# Graduate Research Symposium



**April 28, 2025** 

Showcasing graduate students' research, capstone projects and scholarship

Sponsored by the William T. Daly School of General Studies

# Graduate Research Symposium

# Campus Center, April 28, 2025

4:00 p.m.	Poster & Presentation Session	<b>Begins</b>
1.00 p.111.		

Doctor of Nursing Practice

Doctor of Physical Therapy

Master of Arts in American Studies

Master of Arts in Counseling

Master of Arts in Criminal Justice

Master of Business Administration

Master of Science in Coastal Zone Management

Master of Science in Communication Sciences & Disorders

Master of Science in Data Science & Strategic Analytics

Master of Science in Nursing

Master of Science in Occupational Therapy

Master of Social Work

Professional Science Master's in Environmental Science

# 4:45 p.m. American Studies Musical Presentation

Kieree Cunningham accompanied by Dr. Beverly Vaughn on the keyboard "Gospel Voices of Resistance and Resilience"

# 5:00 p.m. MAIT Capstone Expo

Poster Presentations in Meeting Room 5

# 5:30 p.m. Play Reading and Discussion

Money by Mike Gold, with updates by Dr. David Roessel &

MAHG student Aaliyah Tayyebi

# Dean's Welcome

Welcome to the Graduate Research Symposium at Stockton University. This evening, we celebrate the journey and accomplishments of our graduate students who have engaged in research within the past year. Designing and conducting research can be a challenging and rewarding part of this academic journey and tonight signifies the culmination of each person's thesis or other capstone experience. This quest that our graduate students have undertaken could not have been possible without the dedicated assistance of faculty mentors who have shared their own passion, curiosity, and knowledge with these distinguished scholars.

The Spring 2025 Graduate Research Symposium presenters include students from many programs: two Doctorate programs, in Nursing Practice and Physical Therapy; three Master of Arts programs, in American Studies, Counseling, and Criminal Justice; the Master of Business Administration; five Master of Science programs in Coastal Zone Management, Communication Sciences & Disorders, Data Science & Strategic Analytics, Nursing, and Occupational Therapy; the Master of Social Work program; and the Professional Science Master's in Environmental Science. In a separate area (Meeting Room 5) the Master of Arts in Instructional Technology (MAIT) will have their own Capstone Expo of poster presentations.

The students' projects signify their commitments to academic excellence, either through practitioner-based research or archival research, and they are achieved through the oral and poster presentations listed within this booklet. We celebrate the diversity and innovativeness of the research presented this evening and promote interdisciplinary research conversations among the campus community. We honor Stockton University's commitment to the research projects presented here tonight.

We are proud of the presenters. We are grateful to all who contributed to the success of this event: our graduate student presenters, dedicated alumni/ae, faculty advisors, program directors, program faculty, deans, staff, friends, family, and all of our special guests. We encourage you to attend the sessions, view the posters, and ask these remarkable scholars about their personal journeys.

As a special part of the event, there will be an American Studies Musical Presentation, with Kieree Cunningham singing, accompanied by the one and only Dr. Beverly Vaughn. They will be presenting "Gospel Voices of Resistance and Resilience," which should be compelling. And, to end the evening, there will be a reading of a one act play by Mike Gold called *Money*. The play has been updated by David Roessel and MAHG student Aaliyah Tayyebi and will be performed by members of the Stockton community.

Lastly, I would like to acknowledge the work of Sarah Albertson, herself a former graduate student in both Holocaust & Genocide and American Studies. During the time that Graduate Education has been housed in the School of General Studies she has organized this event with great diligence and efficiency. The success of this event is in large part a result of her vision for how it should be.

## Dr. Robert Gregg

Dean, William T. Daly School of General Studies & Graduate Education

## -Presentations-

# **Doctor of Nursing Practice**

Karen Lucas, DNP-C, ACNP-BC, FHRS, CCDS

Advisor: Lia Ludan, DNP & Jacqueline Arnone, PhD | Poster Presentation

Title: Same Day Discharge Following Left Atrial Appendage Occlusion Procedures

**Introduction:** Percutaneous left atrial appendage occlusion (LAAO) procedures have gained significant importance as a stroke prevention strategy for patients with nonvalvular atrial fibrillation. LAAO has been proven to be noninferior to oral anticoagulation in preventing stroke for atrial fibrillation patients. Following LAAO procedures, most institutions require an overnight hospital admission to monitor patients for procedure related complications. However, many patients recover from anesthesia within a few hours and may be safely discharged on the same day as their procedure. This project introduced a protocol for same-day discharge (SDD) after LAAO procedures at a tertiary care hospital.

**Purpose/Aims:** The purpose of this evidence-based practice quality improvement project was to evaluate the safety and efficacy of transitioning patients from an overnight hospital admission following LAAO procedures to a same-day discharge (SDD) protocol. All patients undergoing LAAO procedures who were admitted to the hospital or discharged the same day were assessed. SDD was felt to be a reasonable and safe alternative to hospital admission. Additionally, this project contributed to more efficient health care utilization and cost savings to the hospital for SDD patients.

**Methods:** Secondary data collection from August 2024 through February 2025 was collected and analyzed for all patients undergoing LAAO procedures. There was a focus on patient demographics, intra-procedural complications, postoperative complications, and hospital readmission following discharge. Additionally, a cost analysis outlined savings associated with same-day discharge of patients.

Results/Findings: During a four-week trial period, three patients were discharged the same day following LAAO procedures. Based on the trial, the same-day discharge protocol was implemented. The initial data collected from August of 2024 through February of 2025 included 125 patients who underwent LAAO procedures. Sixty-four (51.2%) of the LAAO procedures were in combination with another cardiac procedure and were excluded from consideration for the same-day discharge protocol. For the patients who underwent LAAO only procedures, there were 28 males and 24 females with an average age of 78.42. The average CHA2DS2-VASc score was 4.5 with ejection fractions between 30-65%. There was 35 Watchman devices implanted, and 17 Amulet devices implanted. All procedures were performed with general anesthesia and several methods for groin closure were utilized: 12 perclose, 14 vascade, 23 mattress sutures.

Of the 52 eligible patients, only 7 were discharged on the same day (13.46%). %). Eight procedures were aborted, mostly due to anatomical issues, with one caused by hemopericardium. We observed a total of 10 SDD patients including our trial period with no complications or need for readmission to the hospital at 7 and 45 days. Patients undergoing LAAO experienced minimal complications, with no complications reported in association with SDD. Reimbursement for SDD saved the hospital > \$3,000 per case. In addition, SDD patients do not occupy a hospital bed and therefore additional revenue is gained through better utilization of inpatient hospital beds.

Implications/Conclusions: The same-day discharge protocol was implemented during the period when LAAO procedures were new to being combined with other procedures, most often cardiac ablation procedures. This resulted in less use of the protocol and as a result the number of patients utilizing this protocol was <15%. Importantly, SDD patients had no documented complications and complications associated with LAAO only procedures remained low, <2%. There was also a financial benefit to the hospital as well as improved patient satisfaction given the ability to offer SDD. Future studies should involve more SDD patients to verify statistical significance. Based on these study results, same day discharge appears safe and allows hospitals to improve bed utilization without compromising patient care.

Keywords: Same day discharge, Watchman, Amulet, left atrial appendage occlusion

#### Kristen Wadams Drost, MSN, RN, APN, AGOCNP-C Advisor: Dr. Larider Ruffin | Poster Presentation

**Title:** Increasing Advanced Care Planning in the Primary Care Setting

**Background:** Advanced care planning (ACP) is a discussion between a patient and provider to determine the extent of medical treatment desired when a patient is unable to make medical decisions. ACP typically results in the establishment of advanced care directives (ACD), including a healthcare proxy, living will, and Provider Orders for Life-Sustaining Treatment (POLST). The ACP conversation is often delayed until the patient is admitted into the acute care setting. The deferred conversation can greatly impact the patient's plan of care and, secondarily, cause family burden while increasing healthcare costs related to unnecessary life-saving medical treatment. The purpose of this project was to determine how an ACP education session will affect the providers' patient education and referral rates during Medicare Wellness Visits (MWV) in the primary care setting compared to no educational intervention.

**Methods:** This quality improvement project assessed ACP patient education rates and referral rates pre- and post-educational intervention of 10 providers in a primary care office. The investigator utilized primary data collection via chart review from all MWV that took place starting January 2025 to March 2025. The investigator tracked the frequency providers initiated the ACP conversation for patients without existing ACD and whether the provider referred the patient to an in-office ACP visit or IRIS healthcare. The investigator also tracked whether the patient received an ACP education packet upon their departure.

**Outcomes:** A total of 231 MWV were reviewed pre-intervention and 249 chart were reviewed post-intervention. About 40% of patients in both pre- and post- intervention did not have existing ACD. Additionally, the distribution of visits per provider were within 5% when comparing two data collection time frames. The project found that ACP initiation rates went from 29% pre-intervention to 30% post-intervention. IRIS healthcare referral rates remained at 0%. In-office referral rates increased from 0% pre-intervention to 3% post-intervention. Last, patients receiving ACP education packet increased from 3% pre-intervention to 12% post-intervention.

**Discussion:** The outcomes of the quality improvement project favor education intervention. Results cannot be considered clinically significant due to the sample size of 10 providers. Four providers did not incorporate ACP during MWV saw 72% of the patients. The remaining six providers that incorporated ACP education in practice saw the remaining 28% percent. The uneven distribution of visits per provider impacted the overall results.

Conclusion: Education intervention is an important tool to create change within practice as seen in this project. Six providers adopted the practice in the Medicare Wellness Visits. However, it is clear that education intervention does not guarantee provider buy-in to adopt practice change. Future research should focus on increasing sample size to identify clinical significance. Additionally, provider pre- and post-test may be beneficial to identify provider perception on ACP and barriers to implementing ACP during MWV pre- and post-education intervention.

*Keywords:* Advanced Care Planning, Advanced Care Directives, Primary Care Practitioners, Medicare Wellness Visits, Education programs, Healthcare Proxy, Living Will, POLST

## **Doctor of Physical Therapy**

# Timothy Blaney, Lori Boright, Sonti Pilusa, Deborah Doherty, Brianna Breedy, Rachel Cook, & Sidney Crick

Advisor: Dr. Mary Lou Galantino | Poster Presentation

**Title:** Evaluation of Interprofessional Knowledge and Confidence in Oncology Rehabilitation Seminars in South Africa

**Purpose:** Individuals living with a cancer diagnosis have significant impairments including physical, cognitive, and emotional sequelae that contribute to activity and participation limitations. However, oncology rehabilitation education is needed to properly equip a healthcare workforce to prevent and manage adverse effects thusly improving quality of life (QOL). Impact of interprofessional training, knowledge translation, and future needs assessment was explored in South Africa.

Number of Subjects: Eighty one health professionals from rural and urban based hospitals engaged in the study.

**Methods:** Underserved rural areas and urban hospitals were identified and oncology education seminars were developed and implemented for interprofessional teams in Gauteng, Limpopo and Mpumalanga provinces. Participants received 2-3 hours of oncology rehabilitation lectures and discussions on managing the adverse effects of cancer treatment and palliative care. Following the lectures, the participants completed a survey that included questions on demographic data, knowledge of oncology rehabilitation, delivery of the lectures and additional needs. Ethics approval was obtained. Data were analyzed descriptively.

Results: Forty-seven percent of participants stated the most helpful feature of this seminar was the appreciation and importance of an interprofessional team in cancer care. Fifty-nine percent identified the least helpful feature is time constraints in clinical practice. After the workshop, 23% enhanced their rating of knowledge, however, 26% did not feel confident about designing an exercise prescription for various cancer survivors. Remarkably, 78% agreed they are confident in identifying impairments and functional limitations resulting from cancer treatments and 88% would be able to identify one evidence-based measurement tool to quantify pain with 68% able to identify tools to measure cancer related fatigue. Seventy four percent of participants were eager to work with an interprofessional oncology rehabilitation team to establish and execute an appropriate plan of care. Following the workshop, 23% of participants enhanced their rating of knowledge to manage individuals with a cancer diagnosis an 8/10, closely followed by 22% rating their knowledge a 9/10 and all remaining participants were able to achieve greater than 5/10.

**Conclusion:** The need for increased education, a streamlined connection to oncologic services in the community as well as continued interprofessional presence is vital to move toward improved QOL. Timely and accessible oncology rehabilitation for all individuals with a cancer diagnosis is imperative.

Clinical Relevance: Lack of resources, funding, and education in rural areas in South Africa requires unique strategies to upscale clinicians' knowledge and confidence in oncology rehabilitation assessment and intervention. Feedback from participants indicates a positive uptick in knowledge and identification of barriers, however, inclusive education is essential for culturally relevant oncology rehabilitation services and to optimize impact.

## **Master of Arts in American Studies**

#### **Tori Robbins**

Advisor: Dr. Kameika Murphy | Poster Presentation

**Title:** Ascertaining Whether Enslaved Labor Contributed to the Construction of the Old Naval Observatory

This research was funded by a Distinguished Research Fellowship for Graduate Students and the Graduate Student Travel Fund.

This study investigates the history of the Old Naval Observatory in the Foggy Bottom District of Washington, D.C. to determine if enslaved laborers contributed to the construction process at any stage. The building and funds were authorized by Congress, while construction and operations were under Navy control. Construction was completed by a private contractor (William Bird) who was overseen by a Naval Officer (James Melville Gilliss). Construction for the observatory began in 1842 and was completed in 1845. A home was built for the superintendent and repairs continued until 1847. Research on enslaved labor faces the permeating challenge of archival silence – the intentional or unintentional exclusion or removal from historical records. This project was no exception. The Naval Observatory exists in an archival grey space. Records are largely at the National Archives, but also exist at the Library of Congress, Naval History and Heritage Command, James Melville Gilliss Library, online databases, and other smaller collections at various archives. Several records could not be located. Multiple strategies were used and adapted throughout the project to uncover this history. Research began with general and contextual research of practices, culture, and lifestyle of the era, along with consultations with experts. With this information, thousands of records were examined at relevant archives. They included 19th century newspapers, contracts, census, letters, ledgers, and blueprints. While several records allude to the contributions of enslaved labor, discussions of the people behind the work are largely excluded from the records. This project aims to contribute to the history field by investigating a new building and developing methods to uncover archival silences.

# **Master of Arts in Counseling**

#### **Gabrielle Friel**

Advisor: Dr. Erin Sappio | Poster Presentation

Title: Examining Workplace Incivility Among Licensed Associate Counselors and Licensed

**Professional Counselors** 

Workplace incivility encompasses rude or disrespectful behaviors of low intensity with significant negative impacts. The prevalence and manifestations of workplace incivility originate from both peer counselors and supervisory or higher-level positions. This study aims to investigate the multifaceted nature of workplace incivility experienced by Licensed Associate Counselors (LACs) and Licensed Professional Counselors (LPCs), in order to provide a comprehensive understanding of interpersonal dynamics contributing to incivility within the counseling profession. Data on experienced negative behaviors associated with workplace incivility will be collected using the Negative Acts Questionnaire Revised (NAQ-R). The findings of this research will contribute to a deeper understanding of the sources and impact of workplace incivility in the counseling field, potentially highlighting unique stressors or organizational factors that contribute to these behaviors. This knowledge is essential for developing targeted interventions to foster more respectful and supportive work environments, enhancing the well-being of counselors, and thus, the quality of client care.

Keywords: Workplace Incivility, Licensed Associate Counselors, Licensed Professional Counselors, interpersonal dynamics

#### **Trinity Meads**

**Advisor:** Dr. Erin Sappio | **Poster Presentation** 

Title: Access to Mental Health Treatment in Black College Communities

The purpose of this paper is to explore varying barriers which potentially prevent Black people from seeking mental health treatment. The current literature examines individual (personal), social, community, institutional, and cultural barriers which deter Black people from accessing mental health treatment. The purpose of this study is to better understand experienced barriers about seeking mental health counseling services among Black college students, in order to conceptualize ways to deconstruct those barriers to facilitate more access. Participants in this study are college-aged Black students, who attend a public, state university in a suburban area, recruited through outreach to the African Student Organization. Participants will be invited to engage in a one-hour focus group to discuss their experiences with and perceptions about accessing mental health services. Responses from the focus groups will be analyzed through In Vivo Coding. The IRB proposal has been approved.

Keywords: stigmatization, racial barriers, cultural mistrust, poor competency trainings, lack of care, racism

#### **Ashley Valentino**

Advisor: Dr. Kate Worley | Table Top Presentation

**Title:** The Weight of a Diagnosis: Fundamental Issues in Differentiating Sufferers with Atypical Anorexia Nervosa from Sufferers with Anorexia Nervosa

The diagnosis of anorexia nervosa (AN) is defined by the presence of a severe restriction of food, a distorted self-image, and intense fear of weight gain (NIMH, 2025). Atypical anorexia nervosa (AAN) is a separate feeding/eating disorder diagnosis that presents with essentially identical symptomatology. Given this, what actually differentiates these two diagnoses? Surprisingly, body weight is the determining factor. For two eating disorders that center around a fixation on unhealthy weight loss, why are suffering individuals placed into the distinguishing categories of "significantly underweight" versus "healthy/overweight" or, by extension, "typical" versus "atypical"? This poster presents a literature review of research pertaining to this multifaceted, yet under-examined, issue. Individuals given the diagnosis of atypical anorexia are presented with far greater challenges simply due to the "atypical" label placed upon them. Stigmatization from a society that devalues fatness while glorifying thinness, bias from trusted professionals, and a perceived lack of severity of illness creates additional obstacles compared to those diagnosed with anorexia nervosa. In addition to the negative emotional impact the response to this label has on afflicted individuals, misconceptions associated with atypical anorexia nervosa (i.e., perceived controllability of disorder, lack of severity regarding symptoms/medical consequences, etc.) can actually inhibit access to necessary treatment. To expand upon past research, this poster endorses a removal of the

terms "anorexia nervosa" and "atypical anorexia nervosa" from upcoming editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) in favor of the more objective category "restrictive eating disorders".

Keywords: anorexia nervosa, atypical anorexia nervosa, symptomatology, label, weight, stigma, treatment

#### **Master of Arts in Criminal Justice**

Abigail S. Jacobo, Madison Nagel, Dr. Christine Tartaro, & Dr. Kimberley Schanz Advisor: Dr. Christine Tartaro & Dr. Kimberley Schanz | Poster Presentation

**Title:** Decoding Mock Juror Bias: Exploring the Effects of Racial Diversity and Survey Modality on Juror Decisions

This research was funded by Provost Faculty Opportunities Funds (PFOF).

The present study investigated the impacts of racial diversity, sample type, and survey modality on verdict decisions on a fictional case involving a second-degree robbery. Based on previous empirical research, we hypothesized that a defendant's race would impact the sample group's verdict decisions. Minority defendants were hypothesized to have higher guilty verdicts than white defendants throughout all sample groups; community and online samples were theorized to have higher guilty verdicts for minority defendants. Online samples were hypothesized to have higher attention check failure rates. The study utilized a four-group posttest-only experimental design with a targeted sample size of 400 participants, analyzing two independent variables: race/ ethnicity of the defendant and survey method. Four sample groups averaging 100 participants each were divided: students participating online, students participating in-person, online non-university students, and in-person community members. Each sample group was individually provided a vignette that randomized the race/ethnicity of the defendant and was prompted, after reading the case, to deliver a guilty or not guilty jury verdict. An attention check was conducted to ensure the accuracy of validity checks. As the study is still ongoing, the current findings have been analyzed through SPSS descriptive and chi-square analyses. Chi-square tests reveal that there is a significant relationship between the race of the defendant, verdict decision, and the accuracy check. White defendants were found to have the highest rate of guilty verdicts (47.4%), followed by Latino (33.7%) and Black (18.9%) defendants. Out of 71 Latino defendants, only 56 were racially identified correctly (78.9%), while White (88.4%) and Black (94.6%) defendants were more likely to be accurately racially identified. Modality was not found to have significance across any of the variables.

Keywords: Racial bias, Mock juror bias, Verdict decision making, Experimental juror studies

## **Master of Business Administration**

#### Nick Guidotti

Advisor: Dr. Joy Jones-Carmack | PowerPoint Presentation

Title: Strategic Responses to Tariff Challenges

This consulting project investigates the organizational challenges faced by a medium-sized metalworking and manufacturing company on the East Coast, which is anticipating significant operational disruptions due to the upcoming tariffs. As a company heavily reliant on global supply chains for raw materials and exports, the looming tariffs are expected to lead to increased costs, reduced profit margins, and difficulty maintaining competitive pricing. These concerns have sparked uncertainty within the organization about how to adjust operations in response to the potential economic impact.

To better understand the company's preparedness and specific challenges, I visited the client site, where I conducted interviews with various managers and employees. Through these conversations, I learned about the company's concerns regarding the anticipated tariffs, particularly the expected rise in raw material costs, potential supply chain disruptions, and the difficulty in adjusting product pricing to remain competitive. These discussions revealed a clear need for a proactive strategy to address the upcoming changes in the global trade environment.

In response, I developed two sets of survey questions to gather more data on both the internal and external perspectives related to the impending tariffs. One set of questions is designed for employees, focusing on their awareness of the tariffs' potential impact, their views on the company's readiness, and their suggestions for

possible solutions. The second set will be sent to the company's clients, aimed at gauging how they might react to potential price increases and whether they would remain loyal to the company despite the higher costs. These surveys will provide valuable insights into both the company's internal operations and client expectations, helping to shape strategic recommendations moving forward.

#### Erin Kee

Advisor: Dr. Joy Jones-Carmack | Poster Presentation

**Title:** The Hidden Cost of Advocacy: Political Burnout and Employee Well-Being at Politically Driven Organizations

This case study was conducted from the perspective of a management consultant working with a small digital advertising agency. Headquartered in Washington, D.C, the company operates within the fast paced and often unpredictable political sector. As a mission driven for profit company, it is committed to advancing progressive causes through data driven digital strategies and cutting edge advertising technology.

The study was designed to examine the internal work culture at the company, particularly in relation to the increasing reports of political fatigue and job burnout among employees compared to other off election cycles. A review of organizational materials and semi structured interviews with staff across various levels, the analysis focused on how the omnipresent nature of politics, combined with the emotional demands of client facing roles, contributes to ongoing stress and fatigue present currently.

The findings revealed that, despite the company's efforts to promote work life balance and provide strong benefits, employees continue to experience elevated levels of exhaustion.

Recommendations were given for the company to take additional steps to help employees disconnect from politics, or offer and highlight services to help employees cope with politically induced fatigue, including targeted interventions for high stress roles. These strategies aim to strengthen organizational resilience and employee sustainability within the context of a high intensity political environment. While this case focuses on the company, the issues identified are not unique to the organization; they reflect a broader pattern of burnout and fatigue throughout the political sector. As the political climate continues to intensify, further research will be necessary to understand the long-term impact of political work on employee well-being and to develop sustainable solutions that can be applied across the industry.

Keywords: Politics, Fatigue, Job Burnout, Employee well being, Workplace culture

# **Master of Science in Coastal Zone Management**

#### Matthew Deibert, Jr.

Advisor: Dr. Shah Khan | Table Top Presentation

**Title:** Shoreline Dynamics of New Jersey's Beachfront: Using CoastSat for Long-Term Analysis and Ground Truth Verification

This project will assess the long-term changes in New Jersey's beachfront shorelines using the CoastSat toolkit to extract shoreline positions from satellite imagery. The analysis will be verified against historical ground truth data to evaluate the accuracy and reliability of satellite-derived shoreline data. The main question is: How have New Jersey's beachfront shorelines evolved over the past few decades, and how well does CoastSat data align with historical field measurements?

#### John Hallagan

Advisor: Dr. Tait Chirenje | Poster Presentation

Title: Heavy Metal Distribution in Salt Marsh Sediment and Vegetation

This research was made possible by several funding sources, including the Coastal Zone Management Program and funds awarded through the Distinguished Research Fellowship for Graduate Students.

Salt marshes, like other wetlands, are often thought of as sinks for contaminants. These contaminants, from various point and nonpoint sources, can be absorbed, controlled, and/or transformed by natural chemical and biological processes in the sediment and vegetation. The primary objective of this study was to determine the distribution of heavy metals present at two sites in Great Bay, NJ. Both sites are within the same watershed and have similar vegetative communities, but have contrasting adjacent land uses. The presence of a shoreline

stabilization bulkhead at the study site prevents marsh retreat, while retreat at the undeveloped reference site is uninhibited. Sediment core samples were collected to a depth of 36" (91.44 cm) at 20 randomly selected locations at both sites (40 total sample locations). Core samples were partitioned into 6" (15.24 cm) sections and rinsed through a #10 (2.00 mm) sieve to remove subsurface vegetative material. The sediment and rinse water, subsurface vegetation material, and above ground vegetation material was then dried, weighed, and homogenized using a food processor and/or coffee grinder. All samples were digested in a hot block using USEPA Method 3051 (using trace metal grade HNO3). Sample analysis will be conducted using an Inductively Coupled Plasma Optical Emission Spectrophotometer (ICP-OES) at the Rutgers Inorganic Analytical Laboratory to determine the concentration of Pb, Cu, As, and other target analytes in each sample. This study will help us understand heavy metal abundance and distribution at the two sites, how adjacent land use impacts heavy metal abundance, and what impact that may have on local ecosystems as sea levels rise and salt marsh area continues to decrease on our coast.

Keywords: Heavy metals, salt marsh, wetland, contaminants

## **Master of Science in Communication Sciences & Disorders**

Wendy Aguilar, Alexa Atzert, Kali Budd, & Dr. Angela Ladson Advisor: Dr. Monika Pawlowska | PowerPoint Presentation

Title: The Impact of Developmental Language Disorder on Literacy Acquisition in K-3 Students

Developmental Language Disorder (DLD) affects approximately 7% of children and significantly impacts language development. Since language plays a fundamental role in reading and writing, children with DLD often struggle with literacy acquisition. This study explores how DLD affects literacy development in kindergarten through third-grade students while highlighting some challenges. Focusing on K–3 students is essential because the early school years are crucial for developing core literacy skills, including phonological awareness, vocabulary acquisition, and understanding sentence structure. Deficits in these areas, often due to DLD, can result in ongoing academic challenges. Therefore, enhancing literacy development at this stage can lead to improved long-term outcomes, increased confidence, and a proactive approach to preventing reading difficulties.

Our research investigates the question: "How does DLD affect the acquisition of literacy skills among K-3 students?" To address this, we conducted a systematic literature review using a comprehensive search strategy. Databases searched included PubMed, ERIC, and EBSCO. Keywords such as "DLD," "SLI," "reading comprehension," "syntax," "vocabulary," "phonology," "academic performance," "elementary school," and "K-3 students" were combined using Boolean operators to refine our search. Inclusion criteria focused on peerreviewed articles published within the last ten years, targeting studies relevant to our research question and the K-3 population. Articles were excluded if they focused narrowly on dyslexia or specific interventions. Our search identified 14 relevant articles, with four selected for an in-depth review. These studies examine different aspects of literacy development in children with DLD, including reading strategies, spelling difficulties, and ongoing achievement gaps in reading and math. Initial findings indicate that DLD significantly impacts literacy acquisition, with difficulties in phonological processing, syntax, and vocabulary contributing to long-term academic challenges. Furthermore, the research emphasizes the importance of targeted interventions, particularly for bilingual students with DLD, to support their learning needs effectively. Understanding how DLD affects literacy acquisition is important for developing effective instructional approaches. By identifying specific areas of difficulty and evidence-based strategies for support, educators can better meet the needs of young students with DLD and improve their long-term academic outcomes.

Keywords: Developmental Language Disorder, literacy acquisition, early reading skills, academic achievement, early intervention

# Cami Alexy, B.S.; Sarah Morgan, B.S.; Mia Erard-Coupé, B.S.; & Lindsay Kratchwell, B.S. Advisor: Dr. Monika Pawlowska | PowerPoint Presentation

**Title:** The Impact of Dyslexia on School-Aged Children and Adolescents' Academic Performance and Social-Emotional Well Being

Dyslexia is a learning disability that negatively impacts reading and writing abilities, affecting an estimated 15-20% of the population. Despite its prevalence, many individuals are not diagnosed until second or third grade, if not later. Understanding the impact of dyslexia on academic achievement and social-emotional health is essential for developing effective intervention strategies that support long-term success. Since reading is a foundational

skill for academic growth, difficulties caused by dyslexia can lead to challenges across all subjects. This research aims to answer the question: How does dyslexia affect academic achievement and social-emotional outcomes in children and adolescents? A systematic literature review was conducted using databases including PubMed, ER-IC, PsycINFO, and Google Scholar. The search strategy included the following keywords: dyslexia, school-aged children, academic performance, social-emotional well-being, anxiety and mental health. Inclusion criteria required articles to be peer- reviewed, published within the last 10 years, and written in English. The researchers' preliminary findings suggest that children with dyslexia often experience heightened school-related anxiety and lower academic performance in reading and math. These challenges frequently coincide with reduced confidence and social-emotional well-being. Research suggests that providing academic and emotional support to children with dyslexia can help mitigate the effects while fostering a more supportive educational environment.

Keywords: Dyslexia, school aged children, grade level, child development, academic performance, social, emotional, adolescence, academic, educational, scholastic, academic achievement, academic performance, wellbeing, anxiety, mental health

#### Marissa Berkowitz, Jordan Pursell, & Meghan Sooy Advisor: Dr. Stacy Cassel | PowerPoint Presentation

**Title:** Exploring the Implementation of Neurodiversity Affirming Therapeutic Practices In Educational Settings

**Research Question:** What are the challenges and outcomes associated with the implementation of inclusive speech therapy practices for neurodiverse students within K-12 educational settings?

**Purpose:** Implementing inclusive speech therapy practices for neurodiverse students in K-12 settings entails a variety of challenges and outcomes. Our purpose is to explore how inclusive speech therapy approaches can be integrated into school systems and assess their effectiveness in promoting communication skills and social integration for neurodiverse learners. Objective: This project will identify key barriers faced by educators and speech therapists in delivering tailored interventions, while also examining the benefits these practices offer to students' academic and social development. Method: Criteria of research used were peer reviewed articles based on the topic of neurodiversity affirming care in school settings. Researchers focused on the most recent articles available, within a 10 year span, for the most relevant information. Databases searched include: EBSCOhost, CI-NAHL Complete, Taylor & Francis Online, Linguistics and Language Behavior Abstracts, PubMed, etc. **Expected/Current Findings:** The findings of this project are expected to determine how inclusive speech therapy can foster improved communication abilities and peer relationships for neurodiverse students, though challenges such as insufficient professional development for educators and lack of resources may hinder its full implementation. Expected outcomes of the study include recommendations for improving training programs for educators, enhancing collaborative practices between therapists and school staff, and strategies to overcome resource limitations in the implementation of inclusive therapy. This research aims to contribute to the development of best practices for inclusive education and inform policy changes to support neurodiverse students in school settings.

Keywords: neurodiverse, school, treatment, communication, social, speech, language

# Natalie Bernard, Jessica Caiazzo, Madison Donnelly, & Eric O'Brien Advisor: Dr. Michelle Swartz | PowerPoint Presentation

**Title:** Influence of Cultural Beliefs on Initiation of Speech Therapy Services Among School-Aged Children

**Background:** In school-based speech-language pathology, assessment and treatment are initiated based on concerns raised by teachers, families, and other members of the child's care team. However, these processes can be influenced by cultural perspectives on disabilities, which may affect the initiation and continuity of speech therapy services. Many individuals may not fully recognize the impact of these beliefs on their willingness to engage and continue with therapy. We as professionals must be mindful of these differences during the assessment and intervention processes.

**Purpose:** This study aims to explore how differing cultural beliefs concerning disabilities influence the initiation and continuity of speech therapy services for school-aged children.

**Method:** A literature review was conducted using several academic databases, including EBSCOhost, ASHAWIRE, Google Scholar, and LLBA. Key search terms included "cultural beliefs," "disabilities," "perspectives," "speech therapy services," "parental perspectives," "school-aged children." The review focused on the most recent articles published within the past 30 years to ensure the inclusion of relevant and up-to-date information.

**Results and Conclusion:** Preliminary analysis of the literature indicates that cultural beliefs significantly impact families' decisions to initiate and sustain speech therapy. In many cultures, speech and language disorders are perceived as divine or supernatural phenomena, which can lead to a reluctance to seek intervention. While some families may dismiss therapy due to beliefs that their child's condition is incurable, others may rely on prayer or spiritual healing. In contrast, Western cultural perspectives tend to embrace a medical model of disability, leading to greater acceptance and continuity of speech therapy services.

Keywords: cultural beliefs, beliefs, speech-language therapy services, school-aged children

#### Jenna Braun & Alexa Romano

Advisor: Dr. Monika Pawlowska | PowerPoint Presentation

**Title:** Speech-Language Pathologists' Role in Promoting Accessibility and Cultural Relevance of Alternative Augmentative Communication Devices

Augmentative and alternative communication (AAC) is a functional mode of communication used by many individuals who are not able to communicate effectively via spoken language and benefit from additional communication modalities. However barriers exist making AAC difficult to access for some populations. These barriers may include physical limitations that impede individuals' access, health care accessibility, insurance and self pay affordability, environmental factors, and cultural barriers. Speech-language pathologists play an integral role in ensuring the accessibility and customizations of AAC devices for each individual. The objective of our presentation is to investigate: How can speech-language pathologists (SLP) ensure AAC devices are accessible and culturally relevant?

To find research articles, we searched Stockton's Richard E. Bjork Library's EBSCO databases using these key search terms: "AAC+culture + accessibility + funding+SLP." In our presentation, we will introduce examples of AAC devices and discuss several factors limiting their accessibility. We will also suggest ways SLPs may work to improve access and provide assessment and intervention tailored to the needs of culturally diverse users. The more knowledge and understanding we have as clinicians, the better equipped we are to maintain and expand the communication skills and overall quality of life for all AAC users.

Keywords: Augmentative and Alternative Communication, SLP, access, cultural considerations

# Brianna Chavez, Kim Chavez, Veronica Guillen-Herrera, & Martha Rivera Advisor: Dr. Phillip Hernández | PowerPoint Presentation

**Title:** Understanding the Causes of Misdiagnosis in Hispanic Populations within Speech Language Pathology

**Research Question:** What factors contribute to the higher rates of misdiagnosis in Hispanic populations, and how do cultural, linguistic, and systemic barriers impact diagnostic accuracy?

Hispanic populations in the United States experience high rates of misdiagnosis in language and communication disorders, often due to cultural, linguistic, and systemic barriers in diagnostic practices. This research investigates the factors contributing to these misdiagnoses and examines how biases in assessment tools, provider perspectives, and systemic barriers influence diagnostic accuracy. By reviewing existing research and analyzing case studies, we aim to identify gaps in current evaluation methods and recommend strategies for more accurate, culturally appropriate assessments. The findings from this research will also help inform us about how to advocate for changes to improve equity in speech-language pathology services. The goal is to improve speech-language services and to promote more accurate diagnoses for Hispanic populations.

The objective of this study is to answer the research question: What factors contribute to the higher rates of misdiagnosis in Hispanic populations, and how do cultural, linguistic, and systemic barriers impact diagnostic accuracy?

To address this question, a review of literature was made by using keywords such as "language assessment", "bilingualism", "language disorders", and "cultural competence." Databases including PubMed, ASHA, EBSCO-host Education, and the Stockton library database were searched for relevant articles. Criteria for article selection included information regarding the research question, publication dates, and evidence based practice research supporting the appropriate assessment approaches.

Expected findings include insights into how assessment biases, language differences, and systemic challenges contribute to misdiagnosis. This research aims to provide recommendations for speech-language pathologists, educators, and healthcare professionals to enhance diagnostic accuracy and promote equitable assessment practices for Hispanic individuals.

*Keywords:* misdiagnosis, bilingualism, language disorders, speech-language pathology, cultural responsiveness, health disparities, Hispanic population

## Celeste DeRose, Emily Thompson, Grace Curry, & Kelsey Tirpack

Advisor: Dr. Stacy Cassel | PowerPoint Presentation

Title: How Does Compassion Fatigue Affect Therapy in the Acute Care Setting?

This research explores how compassion fatigue impacts therapy in acute care settings, with a focus on factors such as long shifts, high patient turnover, emotional demands, hospital culture, and the broader organizational environment. Compassion fatigue, a condition characterized by emotional exhaustion and diminished empathy, is increasingly prevalent among healthcare providers, particularly therapists working in high-stress environments like trauma centers and general hospitals. This research investigates the ways in which factors such as microaggressions, internal biases, and the broader hospital culture contribute to the onset and progression of compassion fatigue. Specifically, it examines the role of emotional labor and the psychological strain from high patient turnover and long shifts in fostering compassion fatigue among therapists. Additionally, this research addresses how the organizational culture in different acute care settings may exacerbate or mitigate the prevalence of compassion fatigue. Building on existing literature, including research on microaggressions, physician burnout, and bias within healthcare settings, this study also explores potential solutions and interventions designed to alleviate compassion fatigue. These solutions include fostering more supportive work environments, promoting psychological safety, and providing targeted training for healthcare workers. Ultimately, this research aims to provide a deeper understanding of the multi-faceted nature of compassion fatigue and to suggest strategies for mitigating its impact on therapy and patient care in acute care settings.

## Allison Dilks, Georgi Gentile, Sean Pedersen, & Natalie Radano

Advisor: Dr. Monika Pawlowska | PowerPoint Presentation

**Title:** How Does Socioeconomic Status Impact Accessibility to Hearing Assistive Devices and Technology?

Purpose: Despite hearing loss becoming more commonly diagnosed, there is a persistent low percentage of people who adopt hearing aids or other hearing assistive technology (Weycker et al., 2021). Individualized assistive hearing devices obtained through an audiologist can be costly, amounting to \$2,500 on average. The associated costs make hearing assistive devices unaffordable to over 75% of the American population (Jilla et al., 2023). However, there are lower quality devices that may be purchased over the counter as a more affordable option. Additionally, children from low socioeconomic (SES) backgrounds demonstrated less frequent cochlear implant usage, which impacted their speech and language development (Awad et al., 2023). Objective: This project will examine how socioeconomic status impacts accessibility to hearing assistive devices and technology. **Method:** The researchers searched for peer reviewed articles based on the topic of hearing aid or other hearing assistive technology acquisition disparities due to socioeconomic status within the adult and pediatric populations. The search focused on the most recent articles available, within a 10 year span, for the most relevant information. The following databases were used: EBSCOhost, PubMed, and CINAHL Complete. Expected/current findings: Without access to proper technologies and care, people may experience worsened health outcomes, social isolation, and a decline in quality of life. Furthermore, education and health literacy barriers may prevent people of low SES from effectively utilizing hearing aids and assistive technology after obtaining them (Awad et al., 2023). These factors may contribute to healthcare inequity. The research aims to highlight these challenges and suggest strategies to improve access to hearing devices, ensuring that low socioeconomic status doesn't prevent people from getting the care they need.

Keywords: Hearing Aids, Assistive Technology, Socioeconomic Disparities, Hearing Loss, Speech

#### Ashley Fillmore, Alyssa Reavy, Lexie Snajkowski, & Nikita Torres

Advisor: Dr. Michelle Swartz | PowerPoint Presentation

**Title:** Barriers to AAC for those with Acquired Communication Disorders

Acquired communication disorders, such as aphasia, significantly impact an individual's ability to communicate effectively, often leading to isolation, reduced quality of life, and psychological distress. Augmentative and Alternative Communication (AAC) devices act as a vital tool in mitigating these challenges and providing individuals with a means to express themselves that is not dependent on speech. In order for individuals to access AAC devices in hopes of improving their quality of life, several aspects are taken into consideration. The aim of this presentation is to highlight the various considerations involved in obtaining and successfully integrating AAC devices into the daily lives of individuals with acquired communication disorders. A comprehensive literature review was conducted using Stockton University's FlashFind research engine, which directed the team to reputable databases such as EBSCOHost, PubMed, and Taylor & Francis. Keywords used in the search included "AAC," "communication," "language," "adults," "acquired," and "barriers." Peer-reviewed articles were reviewed to ensure the validity and reliability of the gathered information. Research suggests that AAC usage benefits rehabilitation because it allows for functional communication and improves quality of life. However, numerous barriers (e.g., cost, training, under-researched areas, languages, cultural differences, etc.) lead to psychological, social, and accessibility challenges.

Keywords: AAC, acquired, communication, language, adults, barriers

#### Jeffrey Gatton, Sabrina Kratochwill, Chrissy LaPlaca, & Liz Olesky

Advisor: Dr. Phillip Hernández | PowerPoint Presentation

Title: Cultural Norms, Professionalism, and Those Who Don't Fit

Organizations and medical institutions consistently regard professionalism as one of their core principles, utilizing this as a way to attempt to develop a status quo for client and clinician safety and security. Institutions also deem taking care of and supporting their minority professionals as of the utmost importance. This cannot be accomplished, though, without understanding how professionalism is itself a reflection of a culturally biased system.

The objective of this study is to answer the research questions: (1) What are cultural norms? (2) How do cultural norms influence professional standards? and (3) What are the implications for professional norms on marginalized groups in healthcare professions (specifically SLPs and graduate students)? This literature review will help explain how professionalism is typically defined (through the perspective of the cisgender, straight, White male), how all other identities seem to be forced to conform to this ideal, and what this means for clinical professionals and the healthcare system moving forward.

To address this question, a literature search was conducted using the keywords "racism in healthcare", "professionalism", "professionalism as a pillar of white supremacy", "microaggressions", "heteronormativity", and "racism in professionalism". Databases used to select relevant articles included PubMed, EBSCOhost Education, and the Stockton University's library database. Criteria for article selection included information regarding the research question, publication dates, and empirical and peer-reviewed research evaluating the perspectives and experiences of minority professionals facing discrimination through the lens of professionalism.

Expected findings include insights into marginalized experiences of healthcare providers and clients. This information will be helpful for speech-language pathologists, educators, and other professionals who want to consider microaggressions and the impact that it can have on colleagues. Clinical supervisors will also learn methods to improve communication with culturally-linguistically diverse graduate students without enforcing

Keywords: professionalism, racism, discrimination, professionalism in healthcare, white supremacy, LGBTQIA+

#### Sarah Kunkle & Alexis Santoferraro

Advisor: Dr. Stacy Cassel | Table Top Presentation

Title: Echolalia and Autism: Bridging the Gap in Speech-Language Pathology Interventions

Echolalia, the repetition of words or phrases spoken by others, is commonly observed in students with Autism Spectrum Disorder (ASD). Echolalia can serve different communicative functions for individuals with ASD. For example, it may act as a way to process or make sense of language they encounter, or as a strategy to express

needs or desires. The interpretation and response to echolalia can vary widely among educators and speechlanguage pathologists (SLPs), influencing the approaches they use to support communication in the classroom. This research aims to explore how teacher and SLP perceptions of echolalia impact their strategies for fostering communication and interaction with students with ASD. The research question that will be addressed throughout this project is, "How do teacher and SLP perceptions of echolalia in students with ASD influence their approach to communication support in the classroom?" The articles utilized were obtained from the Stockton University's Library Flashfind via keywords; echolalia, ASD, school setting, and perceptions. A narrowed search was conducted by selecting only scholarly, peer-reviewed articles from Health specified databases. Each of the final selected articles related to ASD and echolalia and supports the research question. After thorough analysis and review, the following points were identified. Echolilia is considered a misunderstood aspect of children with ASD that needs to be reduced in order to communicate effectively. Although, there is a growing recognition for echolalia in ASD that contradicts that theory. The following articles present the perspectives of speech language pathologists, parents, and teachers that support echolilia characteristics as a functional form of communication for children with ASD. The increased acknowledgement of echolalia as a functional communication tool in children with ASD highlights its potential to support language development and expression. By shifting the focus from reduction to understanding its role, these findings contribute to a more inclusive approach in addressing communication challenges for children with ASD.

Keywords: echolalia, Autism Spectrum Disorder, classroom communication strategies

# Christine Karen, Mariela Maldonado, Kirina Surabian, & Genevieve Vicere Advisor: Dr. Monika Pawlowska | Poster Presentation

Title: Behavioral and Social Impacts of Stuttering on School-Age Children

Understanding how stuttering affects the behavior and social interactions of school-age children in educational settings is essential for developing effective support systems and fostering inclusive learning environments. Stuttering, a fluency disorder characterized by disruptions in the flow of speech, often leads to anxiety, frustration, and avoidance behaviors in children, particularly in academic and social contexts. These challenges may affect classroom participation, peer relationships, and overall emotional well-being. Examining these challenges is critical for developing tailored interventions that reduce negative social experiences, prevent bullying, and provide children who stutter with the necessary support to thrive both academically and socially. The objective is to answer the research question: How does stuttering in school-age children impact their behavior and social interactions in an educational setting? To address this question, a literature search was conducted using keywords such as "stuttering", "school-age", "education", "social interaction", "bilingual". Databases including PubMed, ScienceDirect, CINAHL, and the Stockton library database were searched for relevant articles. Criteria for article selection included information regarding the research question, with a focus on the most recent articles available, within a 10-year span. The presentation will focus on the behavioral and social impact of stuttering, and ways educators, speech-language pathologists, and parents can better identify strategies to build confidence, enhance communication skills, and promote positive peer interactions.

Keywords: "stuttering", "school-age", "education", "social interaction", "bilingual".

#### **Chrissy LaPlaca & Jeff Gatton**

Advisor: Dr. Monika Pawlowska | Poster Presentation

Title: Speech Language Pathologists' Perceptions of Counseling Bilingual Clients

The American Speech-Language-Hearing Association (ASHA), defines counseling as the having (a) an educational component that refers to the informational content surrounding the disorder and (b) a personal adjustment component in which clinicians and clients participate in "interactions related to the thoughts, feelings and behaviors that result from living with a communication disorder" (ASHA, n.d.b). Speech language pathologists (SLPs) often work with bilingual clients whose native language they may not know. This may affect the clinician-client rapport and the client's counseling experience.

We investigated the perceptions and experiences of SLPs providing informational counseling (IC) and personal adjustment counseling (PAC) to clients whose first language they do or do not speak. We developed a 30-question survey that was distributed to NJSHA members via email in June 2024. Most respondents were monolingual (80%), had eleven or more years of work experience (71%) and worked in various clinical settings. Nearly half had bilingual clients whose native language they spoke, while 90% had clients whose native language they did not speak.

We found that SLPs generally provided more IC than PAC regardless of languages spoken. SLPs felt more confident counseling clients whose native language they understood. They needed more resources when counseling clients whose native language they did not speak and occasionally found these resources ineffective. SLPs shared both positive and challenging experiences and perspectives counseling bilingual clients. Future research should explore bilingual clients' perspectives on counseling.

Keywords: Counseling; personal adjustment counseling; informational counseling; bilingual; bilingual service; bilingual clients; DEI; survey; SLP perceptions and experiences; client perceptions and experiences; monolingual SLP; bilingual SLP

#### Kathryn McDonald, Juliana Giardina, Paige Hyde, & Alexis Weaver

Advisor: Dr. Monika Pawlowska | Poster Presentation

**Title:** Developmental Language Disorder (DLD) in School-Age Children and Adolescents and Its Relation to the Youth Justice System

Developmental Language Disorder (DLD) is a neurodevelopmental condition affecting a person's ability to understand and/or use language. Children with DLD acquire language in the same sequence as typically developing peers, but at a different rate. School-age children and adolescents with DLD have difficulties understanding and using both spoken and written language, which may lead to academic and social challenges. Many individuals are not aware of the impact that DLD can have on future success or that these challenges increase the risk of involvement with the youth justice system.

This study explore the relationship between DLD and involvement in the youth justice system by reviewing existing literature on the topic. The objective was to answer the research question: What aspects of DLD in school age children and adolescents are associated with involvement in the youth justice system? A systematic literature review was conducted using multiple academic databases including Academic Search Complete, CINAHL Complete, and PubMed. Boolean search strategies used the keywords: "developmental language disorder", "DLD", "specific language impairment", "language impairments", "youth justice system", "detention system", "youth offenders" and "juvenile offenders".

The search was narrowed by utilizing scholarly, peer-reviewed articles published between 2016 and 2025. Selected articles directly addressed the research question, and analysis revealed the following findings. School age children with DLD have been found to be at a higher risk for behaviors involving the police, making the need for professional support and specific early intervention critical for changing their life trajectories. This research presentation aims to explore and spread awareness about DLD and the factors, signs, or symptoms that are associated with it, in hopes to reduce the incarceration rate of youth with DLD.

Keywords: developmental language disorder, DLD, specific language impairment, language impairments, youth justice system, detention system, youth offenders, juvenile offenders

## Hannah Skrzenski, Hailey Mckeown, Kaitlyn Schuler, & Sophie Schleentz

Advisor: Dr. Monika Pawlowska| Poster Presentation

**Title:** What factors may contribute to potential misdiagnosis or under diagnosis of ASD in girls/women?

This literature review examines the factors that can contribute to the misdiagnosis and under diagnosis of Autism Spectrum Disorder (ASD) in school-age girls. ASD is a developmental condition that affects communication, sensory processing, emotional regulation, and cognitive abilities. Currently, boys continue to be diagnosed with ASD at a significantly higher rate than girls ("Data and Statistics on Autism Spectrum Disorder," 2024). Previous ASD research has primarily focused on male signs and symptoms, instead of females. As a result, many girls do not receive timely diagnosis and have lack of access to support and services. A better understanding of how ASD manifests in girls is crucial to improving diagnostic accuracy. This review aims to answer the question: What factors may contribute to potential misdiagnosis or under diagnosis of ASD in girls? Factors such as gender-biased symptom presentation, societal expectations, communication differences, and variations in behavioral functioning are examined. The databases used to find articles for this review were PsycInfo and ERIC. The keywords used were "Autism spectrum disorder OR ASD, females, communication". Articles that were considered were published after 2015 and were written in English. If clinicians have a better understanding of

how ASD manifests in girls, early diagnosis and intervention will increase. This is important because early diagnosis and intervention of ASD significantly improves a child's educational and social outcomes. Increased access to both educational and social support services can help improve the quality of life for girls with ASD, helping them navigate academic and social environments more effectively.

Keywords: Autism spectrum disorder, girls, females, diagnosis

# Riley Vaughn, B.S.; Sarah Brown, B.A.; Hailey Carano, B.S.; & Alexandra Searing, B.A. Advisor: Dr. Monika Pawlowska | Poster Presentation

Title: Central Auditory Processing Disorder (CAPD): Assessment and Intervention

Central Auditory Processing Disorder (CAPD) is a neurological condition that affects an individual's ability to attend to and process auditory information. School-aged children with CAPD often struggle academically due to difficulties interpreting spoken language, which can impact attention, comprehension, and overall learning. Despite its significant effects, CAPD remains widely misunderstood and frequently misdiagnosed. While there is no cure, speech-language pathologists, teachers, and other professionals can implement various intervention strategies to support students with CAPD. This project explores the research question: "What assessment and intervention techniques are the most effective for CAPD at the grade school level?" To locate scholarly sources, the databases ERIC, JSTOR, LLBA, and Stockton Library FlashFind were searched using keywords such as academic performance, auditory processing disorder, school-age children, and intervention. The search was limited to peer-reviewed articles written in English. The final selection of articles addressed different aspects of the research question, including a bilingual perspective. Upon analysis, several key findings emerged. First, recent research suggests that CAPD symptoms may be related to cognitive factors like attention rather than purely auditory deficits, leading to debates over whether CAPD should be classified as a cognitive disorder. Critical criteria for diagnosis remain inconsistent, complicating intervention efforts. Additionally, most CAPD interventions focus on bottom-up approaches, such as auditory training, while fewer studies explore top-down strategies. While CAPD clearly affects academic performance, further research is needed to refine assessment tools and determine the most effective intervention techniques for enhancing student success.

Keywords: CAPD, academic performance, school-age children, intervention

# Sarah Wickham, B.S.; Madeline Bankes, B.S.; Juliana Gonzalez, B.S.; & Julia Lutz, B.S. Advisor: Dr. Monika Pawlowska | Poster Presentation

Title: The Effect of Traumatic Brain Injury on Language Development and Academic Performance

**Background:** Traumatic brain injury (TBI) has become increasingly prominent among pediatric populations. According to the Centers for Disease Control and Prevention (CDC) (2023), "In the U.S., over 800,000 children under the age of 17 are treated in emergency departments each year for TBI-related issues." Children recovering from these events may experience deficits both short- and long-term. While TBI has been greatly studied in relation to sports injuries and neuropsychological outcomes, its specific effect on language development and academic functioning in diverse school-aged populations needs further examination.

**Objective:** How does TBI affect school-aged children's language development and academic performance?

**Method:** A literature search using academic databases such as PubMed and CINAHL was conducted. Peerreviewed studies were selected that focused on school-aged populations and measured language, cognitive, or academic outcomes.

**Expected Findings:** Some studies report that TBI is associated with serious language-based and cognitive-pragmatic impairments, while others show limited impact on overall GPA. The presence of language barriers (pragmatic differences, interpretation of language, etc.), injury severity, and lack of academic accommodations influence both language development and academic performance. These findings show the need for culturally sensitive assessments and intervention strategies. The inclusion of pragmatic and executive function assessments may better identify students at risk for academic difficulties.

Keywords: pediatric TBI, post-concussion syndrome, language development, academic performance, school-based outcomes, cognitive-linguistic assessment

# Alexa Atzert, Madeline Bankes, Kathryn McDonald, Alexis Weaver, Sarah Wickham, Hailey Carano, Wendy Aguilar, Kali Budd, Angela Ladson, Hailey Mckeown, Sophie Schleentz, Kaitlyn Schuler, Hannah Skrzenski, & Kirina Surabian

Advisor: Dr. Monika Pawlowska | Poster Presentation

Title: Speech Language Pathologists' Perceptions of Telepractice Outcomes

The American Speech-Language-Hearing Association (ASHA), defines telepractice as "the delivery of services using telecommunication and Internet technology to remotely connect clinicians to clients, other health care providers, and/or educational professionals for screening, assessment, intervention, consultation, and/or education" (ASHA, n.d.). Since the COVID-19 pandemic, telepractice has become more widely used by speech-language pathologists (SLPs). It has proven to enhance flexibility and accessibility of services for both clinicians and clients. However, technology-related challenges and difficulty with online behavior management have resulted in mixed outcomes. Research on telepractice for speech-language services has focused on specific treatments, but gaps remain in research on its overall effectiveness.

Our study addressed the following question, "Do New Jersey based SLPs believe that clients have positive or negative therapy outcomes when using telepractice across the major areas of practice?". We distributed a 10-question survey to New Jersey SLPs through NJSHA between 12/5/2024 and 2/19/2025, resulting in 36 valid responses. The majority of respondents reported being a practicing SLP for 5 or more years and providing telepractice services for less than 5 years in school or private practice settings.

The three most common areas respondents provided telepractice services in were speech sound production, receptive/expressive language, and social communication. The most treated age groups using telepractice were preschool to school-age children. The majority of respondents believe client therapy outcomes using telepractice to be the same or more negative than in-person therapy.

Paige Hyde, B.S.; Juliana Giardina, B.S.; Sarah Brown, B.A.; Sarah Morgan, B.S.; Alexandra Searing, B.A.; Riley Vaughn, B.S.; Christine Karen, B.A.; Lindsay Kratchwell, B.S.; Julia Lutz, B.S.; Mariela Maldonado-Rodriguez, B.S.; Genevieve Vicere, B.A.; Camryn Alexy, B.S.; Mia Erard-Coupé, B.S.; & Juliana Gonzalez, B.S.

Advisor: Dr. Monika Pawlowska | Poster Presentation

Title: New Jersey Speech-Language Pathologists' Job Satisfaction

This study investigates the impact of collaboration and professional autonomy on job satisfaction among Speech-Language Pathologists (SLPs) in New Jersey. Research indicates that when SLPs are empowered to make independent decisions and engage in effective collaboration, they experience heightened job satisfaction. Subsequently, this leads to improved patient outcomes, stronger professional relationships, and reduced burnout rates (Reed & Damp; Farquharson, 2024). Furthermore, higher job satisfaction can facilitate workforce retention and enhance overall professional experiences.

The study addressed the following research question: "What role do collaboration and professional autonomy play in shaping job satisfaction perceptions among New Jersey-based SLPs across various settings?" To explore this question, a 20-question survey was developed by student researchers, and distributed through the New Jersey Speech-Language-Hearing Association (NJSHA) from December 5, 2024, to February 19, 2025, resulting in 57 valid responses. Approximately half of the participants worked in K-12 schools, and most had over 20 years of experience, with many remaining in their primary setting for more than a decade.

The findings reveal that overall job satisfaction—alongside a sense of personal accomplishment—varies among respondents. While workplace autonomy and the personal value placed on collaboration are reported to be high, actual collaboration in the workplace appears to be less prevalent. Additional insights into the perspectives of colleagues and supervisors regarding professional collaboration and autonomy will be explored further in the poster presentation.

# Master of Science in Data Science and Strategic Analytics

#### Victoria Cusimano

Advisor: Melissa Laurino & Dr. W. Clifton Baldwin | Poster Presentation

**Title:** Occurrence, Distribution, and Potential Biological Control of the Spotted Lanternfly (*Lycorma delicatula*) in the Northeastern United States from Citizen Science Data

Spotted lanternflies (*Lycorma delicatula*) are an invasive insect in the Northeastern United States, native to China, Japan, and Vietnam. Spotted lanternflies are considered a planthopper in the Fulgoridae family. First documented in Berks County, Pennsylvania in 2014, the Spotted lanternfly is suspected to have entered the United States. through a shipment of landscape stone in the egg stage. The Spotted lanternfly may feed on 70 different host plants which is what causes the species to be invasive. An invasive species is defined as a species that is non-native to the ecosystem under consideration, and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. The distribution of the Spotted lanternfly remains poorly understood, but identifying the range and potential predators could aid in controlling its spread. This study will analyze the occurrence and distribution of the Spotted lanternfly as reported in iNaturalist, a citizen science platform that uses a crowdsourced species identification system and an organism occurrence recording tool. Additionally, the study will examine the distribution patterns of praying mantis (Mantidae family) and orb weaver spiders (Araneidae family), using iNaturalist as well, to investigate potential predators of the Spotted lanternfly. By examining geographic distribution patterns and seasonal activity periods where these species coexist, this research seeks to evaluate whether praying mantis and orb weaver spiders function as potential natural biological control agents against Spotted lanternfly populations. Data will be analyzed using various computational methods such as pattern recognition, abstraction, and visualization. Exploring this data will help understand the overall occurrence and distribution of the Spotted lanternfly and its potential predators for preventing the spread of the species and to help prevent further damage to ecosystems in the Northeastern United States.

Keywords: Invasive Species, Spotted Lanternfly, Data Analysis, Manidae, Araneidae, Biological Control

#### **Jordan Davis**

**Advisor:** Melissa Laurino, Dr. Joseph Trout, & Dr. W. Clifton Baldwin | **Poster Presentation Title:** Compiling a Century of United States Climate Data into a Structured Database for Analysis

As climate change continues to shape local and global conversations, the need for transparency in climate data is critical. The objective of this project is to create a climate database that spans the last 100 years in the United States (1925-2025). It has the minimum and maximum atmospheric (air) temperatures and cumulative precipitation averaged by hourly intervals. It is sourced from the National Centers for Environmental Information within the National Oceanic and Atmospheric Administration (NOAA). The data was collected using an API from NOAA. It is gathered from 50 different NOAA-affiliated Automated Surface Observing Systems (ASOS) and Automated Weather Observing Systems (AWOS), primarily located at airports from every state in the United States. This project is designed using Python, Spyder, and SQL. The annual data was originally recorded in hourly intervals, then reformatted into monthly averages across 50 separate files, each containing average minimum and maximum temperatures and precipitation. The data will be cleaned to handle missing values and aggregated into a SQL database that is a cumulative representation of the climate of the United States in every state over the past 100 years. It will function to have the potential to create polar and temperature distribution plots to explore questions regarding climate change. A future direction of this project will be to include this type of data from other countries, however, with ongoing censorship internally and externally, access to real open data sources is becoming more and more limited.

Keywords: Climate Change, Polar Plots, Temperature Distribution Plots, Data Analysis, API's, Spyder, SQL, and Python

#### **Daniel Iovino**

Advisor: Melissa Laurino & Dr. W. Clifton Baldwin | Poster Presentation

**Title:** Occurrence and Distribution of the North Atlantic Humpback Whale (*Megaptera novaeangliae*) off Cape May, New Jersey

Humpback whales, Megaptera novaeangliae, follow an extensive staggered migration on both their Northern and Southern migrations along the Northeastern seaboard. Typically, the animals will travel North to colder, more productive feeding grounds in the summer months, and South towards warmer, tropical breeding grounds for the winter months. Along this migration, the Mid-Atlantic region, specifically Cape May, New Jersey, serves as an important feeding ground for this population throughout the year, but the exact reason for the shifting migration patterns of Humpback whales is not well understood. A combination of behavioral and environmental data collected by the Cape May Whale Watch and Research Center from 2011 to 2024 was analyzed, across 599 observations of Humpback whales. Humpback whales were observed from February to December, in all study months, within a water temperature range of 4.2-28.0 °C, and depth range of 2.83-104.8m. Geo-spatial location and datetime data will be explored to examine the distribution of the species in the study area. Individual whales documented in 2024 will be identified with photo-identification and natural markings on the dorsal fin and tail fluke to examine the time of residency, the number of new animals documented per year and the number of resights. Investigating the presence of animals in this region is crucial for monitoring and understanding shifts in migration patterns over time. Analyzing their distribution off the coast of Cape May can also provide valuable insight into emerging challenges, including those related to climate change and regional anthropogenic threats during the ongoing Unusual Mortality Event (UMEs).

Keywords: Data Exploration, Humpback Whales, Migration Patterns, Photo-Identification, Marine Conservation

#### Tat Thinh Le

Advisor: Melissa Laurino & Dr. W. Clifton Baldwin | Poster Presentation

**Title:** Predicting the Presence of Marine Megafauna Using Machine Learning and Environmental Data

There are many environmental factors that can affect the distribution and presence of marine species. For example, the distribution and abundance of marine mammal prey are influenced by environmental and temporal factors such as water parameters, which in turn affect the movement and migration patterns of marine mammals. A machine learning algorithm called random forest, which can provide accurate and reliable predictions, helps researchers identify the key factors important for observing marine species. The data used for analysis were collected from the Cape May Whale Watch and Research Center in Cape May, New Jersey, covering marine megafauna observations from 2012 to 2024. Observational data containing both categorical and numerical features were cleaned and analyzed using Python. The data were also encoded to be suitable for building the machine learning model. The outcome of this research identified the most important factors for predicting marine species, presented through a ranked list of factor importance. Model performance was visualized using graphs of accuracy and loss. Future research will involve expanding the dataset by exploring additional factors and testing alternative machine learning methods to further improve prediction accuracy.

#### Niyati Parekh

Advisor: Melissa Laurino & Dr. W. Clifton Baldwin | Poster Presentation

Title: From Data to Decisions: Exploring Customer Behavior in a Mexican-Fusion Restaurant

This study will leverage operational data from a restaurant, Bubbakoo's Burritos, to analyze customer behavior and sales trends, providing insights that can inform business decisions and targeted marketing strategies. Bubbakoo's Burritos is a Mexican-fusion fast casual restaurant with a location in Egg Harbor Township, New Jersey. With access to this data through a managerial role, this research presents a unique opportunity to investigate trends in customer preferences and purchasing behavior. Data was collected from the Revel platform, then cleaned, analyzed, and visualized using R and RStudio. Key areas of interest included identifying the most popular menu items across different categories, such as entrees, desserts, beverages, catering, and sides, examining busiest times during weekdays versus weekends, assessing variations in peak rush hours across different seasons, and determining the most frequently used ordering platform. Insights from the data are anticipated to uncover trends in customer behavior across key menu categories and peak service hours. Additionally, discovering peak operational hours and preferred order platform could influence business decisions.

Future research will include analyzing a full calendar year of data since only nine months were available at the time of this study. Overall, this research will offer valuable insights into customer behavior and sales trends, which can help inform business decisions and future marketing strategies.

*Keywords:* Consumer Behavior, Business Analytics, Business Performance, Data Visualization, R Programming, Sales Trends

# **Master of Science in Nursing**

#### Morenike Abdur-Rasheed

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

**Title:** Waiting a Little Longer: The Efficacy of Extended Cognitive Behavioral Therapy in the Treatment of Anxiety Disorders in Adolescents

Adolescent anxiety is a common disorder that affects the population in several ways. Diagnosing protocols have been developed over time to provide time-efficient and therapeutic care to reduce anxiety symptoms of those affected. Standard initial intervention of cognitive behavioral therapy (CBT) has been pinned as the gold standard as anxiety symptom treatment for adolescents. Furthermore, pharmacotherapy such as SSRI prescription has been recommended as evidence-based practice to implement when CBT sessions are ineffective for patients. In current practice, the sole treatment of adolescent anxiety disorders with CBT has lessened while SSRI prescription treatment has increased. Additionally, the recommended therapeutic intervention time of CBT is utilized but is not challenged further to assess the impact of extended nonpharmacological implementation. Using the framework of Orlando's Deliberative Nursing Process Theory, this research proposal aims to collect supportive evidence to promote a change in adolescent anxiety treatment protocol and incorporate patient perspective in their treatment plans. Several studies such as randomized-controlled trials (RCTs), systematic reviews and more have revealed the impact of standard CBT treatment sessions but consistently include the adjunct of SSRI prescription to decreased anxiety symptoms. In relation to implications of further nursing practice, the proposed change in lengthening the therapeutic intervention of CBT for anxiety disorder treatment in adolescents may give a holistic approach in the treatment protocol for providers to utilize. This research proposal may potentially promote alternatives to pharmacological treatment and dependence, which could ultimately support optimism, resilience and diversity in future patient care.

Keywords: Adolescent anxiety disorders, Cognitive behavioral therapy (CBT), Selective Serotonin Reuptake Inhibitors (SSRI), Evidence-based practice (EBP)

#### Lanie Baldino

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

Title: The Sound of Relief: Investigating Music Therapy's Impact on Anxiety in Dementia

Fifty-five million individuals worldwide have been diagnosed with dementia; a disease that leads to cognitive decline, emotional distress, and caregiver burden. The prevalence of anxiety and other neuropsychiatric symptoms continues to rise. Pharmacologic interventions pose challenges of adverse effects. Music therapy (MT) may provide promising relief from anxiety within this population. Seven high quality studies were reviewed with a range of engagement styles. The literature reviewed lacked long term effects and clear instructions for music intervention implementation. This research proposal aims to investigate the efficacy of music therapy in reducing anxiety in dementia patients within six months. Using Kolcaba's comfort theory, it is hypothesized that music will provide comfort, reminiscence and reduce anxiety in turn improving overall quality of life in patients diagnosed with dementia. Utilizing a RCT design, 60 participants from three different memory care units will be randomly assigned to groups. Weekly 50-minute small group music sessions will be led by a music therapist. The Rating Anxiety in Dementia and Geriatric Anxiety Scale will be used to collect data at baseline, and again at weeks 6 and 12. Following this treatment a 3-month follow-up will assess the longevity of MT's impact on anxiety. The study aims to contribute valuable evidence for music therapies' impact on anxiety and its possible future in dementia management. This research has the potential to enhance patient outcomes and reduce caregiver burden.

#### **Matthew Buenvenida**

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

Title: Implementing Telehealth to Prevent Rehospitalization and Manage Heart Failure at Home

Heart Failure is a pervasive chronic disease in the United States. The purpose of this EBP proposal is to create guidance for homecare clinicians to help mitigate the challenges faced when caring for patients living with this disease. These patients are exponentially debilitated every time they go to the hospital. They have an even harder time managing their health when they get home and have difficulty leaving their home to see their provider. In homecare, we asked if daily telehealth monitoring compared to the standard care affect rehospitalization rates within 30 days. The Iowa Model Revised was used as a framework for this EBP project. A review of several articles including RCTs and systematic reviews have shown remarkable benefits of telehealth and telemonitoring. Based off the body of evidence, a protocol for home health will be initiated for patients discharged home with a primary or secondary diagnosis of Heart Failure. Eligible and willing patients will receive a telehealth kit with which they will monitor their blood pressure, pulse ox, and scale every day for 4 weeks along with the standard post discharge visiting nurse follow up and therapy. Research has shown that this simple, non-invasive intervention helps provide patients with access to providers for health information, medication understanding, and reminders to monitor their weight and blood pressure to detect early disease exacerbation. Hospitalization rates will be compared to patients with heart failure a year ago who did not receive telehealth. The goal of this EBP help patients manage their health and keep them out of the

Keywords: Heart Failure, CHF, telehealth, telemonitoring, hospitalization, home health, visiting nurse

#### Marie Germar

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

**Title:** Research Proposal: Enhancing Pregnancy-Induced Hypertension Management Through Remote Blood Pressure Monitoring

Pregnancy-induced hypertension (PIH) is one of the major complications affecting the mother and the fetus. Blood pressure control is known to be very important in the prevention of poor prognosis. Remote blood pressure monitoring (RBPM) has been identified as an option to standard face-to-face practice because it is convenient and allows constant tracking. The literature search performed in the present study included one randomized controlled trial (RCT), three systematic reviews of RCTs with meta-analysis, two quasi-experimental studies, and two integrative reviews. The studies revealed that RBPM enhances the accuracy of diagnosing hypertension, decreases the consumption of healthcare resources, and has no adverse effects on maternal and fetal health. Therefore, this research proposal will initiate a RBPM in-clinic care to control blood pressure in women with PIH during pregnancy and six weeks after childbirth. Readmission rates for uncontrolled hypertension over six months post practice change will be compared with baseline data readmission rates prior to commencing this research project. Implementing this practice change may reduce healthcare costs and improve outcomes for pregnant and postpartum women. Using the Orem's Self-Care Theory, the following proposal will outline the plan to actualize RBPM in clinical practice.

#### Fabiola Nelson

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

Title: Cognitive Behavioral Therapy in Children with Autism Spectrum Disorder

Children diagnosed with autism spectrum disorder often struggle with adaptive functioning. Many of those children have severe anxiety and often require psychological therapies to help regulate themselves. Different approaches have been identified to help those that fall in that category such as cognitive behavioral therapy(CBT). Along with psychological therapy, parental involvement play a major role in the success of children that are on the ASD. The purpose of doing this research study is to explore the experience of parents of children diagnosed with ASD receiving CBT. The design will be descriptive phenomenology. Parents of children between the ages of 5 years and 13 years old, diagnosed with ASD, and have been participating in CBT for a minimum of six months will be invited to participate. Flyers and snowball sampling will be used to recruit parents. The targeted sample size is 20 participants or until saturation is reached. Data collected via private interviews with parents will be recorded, transcribed, and content analyzed for themes and patterns. The findings from this study may increase the understanding of parental involvement using CBT for the child's successful adaptation and regulation with ASD.

#### Karly Nickels

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

**Title:** The Impact of Nurse-Led Transitional Care Program on Reducing 30-Day Readmission Rates in Heart Failure Patients: An Evidence-Based Practice Proposal

Heart failure patients face a high risk of being readmitted after 30 days of being discharged from the hospital. This evidence-based practice proposal (EBP) will implement a nurse-led transitional care model to reduce the risk of 30-day rehospitalization for CHF patients. There is a plethora of strong evidence that supports nurse-led transitional care model. Meleis' Transitions Theory will be used as the theoretical framework. This project will use nurse led telephonic follow-up at 48 hours post-discharge and weekly thereafter for 30 days. Outcomes will be measured by comparing baseline readmission rates with post-intervention readmission rates. This project can potentially reduce healthcare costs and improve patient outcomes by reducing 30-day readmission rates. This project is supported by a comprehensive literature review, which includes multiple RCTs supporting the role of nurse-led transitional care model significantly impacting hospital readmission reduction and improving overall patient outcomes.

#### Michael Richie

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

Title: Growth and Development in Children Who Have Been Breastfed for 2 Years

**Introduction:** Breastfeeding benefits mothers and babies. Mothers benefit from having decreased chances of ovarian and breast cancer, depression, and amenorrhea, while infants benefit from having increased brain development, regulated appetite and metabolism, less chance of infection, and more. There is a gap in the literature regarding the benefits of breastfeeding in the infant population until the age of 2 years. The purpose of this study is to investigate the effects on growth and development in children who have been breastfed for two years.

Methods: This study will use a cohort, longitudinal design targeting a sample size of 100 dyads of mothers and toddlers, comparing two groups of children from 12 months to age 2 years. Both groups will progress to solid feedings through infancy into toddlerhood and the intervention group will receive breastmilk for 2 years, while the control group will be fed formula for the first 12 months of life. Fifty participating dyads will be in the intervention group and 50 dyads will be in the control group. Mother-toddler dyads will be recruited from pediatrician offices. Participating groups will receive supplies for breastfeeding, a metric scale, and tape measure to record their toddler's monthly heights, weights, and head circumference in a journal. Follow up will be performed every 3 months over telehealth or in person during well child visits, to ensure participants are healthy. Serum ghrelin levels would be collected every 6 months. The data would be collected from the monthly journal measurements, mean growth, development, and ghrelin levels will be compared between groups at 12 months, 18 months and 2 years. After being recorded in an excel spreadsheet, the information will be analyzed, and growth and development and serum ghrelin levels will be correlated with feeding type.

Keywords: breastfeeding, non-breast fed, breastfed, infant, growth, development, benefits, formula fed

#### Billeny Z Rivera Colón

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

**Title:** The Effect of Culturally Sensitive Nutrition Education on Hemoglobin A1C in Prediabetic Hispanic Spanish-speaking Adults

Type 2 diabetes has a disproportionate impact on Hispanic adults in the United States, and prediabetes frequently remains underdiagnosed. This quasi-experimental research study aims to assess the effectiveness of weekly, culturally sensitive nutrition education on A1C reduction in prediabetic Hispanic Spanish-speaking adults over a three-month period. This education will be provided by a Hispanic Spanish-speaking provider. This quality improvement project utilizes a quasi-experimental design guided by Leininger's Transcultural Nursing Theory. The project will consist of two groups: one group will receive culturally sensitive, face-to-face nutrition education, while the other group will be provided with standard printed materials. The sample will consist of 30 prediabetic Hispanic adults recruited from an occupational health setting at the Viking Yacht Company. A1C levels will be measured using the A1CNow® at the beginning and the end of the project to assess changes. A paired t-test will be utilized for data analysis. Findings may guide effective strategies in culturally competent

diabetes prevention and enhance equitable care. The implications for nursing include the advancement of culturally responsive care models, enhancement of patient outcomes, and addressing healthcare disparities in high risk populations via linguistically and culturally sensitive education.

#### Lidiane Siqueira de Azevedo

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

**Title:** The Effect of Isolation Precautions on the Frequency of Change Mental Status in Dementia Patients

This quantitative research study will evaluate the effect of isolation precautions on neuropsychiatric symptoms in patients with dementia. It addresses the critical clinical issue of balancing the need for infection control with the psychosocial and cognitive well-being of individuals with dementia. While essential for infection prevention, isolation protocols may worsen cognitive and behavioral symptoms in this already vulnerable population.

The study is guided by the Need-Driven Dementia-Compromised Behavior (NDB) model, which posits that behavioral symptom in dementia result from the interaction between background factors (e.g., neurological impairment, cognitive status) and proximal factors (e.g., environmental triggers, unmet needs). This research seeks to explore approaches to infection prevention that reduce the risk of adverse psychosocial outcomes for hospitalized patients with dementia.

**Methods:** A quantitative correlational study will be conducted on a medical-surgical floor in an acute care hospital. Participants will include patients with a confirmed diagnosis of dementia, admitted either to isolation rooms due to infection control precautions or to regular, non-isolated rooms. Approximately 30–40 participants will be recruited through convenience sampling. Changes in mental status will be measured using the Confusion Assessment Method (CAM), a validated tool for detecting delirium and cognitive changes, administered daily during the hospital stay by trained staff.

**Discussion:** This research has important implications for nursing and healthcare practice. Findings will provide empirical evidence on the relationship between isolation practices and cognitive outcomes, informing strategies to mitigate adverse effects.

**Conclusion:** By evaluating the impact of isolation precautions on neuropsychiatric symptoms, this study aims to improve dementia care through protocols that support both infection control and psychological well-being.

#### Cristi Spisak

Advisor: Dr. Mary Padden-Denmead | Digital Poster Presentation

**Title:** The Use of Ultrasound Technology in decreasing the number of IV attempts in Difficult Access Patients

Clinical Question: In hospitalized patients, how does the use of ultrasound-guided peripheral intravenous insertions compared to the traditional method reduce the number of attempts in difficult access patients during admission?

**Background:** The use of ultrasound technology is a valuable tool to help with the aid of difficult access patients. More than 10% of all patients endure more than three attempts at peripheral intravenous insertions. This causes complications such as insertion site pain, phlebitis, extravasation, occlusion, and infection. Many patients that are hospitalized where there have been three or more attempts at obtaining IV access are known as difficult IV access (DIVA). The purpose of this study is to show how ultrasound use can reduce the number of attempts made on obtaining a peripheral IV in difficult access patients.

Methods: PubMed, Cochrane Review, Medline, JAVA, CINAHL were searched for full-text journal articles in the last five (5) years. The following keywords were used in this search: ultrasound guided IV, U/S guided peripheral intravenous access, longevity of peripheral IV, difficult IV access patients. Multiple articles were pulled for this proposal including randomized controlled trials, meta-analysis, systematic reviews and observational studies.

**Results:** The literature regarding the use of ultrasound technology in difficult access (DIVA) patients shows positive results but with limitations. The longevity of the ultrasound guided peripheral intravenous (USGPIV) catheter depends on the amount of catheter residing in the vein as well as the total length of the catheter. Utilizing

ultrasound techniques when inserting a peripheral IV is beneficial to the patient with difficult access. The benefits include increased patient satisfaction and reducing the ultimate number of IV attempts.

**Discussion:** It is my attempt in this EBP proposal to show the positive advantages of using ultrasound technology compared to the traditional method in those described as DIVA.

# **Master of Science in Occupational Therapy**

Victoria Abiva, Taylor Dimino, Emily Klion, Sara Lockwood, Adrian Padayhag, & Ryan Toppi

**Advisor:** Dr. Felicia Chew | **Poster Presentation** 

**Title:** The Impact of OT Program Coursework on Student Perceptions of Individuals with Mental Illness

Healthcare professionals often encounter individuals with mental illness (MI) throughout their careers. Occupational therapists (OTs) play a crucial role in supporting this population, even outside specialized mental health settings. OT Programs offer coursework that addresses mental health diagnoses and how to interact and work with that population; however, limited research has been conducted to determine its effectiveness on student's perceptions of MI. This study analyzes the impact of OT coursework on OT students' perspectives of people with MI, assess the relationship between the coursework and comfortability levels with treating this population, and interpret the effect the coursework has on stigmas held by the students. A single group pretest posttest quantitative study was conducted with 29 participants who completed the Opening Minds Scale during their first week of the OT program, and 27 participants again in the first week of their final semester. Over four semesters, students engaged in mental health-focused coursework and fieldwork experiences. Survey results indicated no statistically significant change in students' perceived comfort in working with individuals with MI. According to the results of the surveys, there is an insignificant difference between the pre and post test, as it relates to students' perceived comfortability. However, there was a statistically significant increase in their awareness of their ability to help those with mental illness as evidenced by a significant change in scores for one question on the Opening Minds Scale. These findings suggest that while coursework may not significantly alter comfort levels, it may enhance students' recognition of their role in mental health care. More research is needed to determine the impact of OT mental health focused coursework and fieldwork opportunities on OT students' perceptions, attitudes, and comfortability in working with the mental illness population.

# Sergio Azcona, Emily Cioffi, Briana Harmon, Ashley Kelly, Courtney Masker, & Laura Nicolich

Advisor: Dr. Felicia Chew | Poster Presentation

Title: Cultural Competence in Stockton University MSOT Students

As the United States becomes more culturally and ethnically diverse, cultural competence in healthcare has become increasingly important. This is especially crucial in occupational therapy (OT), where practitioners frequently interact with individuals from various cultural backgrounds. This study examined how cultural components embedded in the Master of Science in Occupational Therapy (MSOT) program curriculum at Stockton University impacted students' understanding and experiences of cultural competency. Using a one-group pretest-posttest design, the study involved 27 graduate students who completed a survey measuring cultural competence in four areas: dispositions, knowledge, skills, and attitudes. The Development of Competencies for Global Engagement Scale was used to assess these competencies, with paired-sample t-tests analyzing the results. These results indicate that the MSOT program successfully enhanced students' cultural awareness and competencies, specifically in the areas of dispositions, knowledge, and skills, which is essential for delivering patient-centered care. However, limitations, such as the small sample size and potential biases in self-reporting, suggest the need for further research with larger, more diverse populations. This study emphasizes the importance of integrating cultural competency into OT educational programs to ensure healthcare professionals are equipped to serve diverse populations and improve patient outcomes.

Keywords: Cultural competency, MSOT, disposition, knowledge, skills, attitude, curriculum

# Taylor Barto, Christina D'Amodio, Mallory Figel, Casey Liming, & Bethannie Lopez Advisor: Dr. Felicia Chew | Poster Presentation

Title: From Surviving to Thriving: Life Balance Strategies to Enhance Student Wellness in Higher Education

Maintaining a life balance is crucial for the health and well-being of college students. This quantitative study explored the life balance of full-time students enrolled in Stockton University's Master of Science in Occupational Therapy Program (MSOT). Data were collected using Life Balance Inventory (LBI) scales from a convenience sample of students. A total of 28 students completed the LBI during the fall of their first year, with 27 completing it again in the spring of their second year after attrition. The study aimed to assess whether the students' life balance in daily activities and responsibilities can be managed through the use of life balance interventions. Previous research indicates that students tend to experience a decline in their life balance while attending university, though interventions have shown positive outcomes in improving balance. The research question was used to study the effects of life balance interventions on college students' overall well-being and quality of life. These interventions target the balance between self-care, academic demands, work-life responsibilities, and leisure—factors that significantly influence life balance. The researchers examined how the MSOT students view their life balance and whether occupational therapy (OT) interventions can improve this balance for college students. The LBI data assessed health, relationships, challenges/interests, and identity. The results were analyzed using SPSS to determine how being a college student affected the life balance categories of full-time students. Findings revealed a significant decline in life balance scores between the first and second years of the program.

Keywords: life balance, college students, work-life balance, LBI, occupational therapy

# Katelyn Dalponte, Christopher Shaw, Abbygail Montemayor, Amber Cornish, & Alexandra Giancola

**Advisor:** Dr. Felicia Chew | **Poster Presentation** 

**Title:** Exploring MSOT Student Perceptions and Comfort in Working Amongst Individuals with Mental Health Conditions

**Background:** Mental health stigma can impact healthcare outcomes and client-practitioner relationships. Future occupational therapists need knowledge, skills, and positive attitudes to support individuals with mental illness. However, many students lack awareness and feel uneasy working with psychiatric disabilities, often due to limited education, leading to stigma and discomfort in practice.

**Significance:** Insufficient mental health education can negatively impact students' confidence and perceptions of individuals with psychiatric disabilities. Increased knowledge and exposure have been shown to improve attitudes. However, research has not fully explored how combining real-world experiences with education influences students' comfort and perspectives.

**Research Question:** How does Stockton's MSOT mental health curriculum influence students' perception, confidence, and readiness to engage in mental health-related practice?

**Purpose:** This study evaluates how combining clinical experience with mental health education influences students' attitudes and comfort levels in working with individuals with mental illnesses.

**Method:** A pretest-posttest study design was used to evaluate 29 students (27 completing) from Stockton University's 2025 Master of Science in Occupational Therapy (MSOT) cohort. Participants completed surveys before and after a mental health fieldwork alongside a mental health course. The questionnaires gathered qualitative and quantitative data on students' viewpoints and confidence in working with this population. Paired samples t-tests were run using SPSS.

Outcomes: Of the 27 participants, comfort interacting with individuals with psychiatric disabilities significantly increased (p = 0.018), as did perceived competence (p < 0.001). Knowledge of psychiatric conditions, medications, safety (p < 0.001), and attitudes towards mental illness (p = 0.029). Before training, 15 students reported stigma or limited exposure, while 13 had prior empathetic experiences. Post-intervention, 22 participants reported increased knowledge, reduced stigma, and improved readiness, while 6 remained unchanged.

Keywords: Occupational Therapy Students, Mental Health, Education, Stigma, Psychiatric Disorders, Student Perceptions, Attitudes

#### Emily Green, Keishla Sanchez, Thayana Ascencio-Cruz, Erin Megill, & Constance Bevacqua

Advisor: Dr. Felicia Chew | Poster Presentation

**Title:** Bridging the Gap: Occupational Therapy's Role in Disaster Management for Vulnerable Populations

In 2023, over 2.3 million Americans were displaced by natural disasters, which have increased in frequency globally since 1996. These disasters can have devastating short and long-term effects on one's health and wellbeing. Individuals with disabilities experience disproportionate challenges which can be exacerbated by these events. Occupational Therapy (OT), as a client-centered and holistic profession, is uniquely positioned to address the complex needs of this vulnerable population. To explore OT's current and potential role, a literature review was conducted analyzing the impact of natural disasters on individuals with disabilities and OT's involvement in disaster preparedness and recovery.

Several themes emerged from the available literature. Positive findings included OT's demonstrated effectiveness in disaster management, contributions to community-level initiatives, and general preparedness for natural disasters. Practicing OTPs reported confidence in their abilities when involved in these efforts. However, significant barriers were also identified including limited recognition of OT's role by other professionals, exclusion from interprofessional disaster response teams, and insufficient educational opportunities related to disaster management at entry-level and continuing education stages.

Data obtained from FEMA was analyzed to determine the most common disaster types across six U.S. regions. Severe storms were most frequent in New England and the Midwest, fires in the West, and hurricanes in the Mid-Atlantic, South, and Southwest. These regional patterns highlight the need for OTPs to tailor preparedness strategies accordingly. Despite their expertise, OTPs remain underutilized in disaster contexts, leaving key needs unaddressed.

To mitigate risks and support occupational performance during crises and recovery, OTPs must take an active role in educating clients on emergency preparedness. Moreover, the profession must prioritize their own development in this area through targeted education and advocacy.

Keywords: Occupational Therapy, Disaster Preparedness, Disability, Severe Storms, Community Resilience, Patient Education, Professional Training, Emergency Response, Health Disparities, Quality of Life

# Emily Green, Thayana Ascencio-Cruz, Courtney Masker, Casey Liming, & Bethannie Lopez Advisor: Dr. Jennifer Calabrese | Poster Presentation

Title: Living the High Life: The Effects of Cannabis on Health Management in Adults

In recent years, cannabis usage and popularity have increased among the general public. In addition, forty-eight states have passed legislation allowing recreational or medical cannabis use. Despite this, many healthcare professionals receive little to no formal cannabis education and cannot answer patient questions on the subject. This prevents patients from making informed decisions about alternative treatment options. As the American Occupational Therapy Association (AOTA) encourages Occupational Therapy practitioners (OTPs) to incorporate complementary and integrative medicine into their practice, it is essential for OTPs to understand the effects of cannabis use on the occupation of health management. Due to the lack of information regarding this subject, a review of current literature was conducted to better understand the effects of cannabis on health management and other occupations. Four databases were used to search the evidence, including fifteen articles to synthesize best practices. The literature showed cannabis usage has both positive and negative effects on health management. Positive effects include improved symptom management, quality of life, emotional regulation, enhanced sleep, opioid use reduction, and pain reduction. Minor adverse effects include signs of anxiety and depression, increased spending habits, introverted behaviors, physiological symptoms, decreased memory, and increased symptoms due to dosage/frequency. Overall, this literature search concluded that there is strong evidence supporting the use of cannabis in regards to health management, particularly in areas such as pain reduction, sleep improvement, and symptom management, among others. To promote client centered care, health management, and overall occupational performance, it is important for OTPs to educate clients on the potential benefits and adverse effects of cannabis.

Keywords: Occupational Therapy, Cannabis, Health Management, Literature Review, Adults, Education

#### **Christopher Shaw & Keishla Sanchez**

Advisor: Dr. Mary Kientz | Poster Presentation

**Title:** Get FIT: A Health and Wellness Program Designed for Adults with Intellectual and Developmental Disabilities (IDD)

This project received funding through the Graduate Student Travel Fund to present research findings at the American Occupational Therapy Association (AOTA) Conference.

Get FIT is a community-based health and wellness program designed for individuals with IDD, aged 16 and older. Recent research suggests that as individuals with IDD age, they present with declines in health, well-being, and quality of life when compared to typical peers (Santos, et. al., 2022; Mastrangelo et al., 2023). Adults with IDD are more likely to be overweight or obese due to inadequate nutritional habits and lack of physical exercise (Santos et al., 2022). Stockton University started the Get FIT program in 2013 that has evolved into an interprofessional program with nursing, physical therapy, occupational therapy, and undergraduate health science students. The Get FIT program runs twice weekly for 1.5-hour sessions targeting physical activity, nutrition education, and social participation to community members with IDD. Our research focuses on the effects of Get FIT attendance over three consecutive sessions on physical outcome measures and social participation for individuals with IDD.

#### **Master of Social Work**

#### **Delaney Bowman**

Advisor: Dr. Robin Hernandez-Mekonnen | Poster Presentation

Title: Political and Policy Engagement in Washington D.C.

This research was funded by a Distinguished Research Fellowship for Graduate Students.

This mixed methods research paper explores the impact of active learning experiences on social work students' political and policy advocacy and engagement through Stockton University's Master of Social Work (MSW) program. This study reviews students' knowledge of policy, engagement in advocacy activities, and shifts in confidence following a service-learning trip to Washington D.C., where students can meet with legislators to discuss social policy issues. Quantitative pre- and post-survey data reveal increases in students' intention to participate in future advocacy and how much they have learned about policy. Qualitative reflections highlight transformative learning experiences, illustrating how hands-on policy practice inspires students to embrace their ethical responsibility for social change. This study emphasizes the necessity of integrating experiential learning into social work to foster political engagement among students and equip future social workers with the skills to advocate for political change at all levels.

Keywords: social work education, active learning, political advocacy, policy practice, experiential learning, social justice

#### Marianne Luyster, Amber Glenn, & Jake Greeley

Advisor: Dr. Guia Calicdan-Apostle | PowerPoint Presentation

Title: Homelessness in Atlantic City, New Jersey

This research explores the complex nature of homelessness in Atlantic City, shaped by factors such as economic hardship, rising housing costs, seasonal employment, substance use, and mental health challenges. These interconnected issues contribute to a persistent housing crisis affecting hundreds in the area.

The Housing First model, with its harm reduction approach, proves effective by offering immediate housing without requiring prior participation in substance use recovery or mental health programs. This model prioritizes stability as a foundation for recovery.

To address deeper systemic causes, we advocate for policies that target the root drivers of homelessness. The Hope Work Initiative (HWI) complements these efforts by empowering individuals through employment and community engagement.

However, employment alone is not enough. We propose expanding HWI to include immediate, stable housing for participants—mirroring the Housing First model—so that individuals have both work opportunities and a safe place to live.

#### Alejandra Medina, Fatima Khawaja, & Rosalinda Gonzalo-Quijano

Advisor: Dr. Guia Calicdan-Apostle | PowerPoint Presentation

**Title:** Redefining Refugees

Refugees resettling in the U.S. face complex psychological, economic, and cultural challenges, worsened by limited services, tight timelines, and inadequate support. Current interventions often lack cultural sensitivity and focus narrowly on short-term employment. To address these gaps, this research recommends a Wraparound Service Model promoting long-term stability, mental wellness, and community engagement. In addition, the advocacy initiative "Redefining Refugees" raises awareness through psychoeducational events in South Jersey schools and community centers. This initiative emphasizes refugee-led storytelling and community dialogue to foster understanding and support. Ultimately, the goal is to shift public perception, promote culturally responsive practices, and strengthen refugee resettlement through integrated research, intervention, and advocacy.

## Nelcy Ramos, Isabella Trimble, Aleyshka Barbosa, & Alexa Manochio

Advisor: Dr. Guia Calicdan-Apostle | PowerPoint Presentation

Title: Families in the Shadows: The Impact of Family Separation on Children of Immigrant

**Parents** 

Given the current political climate and the intensifying anti-immigration rhetoric across the United States, there is an urgent need to address how these dynamics affect one of the most vulnerable subgroups within Latine and/or Hispanic communities: children. Immigration is often inaccurately and narrowly portrayed in public discourse, with Latinx individuals being disproportionately targeted and generalized. This stigmatization has profound implications, particularly for Latinx children living with the constant fear of their parents being detained or deported.

This research delves into the emotional, psychological, and social tolls that such fear imposes on children. Chronic anxiety, emotional dysregulation, academic difficulties, and social withdrawal are just some of the challenges these youth may experience as a result of living in households marked by uncertainty and instability. To counter these harmful effects, a trauma-informed, resilience-based group intervention approach grounded in the principles of Trauma-Informed Care (TIC) and supportive psychoeducation is essential. Social workers can play a pivotal role in supporting affected families by implementing school-based interventions such as counseling, peer support groups for children, and psychoeducational programs for parents. These programs can help empower caregivers who often feel voiceless and overwhelmed by equipping them with practical knowledge—such as "know your rights" workshops—and emotional support systems.

Furthermore, this research underscores the need to center Latine/Hispanic youth in the broader conversation about immigration reform. By advocating for policy changes, expanding access to culturally competent mental health services, and strengthening family-focused community interventions, we can work to protect the dignity and well-being of children growing up in the shadow of immigration enforcement.

## **Professional Science Master's in Environmental Science**

Robert A. Angelo

**Advisor:** Dr. Tait Chirenje | **Table Top Presentation Title:** Development of an Environmental Ethics Course

Course Name: Environmental Ethics

This course will aim to educate students on their role in the environment and how to go about protecting it from a moral standpoint. Students will be exposed to the common forms of ethical beliefs, both environmental and non environmental, and will be required to defend their stance on issues using ethical beliefs. Throughout this course, students will have the opportunity to further understand why we as humans have difficulty in agreeing upon a way to protect and promote sustainability of the environment and will have the chance to voice their own opinions while categorizing their beliefs into a multitude of ethical approaches. By the end of this course, students will be well rehearsed in developing well supported arguments regarding specific environmental issues where morality and ethics, not only data such as numbers and figures, assist in informing their peers and persuading them to join on new and existing environmental ethics and moral belief systems.

# **Master of Arts in Instructional Technology**

The MAIT Capstone Expo is taking place in Campus Center Meeting Room 5. Below, please find the names of the presenters and information about their projects.

#### Luiza Abbamonte

Advisor: Dr. Jung Lee | Poster Presentation

Title: Educational Opportunity Fund (EOF) Transfer Student Online Orientation to Foster

Community and Knowledge

The purpose of this study is to research how to design an online transfer orientation module for the Educational Opportunity Fund (EOF) transfer students that eases their transition to Stockton University. In particular, the study aimed to investigate the impact of this orientation on the students' knowledge about the EOF program, its resources and requirements, in addition to fostering a sense of belonging. I developed the online transfer module with the Community of Inquiry (CoI) framework in mind, providing content and design in the areas of cognitive, social, and teaching presences to create a valuable educational experience for EOF transfer students (Garrison et al., 1999). The self-paced EOF Transfer Orientation learning module is accessible to enrolled EOF students via the EOF Blackboard. The content is divided into categories, such as financial aid, program requirements, resources, and more. Students are prompted to begin with the pre-assessment and overview video before proceeding to another segment. Each orientation section is self-contained in a separate folder and could be completed in or out of sequence. Posted within the folders are interactive content, visual artifacts, videos, and links to important information such as internal or external websites. The last orientation section contains a link to the anonymous post-assessment tool. Six EOF transfer students participated in the study. In conclusion, the investigation has successfully employed numerous components of the Community of Inquiry model to facilitate the EOF transfer student's transition to the Stockton EOF program. Future research could provide insight into how subsequent cohorts of transfer students perform.

#### Louis Apalucci

**Advisor:** Dr. Jung Lee | **Poster Presentation** 

Title: How to Set and Achieve Goals Using the SMART Goal Method

Goal setting may seem simple, but many middle school students struggle with creating and achieving meaningful goals due to a lack of clear strategies and support. This project addresses that gap by equipping students with practical tools to set and accomplish goals using the SMART goal-setting framework—a proven method widely used in education and professional development.

The project includes five interactive learning modules, available in PowerPoint or Google Slides format, which can be used for self-paced learning or whole-group instruction. Each module builds on the previous one, guiding students step-by-step through crafting Specific, Measurable, Achievable, Relevant, and Time-bound goals. The curriculum integrates Understanding by Design to focus on desired outcomes and work backward, as well as Scenario-Based Learning to make lessons relatable and realistic.

Students receive feedback throughout and after each module, allowing them to refine their goals and deepen their understanding before progressing. This structured, supportive approach helps students develop the confidence and skills needed to set short- and long-term goals, encouraging personal growth, motivation, and a greater sense of ownership over their success.

Fellow middle school educators reviewed the modules, praising the project's clarity, adaptability, and potential for real impact in the classroom. Ultimately, this initiative empowers students to take charge of their academic and personal futures with purpose and confidence.

#### Shekhania Demosthenes

**Advisor:** Dr. Jung Lee | **Poster Presentation** 

**Title:** Event Management Skills

Effective event planning requires integrating complex skills such as budgeting, logistics coordination, and risk management. Novice planners, especially adults aged 25–54 managing personal events, often struggle to synthesize these components into cohesive strategies (Robson, 2011; Dowson & Lomax, 2023). This instructional

design project addresses this gap by developing a self-paced online module grounded in scenario-based learning (SBL) (Odeh & Patanakul, 2024) and multimedia learning theory (Mayer, 2021).

Hosted on Google Classroom, the module targets learners with limited event-planning experience. It emphasizes practical application through interactive budgeting tools, branching scenario simulations for decision-making practice, and virtual event planning exercises to simulate real-world planning tasks.

A needs analysis revealed challenges with budgeting and contingency planning. The module's theoretical framework leverages SBL to foster critical thinking and Mayer's coherence/modality principles to reduce cognitive load.

This project contributes a replicable instructional model for teaching transferable event management skills, applicable in both personal and professional contexts. Future research will assess the module's efficacy in improving learners' budgeting accuracy, adaptability, and confidence.

#### Jessica Griffin

**Advisor:** Dr. Jung Lee | **Poster Presentation** 

Title: The Effect of Project-Based Learning on Students' Research Skills and Motivation

As 21st century learning goals become more inclusive of student-driven inquiry and interdisciplinary learning, research skills have become increasingly important for high school-aged students. High school English Language Arts students struggle to successfully carry out the key components of research. These problems stem from issues with digital literacy and with low motivation for research, which many students see as a process that has little relevance to their daily lives.

Utilizing a project-based learning (PBL) framework, a teaching method in which students gain knowledge and skills by working to learn about and solve real-world problems, I designed an instructional unit to improve research skill acquisition and enthusiasm for conducting research. The learning experience addresses several areas of concern within the research process: understanding research, developing strong research questions, navigating databases, evaluating source credibility and relevance, and presenting a deliverable research product. The lesson plans incorporate student choice, collaboration, and scaffolded instruction, key pillars of PBL, to support students in self-directed learning. The lesson plans were designed in Canva and included resources from YouTube as well as formative assessments generated using Google Docs and Google Forms.

The project was evaluated by experienced high school ELA teachers. Initial findings indicate that project-based learning is an effective framework for improving students' acquisition of research skills and their enthusiasm for research.

#### **Matthew Kokai**

Advisor: Dr. Jung Lee | Poster Presentation

Title: Navigating the Digital World: A Guide for Seniors

This capstone project addresses the ongoing challenge of digital illiteracy among senior citizens by developing and evaluating a targeted instructional solution. The final product is a fully online, self-paced digital literacy course designed specifically for older adults. Delivered through Genially and embedded with Courseau modules, the course includes four multimedia-rich modules: (1) Online Banking & Financial Security, (2) Video Calling & Virtual Communication, (3) Social Media & Digital Identity, and (4) Cybersecurity Basics & Fraud Prevention.

Each module provides step-by-step instruction, interactive exercises, and scenario-based activities tailored to seniors' learning pace and needs. Integrated Genially-native knowledge checks appear between modules and at the end of the course to reinforce understanding. The course also includes an introductory walkthrough video and a printable module guide to assist learners and trainers.

Grounded in the Technological Pedagogical Content Knowledge (TPACK) framework and Mayer's Cognitive Theory of Multimedia Learning (CTML), the design emphasizes reduced cognitive load, hands-on engagement, and real-world application.

To evaluate the instructional product, three expert reviewers assessed the materials using surveys, checklists, and guided observations. Feedback highlighted strengths in usability, clarity, accessibility, and alignment with adult learning course designed specifically for older adults. Delivered through Genially and embedded with Courseau

modules, the course includes four multimedia-rich modules: (1) Online Banking & Financial Security, (2) Video Calling & Virtual Communication, (3) Social Media & Digital Identity, and (4) Cybersecurity Basics & Fraud Prevention.

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To evaluate the instructional product, three expert reviewers assessed the materials using surveys, checklists, and guided observations. Feedback highlighted strengths in usability, clarity, accessibility, and alignment with adult learning principles. Recommendations led to revisions such as the addition of troubleshooting guides, enhanced multimedia elements, and more visual aids.

This project demonstrates how theory-driven, learner-centered instructional design can effectively empower older adults to build essential digital skills and navigate today's technology-driven world with greater independence and confidence.

#### Alyssa Libby

Advisor: Dr. Jung Lee | Poster Presentation

**Title:** Enhancing Middle School Students' Engagement and Motivation in Art Fundamentals Through a Project-based Learning Approach

The fundamentals of art are taught in most curriculums, assisting students in the development of various skills, such as critical thinking and problem-solving, which are essential for students to succeed. While students are motivated to create projects, they are frequently unwilling to engage with learning materials, resulting in a lackluster understanding of art fundamentals. In an effort to increase student motivation and engagement when learning about the fundamentals of art, I explored Project-based Learning (PBL). PBL offers an approach that differs from traditional approaches, by encouraging students to play an active role in their learning and solve real-world, authentic problems. Upon researching PBL, I created lesson plans on the fundamentals of art, encompassing the key components of PBL. I separated the lesson plans into three units, each consisting of six lesson plans. Unit one focused on the elements of art, which encompassed lessons on line, shape, and depth. Unit two focused on color theory, which encompassed lessons on the color wheel, color harmony, and warm versus cool colors. Lastly, unit three focused on shadow and lighting, which encompassed lessons on both shadow and lighting. Within the lesson plans, I created activities and handouts that emphasized personalization, student choice, collaboration, authenticity, and creative control for students. In each of the lessons, there was a heavy focus on real-world applications. For example, examining structures and colors seen in students' day-to-day lives. I also provided differentiated learning resources, where students could choose to watch videos or explore more of the topics with links to outside resources, in an effort to improve engagement and motivation.

#### Kelly Markle

Advisor: Dr. Jung Lee | Poster Presentation

**Title:** Bridging Theory and Practice: Implementing Project-Based Learning with Real-World Problems in Mathematics Education

This research explores the importance of teaching real-world applications of mathematical concepts to high school students, focusing on linear, exponential, and quadratic equations. The study employs project-based Learning (PBL) to address the challenge of students' limited retention and application of previously learned concepts. Interviews were conducted with five teachers and a focus group of five Algebra 1 students to gather insights on current practices, challenges, and perceptions regarding real-world applications in mathematics education.

The instructional products I created are designed to address the challenges of teaching real-world applications. These products include a series of structured, interdisciplinary projects that align with the Mathematics K-12 Common Core State Standards and Mathematical Practice Standards. Each project focuses on practical scenarios that are relevant to students' lives. The instructional materials include detailed lesson plans, student-friendly

rubrics, and guided check-ins for monitoring student progress. The products also incorporate technology to allow students to gather and analyze real-world data, fostering digital literacy and mathematical understanding. The instructional products include enhanced critical thinking, problem-solving skills, and increased student engagement.

Key findings include varied approaches teachers take to incorporate real-world examples, the positive impact of PBL on student engagement and motivation, and the need for interdisciplinary collaboration. The research also reveals students' mixed perceptions of algebra's relevance to their daily lives. By bridging the gap between abstract mathematical concepts and practical applications, this study seeks to improve student understanding, motivation, and long-term retention of mathematical principles, ultimately preparing them for success in higher education and future careers.

#### Zoaennette Molina Ayala

Advisor: Dr. Jung Lee | Poster Presentation

Title: Empowering Educators: Transforming English Language Learning

Despite possessing broad pedagogical skills, many educators find themselves unprepared to meet the unique linguistic and educational needs of English Language Learners (ELLs). In response to this instructional gap, this study investigates the development of a self-paced program, grounded in Kolb's Experiential Learning Theory and Knowles' Adult Learning Theory, that empowers teachers to better serve ELLs. A needs analysis highlighted the demand for flexible, practice-oriented training, prompting the creation of a four-module online course delivered via a dedicated website. Each module features multimedia content, interactive exercises, and reflective prompts to cultivate empathy, cultural responsiveness, and differentiated instruction to enhance engagement and confidence. Specifically, the first module provides foundational knowledge of second language acquisition, the second focuses on differentiation strategies, the third addresses communication techniques, and the fourth emphasizes community building. Reflective journaling aligns with andragogical principles of relevance and autonomy, while experiential tasks follow Kolb's cycle of concrete experience, reflection, conceptualization, and active experimentation. The program's self-paced format enables participants to implement new techniques as they learn, resulting in high engagement, increased confidence in accommodating ELLs, and immediate integration of recommended strategies. Overall, findings suggest that a structured yet flexible online approach rooted in reflective practice, empathy, and evidence-based methods—can significantly strengthen teachers' readiness to support the diverse needs of ELLs.

#### **Jeremy Nevitt**

Advisor: Dr. Jung Lee | Poster Presentation

Title: Unlocking the Potential of Generative AI for Secondary Education Educators

This capstone project addresses the instructional challenge faced by secondary educators who struggle to balance routine non-instructional tasks, such as grading, lesson planning, and administrative duties, with their primary goal of engaging students and delivering personalized instruction. Research highlights a gap in educators' effective utilization of generative artificial intelligence (AI) tools, largely due to limited awareness, training, or confidence in adopting these technologies.

To bridge this gap, the project implemented a professional development program grounded in Problem-Based Learning (PBL). This approach empowered teachers to collaboratively engage with AI tools like ChatGPT, MagicSchool.ai, Gradescope, and Canva by solving authentic, classroom-related challenges. The theoretical framework emphasized active learning, collaboration, and reflective practices, fostering practical application and confidence among participants.

The intervention consisted of five targeted sessions, each focusing on a distinct aspect of educators' daily responsibilities, progressively building teachers' familiarity and competence with generative AI tools. Teachers experienced hands-on activities tailored to their subject-specific needs, practiced creating differentiated instructional resources, streamlined administrative tasks, and explored sustainable AI integration strategies. This structured, scaffolded program aimed not only to enhance instructional efficiency but also to transform teachers' perceptions of AI from intimidating technology to essential tools for innovation and improved student engagement.

#### Henna Panchal

Advisor: Dr. Jung Lee | Poster Presentation

**Title:** Increasing Cultural Awareness in the Middle School Classroom

This study explores how to increase cultural awareness in middle school students using lessons that foster cultural competence built on a diverse curriculum. The research aimed to assess whether integrating Allport's Intergroup Contact Theory, Hall's Iceberg Theory, and Cooperative Learning as theoretical frameworks could help facilitate better interactions amongst students from diverse cultural backgrounds. Teachers read and reviewed the cultural awareness teacher and student guide I developed, which consisted of four units: (1) Social Identity and Self-Concept, (2) Diverse Representations and Bias in the Media, (3) Cultural Values and Beliefs Among Different Societies, and (4) Cultural Holidays and Celebrations. Students completed Unit One and gained a new perspective on self-identity and completed kinesthetic activities to strengthen their peer relationships. Each unit in the instructional product included a range of icebreakers, cooperative learning jigsaw activities, and opportunities to explore both visible and 'invisible' aspects of culture using Hall's Iceberg Theory as a framework. The study was evaluated using a mixed-methods approach, combining quantitative teacher survey data and qualitative interview responses. Pre- and post-evaluations measured seven English teachers' familiarity with cultural awareness before and after reviewing culturally responsive curriculum materials. Post-evaluation results showed increased teacher comfortability with lesson delivery and increased student cultural awareness. These findings support integrating Allport's Intergroup Contact Theory, Hall's Iceberg Theory, and Cooperative Learning to strengthen student relationships in diverse middle school settings. While the results were promising, future research could further explore these interventions and their long-term impact on student interactions.

#### Victor Petak

Advisor: Dr. Jung Lee | Poster Presentation

**Title:** Ensuring Basic Computer Skills in Intro-Level Digital Arts Students

Many of the introductory-level students of the digital arts programs at a two-year community college have been found to struggle with basic computer usage, upon which student success in these courses rely. Thusly, faculty have identified an issue where a small portion of intro-level digital arts students were falling behind their peers due to insufficient desktop computer proficiency.

This study addresses this performance gap using a multimedia module in five parts: a mouse skills unit, keyboard shortcuts unit, a browser skills unit, a file management unit, and a digital arts tools unit; all utilizing Mayer's Cognitive Theory of Multimedia Learning (CTML). Each unit features animated lessons with natural voice narration (made in adherence to Mayer's principles of CTML). Each lesson is followed by interactive activities and/or quizzes.

The module was evaluated by digital arts faculty and tutors during a series of one-on-one interviews. During the evaluation, interviewees expressed mostly positive feedback toward the module, but criticized its lack of MACspecific tutorials. Further development is planned prior to a pilot run of this interactive module in a real classroom.

#### **Terence Williams**

**Advisor:** Dr. Jung Lee | **Poster Presentation** 

Title: Housing Online Made Easy (H.O.M.E.) - Enhancing User Experience on the Stockton

**Housing Portal** 

The Stockton housing portal is a critical tool for residential students, yet many experience confusion due to complex navigation, unclear instructions, and limited support. This project, Housing Online Made Easy (H.O.M.E.), uses the Technology Acceptance Model (TAM) and Cognitive Load Theory (CLT) to improve the student experience with the portal. TAM emphasizes the role of perceived usefulness and ease of use in determining students' willingness to engage. CLT focuses on how instructional design impacts mental processing and influences how well students absorb and apply information. These frameworks inform the creation of tools that aim to make the portal easier to use and less overwhelming. The H.O.M.E. intervention includes a selfservice reference guide, video tutorials, and a chatbot—each designed to streamline information delivery, improve understanding, and reduce frustration. The evaluation process involved 10 participants (7 students, 3 staff), with feedback showing high satisfaction; most users rated the intervention 5/5 in effectiveness. The findings confirm that clear, structured, and accessible resources greatly enhance students' ability to navigate online systems. These results underscore the importance of applying TAM and CLT principles to improve the user experience on the Stockton housing portal. 31

#### Maryna Zhoholieva

**Advisor:** Dr. Jung Lee | **Poster Presentation** 

Title: Designing DEI Training based on the Head-Heart-Hands Model

Although DEI training has become a staple in corporate learning programs, its effectiveness in driving long-term behavioral changes remains widely debated. This action research project was prompted by a phone call from an IT manager in Ukraine, who expressed frustration with the failure of his team's existing DEI initiatives to foster meaningful inclusion. The core of his team is a homogeneous group of young male programmers who continue to exhibit exclusive behaviors toward new, underrepresented hires despite attending multiple DEI webinars and workshops.

Drawing on the Head-Heart-Hands (3H) model, a holistic framework that targets the cognitive, affective, and psychomotor domains of learning, I designed a self-paced DEI training module to increase the frequency of inclusive behaviors within this team. The learning experience consists of three steps: "Facts and Insights" ("head"), which provides foundational DEI knowledge; "Empathy and Connection" ("heart"), which includes a simulation designed to evoke emotional concern; and "Action and Application" ("hands"), where participants practice inclusive behaviors through interactive scenarios. The module was designed in Articulate Rise and Storyline and delivered asynchronously via Google Sites.

The project was evaluated through expert feedback and a pilot test with a team member. Initial findings suggest that the 3H model, particularly the use of emotionally evocative experiences, may serve as a catalyst for behavioral change where previous DEI efforts have failed.

#### **Master of Arts in American Studies**

The American Studies Research Series is taking place over a series of dates this spring.

All presentations will take place in B-003 at 6:00pm.

Below, please find the names of the presenters and the titles of their projects.

#### Tuesday, April 15, 2025

*Lillian Nickens:* "Race, Foster Care, Adoption, and Social Punishment: Historical Perspectives on the African American Family"

#### Tuesday, April 22, 2025

Sarah Harvey: "Fan to Voter: How Celebrities Shape Voting Decisions"

Matthew Truax: "Piano Man in No Man's Land: Words and Music of Billy Joel"

## Tuesday, April 29, 2025

Eryn Genova: "Recovering Dr. Ruth Selke-Eissler"

**Shannon Purcell:** "Adult Films in the 1950's: An Exploration of 8mm and 16mm Film Sales Brochures"

Carlos Diaz: "Podcast Project: Hip Hop Women of the 1990's and Indigenous Influence in Rock and Roll"

## **Tuesday, May 6, 2025**

*Katie Cupo:* "The Psychological Effects of Immigration Policy and Deportation in Latino Children's Art"

Kieree Cunningham: "Gospel Voices of Resistance and Resilience"

*Michelle Contarino:* "Toxic Hero or Trauma Survivor? Hemingway, Depression, PTSD, and Masculinity"

## Join Graduate Student Council

The Graduate Student Council (GSC) is an organization of "graduate students who are diverse individuals with unique skills, experiences, and talents. We value this diversity as it enriches our lives and educational experiences. We are committed to our education, our professions, and the advancement of graduate students at the University. We also value the opportunity to meet with fellow graduate students, faculty, administration, and alumni. We desire an organization that is committed, responsive, efficient, and engaging to carry out these desires and to act on our behalf in matters concerning our general welfare."

#### **Executive Board Membership 2024-2025**

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