The Mediating Role of Shame in the Relationship Between Childhood Trauma and Auditory Hallucinations

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Background

An extensive body of research has established an association between auditory hallucinations and exposure to childhood trauma, suggesting that childhood trauma exposure may play a causal role in the onset of auditory hallucinations (1). Recent studies have focussed upon understanding the psychological mechanisms behind this association, suggesting various mediators (2, 3, 4, 5, 6).

Shame (a common outcome of childhood trauma exposure) has been argued to play an important role in explaining the presence of auditory hallucinations (7).

This study followed Bortolon and Raffard's (2019) findings that shame significantly mediated the relationship between childhood traumatic experience and auditory verbal hallucination proneness in a general population sample of 179 French speakers (8). Understanding the role of shame in hallucinatory experiences can contribute to the growing interest in compassion-focussed therapy and other interventions that target shame.

The present study hence aimed to explore the mediating role of shame in the relationship between childhood traumatic experience and auditory hallucination proneness (AH) using a general population sample.

Hypotheses

H1. Childhood trauma exposure (CTE) would be positively associated with auditory hallucination proneness (AH).
H2. Internal shame would mediate relationship between CTE + AH.
H3. External shame would mediate relationship between CTE +AH.

Key Findings

- In line with H1, childhood trauma exposure showed a significant positive relationship with auditory hallucination proneness, $B = .081$, $t(90) = 2.87$, $p = .005$, $r^2 = .083$.
- Childhood trauma significantly predicted higher levels of perceived external shame, $B = .186$, $t(90) = 5.08$, $p = <.001$, $r^2 = .223$, and internal shame, $B = .318$, $t(90) = 4.43$, $p = <.001$, $r^2 = .179$.
- Both external and internal shame domains did not significantly predict auditory hallucination proneness.
- When controlling for both external and internal shame, childhood trauma remained a significant predictor of auditory hallucination proneness, consistent with partial mediation.
- However, use of percentile bootstrap estimation (at 5000 levels) found that external shame ((95% CI = -.012, .058) and internal shame (95% CI = -.018, .038) were not significant mediators of the relationship between childhood trauma exposure and auditory hallucination proneness.

Methodology

Participants: 92 adults from the general population residing in Australia completed the survey (Male = 26.70%, Female = 71%, Other = 2.20%). The mean age was 32.16 (SD = 13.83). 10.90% of sample experienced clinically significant auditory hallucinations.

Materials: *Launay-Slade Hallucinations Scale – Revised*; α = .75 measured AH proneness with 5 items of the auditory subscale, as used in Alderson-Day et al. (2014) (9).

Cardiff Anomalous Perception Scale. Three items were used from the CAPS as a screening measure for clinical level voice hearers in the sample (10).

Other as Shamer Scale -2 (α = .82) measured degree of external shame experiences (shaming from others) (11).

The *Forms of self-criticising/attacking and self-reassuring scale* (α = .93) was used to measure internal shame experiences (shame directed at self) (12).

The *Childhood Trauma Questionnaire – short form* (α = .94) measured degree of exposure to traumatic experiences in childhood (13).

Procedure: HREC approval was obtained. Participants were recruited using snowball techniques, social media including Facebook groups, and flyers. The questionnaire was administered online.

Conclusions

The present study's finding of a significant relationship between CTE and AH proneness is in line with previous research (1).

However, the present study also reflects the difficulty in untangling the various causal mechanisms involved in this relationship. Despite strong theoretical indication that shame plays a role in the CTE-AH proneness relationship (7), the present study did not support this.

The present study also stands in contrast with Bortolon and Raffard (2019), failing to replicate shame's significant mediation of the CTE and AH proneness relationship in an Australian sample (8). Further research is needed to confirm the nature of shame's role in the relationship between CTE and AH proneness.

Limitations

1. *Sampling limitations.* Interaction between *CTE → Shame → AH* may only be a phenomenon seen in samples reporting higher experiences of CTE and AH than in this sample. Apparent low levels of CTE reported in this sample (compared to Berry et al., 2018 general population study) may explain the findings (14).
2. Lack of covariate use. Use of a DASS-21 to control for mood disturbance in the model would have controlled for the confounding effects of negative affect.
3. Cross-sectional designs fail to capture causality with precision. Mere linear associations fail to understand and untangle the process of CTE escalating to the onset of AH, important for informing further treatment knowledge (15).

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