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Attention fixation training: training people to form cognitive maps help to control symptoms of panic disorder with agoraphobia

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Abstract

Nine individuals diagnosed with panic with agoraphobia received three elements of Attentional Fixation Training (AFT): Directed attention to the external environment, directed topographical synthesis, and directed orientation in space-time to control characteristics of panic. They then walked a standard 2.5 km route and practiced these elements upon entering one of the five panic-inducing situations: (a) walking alone near a busy street with the examiner following at 20 m, (b) walking alone near a busy street with the examiner out of client's visual field, (c) shopping with the examiner present, (d) traveling on a bus alone, and (e) shopping alone. Heart rate was monitored in each of these five situations. Except for the case of using public transport, heart rate activity decreased to a considerable extent during AFT practice suggesting AFT elements provided a good way to control symptoms of panic in vivo. Results were discussed within the confines of a model suggesting that an attentional deficit, which produces a spatial disorientation disorder that maintains both panic and agoraphobia, can efficiently be overcome by means of all three AFT tools.

Keywords: Attention fixation training; Cognitive maps; Agoraphobia; Spatial orientation

1. Introduction

Panic disorder with Agoraphobia is characterized by recurrent panic attacks accompanied by concern about future attacks, worry about what might happen as

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a consequence of the attack, and/or changes in behavior associated with the attacks (DSM IV, APA). The panic attacks are often triggered when the person is alone and in places perceived as new and/or dangerous (place neophobia). In the face of the new or apparently dangerous, individuals experiencing such attacks often seek and find a talisman, a trusted companion, or another form of safety signal (Clark, 1986; Rachman, 1987). In the midst of an attack, the individual appears all too aware of and unable to control psychophysiological responses such as sweating, increased heart rate, chest pain, and paresthesias. Those experiencing panic attacks almost uniformly report heart palpitations, pounding heart, or accelerated heart rate.

In response to such self-report, many have studied in relations among panic attacks and heart rate (e.g., Margraft & Ehlers, 1988; Hodden & Barlow, 1986). Often the form of panic studied in the laboratory is induced by "artificial" means (e.g., Gorman, Dillon & Fyer, 1985; Margraft & Ehlers, 1988). For some, this raises questions about the external validity of laboratory-based findings. Intuitively, the form and intensity of a panic attack should at least partially depend on the ways in which cognitive structures interact with situational variables (Taylor et al., 1986). Attempts to examine the external validity of laboratory-based findings make use of mobile monitoring equipment to monitor physiological reactions under naturalistic conditions (Margraft, 1990; Freedman, 1989; Freedman, Ianni, Ettedgui & Puthezhath, 1985). Panic attacks occurring in the field do not take place under standardized situations, however. The situational variability inherent in designs gathering data under naturalistic conditions has prompted some to argue that in vivo data gathered from such equipment should be treated, at best, as psychophysiological case studies (Mavissakalian & Michelson, 1982; Taylor, Telech & Havik, 1983).

Moreover, attempts to control such sources of error in naturalistic studies are difficult. A study of heart rate under "real-life" (in vivo) conditions such as shopping or travelling may be thwarted by strategies the person uses to escape or minimize the probability of a panic attack. For example, panic attacks engender an intense desire to escape the unfamiliar/dangerous place, produce a sense of disorganized behavior and cognition and engenders intense avoidance of the places associated with panic attacks (e.g., unfamiliar place or places in which panic attacks have occurred). Each of these factors make it difficult to convince individuals to enter a panic-engendering situation, let alone record the physiology of panic under standardized but naturalistic conditions.

Thus, at one extreme, data from naturalistic designs present no small interpretative difficulties; at another data from highly controlled designs may not well represent the phenomenon of interest. The present study attempts to use a design incorporating strengths from both naturalistic and highly controlled studies. The manipulation in the present study was anchored in a model outlined by Jacobs and Nadel (1985).

Jacobs and Nadel (1985) proposed a model of specific phobia couched within the now well-accepted notion of neural-based multiple learning systems (see e.g., Nadel, 1994; Schacter & Tulving, 1994). These authors pointed to two kinds of learning systems: A *locale* system concerned with spatial maps and spatio-temporal context