Sonhos e Cérebro: para uma topografia do sonho em cegos e normovisuais

Results:

Before discriminating several scientific indicators we would like to stress some aspects showing the relevance of the work and its international visibility.

- 1. The publication of the paper "Visual dream content, graphical representation and EEG alpha activity" in Cognitive Brain Research proves the scientific quality of the work and its aknowledgment by the scientific pears. This journal is considered very important with an impact factor of 2.88. The fact that the research team is exclusively portuguese makes the publication even more important.
- 2. The acceptance for an oral communication at the "16th Congress of the European Sleep Research Society" was an important step in the international recognition of our scientific production. Moreover this communication received the "Young Scientist Award".
- 3. Once again an oral communication "Neurophysiological correlates of dream recall and dream content in blind and sighted" was accepted at "11th European Congress of Clinical Neurophysiology".

1) Research

The results regarding alpha attenuation with visual activation in congenitally blind subjects were confirmed. Topographic differences in EEG derivations were also found for several EEG components.

The study also comprised evaluation of EEG spectral components and Rapid Eye Movements (REMs) and their relation with dream recall. The dream recall index was identical for blind and sighted subjects, however blind presented a lower REMs density. We also found important relations between recall and no-recall and specific EEG rhythms.

2) Academic Degrees

Master Thesis – Dr. Tiago Mestre began his Master degree in Neurosciences Ph.D. Thesis – Dr. Helder Bértolo finished the experimental part of his Ph.D. work

3) Prizes

Dr. Tiago Mestre received the "Young Scientist Award" for the work:

Mestre T; Bertolo H; Paiva T: Dream recall, REMs and spectral EEG components in blind and sighted

Presented at the "16th Congress of the European Sleep Research Society", Reykjavik, 2002.

Publications:

Bértolo H; Paiva T; Pessoa L; Mestre T; Marques R; Santos R: Visual dream content, graphical representation and EEG alpha activity. Cognitive Brain Research 15(3):277-84, 2003.

Bértolo H; Mestre T; Paiva T: Neurophysiological correlates of dream recall and dream content in blind and sighted. Clinical Neurophysiology 113 (Supplement), 2002.

Mestre T; Bértolo H; Paiva T: Dream recall, REMs and spectral EEG components in blind and sighted. Journal of Sleep Research 11(S1), 2002.

Bértolo H, Paiva T, Pessoa L, Mestre T, Marques R, Santos R: Conteúdo visual onírico, representações gráficas e actividade alfa do EEG em cegos congénitos. Resumos do III Congresso de Investigação em Medicina, 290, 2002

Mestre T, Bértolo H, Paiva T: Recordação onírica em cegos e normovisuais: associação com movimentos oculares rápidos e componentes espectrais de EEG. Resumos do III Congresso de Investigação em Medicina, 221, 2002

Bertolo H; Paiva T; Pessoa L; Mestre T; Marques R: Differences in dream structure between blind and sighted subjects. Actas de Fisiologia, Volumen 7, 2001

Bertolo H; Paiva T; Pessoa L; Mestre T; Marques R: Alpha attenuation during visual imagery in congenital blind dreams. Clinical Neurophysiology 112 (Supplement 1), 2001

Bértolo H; Paiva T: Conteúdo Visual em Sonhos de Cegos. Psicologia, Saúde & Doenças. 2(1), 2001.

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