Occupational Therapy and Gymnastics: The Development of Mighty Movers Adaptive Gymnastics

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Background

- Children who participate in physical activity can experience positive changes to physical and mental health, as well as cognitive function (Eime, Young, Harvey, Charity, & Payne, 2013; Fedewa & Soyeon, 2011; Janssen & LeBlanc, 2010).
- Participation in recreational sports provides children with the opportunity to engage in physical activity while also enhancing psychological and social health (Eime et al., 2013).
- Recreational gymnastics programs promote physical activity, motor development, and socialization while utilizing core gymnastics activities (Cook et al., 2015; Fennick & Royle, 2003).
- Despite the numerous known benefits, children with disabilities participate in physical activity approximately 4.5 times less often than children without disabilities (Rimmer & Rowland, 2008).
- The decrease in participation is likely due to one or more of the following barriers: environmental programmatic, attitudinal, and contextual (Chien, Rodger, & Copley, 2017; Rimmer & Rowland, 2008).
- The field of occupational therapy is transitioning to community-based practice settings that allow practitioners to meet the needs of more people, populations, and communities (Miller & Nelson, 2004).
- Occupational therapy practitioners have the skills necessary to develop and implement programs that promote health and facilitate occupational performance (Dou, 2010).

Purpose

- The purpose of this Capstone Experience was to gain advanced skills and expertise in the area of program development by creating various program components necessary for future implementation of Mighty Movers Adaptive Gymnastics (MMAG).

Theoretical Foundation

PRECEDE-PROCEED Model

- The PRECEDE-PROCEED Model is a planning model frequently used within the field of public health to develop, implement, and evaluate health promotion programs (Rietz, Scalf, & Merryman, 2014).
- The model consists of nine phases, with phases one through five applicable during planning a program and phases six through nine applicable during implementation and evaluation (Rietz et al., 2014).
- The first five phases of the PRECEDE-PROCEED Model were utilized to guide program development and make decisions about MMAG.

Person-Occupation-Environment (PEO) Model

- The PEO Model focuses on the transactive relationship between the person, environment, and occupation and the impact this relationship has on one’s occupational performance (Law et al., 1996).
- A greater fit between the person, environment, and occupation will create improved occupational performance (Law et al., 1996).
- By identifying the individual factors within each child and utilizing gymnastics activities therapeutically, MMAG can increase a child’s occupational performance in the supportive gymnastics environment.

Ayres Sensory Integration (ASI) Approach

- The ASI approach is a neurobiological approach that assumes sensory experiences within the environment can modify the brain because of its neurolasticity (Ikiugu, 2007).
- A child can adapt to his or her environment when he or she is able to integrate and respond appropriately to sensory input (Ikiugu, 2007).
- The ideal setting for MMAG would provide a child with a sensory-rich environment that promotes exploration and sensory development, allowing him or her to develop improved adaptive responses.

Program Components

- Over the course of the Capstone Experience, the student worked to develop major program components and finalize program details for MMAG. Below is a list of developed components:
  - Program logo
  - Marketing strategies
  - Goals and objectives
  - Evaluation methods
  - Budget and sustainability
  - Implementation plan
  - Foundational toolkit

Implications for Occupational Therapy

- Occupational therapy practitioners have a role in the development of health promotion programs in community-based practice settings.
- Occupational therapy practitioners are equipped to bring their unique expertise and skill-set to the development of an adaptive gymnastics program, such as Mighty Movers Adaptive Gymnastics.
- Occupational therapy practitioners should collaborate with established gymnastics facilities to broaden the outreach to include children with disabilities.
- By creating recreational sports programs, occupational therapy practitioners are able to alleviate some of the known barriers for children with disabilities to participate in recreational sport activities.
- A program planning model, like the PRECEDE-PROCEED Model, is an appropriate theoretical framework to use to guide the development of a health promotion program.
- The use of the PEO Model and ASI approach are two theoretical frameworks that provide an occupational therapy lens with which to develop an adaptive gymnastics program in a non-traditional setting.

References

Doll, J. (2010). Program development and grant writing in occupational therapy: Making the connection. Sudbury, MA: Jones and Bartlett Publishers