TEMPERAMENTAL CORRELATES OF TRAUMA SYMPTOMS IN FIREMEN, POLICEMEN AND SOLDIERS

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Abstract
Objectives: The main goal of the research was to assess temperamental determinants of trauma symptoms in firemen, policemen and soldiers. The temperament traits which were considered were those postulated by the Regulative Theory of Temperament (briskness, perseveration, sensory sensitivity, emotional reactivity, endurance and activity). Material and Methods: A cross-sectional study was run on non-clinical samples. The participants were 417 men, White-Caucasian only: 284 firemen (aged 21–55), 58 policemen (aged 22–45), and 75 soldiers (aged 21–42). Temperament was assessed using the Formal Characteristics of Behavior – Temperament Inventory. Intensity of trauma symptoms was assessed with the PTSD-Factorial Version Inventory, a quantitative measure of trauma-related symptoms. The respondents were examined in their place of work. The study included only men reporting at least 1 traumatic event during the year before the trauma diagnosis. Results: Emotional reactivity had a significant positive effect on the intensity of trauma symptoms only in the group of firemen. Emotional reactivity accounted for 16% of the variance of trauma intensity symptoms in this occupational group. Negative significant effect on trauma symptoms was found for briskness only in the soldiers group (briskness explained 20% trauma intensity variance in this group). Conclusions: Emotional reactivity was conducive to the increased trauma symptoms intensity in firemen, whereas briskness tended to reduce symptoms intensity only in the group of soldiers.

Key words: Trauma, Temperament, Firemen, Policemen, Soldiers

INTRODUCTION

This is a study of the intensity of trauma symptoms (assessed psychometrically, not clinically) in individuals engaged in emergency-services and soldiers involved in military operations.

Research findings suggest that firemen, policemen and soldiers experience many potentially traumatic events and that some of them develop anxiety disorders, including post-traumatic stress disorder (PTSD) [1]. It is also known that various psychological and physical factors play a significant role in the aetiology of trauma-related symptoms in these 3 occupational groups. These factors are, for example, burns and physical injuries, fire incidents with multiple deaths, motor vehicle accidents involving multiple deaths, suicides and others that may concern firemen and policemen [2,3]. On the other hand, combat experiences, number of times in combat, amputations, traumatic brain injuries, blast-related traumatic brain injuries and others are identified as factors affecting the symptoms of...
Emotional reactivity shows significant phenotypic and genetic links to neuroticism, while BR, EN and AC are phenotypically and genetically correlated with extraversion, as described in the 5-factor theory [17,18].

Taking the PTSD theoretical construct and its DSM-IV definition [19], we distinguished, using a factor analysis, 2 basic trauma symptoms: intrusion/arousal (I/A) and avoidance/numbing (A/N). The 1st symptom involves recurrent thoughts (flashbacks) about the traumatic event, which are a source of intensive psycho-physiological arousal, while the 2nd symptom involves avoidance of trauma-related stimuli and diminished reactions to these stimuli [20].

The results of our previous studies showed that ER and PE intensified trauma symptoms in a group of disaster victims [21], in cancer patients [22] and in HIV+ individuals [23]. Both traits, ER and PE, were also positively correlated with somatic anxiety in students [24]. Emotional reactivity was also positively correlated, whereas BR was negatively correlated, with trauma symptoms in motor vehicle accident survivors [25]. Three other temperament traits i.e., BR, EN and AC are usually negatively correlated with the severity of trauma symptoms and likely act as resources that protect individuals against the risk of PTSD (the role of SS is unclear).

Based on the data from the literature concerning the role of neuroticism and extraversion in trauma development, and taking account of the RTT assumptions, we expected that a high level of trauma symptoms would be associated with high levels of ER and PE. We also supposed that BR, EN and AC would act as buffers to protect against the development of trauma in firemen, policemen and soldiers.

MATERIAL AND METHODS

Participants

The participants from non-clinical samples were 417 men, only White-Caucasians, including 284 firemen aged 21–55 years (mean (M) = 33.96; standard deviation...