



Development of a Tailored Exercise Program to Enhance Quality of Life (QOL) in Adults with Intellectual Disabilities (ID)

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Introduction

- Individuals with ID show low levels of physical fitness throughout their life, directly impacting their health (Salomon et al., 2023).
- Although there has been extensive research revealing benefits of physical activity, research is limited on how it affects individuals with ID (Asonitou et al., 2018).
- Research shows a major factor for high rates of lifestyle related disorders from lack of access this population has to tailored health/exercise programs (Salomon et al., 2023).
- Physical activity is an occupation involving complex interactions between social, psychological, environmental, and physical factors, placing it within an occupational therapy practitioner's scope of practice (Hill et al., 2022).
- This project aimed to expand previous research through a program development study using a standardized assessment to advocate for improving quality of life in adults with an intellectual disability.

Methods

Inclusion criteria:

- Ages 18-50 years old
- Diagnosed intellectual disability
- Currently enrolled student at Unless-U
- Ability to follow instructions independently or with verbal assistance
- Ambulatory
- Speak/understand English

Program Details:

- Participants engaged in 10-14 exercise sessions, 30 minutes long, over 7 weeks using their own body weight and low-tech equipment, such as light hand weights.
- Each session included a warmup, strengthening, and cool down/stretching component. The strength section included upper and lower body exercises (bicep curls, shoulder raises, triceps extensions, chest presses, sit to stands, etc.)
- Participants completed *HINT-20 HRQOL* Instrument pre- and post-program
- Participants also completed a post-program satisfaction survey

Results

- All participants' scores either increased or remained the same; no scores decreased.
- As seen in *Table 1*, 60% (n=9) of scores increased after exercise program participation and 40% (n=6) of scores remained the same.
- Largest score improvement seen went from 56 to 66.
- Scored areas that increased included positive health benefits like level of tiredness.

Table 1: QOL Scores

Participants	Pre-Program	Post-Program
Participant 1	85	85
Participant 2	90	93
Participant 3	90	95
Participant 4	93	93
Participant 5	88	91
Participant 6	96	100
Participant 7	83	90
Participant 8	83	85
Participant 9	78	81
Participant 10	56	66
Participant 11	96	96
Participant 12	95	95
Participant 13	96	96
Participant 14	91	91
Participant 15	88	91

- Participants were also asked to complete a post-survey at the end of the 7-week exercise program. When asked the question "Do you feel motivated/encouraged to continue exercising?", 100% (n=15) of participants answered "yes".
- Most common responses to "What did you learn while participating in the program?" included: "to have fun", "to follow directions better", "to believe in yourself", "how to use weights", "how to stretch after working out", and "proper form/adapting exercises when needed".

Discussion

Post-Participation Satisfaction Survey

- Participants overwhelmingly revealed that they not only felt motivated to continue exercising but have also been exercising outside of sessions on their own.
- Participants reported this program increased their knowledge on exercising and confidence in their ability to workout.

Discussion continued

- Increased score related to average level of tiredness post-program shows engaging in physical activity can reduce tiredness.
- Increased QOL scores post-program show engaging in regular exercise can lead to improved QOL, which can increase overall health.
- Despite variety of responses to open-ended questions, feedback indicates all participants benefited from the program.
- All participants stated they would enjoy participating in a program like this in the future if given the opportunity again.

Conclusion

- Findings suggest that when provided the opportunity to engage in regular exercise, this population displayed an increase in QOL and motivation to continue exercising.
- Continuing to provide tailored exercise programs will increase engagement in physical activity, increase physical and mental wellbeing, therefore, an overall better QOL.
- Limitations: Participants being only Unless-U students, one-person leading exercise sessions, and using minimal exercise equipment.
- Future Directions: Continue to examine the benefits of tailored exercise programs for adults with ID including larger sample sizes, and a variety of exercises and equipment use.

References



Acknowledgement & Contact information

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