

Effects of Physical Activity on Subjective Outcomes of Workers in Japan

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Abstract

The negative effects of physical inactivity during leisure time on the health of individuals have been acknowledged, but females with a job spent less time participating in sports than other categories of workers because there are gender-based differences in how non-market working time is spent in Japan. In this study we examined the effects of physical activity on individuals' well-being using micro-data from nationwide surveys in Japan. For males, age had an inversely U-shaped impact on working hours. Married women with two children tended to select part-time work, and the number of children had an inversely U-shaped impact on female working hours. Regular physical activity had negative effects on the number of working hours of both males and females.

To avoid a co-linearity problem, we estimated happiness equations leaving working hours out. Using the bivariate ordered probit models for estimation, we found that there were differences between males and females in the determinants of both perceived happiness and self-assessed health. Regular physical activity had positive effects on male health and female happiness. Drinking had positive effects on males, and smoking had negative effects on male happiness.

As a result of estimation using endogenous switching ordered probit models, we revealed that female happiness was dependent on females' regular physical activities, and that housework had negative effects on happiness for some female workers. Working hours and smoking had a negative impact on regular physical activity for males and females. We concluded that regular physical activity was a major determinant of male health and female happiness, and that decreasing working hours may not enhance happiness in females.

Keywords: Endogenous switching ordered probit model, Happiness, Physical activity, Self-assessed health, Time allocation

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