

Participation in Self-Selected Exercise and Quality of Life Among Adults Living With a Disability: A Mixed-Methods Design

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PURPOSE: Adults living with a disability are more sedentary, have higher rates of chronic conditions, experience lower quality of life (QoL), and participate in exercise significantly less when compared to the general population. Prior disability and exercise related studies have explored participation and health-related outcomes of different exercise interventions and protocols in this population. However, these studies typically focus on the health-related outcomes and efficacy of one or two specific types of exercise interventions, which may or may not have been a meaningful form of exercise for the participant. Sustained participation in exercise overtime can have many health-related benefits. Exploring and identifying a meaningful form of exercise is needed to establish and maintain a sustained long-term exercise routine and can be an opportunity to improve QoL for individuals living with a disability. The aim of this study is to explore if participating in a self-selected meaningful form of exercise influences QoL from the perspective of adults living with a disability and how their QoL, mental health, and physical health compares to the general population.

DESIGN: A mixed methods convergent design was conducted, integrating a cross-sectional survey and semi-structured interviews. 13 individuals met the inclusion criteria of having a physical disability and/or intellectual disability, ≥18 years old, exercise regularly (weekly), and lived within Erie County PA participated in this study. Each participant completed the 35-item AQoL-8D standardized QoL assessment and a 30-45 minute one-on-one semi-structured interview. One-sample *t*-tests were conducted on the AQoL-8D total score, AQoL-8D mental health domain total score, and AQoL-8D physical health domain total score to determine if the sample mean scores were significantly different than the general population (norms determined by a population study in 2016 by Maxwell et al.). Thematic analysis was used to identify any common themes of participant perceptions of their participation in a meaningful form of exercise and any perceived benefits they experienced from their participation. Results were then integrated to obtain a more comprehensive understanding of perceived QoL in this population.

RESULTS: The one-sample *t*-test identified the sample population scored significantly lower on overall QoL (AQoL-8D total score $M = .70$, $SD = .15$; $t [12] = -2.78$, $p = .017$), mental health ($M = .39$, $SD = .14$; $t [12] = -2.78$, $p = .017$), and physical health ($M = .63$, $SD = .20$; $t [12] = -4.15$, $p = .001$) when compared to the general population mean scores (Total Score $M = .81$; Mental Health $M = .50$; Physical Health $M = .87$). Thematic analysis revealed four key themes from participant interviews: “improvement in physical health,” “improvement in mental health,” “increase in perceived QoL,” and “barriers to exercise.” Participants’ perceived exercise participation to contribute to and improve their overall QoL, mental health, and physical health. Despite the perceived and reported improvements in QoL by participants, the quantitative findings indicate individuals with disabilities who participate in meaningful exercise still experience lower QoL than the general population.

CONCLUSION: These conflicting findings could indicate individuals with disabilities may perceive QoL differently than the general population. An alternative explanation is individuals with a disability may experience much lower QoL than the general population at baseline and meaningful exercise participation improves QoL but not enough to close the QoL, mental health, and physical health disparity gap experienced by this population. Participating in meaningful types of exercise may improve QoL in individuals with a disability.

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