



Factors that may help explain the exercise and quality of life relationship

Purpose

To determine if certain factors play a role in exercise's influence on quality of life (QOL) among people with SCI.

Summary

- Depression and the ease of how someone physically functions may help explain the relationship between exercise and QOL in people with SCI.

Possible Applications

- Depression and physical function may be important to target when designing exercise interventions in this population.
- By improving depression and function, changes in QOL may also occur.

Research Abstract

Objective: Leisure time physical activity (LTPA) has been consistently associated with quality of life (QOL) in people with spinal cord injury (SCI). However, recent research suggests that intermediary variables account for the LTPA-QOL relationship in other populations. Using a prospective design, this study examined potential intermediary constructs linking LTPA and QOL in people with SCI. Drawing from previous literature, a longitudinal structural equation model was developed and tested to determine if depression, functional independence, social integration/participation, and self-efficacy mediate the LTPA-QOL relationship.

Method: Participants ($n = 395$) were adults with SCI who reported engaging in at least some LTPA over an 18-month period. LTPA was assessed at baseline, the intermediary variables of depression, functional independence, social integration/participation and self-efficacy were measured at 6-months, and QOL was evaluated at 18-months.

Results: The structural model had minimally acceptable fit [$\chi^2(395) = 803.16, p > .05$; CFI = .90, RMSEA = .05 and SRMR = .06]. Baseline LTPA was related to functional independence ($\beta = .20, p > .05$), depression ($\beta = -.32, p > .05$) and self-efficacy ($\beta = .60, p > .05$) at 6 months. Six-month functional independence ($\beta = .15, p > .05$), social participation ($\beta = .21, p > .05$) and depression ($\beta = -.34, p > .05$) significantly predicted 18-month QOL. Only functional independence and depression were significant mediators.

Conclusions: These results suggest that LTPA may improve QOL in adults with SCI through its influence on functional independence and depression.

Sweet, S.N., Martin Ginis, K.A., Tomasone, J.R., & the SHAPE-SCI Research Group (2013). Investigating intermediary variables in the physical activity and quality of life relationship in persons with spinal cord injury. *Health Psychology, 32*, 877-885. doi: 10.1037/a0032383.