

# The Science of Lucid Dreaming

## A Brief History and New Findings

© 2009 Ryan Hurd

*The Lucid Dream Exchange* has been documenting personal reports and leading experiential research into lucid dreaming for over ten years. I've always loved the focus on individual case studies, as well as the hard-earned advice that comes from real dreamers' experiences.

To give back to this lucid village that has given me so much, I want to promote the other community of lucid dream experts – the psychologists and scientists who study lucid dreaming professionally.

I think it's important for lucid dreamers to keep up with current research. Not only so we can frame our experiences in light of contemporary science, but also to test the findings and provide a counterpoint with our own "empirical data" – the lessons we learn from the dreams themselves.

### **Lucid Dreaming: Ignored, Celebrated, and Shelved Again**

Before discussing some new lucid dreaming research, I'd like to briefly describe the state of lucid dreaming research today and how it came to be this way. Lucid dreaming has been practiced for thousands of years, but only recently has modern science begun to explore this fascinating paradox of being aware in sleep.

In fact, many researchers lambasted lucid dreaming as a "fantasy" until Stephen LaBerge validated the psycho-physical markers of lucidity with an EEG machine. That was 1981, and since then lucid dreaming has not only become accepted as a real state of consciousness, but it has become a household word.

But despite the powerful implications of consciousness during sleep for the philosophy of science -- as well as the promise of lucid dreaming methods for sleep research -- actual lucid dreaming research is hard to find.

Why is this? Long story short: first-person narratives are still not given much credence in research science. The study of experience – and especially conscious experience -- is a sure way for budding psychologists to not get funding. Also, many of the original lucid dreaming researchers who did the ground-breaking work in the 1980s have since moved on to more popular and lucrative topics.

On the other hand, interest in the neuroscience of consciousness is growing within the Academy. Serious studies on meditation, altered states of consciousness, and hallucinogenic compounds are more popular than ever. More scientists are blending hard data with experiential reports. As this "shadow culture" becomes mainstream, my educated guess is that lucid dreaming is on the verge of a new wave of interest in the hard sciences.

### **A Recent Study – Emotions and Lucidity**

Here is a recent lucid dreaming study you probably haven't heard about, presented at the *International Association for the Study of Dreams* last year by cognitive psychologist Tracey Kahan. (link: <http://www.scu.edu/cas/psychology/faculty/kahan.cfm>)

Kahan and her team focused on the topic of comparing self-awareness and emotions in waking and dreaming. The researchers gave a detailed questionnaire to 92 undergraduate students at Santa Clara State University and then calculated the results using quantitative (statistics) and qualitative analyses (by comparing dream themes).

In this study, Kahan wanted to know how emotions in waking life relate to lucidity levels of dreamers, and also if emotions help or harm lucidity in dreams. You may recognize the assumption she is testing here: that high levels of emotion in lucid dreams can reduce self-awareness.

Kahan's results confirmed the common assumption that self-awareness in dreams is less likely to occur in the presence of intense emotions. Also, the study confirmed that dreams, in general, have more intense emotion than in waking life.

So it seems that part of the reason why lucid dreams are so hard to come by is because the powerful emotions in our dreams somehow are involved in limiting the chance to become self-aware in the first place. When emotional, perhaps, we are pulled "into the scene" and lose the ability to reflect on our experience as it happens.

You may have already known that from your own experience, but this research gives us another clue: that the inverse correlation between emotions and self-awareness may point to cognitive limits in the human brain, as well as an evolutionary advantage that may have played out in the distant past.

### **The Future of Lucid Dreaming Research**

As a lucid dreamer myself, Kahan's research makes me reconsider the importance of developing emotional intelligence, not only in lucid dreams, but also in waking life.

My hope is that by delving into the science of lucid dreaming, we can be inspired to dream up our own experiments as well as challenge assumptions about this remarkable state of consciousness. And that is lucid dreaming science at its best.

***Ryan Hurd is a dream researcher and freelance writer; contact him at Dream Studies Portal:***

***<http://dreamstudies.org>***