Os textos são da exclusiva responsabilidade dos autores *All texts are of the exclusive responsibility of the authors*

A LATENT PROFILE ANALYSIS AND STRUCTURAL EQUATION MODELLING OF PARANORMAL BELIEF, PSYCHOPATHOLOGICAL SYMPTOMS, AND WELL-BEING

Andrew Denovan & Neil Dagnall

Manchester Metropolitan University, United Kingdom

Grant 123/20

Background: Research investigating links between paranormal belief, psychopathology, and reduced well-being has produced inconsistent findings. The most reliable outcome being an association between paranormal belief and psychosis-proneness. Accordingly, this project used a range of analytical techniques to further explore links between paranormal belief and reduced well-being.

Aims: To identify profiles combining paranormal belief and psychopathology (Phase 1). Additionally, to develop and test models examining how emergent profiles relate to well-being over a period of six months (Phase 2).

Method: The two project phases included cross-sectional and longitudinal methods. These surveyed participants via online self-report measures. Alongside the Revised Paranormal Belief Scale, participants completed a range of cognitive-perceptual, psychopathology-related, and well-being measures (e.g., Perceived Stress, Life Satisfaction, Manic-Depressiveness, Schizotypy, Transliminality).

Results: Statistical procedures included latent profile analysis (LPA), MANOVA, and longitudinal mediation. Phase 1 LPA identified subgroups of high, moderate, and low combined Paranormal Belief and psychopathology (Schizotypy, Depression, Manic-Depressive Experience) scores. MANOVA revealed that subgroups with higher psychopathology scores (not necessarily higher Paranormal Belief) reported significantly lower wellbeing (Perceived Stress, Somatic Complaints, and Life Satisfaction; all *p*<.001). Phase 2 LPA identified consistent subgroups to Phase 1. Path analysis over six months demonstrated that the profile highest in psychopathology (not Paranormal Belief) predicted significantly lower well-being (higher Perceived Stress, $\beta = .34$, and Somatic Complaints, $\beta = .26$). Transliminality and Fearful Attitude positively mediated this relationship, and Sceptical Attitude produced negative mediation. The path model revealed good fit, χ^2 (1) = 8.10, *p* = .004, CFI = .99, SRMR = .01, RMSEA = .06 (95%CI of .03-.09).

Conclusions: A consistent observation across a range of methodological approaches was that paranormal belief, in the absence of cognitive-perceptual and psychopathology-related factors, had no significant relationship with well-being. Rather, a sophisticated process underpinned this, inferring that paranormal belief does not necessarily influence lower psychological adjustment and reduced well-being. Rather, attendant constructs (e.g., transliminality, psychopathology) facilitate this.

Keywords: Paranormal belief, Psychopathology, Well-being, Psychological adjustment, Longitudinal

Publications:

- Dagnall, N., Denovan, A., & Drinkwater, K. G. (2023). Longitudinal assessment of the temporal stability and predictive validity of the Revised Paranormal Belief Scale. *Frontiers in Psychology*, 13, 1094701. <u>https://doi.org/10.3389/fpsyg.2022.1094701</u>
- Dagnall, N., Denovan, A., & Drinkwater, K. G. (2022). Paranormal belief, cognitiveperceptual factors, and well-being: A network analysis. *Frontiers in Psychology*, 13, 967823. <u>https://doi.org/10.3389/fpsyg.2022.967823</u>
- Dagnall, N., Denovan, A., Drinkwater, K. G., & Escolà-Gascón, Á. (2022). Paranormal belief and well-being: The moderating roles of transliminality and psychopathologyrelated facets. *Frontiers in Psychology*, 13, 915860. https://doi.org/10.3389/fpsyg.2022.915860
- Drinkwater, K. G., Denovan, A., & Dagnall, N. (*under review*). A latent profile analysis and longitudinal assessment of the relationship between paranormal belief, psychopathological symptoms, and well-being. *PLOS One*.
- Drinkwater, K. G., Denovan, A., & Dagnall, N. (*in press*). Paranormal belief and perceived stress: A re-evaluation using the two factor RPBS model and statistical modelling. *PLOS One*. <u>https://doi.org/10.1371/journal.pone.0297403</u>

E-mail contact: a.denovan@mmu.ac.uk