

## An Estimate of Lucid Dreaming Incidence

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Prevalence (how many people have ever had at least one lucid dream) and frequency (how often an individual experiences these dreams) are two ways of conceptualizing lucid dreaming incidence. Seven surveys have attempted to ascertain the prevalence of lucid dreaming in both student (Palmer, 1979; LaBerge, 1985; Gackenbach, Rokes, Sachau & Snyder, 1984) and adult (Palmer, 1979; Kohr, 1980; Blackmore, 1984; Gackenbach, 1978; Gackenbach, Curren, LaBerge, Davidson & Maxwell, 1983) samples. Among the latter estimates of having had at least one lucid dream range from 100% (Gackenbach et al., 1983) to 47% (Blackmore, 1984). Both sample characteristic considerations and understanding of the concept clarify the picture. Kohr (1980), Gackenbach (1978) and Gackenbach et al. (1983) were all dealing with highly motivated adult samples, that is, people who have an unusually high interest in dreaming and/or lucid dreaming. Thus their estimates tend to run high (Kohr, 70%; Gackenbach, 76%; Gackenbach et al., 100%). In the Palmer (1979) and Blackmore (1984) surveys, adults were randomly chosen from the telephone directory in the case of the former and from the electoral register in the case of the latter. Consequently, their estimates are considerably more conservative: Palmer, 55% and Blackmore, 47%. However, there is no indication that Palmer and Blackmore attempted to verify that their respondents understood the concept.

LaBerge (1985) and Gackenbach, Heilman, Boyt and LaBerge (1985) have pointed out that when subjects are asked to supply a lucid dream, incidence rates drop dramatically due to the subjects' confusion over the definition of dream lucidity. For instance, LaBerge reported a drop in incidence of subjects reporting at least one lucid dream during their lifetime from 85% to 77% while Gackenbach et al. (1984) lost 344 of 707 subjects because their dream transcripts were judged to be either clearly not a lucid dream, questionably lucid, or partially lucid.

As with adults, prevalence estimates for students ranges from 85% (LaBerge, 1985) to 57.5% (Gackenbach et al., 1984). In a randomly chosen sample Palmer (1979) reported 71.5 % prevalence but did not verify understanding, while LaBerge (1985) found a 77% prevalence with verification but his sample was not random (i.e., students enrolled in a sleep and dreams class). Gackenbach et al's (1984) estimate of prevalence, 57.5%, in a student sample was chosen randomly from Introductory Psychology classes. They verified that potential research participants understood the concept by collecting lucid dream transcripts and having them evaluated by independent judges.

Frequency, as another incidence indicate, has been conceptualized in two ways: self-reported and percentage of lucid dreams from collected dream diaries compiled either in the laboratory or at home. Only self-report and at home dream diary estimates are reported herein. As with prevalence, considerations of sample characteristics and verification of understanding impact estimates of self-reported frequency. Hearne's (1978; 1983) two samples were all lucid dreamers, so relative individual frequency in a normal population cannot be estimated from his data.

Estimates of experiencing dream lucidity more than once per month range from 13.5% (Gackenbach et al., 1984) to 28.5% (Palmer, 1979). One or more per lifetime (but less than once per month) estimates range from 36.55% (Gackenbach et al., 1984) to 60% (Gackenbach, 1978). When broken down by type of sample, high-interest dream-recalling adults were tapped by Gackenbach (1978; once per month = 16%; once per lifetime = 60%) and Kohr (1980; once per month = 21%; once per lifetime = 49%), while Palmer (1979) randomly sampled adults and found 13.5% reported such dreams once per month, while another 41% said that they had them rarely. Understandably the Kohr and Gackenbach figures are higher than the Palmer estimates with the latter being more accurate. However, Palmer did not verify understanding so his figures may also be inflated.

Of the three student samples upon which this work has been reported, two verified understanding (Gackenbach et al., 1985; LaBerge, 1985) and two were randomly selected (Gackenbach et al., 1985; Palmer, 1979), but only one filled both criteria (Gackenbach et al., 1985). They report that 20.75% of their sample reported lucid dreaming once or more per month while 36.55% reported it more than once in a lifetime but less than monthly.

Two studies considered frequency by counting lucid dreams in a dream log. In a high interest adult sample with control for understanding, Gackenbach, Curren, LaBerge, Davidson, and Maxwell (1983) found a frequency of 13% lucid dreams in their dream logs kept for seven to ten days or an average of one in eight days. The exact same percentage was reported by Gackenbach, Curren and Cutler (1983) in a more normative sample, i.e., college students, also controlled for understanding. They note, "Of the 1601 dreams recorded by the 320 students over a 16-week period of once-weekly recordings, 349 were lucid and 1252 were vivid. However, if the dreamer did not provide a verifiable lucid dream transcript either early or late in the semester, the lucid dreams they experienced were deleted. Consequently, 211 lucid dreams remained" (p. 7).

In conclusion, the best estimate of prevalence is that about 58% of the population

have experienced a lucid dream at least once in their lifetime while about 21% report it with some frequency (one or more per month). Additionally, 13% of dreams recalled on the morning after and recorded in dream diaries are likely to be lucid.

## References

- Blackmore, S.J. (1984). A postal survey of OBEs and other experiences. *Journal of the Society for Psychical Research*, 52, 225–244.
- Gackenbach, J.I. (1978). A personality and cognitive style analysis of lucid dreaming. Un-published doctoral dissertation, Virginia Commonwealth University.
- Gackenbach, J.I., Curren, R., & Cutler, G. (1983). Pre-sleep determinants and post-sleep results of lucid versus vivid dreams. Paper presented at the annual meeting of the American Association for the Study of Mental Imagery, Vancouver, June.
- Gackenbach, J.I., Curren, R., LaBerge, S., Davidson, D. & Maxwell, P. (1983). Intelligence, creativity, and personality differences between individuals who vary in self-reported lucid dreaming frequency. Paper presented at the annual meeting of the American Association for the Study of Mental Imagery, Vancouver, June.
- Gackenbach, J.I., Heilman, N., Boyt, S. & LaBerge, S. (1985). The relationship between field independence and lucid dreaming ability. *Journal of Mental Imagery*, 2(1), 9–20.
- Gackenbach, J.I., Rokes, L., Sachau, D. & Snyder, T.J. (1984). Relationship of the lucid dreaming ability to vestibular sensitivity as measured by caloric nystagmus. Manuscript under editorial consideration.
- Hearne, K.M.T. (1978). Lucid dreams: An electrophysiological and psychological study. Un-published doctoral dissertation, University of Liverpool.
- Hearne, K.M.T. (1983). Features of lucid dreams: Questionnaire data and content analyses (1). *Journal of Lucid Dream Research*, 1(1), 3–20.
- Kohr, R.L. (1980). A survey of psi experiences among members of a special population. *The Journal of the American Society for Psychical Research*, 74, 295–411.
- LaBerge, S. (1985). *Lucid dreaming: The power of being awake and aware in your dreams*. New York: Simon and Schuster.
- Palmer, J. (1974). A community mail survey of psychic experiences. *Research in Parapsychology*, 3, 130- 133.