). In the study of Schredl and Hofmann (2003), the amount of time spent with the partner in waking life was directly correlated with the frequency the partner occurred in the person's dreams. Another group of persons who are very closely related to the dreamer are, of course, his or her core family members, father, mother, brother(s), sister(s). As expected, core family members were found in about 10% to 30% of dreams (Domhoff, 2003; Hall, 1951; Hall & Van de Castle, 1966; Lortie-Lussier, Cote, & Vachon, 2000; Vandewiele, 1981). Interestingly, Hall and Van de Castle (1966) found that female students dreamed more often about their parents (father: 12.4%, mother: 16.2%) than male students (father: 8.0%, mother: 7.8%). This was replicated in another student sample of the author (N = 1612 dreams; data unpublished) where, in female students, the percentage of dreams including the mother (20.37%) and the father (13.70%) was higher than the respective percentage for male students (mother: 9.17%; father: 8.23%). In both samples, the percentage of dreams including a brother or a sister of the dreamer was quite low ranging from 2.0% to 7.5%. In those studies, however, the actual family pattern in waking life was not elicited (e.g. does the dreamer still lives with his parents, has s/he lost a parent, does s/he have siblings etc.). Thus, conclusions about the relationship between waking life contact (frequency, intensity, relationship quality) and dreaming of the family member cannot be made. There are only a few studies looking into factors that might affect the occurrence of core family member in dreams. In a long dream series (Barb Sanders), Domhoff (2003) found that she dreamed more often about her favorite brother compared to her two other siblings. Schredl, Schröder, and Löw (1996) reported that elderly persons dream less often about their parents (2.0%) than students (19.2%), reflecting the fact that the parents of elderly persons have passed away a long time ago. On the other hand, the percentage of mother dreams did not change in a series of dreams reported by a woman from age 25 to 76 yrs. (Smith & Hall, 1964), i.e. the decline of mother dreams in the study of Schredl et al. (1996) was not confirmed by this dream series.

The present study analyzed the frequency of dreams including core family members within a dream series of 8,420 dreams recorded by a dreamer over a period of twenty-three years of his adult life. It was expected – in line with the continuity hypothesis (Schredl, 2003) – that frequency of family member dreams would decrease over time as the period where he spent time within the core family (childhood/adolescence) grows more distant. Secondly, the pattern of family members was studied, i.e., how do they co-occur in dreams. This is especially interesting in this dreamer because his parents divorced when he was twelve. Finally, the change of interaction quality with his father within the dream over time was studied in the series.

2. Method

2.1. Dream diary

The participant kept an unstructured dream diary from the age of 22, beginning in September, 1984 through December 2007. For the present analysis, 8,420 dreams from that period were included (see Figure 1). All remembered dreams were recorded but in periods of high workload (e.g. 1998, 2000) motivation and dream recall frequency in turn dropped somewhat. The mean dream length was 128.8 ± 82.6 words.

2.2. Participant and procedure

The core family of the male participant consists of five members: father (born 1932), mother (born 1943), dreamer (born 1962), sister (born 1963), and brother (born 1965). Till the divorce (1975) all family members lived in the same household. After that, the participant lived with his mother and his siblings. While studying, he lived for three years (1982 to 1984) with his sister during the week but returned home every weekend (living with mother and brother). He moved out at the end of 1986 and kept regular but infrequent contact with his mother and siblings. The contact with his father was regular for one year after the divorce, then contact ceased completely with very few exceptions over the years.

The dream reports were typed and entered into a database, *Alchera* 3.72, created by Harry Bosma, www.mythwell.com. This database allows the assignment of key words to the dreams; a task carried out by the dreamer himself. Each dream was rated for the presence of one or several family members (father, mother, brother, sister). Out of the 203 dream reports including the father, two hundred reports were analyzed by an external judge according to the overall quality of interaction between the father and the dreamer, (three reports were not available in computerized form at the time of the rating). Three categories were coded: -1 = negatively toned interaction (anxiety, threat, anger, neglected or rejected by the father, verbal or physical aggression), 0 = neutral interaction or no interaction, +1 = positively toned interaction (receiving praise, a gift, or help, feeling close). Even though inter-rater reliability was not determined for this scale, similar types of global rating scales (two or three categories) showed high indices of inter-rater

Table 1. Dreams of core family members in the dream series (*N* = 8420).

Variable	Frequency	Percentage
No family member	6845	81.29%
One family member	1015	15.05%
Two family members	357	4.24%
Three family members	169	2.01%
Four family members	37	0.40%

reliability (Schredl, Burchert, & Grabatin, 2004). The Alchera software also provides a word count for each dream report. The analysis unit was a single dream report. The data were exported into an Excel spreadsheet (Microsoft) and data analysis was carried out using the SAS 9.2 for Windows software package. To analyze the single binary time series we fitted an autoregressive Generalized Linear Mixed Model (AR-GLMM) with a logit link and serial correlation according to Klingenberg (2008). Thus, the GLIMMIX procedure with a power covariance structure was used. For analyzing possible linear trends within the binary time series, Bortz (1990) suggested the use of the biserial rank correlation (Kendall's tau).

3. Results

Overall, at least one member of the core family was present in 1575 dreams (18.71% of the total dream series). The number of family members per dream is depicted in Table 1. The brother of the participant was most often present in dreams comparable to the percentage of mother dreams whereas the sister and the father occurred less often (see Table 2).

In Figure 2, the percentage of dreams with at least one family member is depicted; there is a considerable variability with values ranging from about 11.39% (2001) to 26.36% (1986). Using the algorithm of Klingenberg (2008), the course of the time series was analyzed by comparing the percentage of the years 1984 to 1986 (participants living with mother, brother, and sister (during the week)) with the percentages of each of the following years. All of the
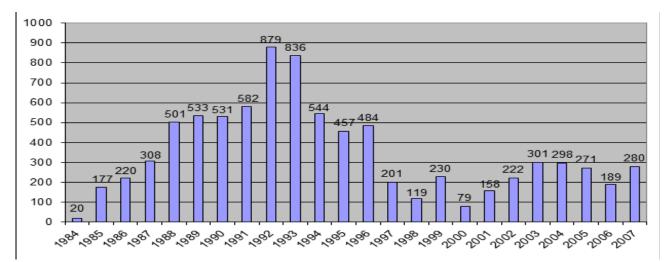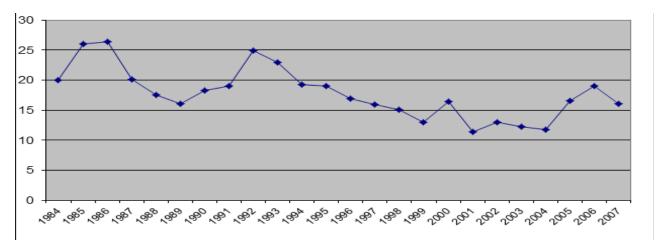
Figure 1. Number of dreams per year.

Figure 2. Percentages of dreams with family members.

21 tests were significant, i.e., the frequencies of the following years were lower compared to the first three years of the dream series. Using the formula of Kendall's tau for determining the linear trend, the correlation coefficient was $r = -.044$ ($p < .0001$).

The frequencies of the constellations of the family members within the dream, i.e., which family members were present in the same dream, are shown in Table 3. The complete family was present in 34 dreams, much less often compared the constellation of mother, brother, and sister ($N = 135$ dreams) and mother and brother ($N = 133$ dreams). Interestingly, the sister as only family member within the dream was found in 399 dreams, the highest percentage of all constellations.

The emotional quality of the interaction with the father in the dream series is depicted in Table 4. Dream with negatively toned interactions outweighed the positive ones but most of the dreams were neutral or did not include a direct interaction between the dreamer and his father. The correlation between time and emotional quality of the contact was positive ($r = .128$, $p = .0217$, Kendall's tau), i.e., the later dreams include more likely positive and less likely negative interactions with the father.

4. Discussion

Overall, family members were found in about 19% of the dreams – comparable with previous findings (Hall & Van de Castle, 1966; Vandewiele, 1981). Comparing the present data with the findings in male students (see Table 2), it is striking that the percentage of father dreams is considerably lower in the present dream series whereas the percentage of mother dreams is comparable. This result is in line with the continuity hypothesis because the dreamer had very little contact with the father during the time period of recording dreams and also due to the divorce when he was twelve years old. The higher percentage of brother and sister dreams in the present dream series and the students' findings is difficult to evaluate as there was no information about the number of siblings in these student samples provided in the publications, i.e., the participants might not have had brothers and/or sisters.

The slight decrease of family member dreams over the 23-year period indicates that occurrence of family members does reflect current waking life (higher percentage in the years when the dreamer lived with his mother, brother, and sister). The linear trend regarding the decrease of family dreams over time (in addition to several ups and downs) might be explained by the idea that the dreams of family members not only referring to current waking life but also to childhood/adolescence as the waking-life contacts during the diary period (adulthood) were quite stable in frequency but the time span between dream and the period of intense contact (childhood/adolescence) is increasing; one of the factors affecting the continuity between waking and dreaming (Botman & Crovitz, 1989; Grenier et al., 2005; Strauch & Meier, 1996).

The continuity model of Schredl (2003) would predict an exponential decrease of the dream element with increasing time interval between occurrence in waking life and occurrence of the dream but, unfortunately, it is not possible to apply more sophisticated methods to binary time series.

Table 2. Percentages of dreams of core family members in the dream series ($N = 8420$) and in the literature.

Category	Dream series (8420 dreams)	Male students[1] (500 dreams)	Female students[1] (500 dreams)	Male students[2] (218 dreams)	Female students[2] (1394 dreams)	Merri[3] (316 dreams)	Barb Sanders[4] (3116 dreams)
Mother	9.68%	7.8%	16.2%	9.17%	20.37%	18.0%	7.7%
Father	2.41%	8.0%	12.4%	8.23%	13.70%	12.7%	6.8%
Sister(s)	6.29%	2.0%	6.8%	2.29%	7.53%	21.5%	≈ 1.6%
Brother(s)	9.79%	3.0%	4.0%	5.50%	5.16%	19.9%	≈ 4.6%

Note. [1]Hall and Van de Castle (1966), [2]unpublished data of the author, [3]Schweickert (2007), [4]Domhoff (2003)

Table 3. Patterns of core family members in the *N* = 1575 dreams including at least one family member.

Pattern	Frequency	Percentage
Mother, father, sister, brother	34	2.16%
Mother, father, sister	3	0.19%
Mother, father, brother	0	0.00%
Mother, brother, sister	135	8.57%
Father, brother, sister	31	1.97%
Mother, father	29	1.84%
Mother, sister	70	4.44%
Mother, brother	133	8.44%
Father, sister	8	0.51%
Father, brother	23	1.46%
Sister, brother	94	5.97%
Mother (alone)	167	10.60%
Father (alone)	75	4.76%
Sister (alone)	399	25.33%
Brother (alone)	374	23.75%

Even using Kendall's tau, as proposed by Bortz (1990), it is only an approximation. More complex models (cf. Klingenberg, 2008) are not available to analyze linear or exponential trends in binary time series. In case of a family member, one would predict a superposition of an exponential decrease (references to childhood/adolescence) and a constant term (references to current waking-life contacts, if they are not changing).

The results regarding co-occurrence of family members in dreams are also in line with the waking life of the dreamer as the complete family was much less often present in one of his dreams compared to the family structure after divorce (mother, father, sister). In addition, the high percentage of dreams with the sister alone reflects that he shared a flat with his sister for three years. Interestingly, dreams with the parents and only one sibling (brother or sister) are very rare; indicating that the complete family is more present in the dreamers mind.

In an exploratory way, it was studied whether the emotional quality of the interaction between dreamer and his father changed over the years. The background for this analysis was that the dreamer was very afraid of the father as a child because the father was physically abusive. The increase in positive interactions with the father in the dream might reflect an inner development rather than a change in waking-life as the period of abuse stopped long before the

Table 4. Quality of the interaction with the father (*N* = 200 dreams).

Category	Frequency
Negative toned interaction	24%
Neutral or no interaction	64%
Positively toned interaction	12%

diary period. This example demonstrates that it might be very fruitful to study long dream series in order to look for changes possibly related to self-development. Interesting, in this context, is Domhoff's (2003) analysis of the Barb Sanders dream series where the aggression/friendliness percent regarding her husband decreased over time. It would also be interesting to study whether working with dreams (overview: Pesant & Zadra, 2004), in this case dreams dealing with negative interactions with the father (or ex-husband), are helpful in self-development.

To summarize, the analysis of this long dream series indicates that family members occur frequently in dreams and that their occurrence reflects current and former contacts in waking life. Future studies using larger samples can investigate whether the emotional quality of the waking-life relationship with the family members affect their frequency within dreams, i.e., a lot of conflicts during adolescence with the mother might show in higher percentages of mother dreams even years later. The quality of the interaction between dreamer and family members might indicate some form of personal development, working through of old fear issues, as it was the case for this dreamer; a topic very promising for future research.

Acknowledgements

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