

The influence of occupational physical activity and work-related stress on perceived work ability.

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Introduction

In the current labor system many workers are still exposed to heavy physical demands during their job. In contrast to leisure time physical activity (LTPA), occupational physical activity (OPA) is associated with an increased risk of cardiovascular diseases and all-cause mortality. In addition to the physically demanding tasks, also work-related stress is known to impact workers' health. OPA and work-related stress do not only have an influence on workers' health, but also on worker's perceived work ability (PWA). PWA is an important factor influencing the risk of long-term absenteeism, early retirement and work disability. This study aims to investigate the underlying factors of PWA and will focus in particular on the influence of OPA and work-related stressors on PWA.

Methods

In our cross-sectional field study 329 workers employed at four different companies in Belgium were included. The group comprised 139 men and 190 women. Participants filled in a questionnaire about their subjective perception of current work ability, by rating the Work Ability Score (WAS), and answered a question whether they would still be able to do their job at the age of 60. Participants furthermore reported about three different work stressors (job demands, job control and social support), using the Dutch version of the Job Content Questionnaire. Objective measures of OPA, using the Axivity AX3 accelerometers, were registered during an average of 3 consecutive days in order to calculate the amount of moderate to vigorous physical activity during working hours. Multiple logistic regression analyses adjusted for possible confounding variables and Spearman correlations were used to analyze the data.

Results

After adjustment for age and gender, OPA was a negative significant predictor of PWA at the age of 60 ($p < 0.01$). In other words, the higher the OPA, the less likely workers perceived to be able to continue their job later on. Of the three psychosocial variables, only social support had a trend to be a positive significant predictor of PWA at the age of 60 ($p < 0.10$). The results revealed that people with a higher social support had a higher chance of sustaining their current job at a later age. The results of the Spearman correlations showed a positive relation of WAS with job demands ($r = 0.185$; $p < 0.01$) and job control ($r = 0.154$; $p < 0.01$), but not with OPA.

Conclusion

Our study investigated whether OPA and psychosocial parameters predict PWA at the age of 60. OPA showed to be a strong predictor of PWA at an older age. Workers who experience high physical demands in their current job had a lower chance to sustain in that particular job. In contrast, people with higher social support are more likely to continue their job in the future. These findings suggest that social support can have a counterbalancing role in the harmful effect of physical work demands on work ability. Furthermore, the results of this study suggest that current PWA is higher in active jobs, i.e. professions with high job demands and high job control.