**Supplementary material II – Consideration of potential confounders, mediators and moderators in the PE-SITB association**

Confounding is present when the following conditions occur: (1) both the predictor [a] and potential confounder [b] are associated with the outcome [c] (a and b are related to c); (2) predictor and confounder are associated (a and b are associated); (3) confounder is not a presumed causal consequence of the predictor (b cannot be caused by a). Mediators differ from confounders on condition (3): the mediator is a presumed causal consequence of the predictor (a causes b) (Babyak, 2009, MacKinnon *et al.* 2000). When determining whether a third variable is a confounder or mediator, it is important to consider whether that variable would logically be situated between psychotic experiences (PEs) and self-injurious thoughts and behaviours (SITB) on the causal pathway. If there is little evidence to support the exposure variable (PEs) preceding the third variable, that variable should be treated as a confounder. Unlike confounders, moderators (which influence the strength or direction of a relationship) can be statistically differentiated from mediators (Kraemer *et al.* 2008); however, no study to date has extensively examined potential moderators in the PE-SITB association.

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| **Category in systematic review** | **Type of third variable** | **Evidence or reasons for confounder/mediator/moderator assignment** |
| 1. Sociodemographics | Confounder | PEs cannot determine or predict such factors as age or sex, and therefore these variables should be treated as confounders. |
| 2. Mental disorders | Mediator or confounder | There is evidence of a bidirectional relationship between PEs and the onset of mental disorders (McGrath *et al.* 2016), so mental disorders could be confounders or mediators, depending upon the variables of interest. Jang *et al.* (2014) found support for depressive symptoms as a partial mediator of the PE-suicidal ideation relationship; however, they incorporated a cross-sectional mediation analysis, which has faced considerable criticism (Cole & Maxwell, 2003). |
| 3. Alcohol and substance use | Confounder | There is strong evidence that substance use precedes PE occurrence, but little of reverse causality. In McGrath *et al.*'s (2016) study, PEs predicted only one of the four substance use disorders (alcohol abuse). Another study found no evidence for reverse causality – PEs at time 1 did not predict subsequent change in cannabis use between times 2 and 5 (Mackie *et al.* 2013). Therefore, substance use should be treated as a confounder. |
| 4. Environmental factors | Confounder (or mediatora) | There is evidence that traumatic events precede PE occurrence. Kelleher *et al.*'s (2013) study demonstrated a clear temporal relationship between exposure to childhood trauma and the onset of PEs, looking only at the effect of trauma exposure on individuals who were free of PEs at baseline. Another study found children who were exposed to bullying at age 8 or 10 showed an increased risk of PEs at age 12 (Schreier *et al.* 2009). Therefore, environmental factors should be treated as confounders; however, there may be some exceptions depending upon the variables of interest e.g. where experiencing PEs makes a person more vulnerable to victimisation (Field & Cartwright-Hatton, 2015). |
| 5. Psychological factors | Mediator or confounder | Psychological distress has been identified as a key factor in the PE-SITB association (Martin *et al.* 2015; Saha *et al.* 2011). PEs are associated with elevated risk for distress (Armando *et al.* 2010) and distress as a result of PEs is proposed to lead to self-injurious behaviour (Grano *et al.* 2015) and therefore, psychological distress should be treated as a mediator. Alternatively, authors have proposed that PEs are a manifestation of general psychological distress (i.e. distress precedes PEs; Capra *et al.* 2015, Saha *et al.* 2011), and therefore could be treated as a confounder instead. Other psychological factors may need to be treated as confounders (e.g., low self–esteem may encourage victimisation which then leads to PEs, van Dam *et al.* 2012) or as mediators (e.g., self-stigma of mental illness). |
| 6. Intervention factors | Moderator | PEs would logically precede seeking help or being admitted to hospital, however, interventions would not likely be situated on the causal pathway between PEs and SITB. Rather, the effectiveness of the intervention, or level of help-seeking (Nishida *et al.* 2014) would influence the likelihood of a person engaging in SITB, and therefore, intervention factors should be treated as moderators. |
| 7. Family history/genetic factors | Confounder | PEs cannot determine or predict family history or genetic factors, and therefore these variables should be treated as confounders. |

a Variables presented in a bracket are plausible, but less likely than the other third variable type listed.

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