Workplace Technostress and Cognitive Fatigue across Generations: A Replication and Cross-Cultural Extension Using Psychometric Validation of the Digital Burnout Scale

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The aims were, first, to validate the Digital Burnout Scale within the organizational context of Uzbekistan; and second, to examine a moderated mediation model exploring the relationships among technostress dimensions, digital burnout, and cognitive fatigue across three generations of workers. Within the framework of a quantitative cross-sectional study, 476 employees from service and governmental organizations in Tashkent, Samarkand, and Bukhara cities were selected using a quota sampling method. In the current study, the Technostress Scale, the Digital Burnout

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Scale developed by Erten and Özcan (2021), and the Fatigue Subscale served as data collection tools. Results of confirmatory factor analysis demonstrated that the three-factor model of digital burnout (digital fatigue, mental distancing, and diminished technological competence) possessed good fit (CFI = 0.94, RMSEA = 0.058), and all factor loadings ranged from 0.63 to 0.88. The results of bootstrap mediation analysis have shown that digital burnout acted as a mediator between all dimensions of technostress and cognitive fatigue, with technology invasion having the most potent indirect effect (β = 0.22). It has been found through multigroup analysis that there is another pattern of moderation effects across different generations. In particular, the relationship between technostress and digital burnout has been more significant for Gen X individuals (β = 0.62), while the relationship between digital burnout and cognitive fatigue has been more significant for millennials and Generation Z individuals (β = 0.65 and 0.70, respectively). These findings suggest that older workers may be more sensitive to technological pressure, whereas younger workers may be more vulnerable to cognitive burnout.

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