

116/04 - "Comparing Conscious and Physiological Measurements in a Cognitive DMILS Study in Bali" - only abstract available

Instituição/*Institution*: College of Arts and Sciences, Rollins College, Florida - USA

Duração/*Duration*: 2005/03 - 2006/12

Investigadores/*Researchers*: Prof. Hoyt Edge, Prof. Luh Ketut Suryani, Dr. Niko Tiliopoulos, Dr. Annemieka Bikker

Abstract:

Objectives: This project aims at comparing physiological responses (heart rate variability) with conscious responses (button presses) to develop a more sensitive measure of psi in a cognitive DMILS experiment in a cross-cultural setting.

Methods: In the cognitive DMILS protocol, a person (Helpee) focuses on a lit candle, and whenever his focus wanders, he presses a button. Meanwhile, a person in another room (Helper) intends to help the person focus during half of the randomly assigned two minute epochs; the other half serve as control. There are 8 counter-balanced epochs per session. Heart rate variability from the Helpee is also collected for each of the 16 epochs. HRV is compared in the help vs. the control epochs. Additionally, extensive interviews were conducted.

Results: Although on average HRV tended to be slightly lower in the Help condition in Study 1, this difference was not statistically significant, Control ($M = 5.84$, $SD = 1.64$), Help ($M = 5.79$, $SD = 1.64$), $t(59) = 0.46$, $p = .32$, one-tail, Cohen's $d = .06$, power = .07. In the Study 2, there was no statistically significant difference in the HRV between the two conditions, Control ($M = 8.74$, $SD = 4.11$), Help ($M = 8.96$, $SD = 4.56$), $t(42) = 0.65$, $p = .26$, one-tail, Cohen's $d = .09$, power = .16.

Conclusions: HRV did not yield a more sensitive measure of psi influence. However, the interviews yielded significant phenomenal data, especially on what cultural factors caused significantly fewer button presses by the Helpee in Bali as opposed to studies in the US and in Edinburgh. We concluded that the Balinese see falling out of focus as a state; that is, the time from the instant of losing focus until they regain it is viewed as one state and is responded to as one event. Thus, they tend to press the button only once during this time. We believe, however, that other cultural factors may be at work, particularly the importance of ritual prayer in Bali.

Keywords: cognitive DMILS, HRV, meditation, cross-cultural differences