IJOD

Dreams of finding money: Four German surveys from 1956 to 2000

Michael Schredl

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

Summary. Money plays an important role in our everyday life; thus, the question arises how often money play a role in our dreams. So far, only the topic of finding money in dreams have been studied systematically. In four representative surveys from 1956 to 2000 carried out in Germany, about 16% of the participants (overall N = 4,613) reported having had "finding money" dreams in the last few months. In line with previous research, this dream topic was more often reported by men compared to women. Adding the findings that the percentage of "finding money" dreams increased from 1956 to 2000 and that more younger persons reported these dreams compared to older persons, the findings support the idea that – according to the continuity hypothesis of dreaming – dreams of finding money reflect the importance of financial issues in the dreamer's waking life. However, more detailed studies are needed to corroborate the findings and underlying theories.

Keywords: Finding money dreams, gender differences, continuity hypothesis of dreaming

1. Introduction

"Money makes the world go round" is a song by Liza Minelli (Movie: Cabaret (1972)) that states the obvious: Since the introduction of money thousands of years ago, it plays an important role in our waking lives (Davies, 2002). Based on the continuity hypothesis of dreaming (Schredl, 2018), one might expect that money might occur quite often in dreams. Unfortunately, content analytic studies looking at the frequency of dreaming featuring references to money have not been carried out yet. So far, only the subtopic "finding money in dreams" was studied. Interestingly, about 25% to 56% of the participants of different studies (Gahagan, 1936; Griffith et al., 1958; Ward et al., 1961) answered the question "Have you ever dreamed of finding money?" with a Yes. Whereas psychoanalytic authors (Feldman, 1943, 1952) emphasized possible symbolic meanings of such dreams, e.g., death anxiety in the case of finding money in the form coins (imperishable) or as infantile desires, one empirical study (Griffith, 1951) linked this dream type to the personality dimension masculinity, that is, persons with high masculinity scores (Minnesota Multiphasic Personality Inventory) were more likely to report having dreams of finding money. This fits with the findings that males more often reported this dream type than women (Gahagan, 1936; Griffith, 1951; Ward et al., 1961). One interpretation of these findings might be that money matters more to men in waking life as they are more often (at least at the time points the studies were published) breadwinners of their families. Moreover,

Corresponding address:

Michael Schredl, Sleep laboratory, Central Institute of Mental Health, PO Box 12 21 20, 68072 Mannheim, Germany. Email: Michael.Schredl@zi-mannheim.de

Submitted for publication: October 2022 Accepted for publication: November 2022 DOI: 10.11588/ijodr.2023.1.91319

Griffith et al. (1958) reported a significance difference between Japanese and American students regarding the percentage of participants having the dream of finding money (25.6% (Japan) vs. 56% (USA)), indicating that making money might be of more importance in the American culture compared to the Japanese culture. In summary, the research on the "finding money" dreams seems to support the continuity hypothesis (Schredl, 2018), that is, these dreams might reflect the importance of money for the individual. The findings that stockbrokers reported more recurrent nightmares after a market downturn (Kroth et al., 2002) and persons for whom financial success is very important have more anxiety-related dreams (Kasser & Kasser, 2001; Kroth et al., 2010) also fit into this framework. However, so far the studies are based mainly on student samples and were carried out some time ago, e.g., (Griffith, 1951). Thus, it would be interesting to know how often this dream topic occurs in the general population and, for example, whether men in these samples report dreams of finding money more often than women.

The present study investigated the frequency of reporting "finding money" dreams in four independent and representative surveys carried out in 1956, 1970, 1981, and 2000. Based on the continuity hypothesis of dreaming and the fact that men were more often the major breadwinner in their families than women in these years in Germany (Sensch, 2004), it was expected that men reported "finding money" dreams more often than women.

2. Method

2.1. Measurement instrument

A list of dream themes were presented to the participants. The instructions were as follows: "We have investigated what people dream about. Here is a list. Have you had any of these dreams in the last few months?" Multiple answers were possible. The list included war-related topics like air raids, being on the run, general topics such as occupation, travelling, swimming, water, and typical dream themes like finding money, being chased, falling, and being paralyzed. The last category was: "I do not dream or almost never dream." It was also possible for the participants to skip the question.

2.2. Participants and Procedure

The Allensbach Institute of Demoscopy carried out surveys with quota samples that were representative for the German population. The quota criteria have been gender, age (four age groups: 18 to 29 yrs., 30 to 44 yrs., 45 to 59 yrs., 60 yrs. and older), marital status (married, single, widowed/ divorced), household size (1 person, 2 persons, 3 persons, 4 persons, 5 or more persons), education (primary education, secondary education), occupation (working class, farmer, employees, public servant, self-employed), place of residence size (less than 5.000 inhabitants, 5.000 to 20.000 inhabitants, 20.000 to 100.000 inhabitants, more than 100.000 inhabitants) and states (16 German states in the year 2000). The interviewers received a list of randomly generated combinations of the criteria mentioned above and were asked to interview individuals who match the criteria.

Generally, a large number of interviewers were included, e.g., the study carried out during the summer of 2000 (N = 2113 interviews) included 512 interviewers who worked part-time. For the present analysis, the data of the 2000 study were cut down to the states that belong to West Germany in order to compare these figures with the prior studies conducted in West Germany. Sample sizes ranged from N = 962 (1981) to N = 2005 (1956) and are depicted in Table 1. The dream-related items were part of a larger study including a diversity of topics; biases caused by interviewers selecting persons who are specifically interested in dreams should be minimal.

For the present article, the topic of finding money was selected; previous publications dealt with war-related dreams (Schredl & Piel, 2006), flying (Schredl & Piel, 2007), workrelated dreams (Schredl & Piel, 2005), falling, being chased, and being paralyzed (Schredl, 2021). Statistical analyses were carried out with SAS 9.4 statistical package for windows using a logistic regression. In these four surveys, about 22% of the participants stated that they dream never or very rarely (Schredl & Piel, 2003). As the percentage of non-recallers varied significantly by study year (effect size: d = 0.079) and gender (effect size: d = 0.249) (cf. Schredl, 2021), the participants with no or very rare dream recall were excluded. Thus, sample size was somewhat reduced. Effect sizes were computed from chi-square values provided by the statistical tests of regression weights according to Cohen (1988).

3. Results

As depicted in Table 1, dreams of finding money were reported by about 16% of the participants. Study year was associated with the frequency of persons reporting dreams of finding money (effect size: d = 0.212), the highest percentage was reported in 2000 (see Table 1). Age was also related to reporting dreams of finding money (effect size: d = -0.212), younger persons were more likely to report this topic. Lastly, men more often reported dreams of finding money compared to women with an effect size of d = .116 (see Table 1).

4. Discussion

The study indicated that – as expected – men were more likely to report the dream theme of finding money than women. Moreover, younger persons compared to older persons more often reported the dream topic, and the percentage of persons reporting dreams of finding money increased from 1956 to 2000.

From the methodological viewpoint, an important strength of the present analysis is the variability of the age range as the guota sampling aimed at a representative sample. For the pros and cons of quota sampling see: Noelle-Neumann and Petersen (2000). Another advantage was that the overall survey did not focus solely on dreams, i.e., attracting persons with high interest in dreams; the dream item was part of a larger survey with a variety of topics. The present survey elicited the occurrence of specific dream topics within the last few month; thus the overall percentage of about 16% was lower compared to the previous studies (Gahagan, 1936; Griffith et al., 1958; Ward et al., 1961) with about 25% to 56% of the participants reporting the dream theme have occurred at least once in their lives. In addition, it has to be considered that the participants were presented with lists including different dream topics, no dream reports were elicited and analyzed. This is a problem with large-scaled surveys as it is guite difficult to obtain a substantial number of dream reports - which would be needed as dream content varies considerably from dream to dream (Kramer & Roth, 1979; Schredl, 1998) - of large populationbased, non-student sample. On the other hand, comparing retrospective estimates of dream themes with content ana-

Total sample	16.26% (N = 4613)				
Study year		Age group		Gender	
1956	13.20% (N = 1523)	18 to 29 yrs.	20.67% (N = 1127)	Men	19.03% (N = 2002)
1970	17.00% (N = 1512)	30 to 44 yrs.	18.54% (N = 1257)	Women	14.13% (N = 2611)
1981	13.16% (N = 775)	45 to 59 yrs.	15.02% (N = 1165)		
2000	23.66% (N = 803)	60+ yrs.	10.24% (N = 1064)		
Study effect: $\chi^2 = 51.3$, p = <.0001		Age group effect: $\chi^2 = 51.0$, p = <.0001		Gender effect: $\chi^2 = 15.4$, p < .0001	

Table 1. Percent of participants reporting dreams of finding money

Note. Logistic regression with study year, age group, and gender entered simultaneously

IJODR

lytic data from diary dreams showed that, for example, for the sports topic the two measurement methods produced similar results regarding frequency and influencing factors, being a sports student vs. being a psychology student (Erlacher & Schredl, 2004; Schredl & Erlacher, 2008). Thus, possible biases due to memory might be relatively small.

In line with previous research (Gahagan, 1936; Griffith, 1951; Ward et al., 1961), we found that men reported dreams of finding money more often than women, supporting the continuity hypothesis of dreaming (Schredl, 2018) as men were more often breadwinners that women within the time range of these studies in Germany (Sensch, 2004). Interestingly, in these four sample work-related dreams were also more often reported by men compared to women (Schredl & Piel, 2005), supporting the claim that the professional world including earning money plays a more important role in men's dreams. As the unemployment rate increased from 1956 (4.4%) to 2000 (8.4%), one might speculate whether the increased percentage of participants reporting dreams of finding money in 2000 might be explained by increasing financial insecurity. In a similar way, the finding that young persons dreamed more often about finding money than older persons points in the direction that this dream type might reflect the focus on financial issues in young adulthood (finding a suitable job, career, starting a family). It would be interesting to carry out studies that directly link topics like inflation, financial insecurity, and unemployment rates to dreams about finding money.

Whereas the findings regarding the factors (gender, age, cohort) associated with the frequency of dreams about finding money support the continuity hypotheses, one can ask the question - given the fundamental importance of money in waking life - why does money not show up in almost every dream. The mathematical model of the continuity hypothesis (Schredl, 2003) offers an possible explanation, as it has been demonstrated that emotional intensity of the waking-life experience is a big factor in determining what will be incorporated into subsequent dreams (Malinowski & Horton, 2014; Schredl, 2006). In the case of money, this would predict that persons who are comfortably off or even wealthy might not dream as much about finding money compared to persons who are short of money. Thus, there might be a direct relationship between income and money dreams that can be studied in the future.

The present study is based on the framework of the continuity hypothesis but dreams of finding money would also fit into Sigmund Freud's notion "that the meaning of every dream is the fulfillment of a wish (p. 214; Freud, 1900/1991)". Even one can argue about Freud's claim that every dream is fulfilling a wish, finding money dreams would support this line of thinking, as many persons, especially those with little money, would like to have a decent amount of money. As this wish for more money is part of the waking life, the continuity hypothesis would also predict findings money dreams, as a reflection of this waking-life wish. Interestingly, Freud used the idea of continuity quite a lot in the interpretation of his own dreams he published in his book "The interpretation of dreams" (Freud, 1900/1991). For example, in one of his dreams he felt ashamed seeing a female maid-servant in a patient's house and tried to avoid her and, in his analysis of the dream (Freud, 1991, p. 336ff), Freud linked the dream to an argument with this maid-servant about his spitting on the floor of the staircase (and not wiping his boots on one occasion) he had in waking life (p. 336ff; Freud, 1900/1991).

For more examples of Freud's linking his waking-life experiences to his dreams, see: Schredl (2008).

Overall, the findings of several factors (gender, age, cohort) affecting the frequency of "finding money" dreams can serve as starting point to take a closer look how being occupied with financial issues in waking life and money in general are reflected in dreams, that is, looking not only on the specific topic of finding money in dreams but all different kinds of contexts money can occur in dreams, for example, losing money, buying things, not having enough money etc.

Acknowledgement

The author would like to thank Edgar Piel, Institute for Demoscopy, Allensbach, Germany, who generously provided the data in 2001.

References

- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Lawrence Erlbaum.
- Davies, G. (2002). A history of money. University of Wales Press.
- Erlacher, D., & Schredl, M. (2004). Dreams reflecting waking sport activities: a comparison of sport and psychology students. International Journal of Sport Psychology, 35, 301-308.
- Feldman, S. (1943). Interpretation of a typical dream: Finding money. The Psychiatric Quarterly, 17(3), 423-425. https://doi.org/10.1007/BF01561996
- Feldman, S. (1952). Contributions to the interpretation of a typical dream: finding money. Psychiatric Quarterly, 26, 663-667.
- Freud, S. (1900/1991). The interpretation of dreams (Org.: Die Traumdeutung). Penguin Books.
- Gahagan, L. (1936). Sex differences in recall of stereotyped dreams, sleep-talking and sleep-walking. Pedical Seminary and Journal of Genetic Psychology, 48, 227-236.
- Griffith, R. M. (1951). Dreams of finding money. American Journal of Psychotherapy, 5, 512-530.
- 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
- Kasser, T., & Kasser, V. G. (2001). The dreams of people high and low in materialism. Journal of Economic Psychology, 22, 693-719.
- Kramer, M., & Roth, T. (1979). The stability and variability of dreaming. Sleep, 1, 319-325.
- Kroth, J., Mann, S., Cervantes, C., Jaffe, M., & Ristig, V. (2010). Financial stress, attitudes toward money, and scores on a dream inventory. Psychological Reports, 107, 173-176.
- Kroth, J., Thompson, L., Jackson, J., Pascall, L., & Ferreira, M. (2002). Dream characteristics of stock brockers after a major market downturn. Psychological Reports, 90, 1097-1100.
- Malinowski, J. E., & Horton, C. L. (2014). Evidence for the preferential incorporation of emotional waking-life experiences into dreams. Dreaming, 24(1), 18-31. https://doi. org/10.1037/a0036017
- Noelle-Neumann, E., & Petersen, T. (2000). Alle, nicht jeder. Einführung in die Methode der Demoskopie. Springer.
- Schredl, M. (1998). The stability and variability of dream content. Perceptual and Motor Skills, 86, 733-734.



- Schredl, M. (2003). Continuity between waking and dreaming: a proposal for a mathematical model. Sleep and Hypnosis, 5, 38-52.
- Schredl, M. (2006). Factors affecting the continuity between waking and dreaming: emotional intensity and emotional tone of the waking-life event. Sleep and Hypnosis, 8, 1-5.
- Schredl, M. (2008). Freud's interpretation of his own dreams in "The interpretation of dreams": a continuity hypothesis perspective. International Journal of Dream Research, 1, 44-47.
- Schredl, M. (2018). Researching Dreams: The Fundamentals. Palgrave Macmillan.
- Schredl, M. (2021). Typical dreams of falling, being chased, and being paralyzed in Germany from 1956 to 2000. International Journal of Dream Research, 14(1), 61-66. https:// doi.org/10.11588/ijodr.0.0.75878
- Schredl, M., & Erlacher, D. (2008). Relationship between waking sport activities, reading and dream content in sport and psychology students. Journal of Psychology, 142, 267-275. https://doi.org/10.3200/JRLP.142.3.267-276
- Schredl, M., & Piel, E. (2003). Gender differences in dream recall frequency: data from four representative German samples. Personality and Individual Differences, 35, 1185-1189.
- Schredl, M., & Piel, E. (2005). Gender differences in dreaming: Are they stable over time? Personality and Individual Differences, 39, 309-316.
- Schredl, M., & Piel, E. (2006). War-related dream themes in Germany from 1956 to 2000. Political Psychology, 27, 299-307.
- Schredl, M., & Piel, E. (2007). Prevalence of flying dreams. Perceptual and Motor Skills, 105, 657-660. https://doi. org/10.2466/pms.105.2.657-660
- Sensch, J. (2004). Erwerbstätigkeitsstatistik in der Bundesrepublik Deutschland. Ausgewählte Daten von 1950 bis 2000. https://histat.gesis.org/histat/de/table/details/01 76E2CBD647FA0D517E0AC4D0880DAF.
- Ward, C. H., Beck, A. T., & Rascoe, E. (1961). Typical dreams incidence among psychiatric patients. Archives of General Psychiatry, 5, 606-615.