

Parkes, K. R. (2006) Physical activity and self-rated health: Interactive effects of activity in work and leisure domains. *British Journal of Health Psychology*, 11 (3), pp. 533-550.

## **Abstract**

**Objectives.** This longitudinal study examined the effects of physical activity on self-rated health (SRH); specifically, predicted interactions between leisure activity and job activity, and between leisure activity and age, were evaluated in relation to SRH.

**Methods.** Survey data on age and leisure activity together with relevant covariates (education, body mass index, smoking, and negative affectivity) were collected from oil industry employees. Three job activity levels (sedentary, active, and strenuous) were identified. At five-year follow-up, SRH, body mass index, and smoking were re-assessed. Hierarchical regression was used to analyse the longitudinal data (N=314).

**Results.** The *job activity x leisure activity* interaction (controlled for baseline SRH and covariates) predicted follow-up SRH ( $p < .025$ ). Individuals in sedentary jobs benefited disproportionately from leisure activity; active and strenuous jobs were associated with lower SRH, irrespective of leisure activity. The *age x leisure activity* interaction was also significant ( $p < .025$ ); leisure activity was significantly and positively associated with SRH only among younger individuals. Changes in body mass index and smoking contributed additively to the model, but did not mediate physical activity effects.

**Conclusions.** These findings highlight the importance of leisure physical activity for employees in sedentary jobs, but suggest that other factors (such as adverse environmental conditions) may underlie the lower SRH associated with physically-demanding work. The results also indicate that, irrespective of job activity level, younger individuals benefit more from leisure physical activity than older ones. Thus, the study informs interventions designed to improve the health of employees through increased physical activity.