INDIVIDUAL DIFFERENCES IN THE COORDINATED BEHAVIOURAL AND PHYSIOLOGICAL IMMUNE RESPONSE TO PATHOGENIC THREAT

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ABSTRACT

The Behavioural Immune System (BIS) describes psychological mechanisms that bias our cognitions and behaviours to facilitate pathogen avoidance before they make contact with the body. Research suggests that when the behavioural immune system detects a pathogenic threat, it facilitates an array of averse emotional, cognitive, and behavioural responses that help us avoid pathogenic threats. The current study investigates whether the functional flexibility of the behavioural immune system impacts the link between physiological and behavioural immune responses as demonstrated by a previous study that merely viewing images of pathogen-relevant stimuli can trigger a physiological immune response. Participants (N = 12) saliva was collected to measure interleukin 6 (IL-6) levels, chemical messengers of the physiological immune system, before and after exposure to pathogenic cues. The Perceived Vulnerability to Disease Questionnaire (PVD) was used to measure participants’ perceptions of susceptibility to illness or disease. While the participant completed the PVD, a researcher assistant displayed a contagion cue (fake sneezing). After completing the PVD, participants watched a slideshow of disease-relevant images. Although the analysis revealed a non-significant difference in means, t(11) = -1.78, p = 0.10, Cohen’s d = -0.51, it is worth noting that p = .10 reflects a trend in the data whereby IL-6 levels elevated after exposure to a pathogenic threat (pre-test M = 2.42, post-test M = 2.84). The current study did not corroborate previous findings that behavioural immune system activation can trigger a physiological immune response and that individual differences in perceived vulnerability to pathogenic threat moderates this response.