

134/04 - “Investigating the multidimensional nature of body image, sensorial representation, and phenomenology in relation to different forms of out-of-body experience”

Instituição/*Institution*: Manchester University - UK

Duração prevista/*Estimated duration*: 2005/06 - 2006/03

Investigadores/*Researchers*: Dr. Craig Murray, Dr. Jezz Fox

Abstract: Many people report having had an ‘out-of-body’ experience (OBE) in which they felt as if their phenomenal self was separated from their physical body. Previous work has found OBE experiencers (OBERS) to score higher on measures of dissociation and to differ in regards to the perceptual experience of their body than non-experiencers (non-OBERS). These findings have been interpreted as supporting a dissociational theory of the OBE. More recent work (project 124/02) has suggested that an examination of other dimensions of body experience might reveal further aspects of such dissociational experience. In this work OBERS have been found to score higher on a measure of body dissatisfaction, and lower on a measure of confidence in their physical self-presentation than non-OBERS. However, this prior research did not distinguish between those who had had a spontaneous OBE or an OBE as part of a near-death experience (NDE).

In a preliminary study we recruited participants via email advertisements to on-line discussion groups dedicated to topics of either near-death experiences or out-of-body experiences. A total of 39 participants who reported either a spontaneous OBE (n=28) or OBE as part of a near-death experience took part (we also received a small number of responses from people who had an OBE when under the influence of drugs or alcohol, but given the small number these were not included in the analysis). It was hypothesised that the causes of the spontaneous OBE and the OBE which takes place as part of an NDE have different causal psychological mechanisms. It was predicted that people reporting a prior spontaneous OBE would score more negatively on a variety of dimensions of body image, such as body dissatisfaction, than people reporting an OBE as part as a Near-death experience. Not all of the hypotheses were supported, but spontaneous OBERS (n=28) were found to score significantly higher on measures of body dissatisfaction and self-consciousness than NDErs (n=11).

In our main project study we have gathered nearly 2000 completed web questionnaires to examine further differences between OBEs and non-OBEs. This includes a comparison of OBEs experienced spontaneously, as part of and NDE, and as part of a meditatively, drug or alcohol induced experience. Analysis of this data is underway and will be reported when available.

163/04 - "Effects of different Biofeedback training procedures on quantitative Electroencephalographic parameters of healthy subjects"

Instituição/*Institution*: Brain Resource Company B.V., Nijmegen - The Netherlands

Duração prevista/*Estimated duration*: 2005/01 - 2006/03

Investigadores/*Researchers*: Dr. Martijn Arns, Dr. Wytze van der Zwaag, Dr. Erica Heesen, Dr. Rien Breteler

Abstract: Objectives: Both GSR and SCP have been associated with epilepsy. These measures may be different expressions of a single underlying neurophysiological (arousal) system. Learning curves of volitional control of GSR and SCP after feedback will be investigated, and compared to changes in simultaneously measured spontaneous SCP and GSR. Effects of training on QEEG profiles and neuropsychological functioning will be assessed.

Methods: Eight men and 11 women were randomly assigned to either a GSR biofeedback condition or an SCP neurofeedback condition. GSR and SCP were measured in both conditions. Each subject participated in 24 sessions of four runs, consisting of 40 trials each, in which pseudo-randomly increases and decreases in SCP or GSR were trained.

Results: For the GSR feedback a polynomial curve was found to fit the data best. An increase in arousal (increase in GSR) appeared to be learned slightly better than a decrease. Four out of 10 subjects showed evidence of discrete self-regulation of their GSR.

For the SCP feedback, preliminary analyses suggest a flat linear learning curve (regression coefficient $r=0.033$). Again, an increase in arousal (cortical negativity) appeared to be learned slightly better than a