

ABSTRACT

Recent research has suggested possible relationships between neuropsychological functioning and belief in superstitious and paranormal phenomena. The prefrontal cortex is of particular interest in this regard, as executive function and the mechanisms associated with faulty reasoning ability may maintain superstitious and supernatural beliefs. The present study investigated the relationship between executive function and superstitious and paranormal beliefs, in order to examine the extent to which the executive function abilities of individuals who subscribe to such beliefs differs from that of individuals who do not believe in such phenomena. The sample consisted of 43 male and female university students, between the ages of 21 and 28, from various ethnic groups. A non-experimental, cross-sectional, between-subjects, correlational mixed methods design was employed. Quantitative data was collected using a demographic questionnaire, a Modified Paranormal Beliefs Scale, the Neuroticism subscale of the NEO PI-R and an executive function and logical reasoning test battery. Qualitative data was collected by means of interviews. Few significant correlations were found between demographic variables and superstitious and paranormal beliefs, Neuroticism and executive function scores respectively. Relationships between Neuroticism and superstitious and paranormal beliefs were minimal. Both positive and negative correlations were found between superstitious and paranormal beliefs and executive function scores, suggesting that other neuropsychological factors may underlie illogical beliefs. Qualitative data revealed that superstitious and paranormal beliefs were perpetuated because of their links to familial environment and culture and beliefs assisted individuals in managing anxiety about the unknown by instilling a sense of control over the future. These results suggest that other neuropsychological mechanisms, such as emotion, may play a more significant role than executive function in superstitious and paranormal beliefs.

Keywords: executive function; superstitious beliefs; paranormal beliefs; personality