

UCA Occupational Therapy Student Abstracts
2024 Cohort
Applied Research III

Relative Mastery of the Transition to a Doctoral-Level Occupational Therapy Program

Kizzie Citty, Adrienne Moran, Carrie Page, & Olivia Williams
Faculty Mentor: Dr. Lorrie George-Paschal

The purpose of the present study was to determine if completing the Occupational Adaptation Practice Guide (George-Paschal & Krusen, 2019) in order to create an individualized approach to developing adaptive strategies would increase an individual's relative mastery of a occupational challenge according to the Occupational Adaptation model (Schkade & Schultz, 1992; Schultz & Schkade, 1992). According to OA, occupational adaptation is the process by which an individual adapts through engagement in occupations when facing challenges that call for an "occupational response reflecting an experience of relative mastery" (Schkade & Schultz, 1992, p. 831). This concept of mastery was measured with the Relative Mastery Scale (George-Paschal, Krusen, & Fan, 2022). To answer the proposed research question, a quasi-experimental design with pre and post-tests was employed. The control group completed only the RMS on both testing dates. The experimental group completed the OAPG on the first data collection day and the RMS on both testing dates. The data analysis indicated no significant differences in RMS scores between the two groups following intervention; this result implies that most participants did not experience a significant change in perceived mastery over their stated goals. However, RMS scores improved overall for both groups, indicating that just the act of completing these surveys can be beneficial.

Caregiver In-Session Participation Checklist (CIPC): Development and Preliminary Validation of In-Session Caregiver Participation

Sara Grygus, Hope Smith, Grant Todd, Jaci Chenowith, & Jillian Diamond
Faculty Mentor: Dr. Deborah Gangluff

Caregiver participation has been shown to improve patient outcomes; however, there is currently no valid instrument to measure caregiver participation in occupational therapy sessions. This study aimed to provide fundamental validity testing on the Caregiver In-Session Participation Checklist (CIPC), developed under the Family Systems Theory. This instrument was designed to provide therapists with a quick tool to identify and assess the level of caregiver participation during a therapeutic session. The CIPC encompasses affective, behavioral, and cognitive engagement domains. Seven STAR-certified occupational therapists responded to a questionnaire with descriptive feedback on the three different areas of engagement and the responses were used to analyze the CIPC. Based on this feedback, a second iteration of the CIPC was created with organizational changes. The CIPC Validity Survey was then completed by 26 pediatric occupational therapy practitioners. The survey asked if each item in the CIPC

appropriately addressed the three domains. Seventy-seven percent of participants agreed that the statements on the CIPC were clearly relevant to what the caregiver was doing during the session, with the other 23% being undecided. Five themes were collected from each open-response question regarding the relevance of each subdomain within the CIPC: defining collaboration, defining “positive” affect, addition of Likert scale/scoring implications, and carryover. The findings of this study support fundamental face validity for the CIPC.

The Impact Functional Activities Have on Balance within the Community-Dwelling Older Adult Population

Madison Bowlan, Mckinsey Ramos, Allison Teague, & Colton Waters
Faculty Mentor: Dr. Deborah Gangluff

As a person ages, their functional balance decreases, which causes a decrease in confidence and an increase in falls. However, research continues to support that individuals who exercise and stay active throughout their lifetime have decreased fall risk and overall improved balance. An explanatory sequential mixed methods design was used to assess and evaluate the effectiveness physical activities have on the balance of community-dwelling older adults. This study set out to answer, “What impact do activities have on the older adult population in relation to their functional balance and perception of fall risk?”. Participants were recruited using convenience sampling at a local senior center. Participants were required to participate in three of the following activities each week: bean bag baseball, chair volleyball, line dancing, silver sneakers, table tennis, chair yoga, or the strength training exercise class for 5-6 weeks. Participation was collected on a self-reported basis. Pre and post data was collected utilizing the assessments of the ABC Scale, TUG, and One-legged Stance Test to evaluate participants’ balance and overall confidence. Then, these quantitative assessments were followed up with a focus group to gather qualitative data. A total of 10 individuals participated in all pre and post balance assessments and of those, eight individuals participated in a focus group. Due to the time constraint of the study, data analysis did not reflect any significant improvement with balance based on the assessments, however, the focus group indicated that the activities at the senior center have overall improved the participants’ balance over the course of time that they have been attending activities at the senior center. The data gathered from this study can help future practitioners to understand how long a program should be to show an improvement in balance, what types of activities may improve balance, and perform activity analysis for improving balance.

The Impact of Interprofessional Educational Experiences (IPE) on Health Science Students’ readiness for Future Interprofessional Practice

Kassidy Dahlem, Sarah Dillard, Summer Rameriz, Addison Starkey, & Leighton Wilson,
Faculty Mentor: Dr. Lorrie George-Paschal

The University of Central Arkansas’ College of Health and Behavioral Sciences (CHBS) aims to prepare its students for interprofessional collaboration in their careers through interprofessional education (IPE) experiences. While these experiences are designed to grow students’ readiness for interprofessional collaboration, there is a need to verify the efficacy of these events in accomplishing this goal. The purpose of this study is to evaluate the impact of

(CHBS) IPE experiences on health students' perceptions of their readiness for interprofessional practice. Researchers created a survey to determine the UCA CHBS IPE experiences participants attended. In addition, the Readiness for Interprofessional Learning Scale (RIPLS) (Parsell & Bligh, 1999) was used to assess UCA CHBS students' perceived readiness to participate in interprofessional practice.

The data collected concludes that students' perceived readiness for interprofessional collaboration improved among the three competency areas measured by the RIPLS: teamwork and collaboration, professional identity, and roles and responsibilities (Parsell & Bligh, 1999), following attendance to one or more UCA CHBS IPE events. This research identifies the positive influence IPE experiences have on UCA CHBS students. The research question addressed in this study could be expanded in the future by further analyzing the impact of student IPE experiences using objective measures.

Driving Simulator: Exploring Performance and Perceptions

Taylor Ahart, Ryan Cox, Maxwell Senger, Grace Smothers, & Madelynn Wauters
Faculty Mentor: Dr. Deborah Gangluff

Abstract: Background: Driving is an important daily activity for many individuals and the skills required for it can be greatly disrupted after neurological injuries. Driving simulators can be effective resources in the rehabilitation of adult individuals disabled by neurological injuries, but there is little research on the effective use of simulators, especially the Virage driving simulator (VS500) at UCA. Further, past research is lacking a standardized protocol to use with driving simulators that would allow for comparison between studies. Purpose: The purpose of this case study was to explore individuals' perceptions before and after a driving simulator assessment and to develop a standardized protocol for future studies. Method: A case study with four participants was conducted, including pre- and post-interviews as well as a novel protocol using the Virage simulator. Results: On average, participants' confidence level in their driving abilities decreased slightly. Additionally, the average effectiveness rating of the driving simulator's ability to simulate a driving experience and assess driving skills provided by participants during the post-interview were 6.25 out of 10. The five following themes were derived from the qualitative portion of the research: awareness/strengths and weaknesses, confidence, steering/real experiences are different, helpful, and reaction time. Conclusion: This case study produced a novel, moderately effective driving simulator protocol to be further developed and used in future studies and treatment. However, this study's reliability and validity may be restricted by the limited number of participants.

Qualitative Exploration of New Mothers Encountering Homelessness and Near-Homelessness Through Occupational Adaptation

Alyssa Clark, Joniya Flowers, Cora Lentz, Halah Nelson, & Aerin Walker
Faculty Mentor: Dr. Lorrie George-Paschal

Transition to motherhood is a demanding, life-altering experience that requires adaptation to an individual's routine, sense of self, and relationships. This transition can be an even greater challenge when an individual is representative of an underserved population. This qualitative

study aimed to explore factors which influence the homeless/near homeless mother as she adapts to her new role. Six homeless/near homeless women over the age of 18 and with a child under three years of age participated in a focus group to share their experiences. Researchers noted five themes: mental health, pride in being a mother, health literacy, job status, and biological father involvement. These themes were found to either facilitate or inhibit the mothers' occupational adaptation to motherhood

Outcomes of a Diversity Experience: Evaluating Self-Efficacy in Occupational Therapy Students within Diverse Populations in Clinical Experiences

Kiyaonda Fisher, Andrew Knopp, Justice Ross, & Shalexis Shelton

Faculty Mentor: Dr. Deborah Gangluff

Supporting equitable health outcomes is an essential factor in the field of healthcare. Therefore, increasing diversity among its members, as the U.S. continues to diversify, must be done to reflect the population and provide high-quality care to everyone. A study was conducted on third-year students at the University of Central Arkansas in the Occupational Therapy Doctoral Program to address this topic. The study evaluated how exposure to diverse populations and educational courses impacts the students' level of self-efficacy when providing care. Data were gathered through an online survey that asked participants to rate their level of confidence when providing services to specific populations, as well as open-ended questions to consider any additional experiences obtained that assisted in learning about diversity. The results of the survey study showed that most participants were not exposed to many diverse populations and did not have educational courses regarding diversity. As a result of the lack of exposure and education, 51% of participants were uncomfortable with providing care for clients of diverse backgrounds. These findings emphasize the importance of expanding education and experiences on diversity so future practitioners are equipped with the necessary skills to deliver holistic and client-centered care. Future research is needed to identify suitable strategies to improve services provided to minority populations and the occupational therapy profession.

Evaluating the Effectiveness of an Occupational Therapy Recruitment Event for High School Students

Tykira Bullins, Philencia Huyler, Madison Joyner, Whitney Storey, & Danielle Warhurst

Faculty Mentor: Dr. Lorrie George-Paschal

In a world where diversity in the healthcare workforce is crucial, occupational therapy stands out as an area lacking representation. To address this gap, an occupational therapy recruitment event was conducted for high school students to increase awareness and interest in the profession. The study aimed to evaluate the effectiveness of this event, utilizing a transformative worldview and the Person-Environment-Occupation-Performance (PEOP) model as the theoretical foundation. Data was gathered through pre- and post-presentation surveys, focusing on participants' knowledge and interest in occupational therapy. Results indicated a statistically significant increase in perceived knowledge and interest among participants. While assessed knowledge did not significantly increase, the recruitment event succeeded in enhancing students' awareness of the profession. Findings underscore the importance of advocacy and

education to bridge the gap in occupational therapy diversity. Future research is needed to identify effective strategies to recruit underrepresented populations into the field, fostering a more diverse and holistic healthcare system, benefitting all populations.

Program Evaluation of the University of Central Arkansas' Go Baby Go Program

Brooke Braden, Emily Moran-Godsey, Loida Perley, Blair Wollard, & Jordan Wylie

Faculty Mentor: Dr. Deborah Gangluff

Mobility is a critical factor of early development however mobility aids are often inaccessible to children under the age of two causing health disparities within this population in achieving independent mobility. GoBabyGo programs have spread nationally to address this health disparity with the intent to increase sustainable access to mobility aids for children with mobility impairments regardless of age. The UCA's GoBabyGo program was implemented as a community outreach initiative in April of 2022 and aims to be held annually. This program evaluation utilized a mixed-method case study approach to evaluate the planning process and outcomes of the UCA GoBabyGo program with intent to refine future iterations of the UCA GoBabyGo program. This program evaluation also aims to fill in a need for the lack of published GoBabyGo program evaluations. This study contained 25 participants made up of 1 guardian, 3 organizers, 16 volunteers, and 5 planning committee members. Organizer and guardian interviews, volunteer surveys, and content analysis were utilized to evaluate the planning process and outcome results. Thematic analysis revealed interdisciplinary collaboration, promotion of community partnerships, and providing modified ride-on vehicles were all successful components of the program. Themes of program needs included improved scheduling and group makeup, and improved volunteer instructions both before and during the event, and improved post program support for family members. Findings from this program evaluation can serve as a guiding frame for future iterations of the UCA GoBabyGo program to promote program effectiveness.

Functional Therapy at the Farm: A Case Study

Hadleigh Griffin, Kali Keeley, Amanda Locknar, Madi Paine, & Kelsey Sherwood,

Faculty Mentor: Dr. Lorrie George-Paschal

Farm-based therapy is an upcoming setting provided by clinicians to provide a natural environment for the development of functional skills in all areas of life. However, there is limited evidence to reflect the benefits of this approach. The purpose of this study was to determine the perceived strengths and concerns of farm-based therapy among caregivers, therapists, and registered behavioral technicians at The Farm at Pediatrics Plus. A purposive sample of 12 caregivers and therapeutic professionals completed surveys and those who elected to participate in focus groups were interviewed further using semi-structured interviews. Themes that emerged from surveys and focus groups included interdisciplinary collaboration, outdoor practice setting, skill development, and facilitators and barriers of The Farm. Overall, the perceptions of caregivers and therapeutic professionals were of a positive nature with enthusiasm for the potential that the permanent farm location will hold.