

## jeREV

# Relaxation and positive emotions in children after a psychological trauma

**jeREV: Relaxation et émotions positives pour les enfants après un psycho-traumatisme**

The attack of July 14, 2016 in Nice has caused a major trauma for people in direct contact with the horror of the attacks, in particular, families and children. The mission of clinicians and researchers is to understand the psychological and neurobiological consequences of trauma, identify risk factors for developing posttraumatic stress disorder in pediatric population has been exposed to this terrorist act. It is in this context that several research projects that are being implemented at the request of the authorities. CoBTek The research team of the University of Nice Sophia Antipolis is particularly sought as it involves a child psychiatry subgroup with Professor Florence ASKENAZY. It is indeed very important to understand, evaluate, maintain and develop the positive abilities of these children. The jeREV protocol (I Relax, Video Interview) was built with this in mind. The concept of resilience, ie the capacity to recover from post traumatic stress disorder is closely related to the need to cultivate hope and optimism. Among the factors that could play a role we must emphasize the importance of being able to relax, to have an optimistic view of the world, to have confidence and be able to control those emotions, to maintain good relations. JeREV The protocol aims to stimulate these characteristics. The protocol offers support, child, and composed of a relaxation technique and virtual sensory immersion, a game and a video interview. The objective video for maintenance to encourage and stimulate verbal productions, motor and interrelationships of the child. The "relaxation" virtual sensory and aims to immerse the child in a soothing and reassuring universe to stimulate its positive emotions and reducing hyper vigilance of states present in post-traumatic conditions. The game aims to stimulate children's imagination, encourage them to build positive scenarios and to have a positive self image.

### **Objective :**

Primary objective :

The main objective of the study is jeREV improve the quality of life (emotional feeling within the family, school, social interactions) in children who have suffered post-traumatic stress disorder following an act terrorist. Secondary objectives:

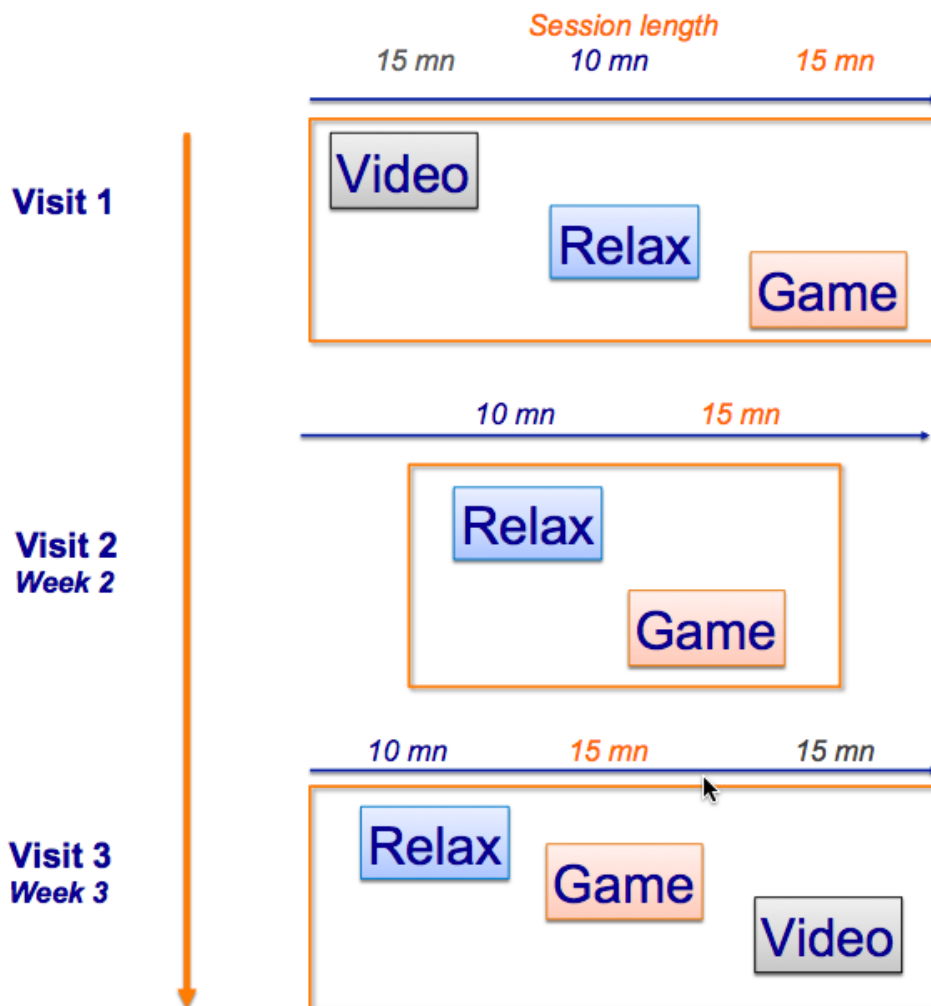
- Evaluate emotion regulation capacity and the ability to feel positive emotions
- Evaluate the capabilities of expression and positive scenario building
- Evaluate the social interaction and the development of positive human relations

### **Population / Study type:**

- Children between 6 to 12 years (N = 40) with post-traumatic stress disorder in the aftermath of the attacks of 14 July in Nice.
- Interventional Biomedical research . Early inclusions: January 2016. Duration inclusions: 6 months.

## Methods

Methods - Children will benefit from 3 sessions (visits). Figure 1 describes the characteristics of each part of the visits; Video Interview, Relax, Play



Improving the quality of life after the treatment will be measured by a specifically developed and standardized self-administered questionnaire for children 6 to 12 years (KidIQoL) and this in various fields such as school life, family life the psychological and physical health and social interaction.

Secondary objectives will benefit from a dynamic measurement during visits at the video interview (verbal productions, motor and child interrelations), production during the game (number of positive image) and measurement of brain activity during the relaxing sensory immersion (Relax).

### Innovative characteristic of the study / Expected benefits

Innovative character / Expected Benefits

After a state of post-traumatic stress, negative emotions are often specifically evaluated and supported as denying the existence of a continuum between positive emotions and negative

emotions which is necessary to achieve optimal emotional functioning. This study is innovative in that it captures the emotions perceived after post-traumatic stress disorder from a positive side whatsoever in the assessment or the management. It also contributes to the development and implementation of an incentive system specifically dedicated to children.

At the individual level the direct benefit of the patient is improving quality of life, whether at school or in his family but also his ability to regulate emotions and build positive scenarios. At the social group level the main benefit from this study is to complement the care of children in a post-traumatic shock using techniques to evaluate and stimulate positive emotions in a dynamic way. It will also help to a better understanding of the emotional functioning in different sections in children who have suffered post-traumatic shock following a terrorist attack and can thus offer a most appropriate possible care.