

especially during a highly stressful period, such as the COVID-19 pandemic.

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THE RELATIONSHIP BETWEEN SPIRITUALITY AND INSOMNIA IN MILITARY SOLDIERS

Nayeli Nunez-Cruz¹, Katherine Miller², Janeese Brownlow³, Elizabeth Klingaman⁴, Philip Gehrman⁵

University of Pennsylvania¹ Cpl. Michael J. Crescenz VA Medical Center² Delaware State University³ VA Maryland Health Care System⁴ Perelman School of Medicine at the University of Pennsylvania⁵

Introduction: Insomnia is prevalent among military soldiers and contributes to poor physical and mental health outcomes. Spirituality has been found to mitigate mental and physical health complaints; however, there is a dearth of research on its relationship with insomnia, particularly among military soldiers. Therefore, this study examined the associations between spirituality, religiosity, and insomnia in a sample of Army soldiers.

Methods: Data were acquired from the All Army Study of the Army Study to Assess Risk and Resilience in Servicemembers (STARRS; N=21,449; mean age= 28.6; 88.24% male). Participants completed the Brief Insomnia Questionnaire, and current insomnia status was determined by DSM-5 criteria. They also completed questions on religious affiliation, how often they attend religious services, and how religious or spiritual they consider themselves on a 4-point scale (1-Very to 4-Not at all). Chi-Square analyses were used to assess the magnitude of relationships.

Results: A total of 19.45% of this sample had insomnia. Self-reported religious affiliation was more common in those without insomnia (73.5%) than those with insomnia (69.9%; $p < .0001$). Self-reported spirituality and religiosity were associated with lower rates of insomnia ($p < .0001$; $p < .0001$). However, insomnia was associated with higher rates of regular attendance of religious services (29.8% vs. 26.0%; $p < .0001$).

Conclusion: In this sample of Army servicemembers, insomnia was less prevalent among those with a religious affiliation and those with regular attendance at religious services. In contrast, individuals with insomnia reported themselves to be less religious or spiritual compared to those without insomnia. These findings underline the importance of further research to understand whether spirituality provides any protective effects against insomnia.

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THE RELATIONSHIP BETWEEN PATHOGEN AVOIDANCE AND INSOMNIA SYMPTOMS: RESULTS FROM A LONGITUDINAL STUDY CONDUCTED DURING THE COVID-19 PANDEMIC

Jamie Walker¹, Anastasia Makhanova¹, Mara Egeler¹, Ivan Vargas¹
University of Arkansas¹

Introduction: Pathogen avoidance has intensified during the past two years because of fear related to the high transmissibility of SARS-CoV-2. This trend aligns with previous research that found increases in pathogen avoidance as a result of impaired immune system functioning, such as in the case of autoimmune disease. Another link to compromised immunity is the presence of insomnia symptoms, which may interfere with a healthy immune response to pathogens. It is not clear, however, if insomnia could be an immuno-compromising factor that leads to a compensatory increase in pathogen avoidance. Therefore, the purpose of the present study was to explore the relationship between situational pathogen avoidance and insomnia symptoms during the COVID-19 pandemic.

Methods: A national online survey was conducted at two time points: April-June 2020 (baseline) and January-March 2021 (follow-up). Insomnia symptoms were assessed using the Insomnia Severity Index (ISI). Affective, cognitive, and behavioral responses that comprise pathogen avoidance psychology, especially as it pertains to avoidance of potentially pathogenic social stimuli, were assessed with the Situational Pathogen Avoidance (SPA) scale.

Results: 2,980 adults (mean age = 47 years) completed both surveys. Overall, the means on the SPA scale at both time points were higher than previously published norms (mean at both timepoints = 5.4), suggesting that average pathogen avoidance increased since the onset of the pandemic. The mean differences in the SPA scale varied by insomnia symptoms (at both time points), with participants who endorsed clinically elevated insomnia (ISI >14) reporting higher pathogen avoidance (baseline, $F(1,2972) = 10.4$, $p = 0.001$; follow-up, $F(1,2918) = 26.6$, $p < 0.001$). The mean differences in the SPA scale by insomnia were greater at follow-up compared to baseline (mean difference at baseline = 0.19; mean difference at follow-up = 0.33). This suggests that, compared to the initial months of the pandemic (Apr-June 2020), the relationship between insomnia and situational pathogen avoidance was stronger post-pandemic peak (Jan-Mar 2021).

Conclusion: Our findings suggest that there is a positive correlation between insomnia symptoms and situational pathogen avoidance. Furthermore, results indicated that this relationship became stronger as the pandemic went on.

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EFFECT OF SLEEP ON THE RELATIONSHIP BETWEEN PAIN RELATED DISABILITY AND NEURAL CORRELATES OF PAIN PROCESSING IN ADULTS WITH FIBROMYALGIA AND INSOMNIA

Neetu Nair¹, Ashley Curtis¹, Jason Craggs¹, Christina McCrae¹
University of Missouri¹

Introduction: Up to 80% of adults with fibromyalgia experience insomnia. While sleep and pain are known to be associated, sleep's role in the association between pain related disability and neural correlates of pain processing is unknown. We evaluated whether sleep moderates the association between brain activity in response