Fifth Annual Occupational Therapy Class of 2025 Student Scholarship Research Symposium



April 12, 2024 | 9 a.m. Stout PA Complex, Medical Lecture Hall & Streamed Online

Stout PA Complex, Medical Lecture Hall & Streamed Online Methodist University
5400 Ramsey St., Fayetteville, NC 28311



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Introduction to the OTD Symposium

These student presentations represent a component of the OTD curriculum that meets the educational standards for scholarship and evidence-based practice. The Clinical and Community Capstone Scholarly Project is part one of the capstone curriculum and begins in the summer term of the first year of the program.

This project is mentored by a faculty member and is aligned with the mentor's scholarly agenda. Completion of the Capstone Scholarly Project prepares the student and serves as the impetus for the culminating Capstone Experience. It generally begins with a literature review, PICO question generation, traditional qualitative or quantitative methods of inquiry, and culminates in the final didactic semester of the program with peer-reviewed dissemination efforts.

OTD Scholarly Agenda

Our departmental faculty scholarship agenda seeks to build quality evidence that spans the depth and breadth of the occupational therapy profession. The OTD program faculty, in collaboration with our students, strives to advance the profession through scholarly engagement, enrichment, and empowerment. Collectively, our scholarly work will create a well-rounded, creative, and collaborative environment that uses a multidisciplinary approach to incorporate the basic and applied sciences, including rehabilitation science, health and wellness, social sciences, and engineering. Pragmatically, our research is grounded in theory, molded by the grant-writing process, and executed in clinical and community-engaged settings. Simultaneously, our faculty scholarship agenda coincides with the evidence-based practice and research course series, allowing us to build a strong peer-mentor relationship with our OTD students and foster student-led capstone scholarship. The ultimate goals of our work are to create evidence-driven occupational therapists and scientists who will contribute to advancing human health and wellness through participation in everyday life activities.

Faculty Capstone Mentors

Stacia Auray, MSOT, OTR/L, CDP Matthew Foreman, PhD Meredith Gronski, OTD, OTR/L, CLA, FAOTA Amy Haynes, OTD, OTR/L, ASDCS Nikki Kardouni, OTD, OTR/L, CLT Annabeth Knight, OTD, OTR/L, ATP Sheri Michel, OTD, OTR/L Charlotte Navarro, OTD, OTR/L



AGENDA ABSTRACTS (In order by session tire

9-9:15 a.m.	Opening Remarks	Gronski
9:15-9:30 a.m.	A Mixed Methods Study: Exploring Views of Occupational Therapists on Their Educational Preparation to Work in End-of-Life Care	Caroline Christie Mentor: Michel
9:30-9:45 a.m.	The Effects of Therapy Dogs on Stress Levels in Undergraduate College Students During Midterm and Final Exam Weeks	Alison Eldridge & Jessica Renken Mentor: Michel
9:45-10 a.m.	The Use of Assistive Technology by Occupational Therapy Practitioners Working with Older Populations to Support Successful Aging in Place	Morgan Nash Mentor: Knight
10-10:15 a.m.	Habits-Based Health Promotion Intervention Targeting Unique Stressors of Graduate Students to Support Occupational Well-Being	Tlejah Chapman, Kelsey Kennedy, & Leah Shaffer Mentor: Haynes
10:15-10:45 a.m.	Q&A Break	
10:45-11 a.m.	Exploring Women's Knowledge on the Signs and Symptoms of Pelvic Floor Dysfunction and the Benefits of Pelvic Floor Therapy	Alexus Alston & Lexus Freeman Mentor: Navarro
11-11:15 a.m.	Developing an ICU Delirium Protocol Based on Current Healthcare Procedures: A Survey Study	Hannah Brumley & Makenzie Lawton Mentor: Navarro
11:15-11:30 a.m.	Practitioner Perceptions of Aquatic Therapy in Occupational Therapy Across the Continuum of Care	Morgan Montgomery Mentor: Navarro, Auray
11:30-11:45 a.m.	The Relationship of Early Childhood Educator Personal Factors and Response Patterns to Classroom Management and Child Behavior	Sherelle Jackson & Hailey Whitter Mentor: Gronski
11:30-11:45 a.m. 11:45 a.mNoon		
	Response Patterns to Classroom Management and Child Behavior	
11:45 a.mNoon	Response Patterns to Classroom Management and Child Behavior Q&A Break	
11:45 a.mNoon Noon-1 p.m.	Response Patterns to Classroom Management and Child Behavior Q&A Break Lunch Exploring the Impact of Fine Motor Function as a Determinant of	Mentor: Gronski Emily Thorne
11:45 a.mNoon Noon-1 p.m. 1-1:15 p.m.	Response Patterns to Classroom Management and Child Behavior Q&A Break Lunch Exploring the Impact of Fine Motor Function as a Determinant of Quality of Life for Individuals with a Parkinson's Disease Diagnosis An Exploratory Study on the Aspects of Mental Health and	Emily Thorne Mentor: Kardouni Riley Brewington, Nadeem Jaber, & Taylor Parrott
11:45 a.mNoon Noon-1 p.m. 1-1:15 p.m. 1:15-1:30 p.m.	Response Patterns to Classroom Management and Child Behavior Q&A Break Lunch Exploring the Impact of Fine Motor Function as a Determinant of Quality of Life for Individuals with a Parkinson's Disease Diagnosis An Exploratory Study on the Aspects of Mental Health and Biomechanical Performance of Collegiate Tennis Athletes Examining the Availability of Functional Capacity Programs for Athletes Following a Sports-Related Concussion: A Scoping Review Exploring Occupational Therapy's Role in Upper Extremity Injury and Recovery in Collegiate Baseball Players	Emily Thorne Mentor: Kardouni Riley Brewington, Nadeem Jaber, & Taylor Parrott Mentor: Foreman Morgan Lane Mentor: Foreman Hannah Little & Alexa Taylor Mentor: Foreman
11:45 a.mNoon Noon-1 p.m. 1-1:15 p.m. 1:15-1:30 p.m. 1:30-1:45 p.m.	Response Patterns to Classroom Management and Child Behavior Q&A Break Lunch Exploring the Impact of Fine Motor Function as a Determinant of Quality of Life for Individuals with a Parkinson's Disease Diagnosis An Exploratory Study on the Aspects of Mental Health and Biomechanical Performance of Collegiate Tennis Athletes Examining the Availability of Functional Capacity Programs for Athletes Following a Sports-Related Concussion: A Scoping Review Exploring Occupational Therapy's Role in Upper Extremity Injury	Emily Thorne Mentor: Kardouni Riley Brewington, Nadeem Jaber, & Taylor Parrott Mentor: Foreman Morgan Lane Mentor: Foreman Hannah Little & Alexa Taylor
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Occupational Therapy Symposium Presentations April 12 | 9:15 a.m-2:15 p.m.

- 9:15-9:30 a.m. —

A Mixed Methods Study: Exploring Views of Occupational Therapists on their Educational Preparation to Work in End-of-Life Care

Author: Caroline Christie

Mentor: Sheri Michel, OTD, OTR/L

BACKGROUND: Several studies have reported that occupational therapy (OT) services are underutilized in end-of-life care settings. Additionally, OT practitioners have a limited understanding of their role and scope of practice in end-of-life care. This study's purpose is to develop an understanding of the breadth of end-of-life care content included in OT curricula by assessing practitioners' opinions on how their program prepared them to work with this population.

METHODS: This mixed-methods design utilized an online survey and follow-up semi-structured interviews. Participants were recruited through convenience sampling. The survey invited licensed occupational therapy practitioners (OTPs) to report their perceived level of preparation to practice in end-of-life care, while interviews allowed OTPs with experience in this setting to highlight important knowledge domains.

RESULTS: Sixty-five complete survey responses were obtained through QuestionPro. The results were exported into Microsoft Excel for data analysis. Descriptive reports revealed that 69% of participants identified as OTs, while 31% identified as OTAs. The results indicated that the content areas with the lowest levels of perceived preparation were the screening and evaluation process, service reimbursement guidelines, and managing personal well-being when working with clients who are dying. Eleven participants were recruited for a follow-up interview. Interviews were transcribed to perform a thematic analysis.

DISCUSSION: Based on the results, we can infer that the scope of occupational therapy in end-of-life care needs to be more extensively discussed in OTP programs. This topic must be included to close the gap in occupational therapy services provided to this population and ensure students feel prepared and competent to enter this setting. In conclusion, this study highlights the importance of incorporating end-of-life care content into OT curricula to prepare practitioners for this critical area of practice.

— 9:30-9:45 a.m. —

The Effects of Therapy Dogs on Stress Levels in Undergraduate College Students During Midterm and Final Exam Weeks

Authors: Jessica Renken & Alison Eldridge **Mentor:** Sheri Michel, OTD, OTR/L

BACKGROUND: Many undergraduate university students face stressful situations, especially during examination times. This study focused on the use of therapy dog intervention to relieve students' stress before taking a final exam. The purpose of this study was to collect evidence to advocate for students' mental health management that supports the use of therapy dogs as a successful intervention for decreasing stress in students before test taking.

METHODS: This one-group pre-test/post-test study design recruited five student participants (mean age = 19, four females, one male). Participants took a self-rated Perceived Stress Scale (PSS-10) and had

their heart rate and blood pressure taken before and after the tenminute therapy dog intervention. To conclude the study, participants completed a subjective survey regarding their thoughts on the experience and whether it impacted their stress levels.

RESULTS: Participant data showed a decrease in PSS-10 scores, a decrease in three out of five participants' heart rate, a decrease in three out of five participants' systolic blood pressure, and a reduction in two out of five participants' diastolic blood pressure. Subjective measures indicated the five participants showed significant improvement in mood and stress levels.

DISCUSSION: Therapy dogs appear to be effective as a holistic approach in helping undergraduate students manage their perceived stress levels before taking an exam. However, future research should be done to recreate these findings with larger samples and explore further variables that may influence the effectiveness of animal-assisted interventions for stress reduction in undergraduate students.

9:45-10 a.m.

The Use of Assistive Technology by Occupational Therapy Practitioners Working with Older Populations to Support Successful Aging in Place

Author: Morgan Nash

Mentor: Annabeth Knight, OTD, OTR/L, ATP

BACKGROUND: This research aims to establish current trends in assistive technology (AT) service provision by occupational therapy practitioners (OTPs) to older adults, including areas of strength, barriers, and steps to fill practice gaps.

METHODS: A cross-sectional survey collecting information about practice using Likert-scaled questions was completed by 36 participants. The survey was disseminated through email and social media to determine the current use of AT by OTPs serving this population, and data was analyzed using descriptive statistics to demonstrate trends.

RESULTS: This survey demonstrates that although most OTPs report currently providing AT services to the older adult population, there are barriers to best practice in this area resulting from a lack of time, resources, and education about available technologies. Additionally, OTPs have the lowest level of confidence in providing AT services in the following areas: providing full scope of AT, trialing and collecting data, explaining insurance coverage, and troubleshooting.

DISCUSSION: Though many OTPs do provide AT services to the older adult population, their functional independence could be further supported by AT if OTPs had more time and resources, confidence, and formal education in this area of practice. Resources should be developed to better support OTPs including providing resources for technology access, continuing education options, AT-specific program development, and support for therapists to advocate for more time and resources. If these resources and supports are provided to therapists, the quality of AT service provision to the older adult population will improve, enabling increased occupational performance, participation, well-being, and aging-in-place.

— 10-10:15 a.m. —

Habits-Based Health Promotion Intervention Targeting Unique Stressors of Graduate Students to Support Occupational Well-Being

Authors: Tlejah Chapman, Kelsey Kennedy, & Leah Shaffer **Mentor:** Amy Haynes, OTD, OTR/L, ASDCS

BACKGROUND: Graduate students are more susceptible to mental health challenges due to numerous unique stressors. A proactive habits-based intervention was designed and implemented to improve self-efficacy in stress management, build a sense of connectedness with peers and belongingness to the profession, improve sleep quality, and encourage students to prioritize occupational balance for overall wellness across the six domains of health.

METHODS: Ten graduate students enrolled in their first year of an occupational therapy doctoral program. They were recruited to participate in an eight-week intervention using peer walk-and-talks and weekly healthy habit tips on the topics of intellectual, physical, and social health and spiritual, emotional, and occupational wellness. Outcome measures were a one-group pre-test/post-test survey design. In addition, participants completed a daily QuestionPro survey to log their physical activity, social engagement, time and quality of sleep, and perceptions of stress management.

RESULTS: Data was collected to investigate the efficacy of the intervention. A comparison of the pre-and post-test responses demonstrated a negative correlation between the Perceived Stress Scale in relation to their Social Connectedness & Social Assurance Scale, Sleep Quality Index, and Self-Efficacy and Coping Regarding Workload. A positive correlation was indicated between the Social Connectedness Scale in relation to Sleep Quality Index and Self-Efficacy and Coping Regarding Workload. Data analysis is still ongoing.

DISCUSSION: The authors hypothesized that incorporating routine physical activity and peer-to-peer social engagements while exploring topics related to a sense of belonging and healthy habit suggestions would improve sleep quality and self-efficacy in stress management.

10:45-11 a.m. ——

Exploring Women's Knowledge on the Signs and Symptoms of Pelvic Floor Dysfunction and the Benefits of Pelvic Floor Therapy

Author: Alexus Alston & Lexus Freeman **Mentor:** Charlotte Navarro, OTD, OTR/L

BACKGROUND: The primary purpose of this study is to identify women's current knowledge of pelvic floor dysfunctions and bridge the gap as the number of women experiencing pelvic floor dysfunction is rising. Our goal is to provide women with the necessary information to take control of their symptoms and increase their occupational performance in different areas of their lives, including sexual activity and intimacy.

METHODS: A semi-structured interview design was utilized with convenience sampling to collect data on women's current knowledge regarding pelvic floor disorders and symptoms. The study sampled two women aged 23 and 59 with a pelvic floor diagnosis or with any experience of abnormal pelvic floor disorder symptoms.

Utilizing QuestionPro, all participants completed the King's Health Questionnaire (KHQ) and the Patient Knowledge survey before their interview. The impact of urinary incontinence on various domains of an individual's life and quality of life was assessed using the KHQ. Women's current knowledge of pelvic floor anatomy and function was assessed using the researcher-designed Patient Knowledge survey. All data will be analyzed using Microsoft Excel and thematic analysis software.

RESULTS: Semi-structured interview data is being collected and synthesized at this time.

DISCUSSION: Occupational therapists (OTs) can play a vital role in pelvic health, as pelvic floor dysfunctions often impact multiple areas of occupational performance. Applying the Person-Environment-Occupational-Performance model, OTs can help individuals take control of their lives and return to engaging in meaningful occupations. Future research with a larger random sample is needed to further explore women's knowledge of pelvic floor dysfunctions.

– 11–11:15 a.m. ———

Developing an ICU Delirium Protocol Based on Current Healthcare Procedures: A Survey Study

Authors: Hannah Brumley & Makenzie Lawton **Mentor:** Charlotte Navarro, OTD, OTR/L

BACKGROUND: Delirium is a complex diagnosis that occurs in over half of the patients in the ICU. Research is limited regarding ICU delirium protocols and the roles practitioners have with individuals experiencing ICU delirium. The purpose of this study is to determine if ICU delirium protocols are being implemented, different protocols being used, and who is implementing the protocols.

METHODS: This is a mixed methods survey study with anonymous responses. Inclusion criteria were individuals who have at least six months of experience; work full-time in an adult ICU; and are a therapist (OT, PT, SLP, RT), nurse (CNA, RN), or provider (PA, MD, DO). Exclusion criteria were individuals who graduated within the last year, float pool employees, and employees in neonatal or pediatric

ICUs. The survey was administered via social media, email, flyer posting, and word-of-mouth. Results from QuestionPro were analyzed to determine common themes within delirium protocols and details about protocol implementation.

RESULTS: Ten individuals completed the survey with the majority being registered nurses. All responses indicate use of an ICU delirium protocol, and responses vary regarding when the protocol is implemented. The five common protocol themes determined were CAM-ICU, Decreasing Sedation, Limiting Delirium-Provoking Medication, Lighting, and Decreased Stimuli at Night.

DISCUSSION: Prevention protocols will help decrease long-term detrimental symptoms caused by ICU delirium. Results will be utilized to formulate a comprehensive protocol aimed at improving current protocols in place. This comprehensive protocol will implement prevention strategies and early interventions, reducing the occurrence of ICU delirium and minimizing the need for extensive management.







– 11:15–11:30 a.m. ——

Practitioner Perceptions of Aquatic Therapy in Occupational Therapy Across the Continuum of Care

Author: Morgan Montgomery

Mentors: Charlotte Navarro, OTD, OTR/L & Stacia Auray, MSOT,

BACKGROUND: There is currently a gap in the literature pertaining to how aquatic therapy may be used by occupational therapists (OT). The purpose of this research is to identify the current aquatic therapy knowledge of allied health professionals across the continuum of care, to identify perceived barriers and facilitators faced by therapists in accessing pools, and to identify how each profession may use the pool.

METHODS: Surveys were provided to allied health professionals working across the continuum of care on a variety of topics including: their perceptions on the use of aquatic therapy, years practicing, barriers and facilitators to its use, and education. Survey questions were

presented in dichotomous style, Likert style, and open-ended format. RESULTS: A total of 60 participants with an average of nine years' experience were surveyed via QuestionPro. Preliminary data analysis revealed that most participants had access to pools in their setting, and feel aquatic therapy is relevant to their profession, but lack education on how to incorporate it into their treatment sessions. Additionally, common responses indicated the pool serves many purposes depending upon the population served with various disciplines leading aquatic therapy sessions.

DISCUSSION: This study provides greater insight into how allied health professionals across the continuum of care are currently using aquatic therapy in practice. This data may be used to support the creation of educational materials for graduate programs on aquatic therapy to use in their intervention courses. Greater research is needed to identify the specific ways in which occupational therapists can apply aquatic therapy into their scope of practice.

— 11:30–11:45 a.m. ———

Early Childhood Educator Perspectives on Classroom Behavior Management

Author: Sherelle Jackson

Mentor: Meredith Gronski, OTD, OTR/L, CLA, FAOTA

BACKGROUND: An abundance of personal and environmental factors impact an ECE's ability to manage a classroom successfully. Understanding and addressing these factors, along with perceived support and job satisfaction may prevent the development of negative student-teacher relationships and ECE burnout. The purpose of this study is to investigate ECE personal factors, such as exposure to adverse childhood experiences (ACEs), and the perceived supports and barriers influencing their ability to manage difficult classroom behaviors.

METHODS: This survey was an exploratory cross-sectional study of ECEs conducted anonymously via QuestionPro. Participants were recruited via convenience sampling. They met the inclusion criteria if they worked at least 20 hours a week in an early childhood (EC) setting, were the lead teacher or assistant teacher, worked with children aged

2-5 years old, had at least 6 months of experience in their setting, were at least 18 years old, and had a high school diploma or the equivalent. Participants were filtered out via a screening questionnaire if the criteria were not met. The outcomes measured were exposure to ACEs, sensory processing patterns, and perceived supports and self-efficacy. Descriptive statistics and correlational analysis were used to analyze the data.

RESULTS: Twenty-eight individuals started the survey and 21 participants completed the survey. All participants identified as female with 71.43% identifying as Caucasian. Analysis of outcome measures is still ongoing at this time.

DISCUSSION: Occupational therapists (OT) can assist in creating a safe, nurturing, and sensory-friendly environment for children and teachers through the use of a holistic approach. There is a future consultative OT role in addressing an ECE's personal and environmental factors to aid them in better managing classroom behavior successfully. Some limitations of this study were strict inclusion criteria, survey retention rates, and recruitment methods.

- 11:30-11:45 a.m. ——

Early Childhood Educator Perspectives on the Supports and Barriers Available for Behavior Management in Early Childhood Classrooms

Author: Hailey Whitter

Mentor: Meredith Gronski, OTD, OTR/L, CLA, FAOTA

BACKGROUND: There are high rates of preschool aged children being expelled from preschool and early education programs. Early childhood educators are an integral part of a child's preschool education and understanding their perceived supports and barriers to managing classroom behavior is a first step to help decrease expulsion rates. The purpose of this research project is to determine ECEs' perceived supports and barriers to managing classroom behavior.

METHODS: This study design is a quantitative cross-sectional descriptive research study. Convenience sampling was used to recruit participants to complete an online survey about their perceived supports

and barriers for classroom behavior management. Inclusion criteria consisted of childhood educators who work with children 2-5 years old, has a minimum of a high school diploma or GED, has at least six months of experience, and is at least 18 years of age or older. Data was analyzed using an excel sheet for descriptive statistics and correlational analysis.

RESULTS: Twenty-one participants completed the survey and five participants started the survey without completion. Participants were all females with 88% between 26-59 years old. Data analysis is ongoing for outcome measures.

DISCUSSION: This study indicates a gap in the support for early childhood educators. Occupational therapy's holistic lens offers an opportunity to be collaborative consultants with ECEs to foster new, innovative techniques to support ECEs in developing an environment that facilitates positive social-emotional relationships among both educators and their students.

1–1:15 p.m.

Exploring the Impact of Fine Motor Function as a Determinant of Quality of Life for Individuals with a Parkinson's Disease Diagnosis

Author: Emily Thorne

Mentor: Nikki Kardouni, OTD, OTR/L, CLT

BACKGROUND: The purpose of this needs assessment is to collect data regarding fine motor deficits for individuals with Parkinson's disease and how it affects their quality of life. This data will be used to develop interventions utilizing a virtual reality system to maintain/improve fine motor function for patients with Parkinson's disease (PD) as a means to increase quality of life and functional independence.

METHODS: This study utilizes an anonymous, cross-sectional, descriptive survey design. The study was designed to collect data for individuals diagnosed with Parkinson's disease. Participants were recruited via word of mouth and through social media. This study was used to identify fine motor deficits in individuals with Parkinson's

disease and how these deficits impact their quality of life. Survey questions included Likert-style, dichotomous, and open-response questions.

RESULTS: In total, 53 individuals with Parkinson's took the survey to completion. All participants noted a change in quality of life due to the effects of Parkinson's disease. 74.36% of participants noted challenges with dressing and 61.54% noted difficulty with self-grooming. The responses indicate that performance in daily activities is negatively impacted secondary to a tremor.

DISCUSSION: This study supports the correlation between fine motor impairment and its effects on the quality of life of individuals with Parkinson's disease. The high correlation of fine motor impairment impacting quality of life will be used to develop an intervention targeting fine motor function utilizing virtual reality technology to increase performance and engagement, leading to increased life satisfaction.



— 1:15–1:30 p.m. ———

An Exploratory Study on the Aspects of Mental Health and Biomechanical Performance of Collegiate Tennis Athletes

Authors: Riley Brewington, Nadeem Jaber & Taylor Parrott **Mentor:** Matthew Foreman, PhD

BACKGROUND: Tennis is a meaningful leisure activity that falls within the scope of occupational therapy (OT) practice. This sport is known to decrease levels of stress, improve health and well-being, and promote social participation. However, there are limitations to evidence supporting the role of OT in mental health for college athletics. The purpose of this study is to explore the role of OT in the mental health and biomechanical performance of collegiate tennis athletes.

METHODS: This research used a cross-sectional, descriptive, exploratory study design and recruited participants (N=8) from the Methodist University Men's and Women's tennis teams. Participants were recruited utilizing convenience sampling through email

communication with coaches. Aspects of stress, anxiety, and depression were measured by four short self-report assessments. For the biomechanical portion, participants completed various swing patterns while being measured by a 14-camera video motion capture system.

RESULTS: Results show that collegiate tennis athletes could benefit from OT services to optimize aspects of mental health. Particularly, there are inter-individual differences in levels of stress, anxiety, and depression in relation to previous injuries and satisfaction with performance on the court during the recovery period. The responses also indicate the lack of OT services during the rehabilitation period following an injury.

DISCUSSION: The findings of this study indicate the need for OT services for collegiate tennis athletes to address mental health implications. Future research should focus on determining effective OT intervention approaches that will support and assist the needs of collegiate tennis athletes to improve their overall quality of life.

----- 1:30-1:45 p.m. -----

Examining the Availability of Functional Capacity Programs for Athletes Following a Sports-Related Concussion: A Scoping Review

Author: Morgan Lane

Mentor: Matthew Foreman, PhD

BACKGROUND: Sports-related concussions (SRCs) are becoming increasingly concerning for public health, particularly among athletes. Although various screening tools like sideline assessments, neurocognitive screenings, and posturography evaluations are commonly employed to determine the safety of return-to-play (RTP), they fall short in assessing athletes' functional capacity to meet their sport-specific demands after SRCs. This study explores existing research on functional capacity programs for athletes and emphasizes the need for further research. It advocates for the potential of occupational therapy to enhance assessments of functional performance among post-concussion athletes.

METHODS: This study followed the PRISMA scoping review

format. Google Scholar, PUBMED, SAGE Premier, ProQuest Center, SpringerLink, and the American College of Sports Medicine databases were reviewed to retrieve articles from 2011 to 2023. These articles focused on post-concussion performance and functional capacity measures employed among athletes. Preference was given to articles covering functional performance, activity tolerance, aerobic capacity, and work-hardening assessments post-concussion.

RESULTS: A total of 28 articles were identified and screened, with seven meeting the eligibility criteria. The studies identified the most frequently used capacity tests for post-concussion athletes, along with their limitations and opportunities for future research.

DISCUSSION: This study emphasizes the need for future research on functional capacity programs to assess athletes' readiness to RTP after a concussion. Occupational therapy should promote upgraded programs prioritizing athlete safety in both RTP and academics. Further research should focus on innovative solutions to bridge gaps and ensure comprehensive evaluations for post-concussion athletes.

1:45-2 p.m.

Exploring Occupational Therapy's Role in Upper Extremity Injury and Recovery in Collegiate Baseball Players

Authors: Hannah Little & Alexa Taylor **Mentor:** Matthew Foreman, PhD

BACKGROUND: Within college athletics, injuries are inevitable. In collegiate baseball players specifically, upper extremity injuries affect one in every three players, and the recovery for each differs. Occupational therapists have a unique skill set to improve the recovery process for injured athletes with a holistic, individualized, client-centered approach.

METHODS: This was a cross-sectional, survey-based, descriptive study designed to explore the current knowledge and utilization of occupational therapy (OT) services within Division I, Division II, and Division III collegiate baseball programs. A small sample of college baseball players (n=16) that were on the roster of a North

Carolina NCAA-accredited college baseball program were used to study the players knowledge of OT, if services are utilized during the recovery process of upper extremity (UE) injuries, and players levels of depression, anxiety, and stress. Custom survey questions; the Depression, Anxiety, Stress Scale (DASS-21); and the Perceived Stress Scale (PSS) were emailed to participants for completion using QuestionPro.

RESULTS: Sixteen collegiate baseball players completed the survey; most participants were pitchers and infielders from Division I and Division III programs. Data analysis is ongoing, but initial results show that many of the players know of OT, yet it is not a service that is utilized during the UE recovery process.

DISCUSSION: The role of occupational therapists and the unique skillset they bring to the table can improve the recovery process for injured college baseball players, both physically and mentally. The results from this study can be used to expand collegiate athletics into an OT area of practice.

2-2:15 p.m.

Perceptions of Active-Duty Military Members on the Design and Implementation of the Army Combat Fitness Test as a Reflection of Functional Job Performance Demands

Authors: Cristina Martinez Lopez, Alexis Maharty, & Peyton Yanick **Mentor:** Matthew Foreman, PhD

BACKGROUND: In 2022, the United States Army introduced the Army Combat Fitness Test (ACFT), a revised assessment aimed at enhancing the evaluation of soldier combat readiness and reducing preventable injuries. The purpose of this study is to investigate U.S. Army soldier opinions regarding ACFT design and implementation and the extent to which the test aligns with soldier occupational demands.

METHODS: This cross-sectional, exploratory mixed-methods study utilized convenience sampling to distribute a 21-item survey to investigate attitudes towards Army physical fitness testing. Former and current members of the U.S. Army (n=93) that took the ACFT and the former Army Physical Fitness Test (APFT) were included. The survey obtained demographic information and perspectives on

ACFT implementation and effectiveness. Results were analyzed using descriptive statistics and comparative inferential statistics.

RESULTS: Descriptive analyses showed disparities between Army objectives and soldier experiences. Participants expressed concerns about gender neutrality in scoring (26.9%) and Military Occupational Specialty (MOS) assessment accuracy, with 29.7% perceiving it as fairly accurate and 28.3% rating it as inaccurate. Additionally, participants noted a perceived shift in Army fitness culture due to the ACFT. However, a significant portion (31.1%) disagreed with its effectiveness in physical training-related injuries.

DISCUSSION: This study examines soldier perceptions of the ACFT, highlighting discrepancies between the Army's intended goals and perceived soldier outcomes. Participants indicate concerns regarding gender neutrality, MOS assessment accuracy, and the ACFT's influence on Army fitness culture and injury prevention efforts. Addressing soldier feedback is crucial to better aligning the ACFT with its occupation-based objectives.





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