

Association of physical activity and sedentary behavior with psychological distress among Japanese adults: a cross-sectional study

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The purpose of this study was to investigate the joint effect of physical activity (PA) and sedentary behavior (SB) on psychological distress.

We evaluated PA and SB on risk of psychological distress. We evaluated PA and SB on risk of psychological distress in 785 Japanese men and women (20-75 years old). Psychological distress was assessed using Kessler-6 (K6). PA and SB were estimated using the short form of international physical activity questionnaire short version (IPAQ-SF). Subjects were categorized into sufficient PA/low SB, sufficient PA/high SB, insufficient PA/low SB, or insufficient PA/high SB categories as per "Physical Activity Reference for Health Promotion 2013" and the median of SB. Relative risk of and 95%

confidence intervals for psychological distress prevalence were obtained using the multivariable logistic regression analyses while adjusting for age, sex, body mass index, drinking, smoking, employment status, living with family, social participant.

The category of sufficient PA was negative associated with decreased odds (OR=0.59, 0.34-1.01) and low SB associated with increased odd (OR=0.71, 0.45-1.14). But both associations were not significant. But, using the insufficient PA/high SB group as reference, the relative risk and 95% confidence intervals were 0.37 (0.18-0.79) for the sufficient PA/low SB group. This result suggests that Japanese with sufficient PA and low SB have a lower risk of psychological distress.