

Lucid Dream Research at the Sleep and Dream Laboratory, University of Virginia, Medical Center

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A combined study of lucid dream induction techniques and efforts to give ocular (eye movement) signals from the lucid dream state is now under way at the Sleep and Dream Laboratory of the University of Virginia Medical Center. Joe Dane, a doctoral candidate in Clinical Psychology at Georgia State University, is comparing the effects of LaBerge's MILD technique (LaBerge, 1980) with those of posthypnotic suggestion (PHS) for willfully inducing lucid dreams in 10 "frequent" lucid dreamers (i.e., who spontaneously experience one or more lucid dreams per month).

Only six subjects have completed the experiment so far, but the results already obtained are quite encouraging.

The study itself involves three phases: a one week baseline monitoring period (passive monitoring of spontaneous dream life); a one week home training period (MILD or PHS); and two consecutive nights in the sleep laboratory. Ten subjects are using MILD and 10 are using PHS. Subjects are matched as closely as possible for sex, frequency of lucid dreaming, level of hypnotic susceptibility, and age.

Once in the sleep lab, subjects attempt to have and give eye movement signals from a lucid dream. However, on night one, they try to do this using only waking suggestion, while on night two, they apply the technique they have been using at home during the training period. The eye signals we are using are particularly effective since they utilize a special arrangement of electrodes which clearly distinguishes between right and left eye movements and which produces a very distinct pattern which is easily distinguished from random eye movements.

For the six subjects who have completed the experiment, the rate of reported spontaneous lucid dream frequency ranges from one to two per month (5 subjects) to more than one per week (1 subject). Five of these subjects have been able to give signals from a total of 9 lucid dreams. Of these signals, three occurred during unambiguous REM sleep, while six can be contested as representing a form of waking arousal from REM (e.g., hypnopompic imagery) due to the amount of alpha present in the EEG and/or slight increases in the level of muscular tension.

Signals occurred during the first and second laboratory nights, but so far no subject has signaled on both nights. No lucid dreams have been reported in which the subject did not signal. Interestingly, however, there is evidence to suggest that subjects some-times “unconsciously” approximate the appropriate directional sequence of eye movements (i.e., left, center, left, right, left, right, left, right) as part of the ongoing dream without being consciously aware of this or intending to signal. It is as if some subjects incorporate the signal task into the dream content without consciously being aware (within the dream) of the task itself. The resulting eye signals are not nearly as crisp and clear as the consciously intended signals, however, and are easily distinguished from them.

With respect to induction techniques, it is still too early to know whether any one technique (MILD, PHS or waking suggestion) is statistically more effective than the other. So far, there appears to be no great difference.

What is clear is that five out of six subjects (over 80%) have been able to consciously signal from “lucid dreams” within a two night period in the sleep lab. This in itself is a significant achievement, particularly in view of prior laboratory efforts to obtain reliable samples of lucid dreams.

Perhaps the most significant result thus far is the observation of three clearly distinguishable, consciously emitted eye signals which occurred during unambiguous REM sleep. This provides independent replication of similar results obtained by Hearne (1978) and La Berge (1981). Our evidence once again confirms that at least some lucid dreams are true “dream” phenomena and are not simply due to hypnagogic or hypnopompic imagery or to hallucinations during micro—awakenings from the REM state. On the other hand, the heightened alpha and/or muscle tension accompanying some of the signals suggests that, as already proposed by LaBerge and others, the term “lucid dreaming” actually refers to range a of dream—like phenomena, some of which occur during true “sleep” (as physiologically defined), and some of which are more clearly associated with the “twilight” zone of hypnagogic and hypnopompic states. All types of lucid dreams are equally valid from the dreamer’s perspective. But the true REM lucid dream does more to legitimize the phenomenon in the eyes of traditional sleep researchers who have heretofore been reluctant to admit its validity.

An additional area of our research at the Sleep and Dream Lab involves developing a questionnaire to aid in the selection individuals who are most likely to respond to lucid dream induction techniques. It is based on our extension of the work on personality variables and lucid dreaming done by Gackenbach (1978) and Hearne (1978). Pilot testing with the Dane—Van de Castle Attitudes and Dream Experience Survey suggests that this 64 item self—report questionnaire can distinguish between the categories of non lucid, infrequent and frequent lucid dreamers. Further statistical analyses are underway to confirm these tentative results with a larger subject pool, and a test—retest reliability check is also under way.

One further note of interest is an article entitled “REM Sleep Phenomena During Out—of—Body Experiences” which recently appeared in the Journal for the American Society of Psychological Research. In this review of OBE literature, Roy Salley (1982) points out the intriguing parallels between the physical catalepsy (paralysis) and penile erections reported in certain OBE accounts and the regular occurrence of these phenomena in the REM state. He also notes that most OBEs are associated with the dream state and that OBEers typically report a remarkable degree of “lucidity” in their experience. Moreover, as Green (1968) points out, there is as yet an uncertain but well established relationship between OBEs and lucid dreams.

Further work with voluntary induction of lucid dreams at home and in the sleep laboratory may be the ideal answer to Salley’s call for more investigation of the parallels between normal sleep phenomena and the remarkable but “officially” neglected OBE phenomenon. Our hope at the Sleep and Dream Lab is to establish a group of lucid dreamers who are proficient in signaling and to work with them in exploring a variety of lucid dream, phenomena, including OBE and dream telepathy experiments.

References

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