

Physical Activity and Quality of Life in people with visual impairments

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Introduction

Visual impairments may cause negative effects on quality of life in older people. (Seland et al., 2011). For younger adults (18 – 65 years) comparable studies are not yet conducted. Therefore the purpose of this study was to gather data about physical activity and quality of life in this target group to optimize upcoming physical activity based interventions in vocational rehabilitation.

Methods

277 former participants of four vocational rehabilitation centres answered an online questionnaire ($M_{\text{age}}=40.13$; $SD_{\text{age}}=10.71$; female=38.2%). The respondents showed an average BMI of 26.70 kg/m² ($SD_{\text{BMI}}=5.54$ kg/m²). Almost 50% described themselves as being physical active (47.7%). The health related quality of life has been assessed by means of the WHOQOL-Bref-questionnaire.

Results

Compared to a normative group of adults aged 36-45, the study group showed lower values in all domains of quality of life.

The MANCOVA (IV: visual acuity $\geq 30\%$; $< 30\%$; $< 10\%$; $< 5\%$; DV: QoL 4 domains) produced no multivariate significant effect ($F[12, 468.59]=1.12$; Wilks' Lambda=.93; $p=.338$; $\eta^2_p=.025$; covariables: age, employment, job-related satisfaction, leisure time activity) Also, the ANCOVA (IV: visual acuity; DV: QoL global) showed no significant effect for the global dimension of the WHOQOL-Bref.

The MANCOVA (IV: more passive; more active; DV: QoL 4 domains) produced a multivariate significant effect ($F[4, 178]=10.17$; Wilks' Lambda=.81; $p=.000$; $\eta^2_p=.186$; covariables: age, visual acuity, employment, job-related satisfaction, physical activity). Post-hoc ANCOVAs revealed significant effects (Bonferroni-adjusted $p \leq .0125$) for all four domains. The ANCOVA (IV: leisure time activity; DV: QoL global) analysing the global domain showed a similar significant effect as well. The active persons had higher values in all domains of quality of life compared to the more passive participants.

Conclusion

The results highlight lower values in all quality of life dimensions also for a younger adult group. Interventions in vocational rehabilitation should focus on leisure time activity to enhance quality of life. At this stage, the role of physical activity is still unclear and further studies are needed.

References

Seland, J.H., Vingerling, J.R., Augood, C.A., Bentham, G., Chakravarthy, U. de Jong, V.M., Rahu, M., Soubrane, G., Tomazzoli, L., Topouzis, F. & Fletcher, A.E. (2011). Visual impairment and quality of life in the older European population. *Acta Ophthalmologica*, 89, 608-613.