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Low levels of posttraumatic stress symptoms and psychiatric symptomatology among third-generation Holocaust survivors whose fathers were war veterans

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ABSTRACT

There is an ongoing debate regarding the intergenerational transmission of Holocaust trauma to the third generation (TGH). However, due to the rareness of this population, there are no studies that have examined TGH individuals whose fathers were also victims of war-related trauma and captivity. This prospective study aimed to assess the role of parents' Holocaust background, fathers' posttraumatic stress symptoms (PTSS), and adult offspring's anxiety sensitivity (AS) in adult offspring's PTSS and psychiatric symptomatology. A sample of 123 Israeli father-child dyads (42 TGH and 71 non-TGH), that included 80 former prisoners of war (ex-POWs) dyads and a comparison group of 44 veteran dyads, completed AS, PTSS and psychiatric symptomatology self-report measures. Fathers were assessed 17 years following the Yom Kippur War (T1: 2008) while offspring took part in T2 (2013–2014). Surprisingly, results show that TGH participants reported lower levels of PTSS and psychiatric symptomatology than non-TGH participants, regardless of their fathers' captivity status. Interestingly, a moderated mediation analysis indicated that offspring's AS mediated the association between Holocaust background and participants' PTSS and psychiatric symptomatology, only among ex-POWs' offspring. This study provides evidence for relatively lower levels of PTSS and psychiatric symptomatology among TGH individuals whose fathers were war veterans. Ex-POWs' adult offspring who are grandchildren of Holocaust survivors reported lower levels of AS that was related to lower levels of PTSS and psychiatric symptomatology.

1. Introduction

Research on the intergenerational transmission of trauma from Holocaust survivors (HS) to their second-generation offspring (SGH) has gained increased attention over the two last decades (e.g., Van IJzendoorn et al., 2003). However, only a limited number of empirical studies have examined whether the intergenerational transmission of trauma spills over to the third generation of Holocaust survivors (TGH; e.g., Letzter-Pouw et al., 2014). Beyond the catastrophic implication of the Holocaust to its survivors, this is a world-wide relevant question as a number of populations around the globe continue to suffer from massive genocides that may potentially affect their children and grandchildren through a continuous cycle of fear and pain.

The literature regarding TGH has shown various, and somewhat contradictory, findings. On the one hand, some studies indicated that TGH adults endorsed disordered eating (Zohar et al., 2007), depression and psychosomatic symptoms (Ullmann et al., 2013) and secondary traumatization symptoms (Giladi and Bell, 2013), more so than comparison groups. On the other hand, some studies have found no significant differences in various psychopathology outcomes between TGH and comparison groups (e.g., Perlstein and Motta, 2013). Moreover, a comprehensive meta-analysis revealed no evidence of intergenerational transmission of Holocaust trauma to TGH in terms of psychological functioning and attachment patterns (Sagi-Schwartz et al., 2008). This may be considered, among other explanations, as a sign of resilience.

Resilience may be nominally defined as a dynamic process encompassing positive adaptation within the context of significant

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adversity (Luthar and Cicchetti, 2000). Alternatively, it may be defined as the ability to maintain a stable equilibrium in the face of adversity (Bonanno, 2012). While such definitions may be acceptable by many researchers, a formulation of an operational definition still poses a significant challenge (e.g., Hoge et al., 2007). Some scholars assess resilience directly, as a construct comprised of various perceptions, cognitions, and emotions (e.g., Connor and Davidson, 2003). Personal qualities associated with resilience include optimism, positive affect, self-efficacy and self-esteem (Lee et al., 2013). Other scholars, however, identify resilience indirectly, by examining traumatized populations and singling out those who did not succumb to the trauma and reported no posttraumatic stress symptoms (PTSS; e.g., Bonanno and Mancini, 2008). In line with this perspective, this study will operationally define resilience as the lower levels of PTSS and psychiatric symptomatology among TGH as compared to non-TGHs.

Understandably, most studies among TGH individuals have referred to the Holocaust as an index traumatic event and relate it to various outcomes. Nevertheless, even if there is a latent vulnerability due to a family history of the Holocaust, a question remains regarding the contribution of their fathers (SGHs), who possibly underwent traumatic events of their own, such as war and/or captivity. War captivity is one of the most severe man-made traumatic events to which an individual can be subjected. Beyond the significant risks of war, prisoners of war (POWs) endure deliberate repeated, prolonged and inter-personal human cruelty. As a result, ex-POWs are at an increased risk of mortality, deteriorated physical health, long-term mental health disorders and profound personality changes (Zerach and Solomon, 2014). The most common and conspicuous outcome of war and captivity is posttraumatic stress disorder (PTSD; e.g., Meziab et al., 2014). Indeed, high rates of PTSD, ranging from 16% to 88%, have been observed in ex-POW samples (e.g., Rintamaki et al., 2009). However, the intersection between the Holocaust and war-related trauma has remained relatively unexplored.

A limited number of studies have suggested that the intergenerational effect of Holocaust trauma is manifested in the context of other adversities, such as war. For example, in a follow-up study of war veterans who had no indication of psychopathology prior to combat, Solomon et al. (1988) documented higher rates of PTSD and slower recovery in SGH, compared to controls. Interestingly, a recent prospective study has shown that this trend might have changed over the years as, in the initial post-war years, Israeli SGH veterans endorsed higher PTSS and psychiatric symptoms than non-SGH veterans, however, lower rates were evident among SGH in the later years following the war (Dekel et al., 2013). In the present study we aim to explore the unique role of war captivity and fathers' PTSS in the intergenerational transmission of Holocaust trauma to TGH individuals.

The intergenerational transmission effect of war trauma and parents' combat-related PTSS on veterans' offspring's psychopathology has been exemplified in a number of studies (e.g., Lambert et al., 2014). Specifically, a recent study has reported that Israeli ex-POWs' adult offspring reported higher levels of PTSS compared to adult offspring of combatants who were not held captive (Zerach and Aloni, 2015) and their PTSS were positively related to their fathers PTSS (Zerach et al., 2015). However, the question remains, what are the possible paths from the fathers' PTSS to the offspring's psychopathology when the offspring are also TGH?

Among others, SGHs may undergo epigenetic changes that might put them at risk for PTSD and may be transmitted to TGH (Yehuda et al., 2015). Moreover, HS that were still occupied with their traumatic losses may have exhibited a disruption in their parenting practices (Schuengel et al., 1999), which formed a problematic parenting model for posttraumatic SGH. In addition, a number of studies have focused on the unique familial characteristics of TGH, such as parental over-involvement and overprotection (Scharf, 2007), emotional neglect and the urge to please the parents (Scharf and Mayseless, 2011), high family involvement (Palgi et al., 2015), and high perceived parental burden (Letzter-Pouw et al., 2014). It is thus plausible that both problematic parenting and a stressful family environment of SGH posttraumatic veterans, as two mutual and related paths, might increase TGH's vulnerability for anxiety sensitivity, which could be another possible mediator in this chain.

Anxiety sensitivity (AS) is defined as cognitive individual differences characterized by a fear of anxiety-related symptoms, based on the belief that they will have harmful consequences (Reiss, 1991). It is accepted that AS is comprised of three components, corresponding to fear of physical catastrophe (e.g., heart attack), fear of mental incapacitation (e.g., becoming insane), and fear of social concerns (e.g., embarrassment; Zinbarg et al., 1997). Etiologic factors contributing to AS dimensions might include both genetic origins and environmental events, such as early learning experiences about the dangerousness of arousal-related sensations or the experience of unpredictable stressful life events (e.g., McLaughlin and Hatzenbuehler, 2009). There is evidence that AS is an important factor in the maintenance and exacerbation of PTSD (e.g., Fetzner et al., 2012). Specifically, a recent study found that fear of physical catastrophe is the strongest AS dimension in the prediction of PTSD (Fetzner et al., 2012). However, to our knowledge, no study has examined the role of offspring's AS in the intergenerational transmission of Holocaust trauma.

For this study we hypothesize that: (a) TGH will report higher levels of PTSS, psychiatric symptomatology and anxiety sensitivity than non-TGH; (b) TGH ex-POWs' offspring will report higher levels of PTSS, psychiatric symptomatology and anxiety sensitivity than non-TGH ex-POWs' offspring; (c) fathers' PTSS will be positively related to offspring's PTSS, psychiatric symptomatology, and AS; (d) offspring's AS will mediate the relation between Holocaust background (TGH vs. non-TGH groups) and offspring's PTSS and global psychiatric symptomatology index (GSI); (e) the indirect relations between Holocaust background and PTSS and GSI will be moderated by group (ex-POWs' vs. veterans' offspring) and offspring's fathers' PTSS.

2. Method

2.1. Participants

This study constitutes part of a larger longitudinal study assessing the psycho-social impact of war captivity (for more details see Solomon et al., 2012). The sample consisted of 123 Israeli father-adult offspring dyads in which the father was a veteran from the Israeli Defense Forces (IDF) land-forces during the 1973 Yom Kippur War. The sample was divided into the following two groups: (a) 79 dyads of ex-POWs and their adult offspring; and (b) 44 control dyads in which the fathers fought on the same fronts as the ex-POWs but were not held captive, and their adult offspring. Control participants were selected on the basis of their similarity to the ex-POWs in regards to relevant military service and personal variables and were sampled from IDF computerized data banks. Data of the present study were collected from the fathers in 2008 (T1), and from the adult offspring in 2013–2014 (T2).

Thirty-seven percent ($n = 46$) of the offspring participants self-identified as TGH (i.e., having a background of at least one grandparent who was a Holocaust survivor under Nazi or pro-Nazi domination during the Second World War); 31.1% ($n = 14$) reported having a paternal grandparent who was a Holocaust survivor, 46.7% ($n = 21$) a maternal grandparent, and 22.2% ($n = 10$) both