



Is there a common pathway to developing ASD and PTSD symptoms?



Maj Hansen^{a,*}, Cherie Armour^b, Lutz Wittmann^c, Ask Elklit^a, Mark Shevlin^b

^a National Centre for Psychotraumatology, Institute for Psychology, University of Southern Denmark, Denmark

^b School of Psychology and Psychology Research Institute, University of Ulster, Northern Ireland, UK

^c International Psychoanalytic University, Berlin, Germany

ARTICLE INFO

Article history:

Received 20 June 2014

Received in revised form 9 September 2014

Accepted 10 September 2014

Available online 8 October 2014

Keywords:

Acute stress disorder

Posttraumatic stress disorder

Common pathways

Risk factors

Bank robbery

ABSTRACT

Numerous studies have identified risk factors for acute and long-term posttraumatic stress symptoms following traumatic exposure. However, little is known about whether there are common pathways to the development of acute stress disorder (ASD) and posttraumatic stress disorder (PTSD). Research suggests that a common path to ASD and PTSD may lie in peritraumatic responses and cognitions. The results of structural equation modeling in a national sample of Danish bank robbery victims ($N=450$) show that peritraumatic panic, anxiety sensitivity, and negative cognitions about self were significant common risk factors for both ASD severity and PTSD severity when controlled for the effect of the other risk factors. The strongest common risk factor was negative cognitions about self. Future research should focus on replicating these results as they point to possible areas of preventive and treatment actions against the development of traumatic stress symptoms.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

Aiding understanding of the mechanisms behind the development of posttraumatic stress symptoms is essential in order to identify victims at risk of developing posttraumatic stress symptoms. Increasing our understanding of these mechanisms will facilitate the development of effective treatment strategies. Numerous studies have investigated the prediction of acute and, in particular, long-term posttraumatic symptoms following different forms of traumatic exposure (Brewin, Andrews, & Valentine, 2000; Hansen & Elklit, 2011; Ozer, Best, Lipsey, & Weiss, 2003). As a result, several factors have been shown to be predictive of acute stress disorder (ASD) and posttraumatic stress disorder (PTSD), respectively. ASD and PTSD are both diagnoses in the Diagnostic and Statistical Manual of Mental Disorders 4th edition and also the recently released 5th edition (DSM-IV; APA, 1994, 2013) which follow traumatic exposure. According to the DSM-IV ASD describes acute posttraumatic symptoms (two days to one month) following traumatic exposure, whereas PTSD describes long-term posttraumatic symptoms (more than a month). The diagnostic criteria for ASD and PTSD are similar as they require symptoms of

intrusion/re-experiencing, avoidance, and arousal. However, the ASD diagnostic criteria also state a requirement of dissociative symptoms. At the same time, only the PTSD diagnosis requires that intrusion involves or causes distress and the presence of at least three symptoms of avoidance and two symptoms of arousal, whereas the ASD diagnostic criteria only state a diffuse requirement of marked arousal and avoidance (Bryant & Harvey, 2002). Due to the strong similarities between the ASD and the PTSD diagnostic criteria, it stands to reason that there will be a strong association between the two disorders. Indeed, research shows a strong relationship between ASD severity and PTSD severity following different forms of traumatic exposure (cf. Classen, Koopman, Hales, & Spiegel, 1998; Hansen & Elklit, 2013). Additionally, when disregarding the dissociation symptom cluster, a similar factor structure has also been found in the two diagnoses (Hansen, Armour, & Elklit, 2012). Research, however, indicates that this may only be in relation to severity and not in relation to diagnostic status given that an ASD diagnosis appears to have limited capacity in identifying those with later PTSD diagnostic status (Bryant, 2011). Due to the close relationship between ASD and PTSD, risk factors for ASD are likely to also be risk factors for PTSD and vice versa (Bryant & Harvey, 2002). Together this suggests that there perhaps exists a common path (i.e. a common combination of risk factors) to the development of ASD and PTSD. Numerous risk factors of both ASD and PTSD have been identified. However, research has shown that peritraumatic (i.e. peritraumatic dissociation, peritraumatic panic, and tonic immobility) and cognitive responses (i.e. negative cognitions about self,

* Corresponding author at: National Centre for Psychotraumatology, Institute for Psychology, University of Southern Denmark, Campusvej 55, 5230 Odense M, Denmark. Tel.: +45 65502303.

E-mail address: mhansen@health.sdu.dk (M. Hansen).

the world and panic) may be of particular importance for the development of posttraumatic symptoms (Ehlers & Clark, 2000; Kunst, Winkel, & Bogaerts, 2011; Nixon & Bryant, 2003, 2005).

Different forms of peritraumatic responses are found to be associated with both the development of ASD and PTSD. In particular, peritraumatic dissociation has been found associated with the development of both ASD and PTSD following traumatic exposure (cf. Breh & Seidler, 2007; Bryant & Panasetis, 2001; Bryant, 2009; Ozer et al., 2003). The DSM-IV defines peritraumatic dissociation as a subjective feeling of emotional numbness, detachment from others, reduced responsiveness to one's surroundings, depersonalization, and derealization during the traumatic exposure (APA, 1994). Thus, dissociation can be regarded as an inner distancing mode allowing the individual to momentarily phase out reality (Breh & Seidler, 2007). Peritraumatic dissociation is assumed to be associated with the development of PTSD as this inner distancing prevents adequate processing and thus adequate integration of the traumatic memories. Ozer et al. (2003), in a meta-analysis, showed that peritraumatic dissociation is the strongest predictor of PTSD across different forms of traumatic exposure among seven investigated predictors. These results were largely replicated in the Breh and Seidler (2007) meta-analysis of prospective studies of peritraumatic dissociation and PTSD.

Peritraumatic panic and tonic immobility are also emerging as important risk factors associated with the development of posttraumatic stress symptoms (cf. Bryant et al., 2011; Marx, Forsyth, Gallup, Fusé, & Lexington, 2008; Rocha-Rego et al., 2009). Symptoms of panic are for instance palpitations, shaking, sweating, shortness of breath, nausea, dizziness, and fear of dying or losing control (APA, 1994). It has been suggested that peritraumatic panic may be associated with the development of posttraumatic stress symptoms as it may condition trauma related cues to subsequent anxiety (Bryant & Panasetis, 2001). Indeed, peritraumatic panic has been found to be associated with the development of both ASD and PTSD (Bryant & Panasetis, 2001; Bryant et al., 2011; Nixon & Bryant, 2003; Rocha-Rego et al., 2009). Tonic immobility is conceptualized as an evolutionary survival strategy and is characterized by involuntary immobility, analgesia, and unresponsiveness to external stimulus (Marx et al., 2008). Contrary to peritraumatic dissociation, tonic immobility is primarily a physical state and awareness of the surrounding environment is preserved (Heidt, Marx, & Forsyth, 2005). The precise mechanism behind the relationship between tonic immobility and the development of PTSD is unclear, but several possible explanations have been put forward (Marx et al., 2008). For instance tonic immobility is said to be related to the development of PTSD as it hinders the use of more adaptive defensive responses during or after traumatic exposure. Indeed, tonic immobility has been found associated with the development of PTSD (Heidt et al., 2005; Kunst et al., 2011; Rocha-Rego et al., 2009). However, to the best of our knowledge, tonic immobility has not been investigated in relation to ASD.

Recently there has been an increased focus on role of cognitions in explaining the development and maintenance of posttraumatic stress symptoms (Cahill & Foa, 2007). According to cognitive theories on PTSD, negative cognitions appear to play a central role in the development of both acute and long-term posttraumatic symptomatology. Specifically, Ehlers and Clark's (2000) cognitive model of PTSD has emphasized the importance of negative cognitions about the traumatic event and one's capacity to respond to that experience for adapting to traumatic exposure. Negative cognitions may hinder the victims from processing corrective information and thus prevent the victims from realizing that the threat has passed. Thus, these negative cognitions may lead to a sense of current threat which can contribute to the development as well as the maintenance of posttraumatic stress symptoms. Indeed, negative cognitive responses to traumatic exposure have been associated

with the development of both ASD and PTSD symptoms (Hansen & Elklit, 2011; Karl, Rabe, Zöllner, Maercker, & Stopa, 2009; Nixon & Bryant, 2005). Furthermore, according to Karl et al. (2009) research show that more theoretical grounded factors (i.e. cognitive factors) may be better predictors of PTSD than less theoretical and more empirically grounded factors such as peritraumatic dissociation. There are two broad classes of negative cognitions (Ehlers & Clark, 2000): those that focus on the self and those that focus on the world. However, research indicates that these cognitive responses also include maladaptive thinking associated with panic (i.e. anxiety sensitivity; Nixon & Bryant, 2005). Indeed, anxiety sensitivity has been found associated with the development of both ASD and PTSD symptoms (cf. Bryant & Panasetis, 2001; Nixon & Bryant, 2005).

To summarize, research has shown a strong relationship between ASD and PTSD, both with respect to symptom severity as well as in relation to common pathways/risk factors. Research suggests that common pathways may exist through the three above stated peritraumatic responses and the three cognitive factors. The aim of the present study was therefore to investigate whether these six risk factors are common risk factors for both ASD and PTSD severity while controlled for the effect of the other risk factors and control factors and not to investigate the strength of these risk factors as such. Given the extant literature, we hypothesized that the three peritraumatic risk factors and three forms of cognitions would be significantly associated with both ASD and PTSD severity. To the best of our knowledge no other study has previously investigated the above stated risk factors collectively in relation to both ASD and PTSD. Thus, it is unknown which factors will be significant common risk factor for ASD and PTSD severity when controlled for the effect of the other factors. However, due to previously mentioned research we expected that the effect of the peritraumatic factors would diminish whilst controlling for the effect of negative cognitions. The conceptual model investigating the common paths to ASD and PTSD is shown in Fig. 1.

2. Methods

The current study is part of a national Danish cohort questionnaire survey of the psychological impact of bank robberies conducted in collaboration with the Danish Bankers Association, the National Bank of Denmark, all Danish Banks, and the University Southern of Denmark. From April 2010 to April 2011, every bank employee exposed to bank robbery in Denmark ($N=614$) received the first questionnaire. A total of 450 employees (73%) filled out the first questionnaire a week after the robbery ($T1$, $M=9.89$ days, $SD=6.30$), and a total of 371 of these (82%) filled out the second questionnaire six months after the robbery ($T2$, $M=191.7$ days, $SD=13.15$). There were no significant group differences in ASDS scores or any of the control factors or risk factors in relation to the dropout between $T1$ ($N=450$) and $T2$ ($N=371$). All participants were informed of the purpose of the study orally and in writing. Furthermore, all necessary permissions for conducting this study, according to Danish Law, were obtained and participation was voluntary. The current study is based on the DSM-IV criteria as the DSM-5 criteria was not available when conducting the study. Please see Hansen and Elklit (2014) for further details on the study.

2.1. Measures

The questionnaire assessed demographic factors and the following factors related to the current study. All of the following described control factors, risk factors, and ASD severity were assessed at $T1$ and PTSD severity was assessed at $T2$. Prior traumatic exposure was assessed as the sum of endorsements from a checklist of 14 different kinds of traumas used in the U.S. National

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات