**Health-Related Quality of Life Interventions for Vulnerable Populations**

**Research Goals:** Develop and deliver traditional, alternative, and complimentary activity-oriented interventions to improve health-related quality of life indicators for vulnerable populations and their families and caregivers, focusing on the impact of paired vs. individual interventions.

**Research Resources**

- Samsung tablets for real-time data collection
- Large exercise balls and drumsticks
- Psychomotor, fine and gross motor skills, and school readiness interventions
- Multigenerational and multicultural interventions
- Community-based, socially inclusive program space
- Drumtastic® curriculum aligned with developmental activities from the National Standards for Physical Education (NASPE) and Depth of Knowledge (DOK)
- SMCISD behavioral specialist
- Partnership with Special Olympics Texas

**Researchers**

- Dr. Lyn G. Litchke, Associate Professor of Recreation Administration
- Dr. Ting Liu, Associate Professor of Exercise & Sports Science
- Dr. Andrea B. Deminson, Assistant Professor of School Psychology

**Research Findings**

- **Children with autism** receiving a psychomotor intervention scored significantly higher on body awareness, body concepts, space concept, and overall psychomotor concepts compared to control group.
- Fine and gross motor difficulties of children with autism may be related to their delayed processing of visual, auditory, tactile, and movement stimuli.
- Yoga improved emotional expressiveness, social engagement, attention span, and reduced disruptive behaviors in children with autism.
- Chair yoga for individuals with Alzheimer's improved daily living skills, engagement with others, eye contact, verbal language, positive outlook, and sense of humor.
- Drumtastic® improved motor performance and behavior in children and youth with developmental delays and intellectual disabilities.
- Children and youth with ADHD engaging in a spiritually-based recreation inclusion program improved memories of specific activities, connection with God, meaning of faith, and appreciation of friends.

**Research Goals**

- Determine impact of interdependence between participants from vulnerable populations while engaging in evidence-based practice
  - Measure the impact of engagement with task and peer participants on Health-Related Quality of Life indicators and school readiness.
  - Identify interventions that impact the short and long-term Health-Related Quality of Life benefits that impact positive lifestyle choices.
  - Explore the impact of therapeutic interventions and interdependent systems approach on developing resilient relationships.