Predictors of musculoskeletal discomfort: a cross-cultural comparison between Malaysian and Australian office workers

Abstract

Prevalence and predictors associated with musculoskeletal disorders (MSDs) vary considerably between countries. It is plausible that socio-cultural contexts may contribute to these differences. We conducted a cross-sectional survey with 1184 Malaysian and Australian office workers with the aim to examine predictors associated with MSD discomfort. The 6-month period prevalence of self-reported MSD discomfort for Malaysian office workers was 92.8% and 71.2% among Australian workers. In Malaysia, a model regressing level of musculoskeletal discomfort against possible risk factors was significant overall (F [6, 370] = 17.35; p < 0.001) and explained 22% (r = 0.46) of its variance. MSD discomfort was significantly associated with predictors that included gender (b = 14), physical (b = 0.38) and psychosocial hazards (b = -0.10), and work-life balance (b = -0.13). In Australia, the regression model is also significant (F [6, 539] = 16.47; p < 0.001) with the model explaining 15.5% (r = 0.39) of the variance in MSD discomfort. Predictors such as gender (b = 0.14), physical (b = 24) and psychosocial hazards (b = -0.17), were associated with MSD discomfort in Australian office workers. Predictors associated with MSD discomfort were similar, but their relative importance differed. Work-life balance was significantly associated with increased MSD discomfort for the Malaysian population only. Design and implementation of MSD risk management needs to take into account the work practices and culture of the target population.