

Examination of the homogeneity of the psychological, behavioral and physiological mechanism of the compulsive sexual behaviors.

In the research project undertaken is problem of Compulsive Sexual Behavior. This phenomenon is related to such problematic behaviors as compulsive pornography viewing, compulsive masturbating, having frequent casual and/or paid sexual contact. This problem becomes more and more significant issue to be considered from different perspectives, including scientific perspective. Despite the high prevalence of the problem (from 1 to 6%) we lack the knowledge about the causes or mechanism underlying the phenomenon. No one has so far asked the question whether this problem is homogeneous or heterogeneous. The proposed project was created to increase the scientific knowledge about compulsive sexuality, e.g. through the description of the functioning of CSB patients based on the methodology used in modern psychiatry or through examining the homogeneity of the phenomenon and answering the question whether similar symptoms of problematic sexuality are a consequence of the same or various etiological mechanisms.

It will be describe the patients' functioning, within the framework of three functional domains: positive and negative evaluation system, and the cognitive functions system (including control of behavior, inhibition, attention, decision making). It will carry out a research project that allows for multi-level description from the declaratory level (measured by questionnaires, structured clinical interview and diary assessment), behavioral (behavioral procedures battery) and physiological (using magnetic resonance imaging). We predict that patients will demonstrate cognitive deficits and greater sensitivity to rewards (especially to erotic reward) and greater sensitivity to negative stimuli (especially fearful stimuli) than the control group (subjects without CSB problem). What's more, this phenomenon will have a heterogeneous nature, it will be extracted subunit of CSB. The project consists of two studies, in the first study, 100 participants will take part (75 with the problem and 25 without a problem – a control group). The subjects will perform 7 behavioral procedures and complete battery of questionnaires. The results of this study will show deficits in three problematic domains and will also test the hypothesis of a heterogeneous characteristics of the phenomenon. Patients will also take part in the clinical interview and in the longitudinal diary measurement. This study will give us a qualitative and quantitative characteristics of the symptoms, a description of the development of psychopathology and will we be able to measure sexual behaviors, emotional state e.g. mood and anxiety, sexual arousal and stress in real time. Based on the results of a first study we will select a task, which most effectively measures the deficits in executive function in patients. A second study will be performed. In this study 60 participants will take part (30 patients and 30 healthy control people). Using magnetic resonance imaging it will be checked whether the patients' cognitive deficit is associated with reduction in brain activity during cognitive tasks or with structural deficits of the brain tissue.

The result of the project will increase the scientific knowledge about Compulsive Sexual Behaviors problem, particularly knowledge about the mechanisms and causes. What's more, the potential results of the experiment will help in evaluation if the nature of the phenomenon is homogenous or not. Also it will describe patients' functional deficits in the perspective of modern and innovative psychopathological methodology. It will extract subunit of this problem. Obtained knowledge is important, thanks to the development of science and clinical implications. Obtained results will allow for a more effective and more suited to the patient's needs therapeutic actions. In addition, the results of the studies will form the contribution to the development of public awareness concerning the problem e.g. through the website <http://hiperseksualnosc.pl/>, which is the source of knowledge about results of the Polish and international experiments and research projects.