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# The co-occurrence of potentially traumatic events (PTEs) and their associations with posttraumatic stress disorder (PTSD) in Indian and Malaysian adolescents

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#### ABSTRACT

*Background:* Although it is well-established that people can experience multiple traumatic events, there are few studies examining the co-occurrence of such experiences in non-Western nations. The current study sought to examine the occurrence of multiple potentially traumatic experiences (PTEs) and their associations with post-traumatic stress disorder (PTSD) among adolescents from two Asian nations.

*Methods*: Latent class analysis (LCA) was employed to model the co-occurrence of PTEs in two school samples of adolescents from India (n = 411) and Malaysia (n = 469). Demographic correlates (i.e., sex, age, household composition, parent education) of the latent classes and the association between latent class membership and probable diagnosis of posttraumatic stress disorder (PTSD) were examined.

Results: The LCA identified three latent classes for the Indian sample: 'Low Risk – moderate sexual trauma', 'Moderate Risk', and 'High Risk'. Similarly, three classes were also identified for the Malaysian sample: 'Low Risk', 'Moderate Risk', and 'High Risk'. Membership of 'Moderate Risk' was associated with male sex in both samples, and with older age and lower levels of parental education attainment in the Malaysian sample. No correlates of 'High Risk' class were identified in either sample. Membership of the 'High Risk' class was significantly associated with probable PTSD diagnosis in both samples, while membership of the 'Moderate Risk' class was associated with probable PTSD diagnosis in the Malaysian sample.

Conclusion: Findings from this study correspond with Western studies indicating co-occurrence of PTEs to be common and to represent a salient risk factor for the development of PTSD.

## 1. Introduction

Research has shown that likelihood of exposure to potentially traumatic events (PTEs) peaks during adolescence (e.g., Breslau et al., 1998) and that risk of developing posttraumatic stress disorder (PTSD) is highest among this demographic group (Kessler et al., 2017). It is estimated that one in six children and adolescents develop PTSD following exposure to a traumatic event (Alisic et al., 2014) while approximately one in ten adults are estimated to develop PTSD (Kilpatrick et al., 2013). Adolescents with PTSD are at increased risk of additional mental health problems including depression, conduct disorder, alcohol dependence, self-harm, suicide attempts, and functional impairment (Lewis et al., 2019). It is widely acknowledged that PTEs rarely occur as isolated

events, and that adolescents are often victims of multiple co-occurring PTEs (e.g., Finkelhor et al., 2005, 2007; Turner et al., 2010; Ford et al., 2010; Pears et al., 2008). Research has consistently illustrated how adolescents exposed to poly-victimization (i.e., multiple co-occurring traumas) are at much greater risk of experiencing maladaptive psychological outcomes including PTSD (e.g., Karsberg et al., 2014; McChesney et al., 2015; Petersen et al., 2010; Shevlin & Elklit, 2008).

Consequently, in recent years, "person-centered" approaches to modeling PTEs have superseded more traditional "variable-centered" approaches due to their ability to explicitly capture the non-random distribution of exposure to traumatic events (O'Donnell et al., 2017). Commonly deployed variable-centered approaches have included examining the influence of trauma type, whether that be (1) a singular

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