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Influence of Adaptive Water Sports Programs on Quality of Life Perceptions for People with Disabilities: A Feasibility Study

Joanna Cosbey, PhD OTR/L; Jason Jackson, MOTS; William Meyer, MOTS

Objectives

- Examine the relationship between participation in adapted water sports events and QoL
- 2. Analyze the feasibility of the data collection methods from participants involved in adaptive water sport activities

Background

- Participation in adaptive sport and physical exercise programs is enjoyable for participants with a wide variety of disabilities and contributes to improved personal perceptions of QoL and self-worth 1,2
- Because individuals with disabilities generally report lower levels of community participation, life satisfaction, and QoL perceptions, it is important to explore the relationship between participation in adaptive sports and perceptions in these areas ^{3,4}
- Feasibility of hand delivering questionnaires has not been examined in previous research ⁵

References

- 1. Fragala-Pinkham, M., A., Haley, S., M., & O'Neil, M., E. (2011). Group swimming and aquatic exercise programme for children with autism spectrum disorders: A pilot study. Developmental Neurorehabilitation, 14(4), 230-241.
- 2. Shapiro, D. R., & Martin, J. J. (2010). Athletic identity, affect, and peer relations in youth athletes with physical disabilities. *Disability* and Health Journal, 3(2), 79-85.
- 3. Groff, D. G., Lundberg, N. R., & Zabriskie, R. B. (2009). Influence of adapted sport on quality of life: Perceptions of athletes with cerebral palsy. Disability & Rehabilitation, 31(4), 318-326.
- 4. Yazicioglu, K., Yavuz, F., Goktepe, A. S., & Tan, A. K. (2012). Influence of adapted sports on quality of life and life satisfaction in sport participants and non-sport participants with physical disabilities. Disability and Health Journal, 5(4), 249-253.
- 5. McCormack, L., Friedrich, C., Fahrenwald, N., & Specker, B. (2014). Feasibility and acceptability of alternate methods of postnatal data collection. Maternal & Child Health Journal, 18(4), 852-857.

Design

- Quasi-experimental study
- Used self- or proxy-report questionnaires
- Pre- and post-activity data collection time periods
- Quantitative questionnaire data analyzed for feasibility of measuring QoL perceptions in this population

Participants

- 13 participants with a disability
- Recruited through the NMASP Inclusion Criteria:
- Any documented disability
- Participation in NMASP event

Methods

Instrumentation: Adaptive Water Sports Questionnaire (AWSQ)

- Developed by UNM faculty and students
- Pre-Activity: 4 pages long (51 questions; 5 sections)
- Post-Activity: 3 pages long (33 questions; 3 sections)
- Not subject to reliability or validity testing

Domains examined in AWSQ

- 1. QoL perceptions
- 2. Feasibility

Data Analysis

- Processed in Microsoft Excel 2011
- All data $\geq \pm 1.5$ SD considered meaningful
- Demographic data analyzed for:
 - Gender
 - Disability type
 - Age
 - Self- or proxy-report
- QoL data analyzed for:
 - Mean
 - \circ SD
 - Mode

Conclusions

Quality of Life

- QoL is elusive and difficult to quantify
- In general, QoL remained the same after AWSP participation
- The use of participant surveys did not produce statistically significant information

Feasibility

• The analysis of feasibility data collected indicated a need for better recruitment strategies, survey design, and timing of survey distribution

Recommendations

Quantifying QoL perceptions:

- Better instruments and more rigorous research methods need to be developed and implemented in future research
- Ways to improve future QoL data collection methods:
- Reduce survey length
- Reduce items requiring written response
- Distribute survey at a time and place that minimizes distractions and environmental discomfort
- Multiple survey formats (hardcopy and email)



Results

QoL Perceptions

- data due to small sample size and incomplete participant responses
- participation in AWSP does not increase participant QoL perceptions
- assumptions, and much of the extant body of research

Feasibility

- No statistically significant
- Data indicates that
- Data challenges popular

QoL attribute

- Comments indicated that collecting QoL data utilizing a questionnaire format must account for:
- 1. Environmental distractions
- 2. Time restrictions
- 3. Caregiver responsibilities

Mean Score of Perceived Importance

0.16

0.13

-0.03 (*0*.38)

4.90

- 4. Survey length
- 5. Complexity

Pre-Activity Post-Activity Difference Physical health 4.69 4.70 0.01 Ability to get around 4.46 4.10 -0.36 Ability to perform ADLs 3.90 4.23 -0.33 Ability to concentrate 4.00a 3.90 -0.10 Ability to communicate 4.08 4.50 0.42 Flexibility and/or the ability to 3.80 -0.35 4.15 cope with stressful situations Energy to participate in life 4.60 4.46 0.14 Physical fitness 4.89 4.77 0.12 Active lifestyle 4.46 5.00 0.54^{a} Feeling of safety 4.23 4.89 0.66^{a} Opportunities for leisure activities 4.38 4.40 0.02 Ability to work 4.08 4.10 0.02 Personal relationships 4.15 3.56^a -0.60^{a} Support from friends 4.46 4.40 -0.06 Community inclusion 4.58 3.70 -0.88^{a} Sense of self-confidence and/or 4.70 4.75 -0.05 self-efficacy Feeling of independence 4.54 4.70

Total Group Attribute mean (SD) 4.40 (.25) 4.37 (.46) ^a Value ± 1.5 SD from Total Group Attribute Mean in each area

4.77

Overall happiness