'EMD - Eye movement desensitization, Treatment Procedure'

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Summary

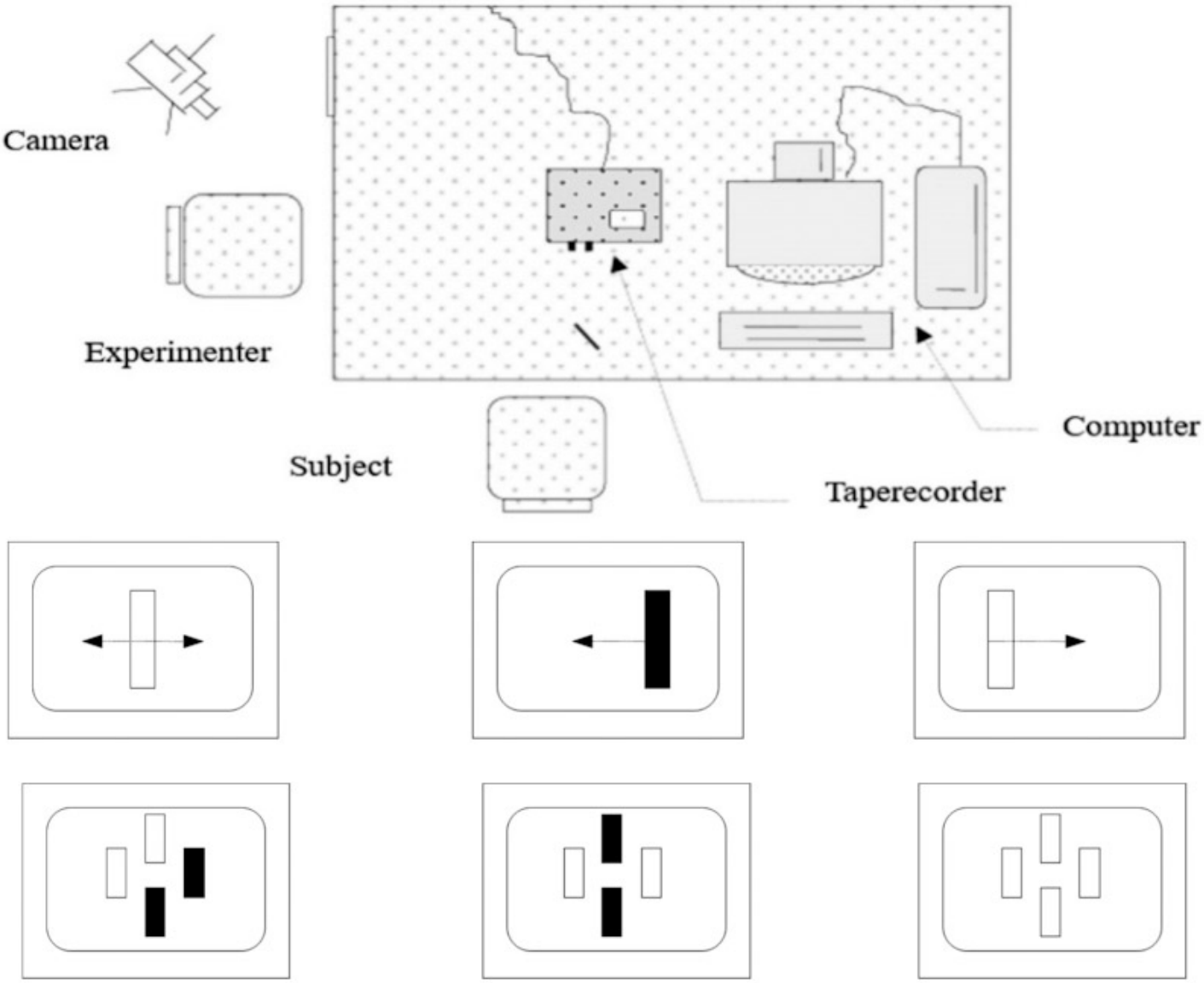
To demonstrate the putative affect-reducing effect of the clinical method lateral eye movement (EMD) in the normal range an experiment was conducted. It is assumed that arousal reduction and mood elevation compared to other types of distractions are significant. An emotionally colored excitement was generated experimentally, followed by lateral eye movement and two variants of distraction. Before and after the treatment, arousal and subjectively experienced mood of subjects was measured. Results suggest an effect in arousal reduction compared to distraction in general and to a specific distraction condition in particular. There were no effects on the subjectively perceived mood.

Statement of need

The method of 'Eye Movement Desensitization' (EMD) was developed by Francine Shapiro in 1989 to treat post-traumatic stress disorder (PTSD). According to @DSM-III-R:1987 PTSD is defined by (a) constant reliving of a traumatic experience, (b) avoidance of thoughts about that situation and (c) an associated increased level of arousal. @Shapiro:1989 describes the process of treating PTSD with EMD as follows: At the beginning, the client should visualize the traumatic event as vividly and in as much detail as possible. The therapist now moves his finger rhythmically from right to left at a distance of 30 cm from the client's head and with a deflection of 30 cm, with a pendulum movement per second. During the imagining of the traumatic event, the patient generally follows the therapist's finger with his eyes until the imaginings become bearable. The length of such a set is given as 15 to 25 lateral eye movements. A stable effect was reported in a follow-up study after three months in 22 persons. To explain how EMD works, @Shapiro:1989 refers to the fact that experiencing a traumatic event disturbs the balance between excitation and inhibition in the brain [@Pavlov:1929]. According to Shapiro, lateral eye movements should be able to restore this balance. The advantage of this method is seen in the fact that the treatment with EMD is very short and the client is not exposed to intense fear for a long time, as is the case with other methods. @Vaughan:1994 first examined the effect of EMD on the major symptom groups of PTSD and found that all three categories of PTSD (see above) as well as depression were significantly improved immediately after treatment with EMD. At a follow-up, however, only the categories “re-experiencing” and “avoidance” were significant; arousal and depression had increased again. It is suggested that, in order to further examine the mode of action of the EMD, the question should primarily be investigated as to whether fixing a stable target alone or any other form of distraction would not have the same effect. The aim of the present study was to address these questions by experimentally inducing an emotionally colored arousal, one of the three symptom groups of PTSD, and investigating whether lateral eye movements reduce this activation more than (a) fixing a stable target or (b) a different kind of distraction. The arousal was achieved by the sbj. placed in a situation that triggers evaluation anxiety. Research has shown that evaluation anxiety and arousal levels are significantly positively correlated. Furthermore, the results of an experiment on 'social facilitation' and 'social monitoring' also point to such a relation [Guerin:1983]. In order to exclude suspected placebo effects, arousal was measured indirectly via short-term memory, since material learned with an increased activation level can be reproduced more poorly in direct replication than material learned with a low arousal [@Walker:1958; @Kesner:1973]. However, this negative association between arousal and memory is not substantial. For this reason, the current mood of the sbj. Was additionally measured via a questionnaire. A PC was set up to the right of the subject, and a video camera was set up on a tripod to the left\autoref{fig:procedure}. Subjects were filmed throughout the experiment to maintain a constant anxiety-provoking situation. The recordings were not included in the evaluation and have been deleted. The experimenter sat between the video camera and the subjects\autoref{fig:treatment1}. In order to fix a central object, four rectangles were

displayed on the monitor as shown in \autoref{fig:treatment2}. These appeared either blue or green every 3 seconds independently of each other (50% probability). As soon as all four rectangles showed the same color (13% probability), the subject had to report this ('blue' or 'green'). The length of the procedure was also 3 minutes. The computer program was implemented in QBasic.

Figures



References