



# Increasing Motivation for Physical Activity among Individuals with Severe Intellectual or Developmental Disabilities

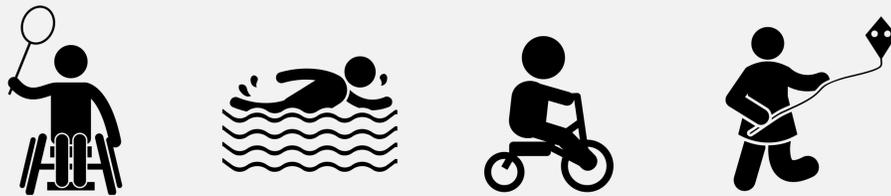
Emma Heverly, Brooke E. Wagner, MA, Daheia J. Barr-Anderson, PhD  
University of Minnesota, Minneapolis, MN

## Introduction

- Individuals with severe intellectual or developmental disabilities (IDD) face some of the worst outcomes for physical activity among the general population [1].
- It is often difficult to foster intrinsic motivation for physical activity among this group [2].
- Physical activity is highly beneficial as it decreases the risk of non-communicable diseases, strengthens physical and motor deficiencies, and aids behavioral and sensory regulation [3].
- Research often focuses on mild to moderate disabilities and does not consider severely affected individuals.
- Licensed occupational therapists have unique and valuable perspectives due to their expertise in the field as well as their personal connection and experience with individuals with IDD.

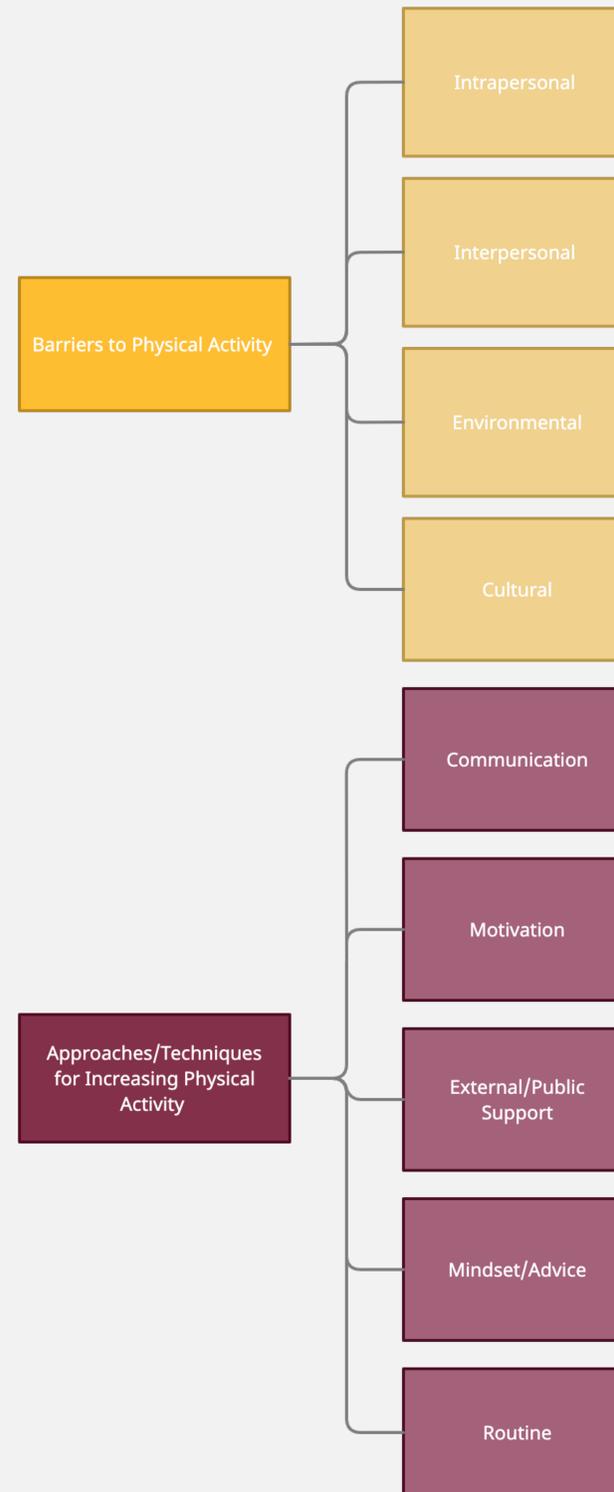
## Purpose

The study aims to uncover themes in the barriers and difficulties that individuals with severe IDD face in initiating and sustaining physical activity, as well as strategies occupational therapists use to motivate this demographic to engage in such activities.



## Methods

- Occupational therapists (i.e., participants) were recruited through professional contacts and referral by medical professionals.
- A demographics survey was used to collect information regarding the participants' age, gender, race, and location of practice.
- Semi-structured interviews via Zoom were conducted with each participant (n=6) individually.
  - Consisted of questions about their experience and familiarity with issues faced by people with IDD regarding physical activity, nonverbal communication and motivation, and increased incorporation of physical activity.
- Interviews were transcribed; transcripts were revised for clarity and coded using Excel for common themes and categories.



## Results

Barriers to physical activity were found in intrapersonal, interpersonal, environmental, and cultural categories:

- Physical difficulties, cognitive dissonance, lack of motivation, and understanding
- Communication between caregiver and individual is limited
- Societal expectations and accessibility
- Family health and mindsets, and expectations

Approaches to increasing physical activity were categorized into communication, motivation, external/public support, mindset/advice, and routine:

- Use of cues, including visual, tactile, and verbal
- Use of extrinsic motivators and pairing intrinsically motivated activities or reward systems with physical activity
- Involving social activity and peer motivation
- Gaining access to adapted equipment or specialized locations and organizations, and incorporating additional caregivers
- Changing the mindset to expand caregivers' ideas of what physical activity can look like, and encouraging creativity and education
- Persistence in encouraging physical activity as part of a routine and incorporating them into daily living activities

*"They don't understand why they should be doing something like that...So they don't look for it independently and unless you're quite creative, they won't seek you out to help them out with something like that."* - Participant, pediatric specialist

*"It's maybe not thinking about the limitations but thinking about the abilities and so what can these individuals do right now, what do they like doing, what motivates them, and how can we work with whatever sort of limitations."* - Participant, research professor

## Conclusions

- Individuals with IDD face unique barriers to physical activity and need additional support to increase involvement and consistency in physical activity.
- Further research needs to be conducted on severely effected individuals with IDD for specialized interventions.

### References

1. Dairo, Y. M., Collett, J., Dawes, H., & Oskrochi, G. R. (2016). Physical activity levels in adults with intellectual disabilities: A systematic review. *Preventive Medicine Reports, 4*, 209–219. <https://doi.org/10.1016/j.pmedr.2016.06.008>
2. Temple, V. A., & Walkley, J. W. (2007). Perspectives of constraining and enabling factors for health-promoting physical activity by adults with intellectual disability. *Journal of Intellectual & Developmental Disability, 32*(1), 28–38. <https://doi.org/10.1080/13668250701194034>
3. CDC. (2021, August 5). Increasing Physical Activity among Adults with Disabilities. *CDC*. Centers for Disease Control and Prevention. <https://www.cdc.gov/ncbddd/disabilityandhealth/pa.html>