

# Home Dream Recall in Children and Young Adults

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Summary. Small scale laboratory studies have indicated that children have lower home dream recall when compared to young adults. However, larger studies do not support these findings. The present study compared home dream recall frequency of 558 children, (mean age 10.6 years), with a sample of 444 young adults, (mean age 23.5 years), and found a marked lower dream recall frequency in the younger age group. Longitudinal studies, with sufficient sample size, are necessary to validate this cross-sectional finding.

Keywords: Dream recall frequency; Children; Young adults

#### Introduction

Results of previous research, conducted in sleep laboratories, (Kales, Kales, Jacobson, Paulson, Klein & Kun, 1968; Foulkes, Maykuth, Butler, Kerr, Irwin, Ponder, Schmitt & Cole, 1980; Strauch, 2004) indicates that dream recall rates after REM awakenings are considerably lower in children compared to young adults. Findings ranged from 15% at ages 3 to 4 years, (Foulkes et al., 1980), 60 to 70% at about the age of 10 years, (Foulkes, 1982), rising to 80 to 90% in young adults (Nielsen, 2000). The major problem in evaluating these findings is the small sample sizes of the sleep laboratory studies (e.g., N = 12; Strauch, 2004). Although home dream recall frequency has been shown to be related to the recall rates in the laboratory, (Goodenough, Shapiro, Holden & Steinschriber, 1959), the question arises whether home dream recall frequency of children differs from that of young adults. A cross-sectional study (Chrysanthis, 1945) found in a large sample (N = 1418) that young adults had more frequent recall, (43.9% at 18 years), than children, (27.9% at age 12 years). This is supported by the findings of a longitudinal study (N = 610; aged 13 yrs. to 16 yrs.), Nielsen, Leberge, Paquet, Tremblay, Vitaro & Montplaisir, 2000) but it is not consistent with another longitudinal study (Strauch & Meier, 1992; N = 92) that found that the percentage of frequent dream recallers was smaller (26%) in young adults (18 to 22 yrs.), when compared to 10-12 year old children (47.5%). The inconsistent findings might be partly explained by the measurement instruments applied in the studies; Schredl (2007) has shown that scales with categories like "frequently", "occasionally", "rarely" (cf. Strauch & Meier, 1992) are less reliable than scales with absolute categories like "about once a month", "once a week" and so forth.

The present study uses the seven-point rating scale recommended by Schredl (2004) to compare home dream recall frequency data of children and young adults.

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#### 2. Method

#### 2.1. Measurement instrument

The seven-point dream recall frequency scale (Schredl, 2004) was presented within a dream questionnaire in each of the studies. Participants were asked to rate dream recall frequency of the previous months (0 = never, 1 = less than once a month, 2 = about once a month, 3 = twice or three times a month, 4 = about once a week, 5 = several times a week and 6 = almost every morning).

Due to technical errors, the category "about once a month" was not included in the study of Schredl, Anders, Hellriegel & Rehm (2008).

### 2.2. Participants and Procedure

The "children" sample included the participants of three studies who, in the main, were fifth-grade school children, (Schredl & Sartorius, 2006; Schredl, Biemelt et al., 2008; Schredl, Anders et al., 2008). The young adult sample was taken from the Schredl, Wittmann, Ciric and Götz (2003) study.

Overall, 558 children (287 girls, 271 boys) with a mean age of 10.6 years, (SD = 1.2), and 444 young adults (376 women, 68 men) with a mean age of 23.5 years, (SD=5.7), were included in the analysis.

#### 3. Results and Discussion

Results were analyzed using two-way ANOVA with the factors age, group and gender. The mean values of home dream recall frequency differed significantly, F(1, 984) = 64.5, p < .0001, between the children (M = 3.2, SD = 2.1) and the young adults (M = 4.44, SD = 1.19) and the effect size was d = 0.64. There was a significant gender effect, F(1, 984) = 10.0, p = .002, whereas the interaction between gender and group was not significant, F(1, 984) = 0.8, ns.

The result indicates that home dream recall is considerably lower in children compared to young adults; confirming previous laboratory findings (Foulkes, 1982). The most prominent difference was found in the category "never recall dreams" (18.6% for children vs. 0.5% for young adults) indicating that the methodological problem of not including one category in one of the children studies could not have affected the results in a marked way.



In order to validate this cross-sectional finding, it will be necessary to carry out a longitudinal study with a sufficiently large sample and a reliable dream recall frequency scale. Of special interest are the apparent gender differences in dream recall. A recent meta-analysis, (Schredl & Reinhard, 2008), has shown that women tend to have a higher dream recall than men, with adolescents showing a larger gender difference than adults, and children younger than 10 years showing the least. This may indicate a gender-specific "dream socialization" which could be investigated by the proposed longitudinal approach.

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