

Typical dreams of falling, being chased, and being paralyzed in Germany from 1956 to 2000

Michael Schredl

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

Summary. Typical dream themes like falling, being chased, and being paralyzed are very common in many different cultures and time epochs and are, therefore, also termed universal. The present analyses included data from 4 independent, representative surveys carried out from 1956 to 2000 in Germany. Overall, 5941 participants reported as to whether they had falling dreams, dreams of being chased or being paralyzed. The most frequent topic was being paralyzed; about 26% of the sample reported this dream theme, followed by falling (18%), and being chased (12%). There were no differences between the studies and between age groups. Solely, a small but significant gender difference was found. The findings indicate the stability of these typical dreams, and future study should focus on their details, e.g., the chasing figures, as these might reflect cultural backgrounds. Moreover, it would be interesting to relate the occurrence of typical dream themes to waking-life emotions in order to test the idea that these dreams are metaphorical and dramatized expressions of emotions experienced in waking life.

Keywords: Typical dreams, Falling dreams, Dreams of being chased, Dreams of being paralyzed, cultural differences

1. Introduction

Content analytic studies (Domhoff, 1996; Hall & Van de Castle, 1966; Schredl, 2018; Strauch & Meier, 1996) indicate that dream topics vary a great deal from dreamer to dreamer (inter-individually) and from dream to dream (intra-individually). A quantitative study (Schredl, 1998) looking at diary dreams of a student sample found that dream length correlated from one dream to the next, and, thus, reflecting stable inter-individual differences regarding this formal characteristic but aspects like dream bizarreness, occurrence of verbal interactions in dreams they did not correlate, supporting the notion of huge variability regarding dream content.

One approach to study the occurrence of dream themes, was the development of a questionnaire measuring the occurrence of so-called typical dreams; these are defined as dreams with a very specific pattern that is experienced by substantial percentages of the general population (Schredl, 2019). The most recent versions of the Typical Dream Questionnaire (TDQ-55 and TDQ-56) also include relative broad categories like “school, teachers, or studying” or “sexual experiences” which can be argued not be a very specific dream patterns and should be removed from the questionnaire (Mathes & Schredl, 2014). For dreams like being chased, falling, flying, failing an examination, or being inappropriately dressed in public the consensus is stronger, starting with Sigmund Freud who also included typical

dreams in his book “Die Traumdeutung” (Freud, 1900/1991). Questionnaire studies in student samples (Gahagan, 1936; Griffith, 1958; Griffith et al., 1958; Nasser & Bulkeley, 2009; Nielsen et al., 2003; Schredl et al., 2004; Yu, 2008) eliciting whether an individual had experienced a specific dream type at least once during the lifetime indicated that falling dreams and dreams of being chased or pursued are reported by two thirds or more of the participants, irrespective of the cultural background (United States of America, Japan, Canada, Germany, Hong Kong/China, Jordan). Interestingly, a lower percentage (89.2%) of Tibetan students reported dreams of being chased compared to Han Chinese students (97.3%); however, the gender distributions of the two samples differed greatly (Yin et al., 2013). Other frequent typical dream topics are “being frozen with fright”, “examination”, “trying again and again to do something”, “arriving too late”, “flying”, and “being inappropriately dressed” (Schredl, 2019). In a representative study (Schredl, 2010) carried out in Germany, the most frequent topic of recurring nightmares was “Falling”, reported by 39.5% of the participants; “Being chased” (25.7%) and “Being paralyzed” (25.3%) were the next most commonly reported motifs. Age, gender, and education were not associated with the frequency of these three topics (Schredl, 2010), indicating the universality of these topics within the population. In addition to the cultural stability, there is also a temporal stability since the findings published by Griffith et al. (1958) are comparable with studies published almost 50 years later (Nasser & Bulkeley, 2009; Nielsen et al., 2003; Schredl et al., 2004; Yu, 2008). However, the Griffith et al. (1958) study was carried out in the US and in Japan, whereas the other studies were carried out in different countries. That is, studies eliciting the frequency of typical dream themes with the same methodology carried out in a specific country/region over longer periods of time have not been carried out.

From a methodological viewpoint, it has to be mentioned that the typical dream questionnaires have never been validated, i.e., comparing the questionnaire data with data

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

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obtained from analyzing dream reports. For example, one might argue that eliciting the occurrence of falling dreams might be problematic as participants might include non-dream-related like sleep starts or hypnic jerks that are often accompanied by the feeling of falling (Salas et al., 2017). The finding that falling dreams are quite rare in a study of nightmare reports (Robert & Zadra, 2014) might support this notion. On the other hand, the two studies (Mathes & Schredl, 2014; Mathes et al., 2014) that instructed external judges to code the dream reports (diary dreams and most recent dreams) for the occurrence of the TDQ themes found that, for example, falling dreams were reported by 5% of the participants who kept a dream diary over two weeks (Mathes & Schredl, 2014). In addition, about 7% to 10% of most recent nightmare reports included the theme of falling (Schredl & Göritz, 2018; Schredl & Pallmer, 1998), also indicating that the question regarding falling dreams might actually refer to dreams and not solely to sleep starts. As mentioned above, however, validation studies of the TDQ are still lacking. Another typical dream topic that might be confused with another phenomenon are “being paralyzed”, “being unable to move” or “being frozen with fright” (Nielsen et al., 2003; Schredl, 2010) as one might argue that participants experiencing sleep paralysis, i.e., awakening from REM sleep with persisting muscle atonia (typically very short, up to several minutes) and the inability to move (Vaughn & D’Cruz, 2017) answer these TDQ items affirmative. Again, studies (Mathes & Schredl, 2014; Mathes et al., 2014) analyzing dream reports indicate that this topic of being paralyzed can be found within dreams, about 5% of the participants had one dream with being paralyzed in two weeks (Mathes & Schredl, 2014). To summarize, as the TDQ versions did not include detailed descriptions of the dream themes, it might be that participants might mix up different phenomena but the extend of this methodological problem is not known as dream themes like falling or being paralyzed can be found in dream reports and cannot attributed solely to sleep starts or sleep paralysis.

In addition to demonstrating the universal character of these typical dream themes, the question arises as to why these dream topics occur in so many dreamers. One line of theorizing resorted to physiological aspects of REM sleep, for example, the muscle atonia which is always present in REM sleep of healthy participants (Salas et al., 2017), might be responsible for dreams of being paralyzed or falling (cf. Schönhammer, 2004). A problem with this explanation is that dreaming is not restricted to REM sleep (Nielsen, 2000),

even though idiopathic nightmares with the themes of falling or being paralyzed as examples occur most likely in REM sleep (Paul et al., 2019). As it is still difficult to explain why not every dream is affected by REM or NREM sleep physiology, other dream experts (Freud, 1900/1991; Garfield, 2001) focused on the relationship between these dream themes and waking life. It seems obvious that a simple replay of waking life experiences (cf. Malinowski & Horton, 2014) is not the basis for most of these dream topics, as endlessly falling and being chased by a monster does not occur in waking life. The basic idea put forward, for example by Garfield (2001), is that typical dreams are metaphors for emotions experienced in a less intense manner in waking life, e.g., falling dreams are related to feelings of insecurity (having no support) or dreams of being chased might be related to a feeling of threat (someone or something is threatening me). In the terminology of the continuity hypothesis (Schredl, 2012), typical dreams are typical because they reflect typical waking-life experiences in a metaphorical way.

The present study investigated the frequency of participants reporting three typical dream topics, dreams of falling, being chased, and being paralyzed, elicited in four independent and representative surveys carried out in 1956, 1970, 1981, and 2000. Based on the universality of these dream themes, it was expected that the percentage of participants reporting them do not differ significantly in the different surveys.

2. Method

2.1. Measurement instrument

The participants were presented with a list of dream themes and were instructed 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 themes like 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

Table 1. Percent of participants reporting very rare or no dreaming (Logistic regression including study year, age group, and gender)

Total sample		Age group		Gender	
22.07% (N = 5941)					
Study year		Age group		Gender	
1956	23.49% (N = 2005)	18 to 29 yrs.	20.24% (N = 1418)	Men	27.56% (N = 2776)
1970	22.70% (N = 1956)	30 to 44 yrs.	23.36% (N = 1644)	Women	17.25% (N = 3165)
1981	19.23% (N = 962)	45 to 59 yrs.	22.76% (N = 1516)		
2000	20.73% (N = 803)	60+ yrs.	21.64% (N = 1363)		
Study effect: $\chi^2 = 9.3, p = .0257$		Age group effect: $\chi^2 = 5.1, p = .1677$		Gender effect: $\chi^2 = 90.8, p < .0001$	

Table 2. Percent of participants reporting falling dreams (Logistic regression including study year, age group, and gender)

Total sample		18.32% (N = 4613)			
Study year	Age group		Gender		
1956	18.84% (N = 1523)	18 to 29 yrs.	18.90% (N = 1127)	Men	15.33% (N = 2002)
1970	17.66% (N = 1512)	30 to 44 yrs.	19.01% (N = 1257)	Women	20.61% (N = 2611)
1981	18.32% (N = 775)	45 to 59 yrs.	18.54% (N = 1165)		
2000	18.56% (N = 803)	60+ yrs.	16.64% (N = 1064)		
Study effect: $\chi^2 = 0.7$, $p = .8780$		Age group effect: $\chi^2 = 3.4$, $p = .3310$		Gender effect: $\chi^2 = 21.6$, $p < .0001$	

(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 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 item was 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 a detailed discussion of the advantages and disadvantages of this sampling method see Noelle-Neumann and Petersen (2000).

Statistical analyses were carried out with SAS 9.4 statistical package for windows using logistic regressions. Effect sizes were computed from chi-square values according to Cohen (1988).

3. Results

Overall, about 22% of the participants stated that they dream never or very rarely (see Table 1). As this variable was affected by the year the study was carried out (and by gender with the effect size of $d = 0.249$), the subsequent analyses were carried out only for the participants who reported dreams. Additionally, 17 participants were excluded who did not answer the dream item.

As depicted in Table 2, falling dreams were reported by about 18% of the participants. Whereas study year and age group were not related to reporting falling dreams, women tend to report falling dreams more often than men (effect size: $d = 0.137$). Similarly, the percentage of individuals reporting dreams of being chased was not related to study year and age group but only to gender with an effect size of $d = 0.104$ (see Table 3). Lastly, dreams of being paralyzed were the most frequently reported typical dream of the three, with about 26% of the participants having had this type of dream in the last few months (see Table 4). Again, women tend to report dreams of being paralyzed more often than men (effect size: $d = 0.110$), whereas study year and age group were unrelated to the frequency of these dreams.

4. Discussion

The results of the present study demonstrated the stability of the prevalence rates of the three typical dream themes of falling, being chased, and being paralyzed over a period of 44 yrs., supporting the idea that some dream topics are universal across cultures (see: Schredl, 2019) and time periods.

Table 3. Percent of participants reporting dreams of being chased (Logistic regression including study year, age group, and gender)

Total sample		12.16% (N = 4613)			
Study year	Age group		Gender		
1956	12.21% (N = 1523)	18 to 29 yrs.	11.71% (N = 1127)	Men	10.24% (N = 2002)
1970	12.50% (N = 1512)	30 to 44 yrs.	13.89% (N = 1257)	Women	13.63% (N = 2611)
1981	12.13% (N = 775)	45 to 59 yrs.	12.79% (N = 1165)		
2000	11.46% (N = 803)	60+ yrs.	11.09% (N = 1064)		
Study effect: $\chi^2 = 0.5$, $p = .9232$		Age group effect: $\chi^2 = 2.7$, $p = .4352$		Gender effect: $\chi^2 = 12.4$, $p = .0004$	

Table 4. Percent of participants reporting dreams of being paralyzed (Logistic regression including study year, age group, and gender)

Total sample		26.40% (N = 4613)			
Study year		Age group		Gender	
1956	27.05% (N = 1523)	18 to 29 yrs.	24.76% (N = 1127)	Men	23.63% (N = 2002)
1970	26.39% (N = 1512)	30 to 44 yrs.	27.53% (N = 1257)	Women	28.53% (N = 2611)
1981	24.90% (N = 775)	45 to 59 yrs.	26.52% (N = 1165)		
2000	26.65% (N = 803)	60+ yrs.	26.69% (N = 1064)		
Study effect: $\chi^2 = 1.1$, $p = .7729$		Age group effect: $\chi^2 = 2.3$, $p = .5097$		Gender effect: $\chi^2 = 13.8$, $p = .0002$	

All three themes were more often reported by women compared to men; the effect sizes, however, were very small.

From the methodological viewpoint, an important strength of the present analysis is that all four independently carried out studies adhered to the same question. Regarding the main focus of the study, namely war-related dreams, the expected decrease from 1956 to 2000 was found (Schredl & Piel, 2006), an indication for the validity of the surveys. About 22% of the participants reported that they never or almost never dream; this is somewhat lower compared to about 31% found in representative samples that elicited dream recall frequencies (see Table 1; Schredl et al., 2014). This might reflect a small disadvantage of the quota sampling approach (Noelle-Neumann & Petersen, 2000) as individuals have to be interested in participating in surveys. An advantage on the other hand 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. Interestingly, the effect size of the gender difference in dream recall ($d = 0.249$) fits in well with meta-analytic findings (Schredl & Reinhard, 2008), also supporting the validity of the present findings. And it should be mentioned that the quota sampling aimed at the representativeness of the samples (regarding the population of Germany), whereas most studies addressing the occurrence of typical dream themes included student samples (Griffith et al., 1958; Nasser & Bulkeley, 2009; Nielsen et al., 2003; Schredl et al., 2004; Yin et al., 2013; Yu, 2008).

As pointed out in the introduction, eliciting specific dream topics like falling and/or being paralyzed without clear-cut definitions presented along the item might overestimate the frequency of falling dreams or dreams of being paralyzed as the participants might include sleep starts episodes although these are not typically accompanied with panic of crashing but by startle (Salas et al., 2017) or sleep paralysis experiences (Vaughn & D'Cruz, 2017).

The most frequent topic was being paralyzed; about 26% of the sample reported this dream theme, followed by falling (about 18%), and being chased (about 12%). Although the exact percentages vary due to methodological differences compared to other studies, e.g., measuring the occurrence within in the last few months vs. at least once in a lifetime, these three dream themes were also the reported nightmare topics most often in a 2010 survey (Schredl, 2010), again supporting the idea that some dream topics can be found everywhere. As in the present study, the occurrence of the typical dream themes within the last few months, one would

expect much higher percentages of participants having experienced the specific dream topic at least once in their life time – this would support the notion of universality of these dream themes. The year of the study and age (see also: Schredl, 2010) were not related to the prevalence of these three, typical dream themes. Taken together with the findings of cross-cultural stability of typical dream themes (Griffith et al., 1958; Nasser & Bulkeley, 2009; Nielsen et al., 2003; Schredl et al., 2004; Yin et al., 2013; Yu, 2008), the claim of Garfield (2001) that these topics are universal seems quite reasonable. Even though the effect sizes were very small, the only factor affecting the occurrence of the three typical dreams topics was gender, i.e., women reported more often of falling dreams, dreams of being chased or paralyzed than men did. Interestingly, the frequency of sleep paralysis did not show a consistent gender effect (Dennis et al., 2018) but women tend to report higher nightmare frequencies in general (Schredl & Reinhard, 2011), i.e., this supports the notion that the “being paralyzed” theme might refer to actual dreams/nightmares and not to sleep paralysis experiences. It would have been interesting to include nightmare frequency, which unfortunately was not measured in the four surveys, as a possible confounder in the regression analyses.

The next step would be to look more closely at the content of typical dreams and their stability in time and across cultures. Yin et al. (2013), for example, reported that Tibetans had dreams of being chased by animals more often than persons living in the South of China; since these animals were mostly yaks and dogs, this difference reflects the different waking-life environments of the two populations. Similarly, children in rural areas in Mexico reported more dreams of being chased by animals than urban US American children (O'Neil & O'Neil, 1977). Interestingly, the chasing figures seem also to change over time: In the 1930s the bogey man was common (Kimmins, 1937), in the 1950s and 1960s ghosts (Schnell, 1955a, 1955b) and the devil (Gremmel, 1962), whereas in the 1990s media figures like Freddie Kruger (Nightmare on Elmstreet) occur (Schredl & Pallmer, 1998). These studies indicate that it would be very interesting to carry out more detailed studies of typical dreams.

To summarize, research – including the present findings – indicate that the basic patterns of typical dreams, like being chased, falling, and being paralyzed, are universal but also that the details of these dreams might vary according to the waking-life experiences of the dreamer, e.g., culture and time epoch, as predicted by the continuity hypothesis

of dreaming (Schredl, 2003). In order to test the assumption that these dreams are metaphorical and dramatized expressions of emotions experienced in waking life (Garfield, 1984, 2001), it would be interesting to complement the dream questions with measures of the emotional states during waking.

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References

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Lawrence Erlbaum.
- Denis, D., French, C. C., & Gregory, A. M. (2018). A systematic review of variables associated with sleep paralysis. *Sleep Medicine Reviews*, 38, 141-157. <https://doi.org/10.1016/j.smrv.2017.05.005>
- 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.
- 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.
- Garfield, P. L. (1984). *Your child's dreams*. Ballentine.
- Garfield, P. L. (2001). *The universal dream key: The twelve most common dream themes around the world*. Cliff Street Books.
- Greppe, F. (1962). Gruppendynamik im Spiegel des Kindertraums. *Jahrbuch für Psychologie, Psychotherapie und Medizinische Anthropologie*, 9, 14-41.
- Griffith, R. M. (1958). Typical dreams: A statistical study of personality correlates. *Dissertation Abstracts*, 18, 1106.
- Griffith, R. M., Miyagi, O., & Tago, A. (1958). The universality of typical dreams: Japanese vs. Americans. *American Anthropologist*, 60, 1173-1179.
- Hall, C. S., & Van de Castle, R. L. (1966). *The content analysis of dreams*. Appleton-Century-Crofts.
- Kimmins, C. W. (1937). *Children's dreams: An unexplored land*. George Allen & Unwin.
- Malinowski, J. E., & Horton, C. L. (2014). Memory sources of dreams: The incorporation of autobiographical rather than episodic experiences. *Journal of Sleep Research*, 23, 441-447. <http://www.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3fdirect%3dtrue%26db%3dpsych%26AN%3d2014-18562-001%26site%3dhost-live>
- Mathes, J., & Schredl, M. (2014). Analyzing a large sample of diary dreams - How typical are typical dreams? *Somnologie*, 18, 107-112.
- 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>
- Nasser, L., & Bulkeley, K. (2009). The typical dreams of Jordanian college students. In K. Bulkeley, K. Adams, & P. M. Davis (Eds.), *Dreaming in Christianity and Islam: Culture, conflict, and creativity* (pp. 200-216). Rutgers University Press.
- Nielsen, T. A. (2000). A review of mentation in REM and NREM sleep: "covert" REM sleep as a possible reconciliation of two opposing models. *Behavioral and Brain Sciences*, 23, 851-866.
- 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.
- Noelle-Neumann, E., & Petersen, T. (2000). *Alle, nicht jeder. Einführung in die Methode der Demoskopie*. Springer.
- O'Neil, C. W., & O'Neil, N. D. (1977). A cross-cultural comparison of aggression in dreams: Zapotecs and Americans. *International Journal of Social Psychiatry*, 23, 35-41.
- Paul, F., Alpers, G. W., Reinhard, I., & Schredl, M. (2019). Nightmares do result in psychophysiological arousal: A multi-measure ambulatory assessment study. *Psychophysiology*, 56(7), e13366. <https://doi.org/10.1111/psyp.13366>
- 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>
- Salas, R. E., Gulyani, S., Kwan, A. B., & Gamaldo, C. E. (2017). Sleep-related movement disorders and their unique motor manifestations. In M. Kryger, T. Roth, & W. C. Dement (Eds.), *Principles and Practice of Sleep Medicine* (6th edition) (pp. 1020-1029). Elsevier.
- Schnell, A. M. (1955a). Über Gespensterträume bei Schulkindern - Teil I. *Psychiatrie, Neurologie und Medizinische Psychologie*, 7, 10-18.
- Schnell, A. M. (1955b). Über Gespensterträume bei Schulkindern - Teil II. *Psychiatrie, Neurologie und Medizinische Psychologie*, 7, 34-42.
- Schönhammer, R. (2004). *Fliegen, Fallen, Flüchten: Psychologie intensiver Träume*. dgvt.
- 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. (2010). Nightmare frequency and nightmare topics in a representative German sample. *European Archives of Psychiatry and Clinical Neuroscience*, 260, 565-570. <https://doi.org/10.1007/s00406-010-0112-3>
- Schredl, M. (2012). Continuity in studying the continuity hypothesis of dreaming is needed. *International Journal of Dream Research*, 5, 1-8. <http://archiv.ub.uni-heidelberg.de/ojs/index.php/IJoDR/article/view/9306>
- 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., Berres, S., Klingauf, A., Schellhaas, S., & Göritz, A. S. (2014). The Mannheim Dream questionnaire (MA-DRE): Retest reliability, age and gender effects. *International Journal of Dream Research*, 7, 141-147. <https://doi.org/10.11588/ijodr.2014.2.16675>
- Schredl, M., Ciric, P., Götz, S., & Wittmann, L. (2004). Typical dreams: stability and gender differences. *Journal of Psychology*, 138, 485-494.
- Schredl, M., & Göritz, A. S. (2018). Nightmare themes: An online study of most recent nightmares and childhood nightmares. *Journal of Clinical Sleep Medicine*, 14(3), 465-471.
- Schredl, M., & Pallmer, R. (1998). Geschlechtsunterschiede in Angstträumen von SchülerInnen. *Praxis der Kinderpsychologie und Kinderpsychiatrie*, 47, 463-476.
- Schredl, M., & Piel, E. (2006). War-related dream themes in Germany from 1956 to 2000. *Political Psychology*, 27, 299-307.
- Schredl, M., & Reinhard, I. (2008). Gender differences in dream recall: a meta-analysis. *Journal of Sleep Research*,

17, 125-131. <https://doi.org/10.1111/j.1365-2869-2008.00626.x>

- Schredl, M., & Reinhard, I. (2011). Gender differences in nightmare frequency: a meta-analysis. *Sleep Medicine Reviews*, 15, 115-121. <https://doi.org/10.1016/j.smr.2010.06.002>
- Strauch, I., & Meier, B. (1996). *In search of dreams: results of experimental dream research*. State University of New York Press.
- Vaughn, B. V., & D'Cruz, O. N. F. (2017). Cardinal manifestations of sleep disorders. In M. Kryger, T. Roth, & W. C. Dement (Eds.), *Principles and practice of sleep medicine* (6th edition) (pp. 576-586). Elsevier.
- Yin, F., Shen, H., He, Y., Wei, Y., & Cao, W. (2013). Typical dreams of "being chased": A cross-cultural comparison between Tibetan and Han Chinese dreamers. *Dreaming*, 23(1), 64-77. <https://doi.org/10.1037/a0031004>
- Yu, C. K.-C. (2008). Typical dreams experienced by Chinese people. *Dreaming*, 18, 1-10.