Brief Report

Resilience, Recovery Style, and Stress in Early Psychosis
Abstract

**Aim:** To investigate relationships between stress, resilience, recovery style, and persecutory delusions in early psychosis.

**Methods:** Thirty-nine participants completed questionnaires in a cross-sectional design.

**Results:** Higher stress, lower resilience, and a sealing-over recovery style predicted higher delusional severity and accounted for 31% of the variance in delusion severity.

**Conclusions:** Enhancing stress-coping strategies, building resilience, and facilitating an integrative recovery style may be helpful intervention targets for reducing the severity of persecutory delusions in patients with early psychosis.

Key words: resilience, recovery style, stress, persecutory delusions, early psychosis.
Introduction
Consistent with the stress-vulnerability model, a body of evidence supports the role of stress in the development and persistence of psychosis (Beards et al., 2013). Resilience denotes the ability to ‘bounce back’ from stress and may be ‘valuable in coping with health-related stressors’ (Smith et al., 2008, p.195). Only two studies to date have employed standardised measures to investigate resilience in patients with chronic schizophrenia, whereby resilience was associated with current psychosocial functioning, subjective well-being, and recovery status (Torgalsboen, 2012; Torgalsboen & Rund, 2010). However, no study to date has directly investigated resilience in patients with early psychosis or examined the association between resilience levels and persecutory delusions, whilst controlling for stress. Controlling for stress is important as it may confound the relationship between resilience and delusions. Additionally, using a measure of coping with the illness (recovery style), rather than coping with stress per se, may aid in understanding the relationship between stress and symptoms (Pruessner et al., 2011). In early psychosis, sealing-over (minimization/denial) has been associated with a poorer quality of life and significantly higher levels of positive symptoms than integration (curiosity/acceptance) (Thompson, McGorry, & Harrigan, 2003). However, a tendency towards a sealing-over recovery style has also been associated with an improvement in psychosis symptoms (Tait, Birchwood & Trower, 2003). This study thus explored the relationships between resilience, recovery style, and stress with persecutory delusions in patients with early psychosis.

Methods
Thirty-nine participants (29 male) aged 18-37 (mean:25.3 years; SD:5.05) with an ICD-10 defined psychotic disorder were recruited from three Early Intervention in Psychosis Services within London. A cross-sectional questionnaire design was employed using the PSYRATS for Delusions (Haddock et al., 1999), Brief Resilience Scale (Smith et al., 2008),
Recovery Style Questionnaire (Drayton, Birchwood, & Trower, 1998), and the Short Trier Inventory for Chronic Stress (Schlotz & Schulz, 2008). Partial correlations and a standard multiple regression analysis were employed.

**Results**

Mean delusion score was 16.95 (SD:3.95; range:7-22). A significant moderate negative correlation was found between resilience and the severity of delusions whilst controlling for stress (r(36)=−0.39, p=0.017). A significant large positive correlation was found between recovery style and delusional severity whilst controlling for stress (r(36)= 0.50, p=0.001). Stress, resilience, and recovery style significantly accounted for 31% of the variance in delusional severity (R²=0.37, adjusted R²=0.31; F(3,35)=6.72, p=0.001). Stress made a significant unique contribution to delusional severity (B=0.10, β=0.34, t(35)=2.36, P=0.02), as did resilience (B=-1.25, β=-0.30, t(35)=-2.22, p=0.03), and recovery style (B=1.69, β=0.46, t(35)=3.19, p=0.003).

**Discussion**

Low levels of resilience, and a sealing-over recovery style, were associated with a greater severity of persecutory delusions, after controlling for stress. Additionally, stress, resilience, and recovery style were all unique predictors of delusional severity, accounting for 31% of the variance. The remaining variance in delusional severity may be partly accounted for by cognitive (reasoning biases, interpersonal beliefs about self/others) and affective (anxiety/depression) processes known to be important in the development and maintenance of positive psychotic symptoms (Garety et al., 2001). It is important to acknowledge that as this was a cross-sectional and correlational study, causation cannot be assumed. Furthermore, patient reports of stress may be linked to the symptoms of psychosis itself, thereby presenting a confound.
Clinical implications

The findings highlight the possibility that enhancing stress-coping strategies, building resilience, and facilitating an integrative recovery style may be helpful intervention targets for reducing the severity of persecutory delusions, and improving the long-term trajectory of, patients with early psychosis. These therapeutic targets offer the potential to reduce the severity of delusions without working directly with symptomatic belief content, consistent with the recent emphasis on strengths-based approaches (Padesky & Mooney, 2012; Chadwick, 2006).

REFERENCES


Schlotz, W., & Schulz, P. (2008). *The Short Trier Inventory for Chronic Stress (STICS)*. Unpublished manuscript, School of Psychology, University of Southampton, Southampton, United Kingdom.


