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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 investi-gate the joint effect of physical activity (PA) and sedentary behavior (SB) on psychologi-cal distress.

We evaluated PA and SB on risk of psychological distress. We evaluated PA and SB on risk of psy-chological 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 ques-tionnaire 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 logis-tic regression analyses while adjusting for age, sex, body mass index, drinking, smok-ing, 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 in-creased odd (OR=0.71, 0.45-1.14). But both associations were not significant. But, using the insufficient PA/high SB group as refer-ence, the relative risk and 95% confidence intervals were 0.37 (0.18-0.79) for the suffi-cient PA/low SB group. This result suggests that Japanese with suf-ficient PA and low SB have a lower risk of psychological distress.