

## Negative Air Ions and Lucidity Induction: Additional Data

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It has been reported that using a negative ion generator in ones bedrooms may be detri-mental to falling asleep. The general influ-ence of negative air ions on the brain may be a lower arousal threshold. Too much arousal keeps us awake; but by controlling the nega-tive ion concentration individuals may find that they are able to sleep while retaining a tendency for heightened arousal in dreams. In this way negative ions may be conducive to lucidity. Adler reports that the frequent appearance of rain in his dreams in an ion-ized environment may also express this arousal effect. Sometimes this “rain” assumes bizarre forms: emeralds falling out of the sky, thousands of birds descending, but usu-ally it is ordinary rain. Falling water and rainstorms are the natural source of negative air ions.

Relatedly, Adler notes that the results from exposure to 105 negative air ions/cc. given below do not reach conventional significance levels but was in the expected direction and indicates that further experiments would be worthwhile.

	Lucid	Non— Lucid	Totals
Ion	13	41	54
Non— Ion	10	52	62
Totals	23	93	116

$$X^2 = 1.15, df = 1, p = 0.30$$

As a further test of the aforementioned hypothesis, Gackenbach and LaBerge gathered 1006 dreams from 183 adults in an at home dream survey project. The amount of rain and cloudiness (i.e., times when negative ions would occur spontaneously in greater density in the atmosphere) on the days preceding their dreams were recorded on their dream logs. Only lucid dreams from subjects who demonstrated an understanding of the concept by providing a lucid dream transcript were included in subsequent analyses.

Simple correlations between type of dream and cloudiness and raininess of the previous day calculated separately for each sex resulted in nonsignificant correlations for males and a very small and marginally significant correlation for females ( $r = 0.06$ ,  $n = 605$ ,  $p < .098$ ). This was in the expected direction, the more lucid a dream (lucid dreams were assigned 1 point, prelucid dreams such as false awakenings were assigned 0.5 points and nonlucid dreams were assigned 0 points) the more likely it was to have rained the day before. However, this was attenuated by a small but significant correlation between the amount of recall of the dream and the raininess of the day before for females ( $r = 0.08$ ,  $n = 605$ ,  $p < .037$ ). This association was not found for males. When partial correlations were computed controlling for dream recall and attempts at lucidity induction the correlation between degree of lucidity and raininess dropped ( $r = 0.047$ ,  $n = 603$ ,  $p = .249$ ) and was nonsignificant.

Support from these two studies is weak, at best, for the hypothesized relationship between the presence of negative ions and the emergence of lucidity in the dream. Nonetheless this provocative notion deserves further investigation.

Original source: *Lucidity Letter Back Issues*, Vol. 2, No. 2, April, 1983, page 53.