



A Celebration of Student Scholarship Across Disciplines

ABSTRACT BOOK

**Friday, April 24, 2026
9:30 – 2:30 PM
Honors Center**

#1 – Pediatric Obesity and Applied Behavior Analysis: Current Evidence-Based Approaches and Implications for Future Research*

Student Presenter: Morgan O'Melia

Advisor: Christopher Bullock (Psychology)

Presentation Time: 9:30-10:30

Abstract: Pediatric obesity has been recognized as an increasingly prevalent epidemic throughout America, which comes with heightened risks of developing physical and mental health conditions. Worse yet, the prevalence of pediatric obesity is even greater among children diagnosed with intellectual and developmental disabilities (IDD) and autism spectrum disorder (ASD). As a result, the need for effective, evidence-based practices that address pediatric obesity for children with IDD and ASD remains a priority. Current research within the field of Applied Behavior Analysis (ABA) suggests that effective interventions promote healthy eating habits, physical activity, or both in the context of a weight management program. This poster reviews research on pediatric weight management that includes both dietary and exercise components and provides and identifies research areas and current best practice for pediatric obesity interventions within the field of ABA.

#2 – Use of Augmentative and Alternative Communication Devices by School-Aged Children*

Student Presenters: Madison Norris, Kinsley Atkins, Grace Campbell, Zykirah Davis, Sarah Mixon Eaddy, Aubrey Eaddy, Grace Floyd, McKenzie Graham, Madison McAbee, Sophia Askins, Mary Frances Nettles, Brooke Turner

Advisor: Rebekah Wada (Speech Language Pathology)

Presentation Time: 10:30-11:30

Abstract: A survey was completed by 17 school-based SLP's in South Carolina to examine the use of AAC devices in school-aged children, influence of diagnosis on device selection, and factors that impacted access. Results indicated variability in AAC device use across categories.

#3 – Alpha on a Budget: Lowering the Barrier to Entry in Radiation Instrumentation

Student Presenter: Austin Coleman

Advisor: Lisa Manglass (Physics & Engineering)

Presentation Time: 11:30-12:30

Abstract: In recent years, low-cost radiation detectors have become widely available, allowing educators and hobbyists to measure certain types of radiation without professional equipment. This project presents the YAPR, a modified commercially available Geiger counter that achieves alpha, beta, and gamma detection at a fraction of the cost of existing alpha capable instruments. To ensure reliable and reproducible results, a custom 3D printed test rig was designed that locks the detector and source into a fixed, repeatable geometry across all measurements, eliminating the positioning variability common in improvised or educational lab setups. This presentation will discuss the design and testing methodology and outline our ongoing work toward developing procedures so that students, educators, and citizen scientists can build their own modified detectors.

*Graduate Student Project

#4 – Synthesis, structure, and properties of rare earth sulfates

Student Presenters: Sydnee Floyd

Advisor: Jennifer Kelley (Chemistry)

Presentation Time: 12:30-1:30

Abstract: A series of rare-earth sulfates with the general formula $\text{CsLn}(\text{SO}_4)_2$ ($\text{Ln} = \text{Ce, Tb, Dy, Ho, Er, and Tm}$), was synthesized using mild hydrothermal conditions and characterized by single-crystal X-ray diffraction and powder X-ray diffraction. Although the material compositions have similar stoichiometries, these phases belong to different symmetries and space groups. $\text{CsCe}(\text{SO}_4)_2$ contains both monoclinic space group $P2_1/n$ and orthorhombic $Pnna$ phases within the same sample. $\text{CsLn}(\text{SO}_4)_2$ ($\text{Ln} = \text{Tb, Dy, Ho, and Er}$) crystallize in the orthorhombic space group $Pnna$, while $\text{CsTm}(\text{SO}_4)_2$ phase crystallizes in the monoclinic space group $P2/c$. The thermal, magnetic, and optical properties were characterized by thermogravimetric analysis, magnetic susceptibility, and single-crystal photoluminescence emission spectroscopy.

#5 – Fourier Analysis and Musical Recognition: A Study of Frequency Filtering and Perception

Student Presenter: Chaeron Lockett

Advisor: Daniel Brauss (Mathematics)

Presentation Time: 1:30-2:30

Abstract: This study explores how formal musical experience affects the way people listen to and interpret music. The main goal is to determine whether individuals with instrumental or vocal training engage with a wider variety of genres and are better at recognizing elements such as harmony, timbre, and overall complexity. By comparing participants with varying musical backgrounds, the study aims to understand how experience influences both musical preferences and perception. Data are collected through a survey that asks participants about their musical training and listening habits. In addition to survey responses, the songs are analyzed using Fourier Transform methods, including frequency-domain filtering (such as low-pass and high-pass filtering), to examine their frequency components. The study then compares the mathematical analysis with participant responses to see if perceived complexity matches objective measures.

#6 – Effects of the Major Polyphenol in Green Tea on DNA Methyltransferase 3A Expression in Neuroblastoma Cells

Student Presenter: Teil Fuller

Advisors: Jeremy Rentsch (Biology), Janay Vacharasin (Biology), & Jessica Gause (Chemistry)

Presentation Time: 9:30-10:30

Abstract: Deoxyribonucleic acid methyltransferase 3A (DNMT3A) is an enzyme in the DNA methyltransferase 3 (DNMT3) family that plays a critical role in regulating gene expression and is often dysregulated in cancer cells. This study investigates the effects of epigallocatechin gallate (EGCG), the major polyphenol found in green tea, on DNMT3A expression in SH-SY5Y cells. Results indicated that EGCG treatment was associated with downregulation of DNMT3A expression relative to the negative control, with greater effects observed at higher concentrations and longer exposure times.

#7 – Improving the Utilization of Mental Health Services on a University Campus Through Outreach and an Appointment Adherence Initiative*

Student Presenter: LaQuita White

Advisor: Deb Hopla (Nursing)

Presentation Time: 10:30-11:30

Abstract: Missed and canceled appointments disrupt continuity of care and pose ongoing challenges in college health settings. This quality improvement project evaluated the effectiveness of a multi-component appointment adherence initiative that aimed to increase the percentage of appointments kept by students. The intervention included a structured follow-up approach for students with missed or cancelled appointments and targeted outreach strategies to increase knowledge about the counseling center on the university campus. Appointments kept by students increased from 76% before the intervention to 90% afterwards. Of the 58 missed or canceled appointments identified during the intervention period, 24 (41.4%) were successfully rescheduled. Of the rescheduled appointments, 19 (79.2%) were kept.

#8 – ModXplorer

Student Presenter: Antoine Benbow

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 11:30-12:30

Abstract: ModXplorer is a mobile application designed for car enthusiasts who want to plan, customize, and optimize vehicle modifications before making real-world purchases. Instead of relying on scattered online research or guesswork, the app provides a centralized platform where users can explore different performance parts and see how those upgrades work together. Overall, ModXplorer simplifies the modification process by combining data, visualization, and planning tools into one easy-to-use experience for both beginners and experienced automotive enthusiasts.

#9 – Examining the Effectiveness of Positive Behavioral Interventions and Supports (PBIS) on Office Discipline Referral (ODR) Rates*

Student Presenter: Rebecca Pille

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: This study examines the impact of PBIS implementation on the frequency of behavior incidents resulting in office discipline referrals (ODRs) across all elementary schools in a suburban school district in Fort Mill, South Carolina. ODR data from the three years before PBIS implementation and the three years following PBIS implementation were analyzed for trends. The results of this study indicate an increase in ODR rates from the pre-implementation period (average of 9.32 ODR per 100 students) to the post-implementation period (average of 24.18 ODR per 100 students; 159% increase). Despite the results not reaching statistical significance ($p=0.52$), the model explained a substantial proportion of variance in annual ODR rates ($R^2 = .652$). These findings highlight the limitations of relying solely on ODR data for data-based decision-making, particularly when external factors such as COVID-19-related school shutdowns, fluctuations in enrollment, and changes in school- and/or district-level ODR reporting practices may influence results.

*Graduate Student Project

#10 – Predicting the Unpredictable

Student Presenter: Nadeem Madyun

Advisor: Dan Brauss (Mathematics)

Presentation Time: 1:30-2:30

Abstract: The purpose of this project is to determine if regular season NBA statistics can be used to calculate the likelihood of a team winning the NBA Championship. To achieve this, a two-part statistical approach was used on team-season data from the mid-1990s until the present, obtained from Basketball-Reference.com. First, multiple linear regression was used to identify the determinants of team quality, measured by Net Rating. Efficiency-based statistics, including both defensive and offensive effective field goal percentages, turnover rate, and free throw rate, were significant determinants of team quality. Second, binary logistic regression was used to model the determinants of winning the NBA Championship based on regular season team statistics, including Net Rating, Average Age, and Team Rank. It was found that team quality, measured by Net Rating, and team experience were significant determinants of winning the NBA Championship, while team rank was found to have little effect.

#11 – Mental Health in Art

Student Presenter: Victoria Rogers

Advisor: Delaney Me-Sun Shin (Visual Art)

Presentation Time: 9:30-10:30

Abstract: Art has served as a means of expressing individuality and emotions since the earliest recorded history. Several of the world's greatest artists have used this outlet as a way to communicate and exemplify their struggles with mental health disorders. Most famously, artists such as Van Gogh and Louis Wain struggled with debilitating mental health disorders, which can be seen in their art through their different eras. This presentation explores the use of art as a way to visually represent internal thought processes and the effect of mental illness on an individual's artwork.

#12 – Pee Dee Region Residents' Knowledge of Stroke*

Student Presenters: Carlyn Gibbs, Riley Gillmore, Kaylee Ridgeway, Alyssa Klaess, Abby Millo, Caleigh Barrett, Marisa Gilhuly

Advisor: Michele Norman (Speech Language Pathology)

Presentation Time: 10:30-11:30

Abstract: Stroke is a leading cause of death and disability in the United States, however, public awareness of its risk factors and symptoms remains limited. This study examines stroke knowledge among adults in the Pee Dee region of South Carolina and the influence of demographic factors. Unlike previous research, this study specifically aimed to increase participation among African American individuals. Using a quantitative, non-experimental design, 314 participants completed a 25-question survey assessing knowledge of stroke symptoms, risk factors, and emergency response. Results showed high overall stroke knowledge (82.5%), with strong recognition of symptoms (86.9%–99.7%). However, knowledge of risk factors was lower (75.5%). Younger age, higher education, and insurance status were associated with greater knowledge, while gender, ethnicity, and prior stroke experience showed no significant differences. These findings indicate strong awareness of stroke symptoms but gaps in prevention knowledge.

*Graduate Student Project

#13 – Building a Convolutional Neural Network (CNN) to Provide Explainability

Student Presenter: Tytrez Dixon

Advisor: Ivan Dungan (Mathematics)

Presentation Time: 11:30-12:30

Abstract: A neural network is a machine learning tool that allows artificial intelligence (AI) to make decisions. An input (or series of inputs) is provided, and an output (or prediction) is received. This tool is extremely useful in the development and training of AI. A convolutional neural network (CNN) is a specialized neural network that predicts the label of input images based on specific features (or kernels). The components of a CNN include padding, convolution, pooling, and the addition of an artificial neural network (ANN). An image is padded by adding an artificial border around it, ensuring we do not inadvertently reduce its dimensions while performing convolution. We perform convolution on an image by scanning it for a specific feature, utilizing core linear algebra concepts. Pixelated images of triangles and circles are used as input and we evaluate the effectiveness of the CNN by analyzing how well it distinguishes the two shapes.

#14 – How does Road Infrastructure affects Economic Development in US States?

Student Presenter: Raulston McKenzie

Advisor: Caroline Padgett (Economics)

Presentation Time: 12:30-1:30

Abstract: I will be looking at how road infrastructure and its quality play a role in economic development, which I will be defining as GDP. I will also be looking at how it affects GDP per Capita to get an idea of how it affects the wellbeing of their population.

#15 – Genetic Screening of Flap-endonuclease RAD27 for Mutation at Threonine 193 in *Saccharomyces cerevisiae*

Student Presenter: Jameel Montgomery

Advisor: Trevor Baumgardner (Chemistry)

Presentation Time: 1:30-12:30

Abstract: DNA repair and synthesis are vital functions of every cell and, like most biochemical pathways, have a multitude of biological machines (enzymes) that facilitate the process. Among these enzymes are a class that work on the cell's genetic code called endonucleases. One particular type of endonuclease has a dedicated task of clipping single-stranded "flaps" of DNA that hang from double stranded DNA. These enzymes are justly named flap-endonucleases, the first of which was identified in humans and named flap-endonuclease 1 (FEN1). The DNA flaps they act on are common occurrences resulting from Okazaki fragment maturation during DNA replication, and during standard DNA repair processes. If not properly resolved, these flaps can lead to genetic instability, oncogenesis, or cell death. Per this experiment, RAD27, the *Saccharomyces cerevisiae* homolog of FEN1, had its DNA sequence modified, resulting in the mutation of the threonine (T) at position 193 to an alanine (A). Alanine differs from threonine by being unable to be phosphorylated, with phosphorylation acting as a key process to modify how an enzyme works. This modification to the amino acid sequence of RAD27 will allow analysis of the enzyme's action and how phosphorylation at this site may regulate the enzyme.

#16 – The Evolution of Women in Times of War

Student Presenter: Charlotte Sellers

Advisor: Will Bolt (History)

Presentation Time: 9:30-10:30

Abstract: Women have always had an impact on history during times of war, however during the American Civil War and through World War II we see them become very active in places other than the home front. This thesis looks closely at how these women and their active roles in combat, have shaped the way we view the skill sets and usefulness of women during conflicts. The progress made by women in their respective countries after these women made their mark on history is immeasurable. There are more notable women that can and will be discussed because there is never a shortage of female power in times of war, just a shortage of men who want to document it to the fullest extent.

#17 – 7 Card Draw!

Student Presenters: Kevin Hawkins & Sean Rogers

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 10:30-11:30

Abstract: 7 Card Draw! seeks to merge Western aesthetics with intense social gameplay. Players can bluff, cheat, make accusations, and settle disputes through quick-draw duels. This creates tension and strategy beyond that of normal poker. We use innovative mechanics such as timed duels and collection cheating mechanics. The visuals and sound design will replicate the feel of smoky saloons to match the high-stakes risks. 7 Card Draw! allows for gameplay outside of the normal bounds of poker. The added mechanics make for a fresh experience.

#18 – Level Up

Student Presenter: Jonathan Gibson

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 11:30-12:30

Abstract: Level Up transforms fitness into a progression-based experience inspired by the systems that make video games engaging. Instead of simply tracking workouts, the app allows users to earn XP (experience) every time they complete an exercise session. This XP contributes to their overall level, giving users a clear sense of long-term progression. In addition to leveling up their overall profile, users choose a specialization or “class,” such as Warrior, Ranger, or Monk, allowing them to focus on different fitness styles. As users' complete workouts, they unlock milestones and achievements that visually represent their progress and reinforce continued participation.

#19 – MTSS Referral Trends and Their Impact on IEP Determinations*

Student Presenter: Kamryn Rushing

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: This study was conducted to examine the effectiveness of the MTSS (Multi-Tiered System of Supports) process within Harnett County Schools. Additionally, it sought to evaluate the accuracy of MTSS teams in identifying students who require specially designed instruction. To collect data, eight school psychologists and one intern utilized a district-wide Excel spreadsheet. The study included a total of 33 participants. Results indicated that 88% of participants met the criteria for special education services. Among those identified, eligibility classifications were distributed as follows: Specific Learning Disability (76%; n = 22), Other Health Impairment (6%; n = 2), Developmental Delay (3%; n = 1), Emotional Disability (3%; n = 1), Autism (3%; n = 1), and Comorbid Classification (3%; n = 1).

#20 – The Impact of a Colorectal Cancer Eligibility Checklist on Colorectal Cancer Screenings in a Primary Care Setting*

Student Presenter: Joshua Summerford

Advisor: Tracy George (Nursing)

Presentation Time: 1:30-2:30

Abstract: Colorectal cancer (CRC) involves cancers of the colon and rectum and is the third leading cause of death in the United States (US) (ACS, 2023b). During this quality improvement (QI) project, a CRC eligibility checklist and educational intervention were implemented to improve CRC screening referral rates. Prior to the project, 20.8% (n=98/472) of eligible patients accepted a referral for CRC screening. During the QI project, 55.2% (n=37/67) of eligible patients accepted a referral for CRC screening. Of the 98 referrals during the pre-intervention time period, 32.7% (n=32/98) were completed. Of the 37 patients referred for CRC screenings during the QI project, 64.9% (n=24/37) of the CRC screening tests were completed by the end of the project. This QI project demonstrates that a low-cost intervention can impact CRC referrals and completions in a rural, underserved area in South Carolina.

#21 – Determining the Zinc Content in Milk by Graphite Furnace Atomic Absorption Spectrometry

Student Presenters: Sean Johansen & Brycelyn Berry

Advisor: Kris Varazo (Chemistry)

Presentation Time: 9:30-10:30

Abstract: This study was done to determine the zinc content in pasteurized whole milk. To determine the zinc content in whole milk, we used graphite furnace atomic absorption spectrometry (GFAAS) which can be as sensitive as inductively coupled plasma mass spectrometry (ICP-MS) for elemental detection. Because milk is a complex mixture, the other substances present in the milk may affect the zinc signal, so we used the standard addition method to determine the zinc content. Standard addition minimizes matrix effects. We determined that milk has a significant zinc content, which suggests that it should be included in nutritional labeling.

*Graduate Student Project

#22 – Milestone: A unified workspace for planning, tracking, and shipping projects

Student Presenter: Raiz Mohammed

Advisor: Paul Zwiers (Biology)

Presentation Time: 10:30-11:30

Abstract: Milestone is a unified project workspace designed to bring planning, execution, and team coordination into one platform. Many student teams and small organizations rely on multiple disconnected tools for task tracking, notes, approvals, time logging, and budgeting, which can create friction, duplicated work, and poor visibility across a project. Milestone addresses this problem by integrating those functions into a single system with project boards, collaborative canvas and notes, user management, approval workflows, time tracking, and budgeting tools. The platform is designed to help teams keep project knowledge close to the work itself while improving organization, accountability, and efficiency. By reducing the need to switch between separate applications, Milestone aims to streamline the full project lifecycle from planning to delivery.

#23 – BEAM: Resilient Multi-Sensor Environmental Monitoring

Student Presenters: Jackson Roberts, Noel Challa, Jaylen Smalls, & Raiz Mohammed

Advisor: Paul Zwiers (Biology)

Presentation Time: 11:30-12:30

Abstract: This presentation details the development and validation of a high-fidelity sensing module for the BEAM project, specifically focusing on the integration of a diverse sensor suite including the PMSA003I particulate matter sensor, BME680, AHTx0, and Atlas Scientific ORP, conductivity, and RTD modules. To bridge the gap between low-cost hardware and professional research requirements, I developed a custom "launcher and retry" architecture. This workflow ensures local data persistence and automated retransmission during periods of mesh network instability, which are common in remote deployments. Experimental results confirm that this fault-tolerant approach significantly reduces packet loss and maintains data integrity compared to standard operations. By securing continuous operation across intermittent links, this module provides field researchers with a building block for long-term ecological monitoring and localized environmental decision-making.

#24 – How do GDP and the share of high school graduates affect homeownership rates across U.S. states?

Student Presenter: Sierra Washington-Fox

Advisor: Caroline Padgett (Economics)

Presentation Time: 12:30-1:30

Abstract: This research project examines the relationship between high school graduation rates, gross domestic product (GDP), and homeownership rates, and how these factors influence one another. Data was collected for all 50 U.S. states covering the years of 2016 through 2019. Specifically, the dataset includes high school graduation rates, state-level GDP, and homeownership rates for each year, allowing for a comparative analysis of how educational attainment and economic performance relate to patterns in homeownership trends over time.

*Graduate Student Project

#25 – Node Integration and Mesh Networking for Distributed Sensing in the BEAM Platform

Student Presenters: Noel Challa & Jackson Roberts

Advisor: Paul Zwiers (Biology)

Presentation Time: 1:30-2:30

Abstract: Field biologists need reliable ways to collect, transmit, and organize environmental data from distributed sensors in remote settings. The BEAM platform is being developed to address this need through a modular network of Raspberry Pi-based sensing nodes that support field data collection, communication, and monitoring. I contributed to installation and configuration of BEAM nodes, including setup of BATMAN-adv mesh networking, management of wlan0/bat0 communication, and development of boot and recovery workflows to improve stable wireless connectivity across nodes. In addition, I supported reliable data movement by working on file-transfer and retry logic for communication between nodes and the supervisor system.

#26 – Affordability and Accessibility Assessment of Chemotherapy-Induced Peripheral Neuropathy Treatment Options for Cancer Patients Undergoing Chemotherapy

Student Presenter: Halie Hightower

Advisor: Sarah Kershner (Health Care Administration)

Presentation Time: 9:30-10:30

Abstract: Chemotherapy-induced peripheral neuropathy (CIPN) is an umbrella term for neuropathy as a side effect of various chemotherapy drug classes, resulting in countless patients with cancer suffering from weakness, tingling, and/or pain in their limbs. One study created a figure that was designed to break CIPN treatment considerations into two subcategories, pain relief and functional improvement, and gave several options that have been documented to help improve the quality of life for patients (Preti & Davis, 2024). The purpose of my paper is to further develop this idea with the affordability and accessibility of each option in mind so that providers and patients can work together to come up with the best, personalized care plans possible.

#27 – Stickier Than Expected: An Optimized Approach in Southeastern Drosera Species

Student Presenters: Niklas Plath & Laci Coker

Advisor: Jeremy Rentsch (Biology)

Presentation Time: 10:30-11:30 & 1:30-2:30

Abstract: The isolation of genomic DNA from carnivorous plants, particularly of the genus *Drosera*, presents obstacles due to co-extractions such as polysaccharides and phenols. In this study, we compared three extraction protocols – a sorbitol-based nuclei isolation protocol, a hot borate method, and a modified high-salt CTAB protocol from Healey et al. – which showed successful extractions in other taxa. Using *Drosera capensis* and *Drosera filiformis*, we evaluated DNA yield, purity, and functionality through PCR-Amplification of the ITS2 region before and after SPRI bead cleanup. Results showed that a high yield did not necessarily indicate good functionality. Additional testing across other *Drosera* species confirmed its reliability as a broadly applicable method for genomic DNA isolation in *Drosera*.

#28 – The OUTSIDER

Student Presenter: DeAndre Savage

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 11:30-12:30

Abstract: A turn-based style RPG is a game where combat is structured into strategic sequential turns, where players must analyze the situation and take actions to win. A lot of Role-Playing Games (RPGs) focus on a human, or human-like, protagonist with only class focused abilities or an attribute system. The Outsider will allow them to play as a purely “alien” character that will allow them to take upon the abilities of defeated enemies. Mechanics revolving around form changing is not uncommon in RPGs, but almost always limited in comparison to what the Outsider can and will offer players. A wide variety of forms, unlocked by defeating enemies, all of which will serve a purpose in the gameplay loop.

#29 – AI-Based Reading Tutoring: Does it have a Significant Impact on Benchmark Reading Scores in Elementary School Students?*

Student Presenter: Emily Norman

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: A multiple linear analysis was conducted on the reading benchmark scores of 155 2nd and 3rd grade students across three school years. The analysis examined whether the implementation of Amira, an AI-based reading tutoring program, was significantly correlated with higher reading benchmark scores. Amira was not implemented during year 1, was partially implemented during year 2, and was implemented by the majority of teachers in year 3. Initial results indicate that the implementation of Amira is not significantly associated with higher reading benchmark scores. Notably, Amira was implemented based on teacher preference. While it is possible that teacher preference was influenced by student need, student need alone does not explain why Amira students did not score significantly higher on reading benchmark scores.

#30 – DLiA Internship

Student Presenter: Justin Bartolon

Advisor: Travis Knowles (Biology)

Presentation Time: 1:30-2:30

Abstract: Discover Live in America (DLiA) is a non-profit organization based in the Great Smoky Mountains National Park in Tennessee that helps communicate, inform, and conserve the natural world for communities. I had the opportunity to spend my summer as a biology intern working on revising a checklist for a specific part of the park. The main objective of the project was to use year’s worth of audio data collected from a BirdNET Pi computer and analyze whether the audio collected matched the bird that it identified it as. There were over 164,00 audio recordings from between April 2024 and June 2025. This was the basis for the revision, and it was a daunting task to go through most of the recordings. The result of this project was a more simpler, yet shorter version of the original checklist and adding 1 new species, the Cerulean Warbler.

*Graduate Student Project

#31 – User Experience (UX) Research for Designing the Clarke Cemetery Digital Memorial

Student Presenters: Maya Alston, Jerrie Cardwell, Paul Dewitt, Matthew Gardner, Kaylee Hewitt, Taylor Milford, Devan Murphy, Briana Sessions, Parker Sherwood
Advisor: Christine Masters-Wheeler (English)

Presentation Time: 9:30-10:30

Abstract: Clarke Cemetery is a historic burial ground near the former Roseville Plantation in Florence County, South Carolina, believed to contain 129 graves spanning the early 1900s through the 1970s. This user experience (UX) research study investigates how diverse audiences, including descendants, historians, and community members, would interact with and interpret such a memorial. The research team conducted heuristic evaluations of comparable digital memorial sites, semi-structured interviews with historians and community stakeholders, and card sorting activities to determine how users expect website content to be organized. This poster presents the study's methods and preliminary findings, which will inform the design and development of a user-centered digital memorial for Clarke Cemetery.

#32 – “Tough It Out and Stay Silent”: Examining the Dimensions of Masculinity, Social Stigma, Mental Health Problems, and Help-Seeking Behaviors as Predictors of Suicidality in College-Aged Males

Student Presenter: Xavier Malachi Stagg

Advisor: Anna Caroline Chinnes (Psychology)

Presentation Time: 10:30-11:30

Abstract: This comprehensive literature review examines the roles of masculinity, gendered socialization, mental health problems, and help-seeking behaviors as predictors of suicidality in college-aged males. A growing body of research demonstrates an association between masculinity and externalizing behaviors and interpersonal problems, risk-taking, and negative health behaviors especially in college men (Locke & Mahalik, 2005). Connections among findings illuminate how conforming to particular masculine norms can be harmful for men and those around them. Additionally this project highlights the implications for gender-sensitive interventions and prevention needs.

#33 – Flexible Seating in the Elementary Classroom

Student Presenter: Amelia Sue Tennis-Shock

Advisor: Karen Fries (Education)

Presentation Time: 11:30-12:30

Abstract: This thesis explores the impact of flexible seating in elementary classrooms, focusing on how nontraditional seating options influence student engagement, behavior, and academic performance. Flexible seating includes alternatives such as wobble stools, floor cushions, and scoop chairs, which allow students to remain physically active while learning. The study examines existing peer-reviewed research to evaluate how these seating arrangements affect classroom environments, particularly for students who struggle to maintain focus in traditional desk settings. Additionally, the research considers teacher perspectives on implementation, including the benefits and challenges of transitioning to flexible seating.

#34 – Utilizing Group Cognitive Behavioral Therapy Techniques to Reduce Anxiety Symptoms in Adolescent Girls*

Student Presenter: Elaine Burdge

Advisor: Antonio Cooper (School Psychology)

Presentation Time: 12:30-1:30

Abstract: The present study examined the effectiveness of school-based group cognitive-behavioral therapy (CBT) in reducing anxiety symptoms among adolescent girls and explored the extent to which participants generalized coping skills beyond the intervention setting. Five female high school students (ages 14–17) in a rural South Carolina school participated in a 16-week small-group intervention using the C.A.T. Project curriculum, an adolescent adaptation of the Coping Cat program. Anxiety symptoms were measured using PROMIS self-report rating scales administered at pre-, mid-, and post-treatment intervals. Results indicated a decrease in mean anxiety scores from pre-treatment ($M = 62.82$) to mid-treatment ($M = 53.72$) and post-treatment ($M = 51.82$). A Friedman's ANOVA revealed a statistically significant reduction in anxiety over time, $\chi^2(2) = 6.40$, $p = .041$. These findings suggest that group CBT delivered in a school setting may be an effective and accessible intervention for reducing anxiety in adolescent girls.

#35 – Graph Neural Networks for Predicting Stability of Alloys

Student Presenter: Michael Ian Simpson

Advisor: Daniel Scofield (Mathematics)

Presentation Time: 1:30-2:30

Abstract: Graph Neural Networks (GNN) are an emergent extension of traditional Neural Network (NN) systems where the data that the NN is learning on takes the form of a graph, making them a natural choice for problems where the data have a connected structure. We investigate the use of GNN's for predicting the stability of alloys with comparison to the performance of a densely connected NN for the same problem

#36 – Investigating Function Approximation With Neural Networks

Student Presenter: Zayed Chatila

Advisor: Ivan Dungan (Mathematics)

Presentation Time: 9:30-10:30

Abstract: In this work, the Universal Approximation Theorem is examined in the context of function approximation. The theorem states that a neural network with a single hidden layer can approximate any continuous function arbitrarily well, given a sufficient number of neurons. A single-layer network with four neurons is implemented to approximate the function $y=x^2$ using different activation functions, including Heaviside, ReLU, and sigmoid. The network is initialized with specified weights and trained over 3000 epochs to minimize the mean squared error (MSE) between predicted and target outputs. For the sigmoid activation function, the model achieves a final MSE of 2.35×10^{-4} , indicating the highest approximation accuracy among the tested models. Among the activation functions considered, the sigmoid-based network yields the lowest MSE and the most accurate approximation of the target function. The study is further extended to additional functions to investigate the influence of model parameters on approximation performance.

*Graduate Student Project

#37 – Noticing Nature and Psychological Well-Being Through the Lens of Self-Determination Theory

Student Presenters: Makayla Sheppard & Noah Lewis

Advisor: Laurie Hunter (Psychology)

Presentation Time: 10:30-11:30

Abstract: The Noticing Nature Intervention is a study aiming to improve psychological well-being through an autonomous and intentional connection with nature. Passmore et al. (2017; 2022) have shown the relationship between the intentional noticing of the natural environment in the natural conditions, improved feelings of well-being, and decreased feelings of anxiety, depression, stress, and ill-being. The current study expands on previous research by adding a nature-focused human-built condition. Participants will be randomly assigned to one of four conditions (Noticing nature, noticing nature integrated human-built, noticing human-built, and control) and complete daily diary sheets, similar to those used by Passmore et al. (2017; 2022) for a two week period. Based on previous research, we predict significant differences in psychological well-being and satisfaction of psychological needs amongst the four different conditions.

#38 – Skeleton Key

Student Presenter: Sonny Smothers

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 11:30-12:30

Abstract: Skeleton Key is a modular turn-based combat simulation platform I have developed that allows users to create combatants with customizable stats (health, damage, speed, etc.), design abilities and status effects (such as poison, shields, or healing), simulate thousands of battles instantly, analyze win rates and outcomes, and much more. Skeleton Key transforms combat balancing from guesswork into a measurable, data-driven process.

#39 – An Investigation into the Usage of Machine Learning in Predicting the Stability of Heusler Alloys

Student Presenters: Samuel P. Reeder & Ian Simpson

Advisor: Hunter Sims (Physics & Engineering)

Presentation Time: 12:30-1:30

Abstract: In this research, we focus on a deep-learning-based approach, made possible by open and easily searchable materials databases like the Materials Project. Developing an accurate and useful model requires carefully selecting and preprocessing of input data. This research includes procedures for obtaining and preparing physical, chemical, and structural information as well an approach to building and refining a deep learning model architecture for use in predicting the stability of intermetallic compounds with the Heusler structure, specifically with the space group 225. We extracted structural information like fractional coordinates and used it in conjunction with tables of atomic properties of individual elements to be used as input data for deep learning models. In developing the model, the strength of the correlation of the variables was evaluated in order to determine which are most important. Additionally, the effects of altering the complexity of the model on its predictive power were also evaluated.

*Graduate Student Project

#40 – Symmetry helps memory more for strong visualizers

Student Presenters: Kierra Hernandez & Chris Cepeda

Advisor: Jesse Sargent (Psychology)

Presentation Time: 1:30-2:30

Abstract: Spatial span (how many sequentially presented locations can be recalled in order) is greater if the locations together form a symmetrical pattern. Participants viewed a 5x5 grid of squares on a computer screen. Six of the squares lit sequentially for 1 s. each. After a brief delay participants clicked on the remembered locations. The delay was filled with either a visual, spatial or no interference task. We analyzed data from several experiments to show that those who have the best visuo-spatial memory a) show the greatest symmetry benefit, and b) show that this benefit is interfered with most by visual interference, compared to lower capacity individuals. This suggests that the memory advantage for symmetrical patterns accrues in the visual, more than in the spatial, buffer and that those who are not strong visualizers thus benefit less from the perceptual grouping afforded by symmetry.

#41 – Nurse Staffing Levels and Patient Outcomes

Student Presenter: Benjamin Bridges

Advisor: Caroline Padgett (Economics)

Presentation Time: 9:30-10:30

Abstract: I have extracted nurse staffing and patient outcome data from each hospital in California. I will analyze the impact that a lower nurse-to-patient ratio has on mortality rates across 3 different conditions at each hospital.

#42 – Culturally Responsive SLPs: Multiple Perspectives*

Student Presenters: Andrea Santillanez-Copetillo, Isabelle Soito, Megan Little, Tierra Harris, Amoya Lenworth, Kameelah Green

Advisor: Frances Burns (Speech Language Pathology)

Presentation Time: 10:30-11:30

Abstract: Speech-language pathologists (SLPs) report gaps in providing culturally and linguistically appropriate care. Graduate education, professional development, and access to culturally sensitive tools may affect a clinicians' preparedness and confidence; however, the strongest influences sculpting clinical practice remain unclear. This mixed-method, non-experimental study examines factors shaping culturally responsive practice and explores perspectives of educators and individuals who provide speech-language pathology services. Participants include SLP graduate students, speech-language pathologists, and university personnel recruited through flyers, on Facebook, Instagram, and via email.

#43 – Fish Guts! Genetic Analysis of Fish Stomach Contents in the Great Pee Dee River

Student Presenter: Brycelyn Berry

Advisor: Jason Doll (Biology)

Presentation Time: 11:30-12:30

Abstract: To determine what these fish eat and how their feeding habits affect native fish species, we examined gut contents of 28 fish that were collected using boat electrofishing from February through May 2025. Stomachs were removed on site and frozen until they could be processed. Eight of the 19 stomachs contained digested material and yielded a sufficient amount of DNA for further analysis. The 8 stomachs amplified using the *rbcl* gene primer were sent for metagenomic sequencing, and their results were compared using BLAST to identify the plant material present. The most common plant genera identified within the sequenced samples included *Podostemum*, *Carex*, and *Ulmus*.

#44 – The Impact of Social-Emotional School Readiness in Kindergarten on Future Multi-Tiered System of Supports Involvement in 2nd and 3rd grade*

Student Presenter: Dana Little

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: Multi-Tiered System of Supports (MTSS) in schools provides targeted early intervention for students with academic needs before special education services are considered. This study examined whether Kindergarten Readiness Assessment (KRA) scores were associated with later receipt of Tier 2 or Tier 3 MTSS interventions or special education services in Grades 2 and 3. Students with Emerging readiness scores were more likely to receive subsequent MTSS Tier 2/3 interventions and special education services than students with Approaching readiness scores (all p s < .001). Social Foundations scores were not significantly associated. These findings emphasize the importance of early identification and targeted prevention to improve academic outcomes.

#45 – Virtual Reality Mock Interview

Student Presenters: Vien Trieu, Tytrez Dixon, & Raiz Mohammed

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 1:30-2:30

Abstract: Virtual Reality Mock Interview (VRMI) is an immersive platform that enables students to practice mock interviews in a 3D virtual environment at university career centers. It allows college students to independently build their interviewing skills without the full pressure of a live interview setting. The system leverages an AI-powered backend, accessed through an application programming interface (API), to simulate a dynamic interviewer that interacts with the student as the interviewee. Following each session, an email transcript is generated, allowing the user to review the interaction for future reference.

#46 – The Impact of a Relay Team Approach on Neurosurgical Operating Room (OR) Turnover Times*

Student Presenter: Kate Rhea

Advisor: Tracy George (Nursing)

Presentation Time: 9:30-10:30

Abstract: Turnover time is defined as the time between when one patient leaves the operating room (OR) and the next patient enters (SurgiStream, 2023). The neurosurgical case turnover times at the project site range from 30 to 60 minutes, which is longer than the national benchmark of 20 to 45 minutes. Using the Plan-Do-Study-Act (PDSA) model, a relay team approach was implemented to impact neurosurgical OR turnover times. The focus of this intervention was staff education, communication, case preparation, and accountability. The mean turnover time increased from 34.63 minutes pre-intervention to 35.43 minutes post-intervention. During the intervention, the mean turnover time was below the 30-minute turnover goal in five of the 12 weeks. There was an increase in the number of neurosurgical case turnovers, variability among the specific neurosurgeons' turnover times, and OR staffing issues during the intervention period. This project demonstrated that a relay team approach can be helpful when examining OR turnover times.

#47 – Market Segmentation of Green Smart Technology

Student Presenters: Kal-El Ramos Rodrieguez & Santiago Sanchez

Advisor: Sooyeon Choi (Marketing)

Presentation Time: 10:30-11:30

Abstract: The market of green smart technology has been prevalent over the last decade. This study examines green smartwatch adoption by addressing overlooked consumer heterogeneity. Prior research has focused on general motivations and post-adoption outcomes, treating consumers as homogeneous. In contrast, this research proposes a value-based segmentation approach, identifying distinct consumer groups based on underlying motives such as environmental concern, technological innovativeness, and health orientation. By uncovering these value-driven segments, the study provides theoretical contributions and practical insights for marketers and firms seeking to better understand and target diverse consumer needs.

#48 – Embolden Education

Student Presenter: Mary Alise Lesley

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 11:30-12:30

Abstract: Embolden Education is an online learning platform specifically created for adults who struggle with illiteracy. A large issue arises due to this. Nearly 25% of South Carolina's adult population are illiterate and there are very few resources specifically created to teach adults how to read and write. In addition, many adults who struggle with literacy, have feelings of embarrassment that are aggravated by having to use resources not created for their demographic. This is why I have created this free, nonprofit, online learning platform- Embolden Education. So that low income individuals will have access to age appropriate resources to learn how to read and write.

#49 – Whisk-AI

Student Presenter: Olive Challa

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 12:30-1:30

Abstract: Whisk AI is a smart pet care platform designed to address one of the most common challenges faced by pet owners; uncertainty about their pet's breed and care needs. Whisk AI solves this problem by combining AI-powered breed identification with personalized, real-time care guidance. By analyzing a pet's characteristics, the platform delivers tailored recommendations specific to that animal, eliminating the need for owners to rely on scattered or generic online resources. The system centralizes essential features such as breed insights, care plans, and health considerations into a single, user-friendly interface.

#50 – Conducting Radio Astronomy at FMU

Student Presenters: Isaac McMillan & Jacob Cedilote

Advisors: Jeanette Myers & Hunter Sims (Physics & Engineering)

Presentation Time: 1:30-2:30

Abstract: This project focuses on the design, construction, and testing of a low cost horn antenna for radio astronomy applications, with a primary target of detecting the 21-cm neutral hydrogen emission line at 1420 MHz arising from electron spin-flip transitions. The antenna was built using a combination of 3D printed components and commercially available materials sourced from a local hardware store, with the goal of demonstrating that functional radio astronomy instrumentation can be produced with limited resources. Data collection with the horn antenna is scheduled for upcoming observation sessions, after which measurements will be analyzed for signatures consistent with the 21-cm hydrogen line. The current design will allow us to detect structures such as the Orion and Horsehead Nebulae and the galactic center. Future modifications will allow us to map the structure of the Milky Way Galaxy.

#51 – The effect of exercise duration and frequency on psychological distress

Student Presenter: Lian Timmermans

Advisor: Jesse Sargent (Psychology)

Presentation Time: 9:30-10:30

Abstract: This study examined the relationship between exercise duration and frequency on psychological distress among the Francis Marion University student population. The participant population sample consisted of 25 students, who all completed a pre- and post-workout survey on psychological distress with 17 items each based on the POMS-SF scale. Interestingly, all subcategories (tension, anger, depression, fatigue, confusion, vigor) except for 'fatigue' showed a decrease in psychological distress scores. Subcategory 'Fatigue' could have shown an increase in the post-workout scores due to exercise-induced fatigue. Despite a slightly negative correlation between exercise duration and the total score (pre-workout – post-workout), decrease in distress, correlations between exercise duration and frequency per week on the total scores were shown to be not significant. Further recommendations for research in this area are discussed.

#52 – Impact on radiation protection internal dosimetry of modeling organ vasculature

Student Presenter: Sebastian Harding

Advisor: Derek Jokisch (Physics & Engineering)

Presentation Time: 10:30-11:30

Abstract: We explore the dosimetric impact of this advancement by coupling the S-coefficient to biokinetic model predictions for select radionuclides. The objective was to determine any difference in absorbed and equivalent dose due to explicitly modeling vasculature versus treating the liver as a homogenous tissue/blood mixture. The largest difference was seen for the ingestion of tritium in food, due to the combination of tritium's low-energy beta emissions and a lack of preferential uptake in the liver. We conclude that separate dosimetric modeling of the blood-containing vasculature and an organ's avascular tissue may be dosimetrically significant for select radionuclides which have the following characteristics: (a) a significant portion of the dose is due to short-range emissions (alpha particles or low energy electrons) and (b) biokinetic models yielding a significant proportion of the nuclear transformations taking place in the blood compared to the tissue of the organ.

#53 – Error Detection Using Verhoeff's D5 Scheme

Student Presenter: Jeremiah Luke Poston

Advisor: Ivan Dungan (Mathematics)

Presentation Time: 11:30-12:30

Abstract: This project studies check digit systems based on the dihedral group D_5 , focusing on Verhoeff's algorithm and its use of group operations and automorphisms for error detection. Unlike cyclic methods, the non-abelian structure of D_5 makes digit order significant, allowing the algorithm to detect common input errors such as single-digit mistakes and adjacent transpositions more effectively. This work shows how non-commutativity improves detection of order-based errors that simpler methods often miss, and how abstract algebra, particularly group theory, can be applied to enhance the reliability of real-world data validation systems.

#54 – Teacher Encouragement and Academic Outcomes Among At-Risk Middle School Students*

Student Presenter: Emily Yip

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: This study examined the relationship between teacher positive behavior encouragement and academic outcomes among at-risk middle school students at Mid-Carolina Middle School in Newberry County, South Carolina. Teacher encouragement was defined as supportive instructional behaviors, including positive reinforcement, recognition of student effort, verbal encouragement, and constructive feedback. Using a paired t-test, the study analyzed benchmark assessment scores, in conjunction with teacher-reported encouragement practices. The study also explored whether academic outcomes varied based on teacher–student gender pairings. It was hypothesized that higher levels of teacher encouragement and rapport would be associated with improved academic outcomes and that differences may emerge across gender pairings.

*Graduate Student Project

#55 – Forensic Detection of Accelerants in Fire Debris Using Infrared Spectroscopy

Student Presenters: Trinity Harrell & Sydnee Floyd

Advisors: Jessica Gause (Chemistry)

Presentation Time: 1:30-2:30

Abstract: Forensic analysis of fire debris plays a critical role in arson investigations, especially in detecting the presence of accelerants. This study explores the potential of Attenuated Total Reflectance (ATR) infrared spectroscopy as a rapid, non destructive technique for identifying chemical residues from commonly used accelerants, including ethanol, gasoline, and kerosene. By analyzing and comparing the ATR-IR spectra profiles of multiple burned samples, the aim is to determine whether this technique can reliably distinguish between different accelerants based on their unique chemical signatures. These findings contribute to the growing corpus of forensic science by examining the accuracy of ATR-IR as a standalone or supplementary analytical tool to traditional methods of analysis. Preliminary statistical analysis supports the method's capability to consistently differentiate residue types across samples

#56 – Market Segmentation of Green Smart Technology

Student Presenters: Santiago Sanchez & Kal-EI Ramos Rodrieguez

Advisor: Sooyeon Choi (Marketing)

Abstract: The market of green smart technology has been prevalent over the last decade. This study examines green smartwatch adoption by addressing overlooked consumer heterogeneity. Prior research has focused on general motivations and post-adoption outcomes, treating consumers as homogeneous. In contrast, this research proposes a value-based segmentation approach, identifying distinct consumer groups based on underlying motives such as environmental concern, technological innovativeness, and health orientation. By uncovering these value-driven segments, the study provides theoretical contributions and practical insights for marketers and firms seeking to better understand and target diverse consumer needs.

#57 – Correlation Between Unemployment and Crime Rates in SC

Student Presenter: Ava Roscoe

Advisor: Caroline Padgett (Economics)

Presentation Time: 10:30-11:30

Abstract: I have been doing a semester long research project surrounding the correlation between the unemployment rates and violent and non violent crime rates in the 46 South Carolina counties. I am taking 7 years of data, and multiple different factors across time to fully grasp and analyze this relationship. My findings may obligate the state to create policies surrounding unemployment, if it is true that they go hand in hand.

#58 – Nexus

Student Presenter: Brody Darr

Advisor: Padmaja Rao (Computer Science)

Presentation Time: 11:30-12:30

Abstract: Nexus (publicly deployed at nexusbuild.dev) is a career intelligence platform for developers. Users can analyze their resume with AI, receive personalized feedback, view live job postings that align with their skills, and track the status of their applications all on one website. Data analytics and insights are also offered, allowing job seekers to better understand and optimize their job search. I offer a "freemium" pricing model, with a free tier to get a feel for what Nexus has to offer, and a \$19/month tier for serious users.

#59 – A Comparison of i-Ready Reading Scores in a State Controlled School: A Fall 2024 to 2025 Analysis*

Student Presenter: Cara Dunn

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: Williamsburg County School District has been under State Control since the year 2018 and is actively working towards local control. The Multi-tiered system of support is still relatively new, and it is important to measure whether this system is actively identifying students who are below grade level in reading. Williamsburg County Schools have a disproportionate rate of special education referrals due to extremely low test scores and grades across the county. To measure the effectiveness of the MTSS system, a comparison analysis was done on i-Ready Reading scores from Fall 2024 to Fall 2025 for an elementary school in the Williamsburg County School District. Scores were gathered from grades kindergarten through fifth which show all categories of reading skill. A one-sample Chi-Square test will be initiated once all data has been gathered in order to investigate whether a significant difference happened between reading scores from Fall 2024 to Fall 2025. It is hypothesized that reading scores will have increased for all grade levels and the the school as a whole.

#60 – Cryptocurrency and Risk: A Generational Investment Divide

Student Presenter: Selena Wimbish

Advisor: Caroline Padgett (Economics)

Presentation Time: 11:30-12:30

Abstract: This study examines the relationship between age and investment risk perception using data from the FINRA National Financial Capability Study. My research hypothesizes that younger individuals are more willing to take financial risks and invest in cryptocurrencies compared to older individuals. By analyzing survey data on age, gender, education, and investment behavior, this study evaluates how demographic factors influence risk tolerance and investments in various financial assets. The findings contribute to a broader understanding of how an individual's characteristics shape their personal financial decision making.

#61 – A Comparison of MAP Reading Achievement Between Early Elementary Montessori and Traditional Classroom Students in a Title I School*

Student Presenter: Erin Todd

Advisor: Antonio Cooper (Psychology)

Presentation Time: 12:30-1:30

Abstract: Instructional approaches to early literacy development between Montessori and traditional classroom settings vary. Traditional classrooms typically emphasize structured, teacher-led instruction and standardized curriculums, while Montessori environments focus on self-directed learning, hands-on materials, and collaboration of students of different ages. Understanding how these two models shape reading skills, especially in early years is important for educators and families seeking to track and support literacy of young readers. At a Title I school, growth on MAP Reading from fall to spring was measured for Montessori and traditional kindergarten and first-grade students. The study compared beginning- and end-of-year scores, as well as growth rates, across the two instructional settings.

#62 – Familial Caregiver Training from Speech Language Pathologists in South Carolina with Dementia and Dysphagia*

Student Presenters: Sara Frances Miller, Emily Campbell, Laura Kelly Cook, Aliyah Herod, Allison Wellons, Tess Graham

Advisor: Michele Norman (Speech Language Pathology)

Presentation Time: 10:30-11:30

Abstract: Parkinson's Disease Dementia (PDD) is often linked to pharyngeal swallowing impairments, which can increase the risk of aspiration pneumonia (Larsson, 2017). Caregiver support and training are an essential part of safely managing dysphagia (Dibao-Dina, 2025). This study aims to provide details regarding how and when familial caregiver training is provided by speech-language pathologists in South Carolina to caregivers of individuals diagnosed with Dysphagia and Parkinson's Disease Dementia. Using a quantitative survey, participants were recruited using the South Carolina Speech and Hearing Association (SCSHA) Directory, social media via Facebook posts, and other email contacts. Nineteen participants were initially eligible for the study, and an additional 5 were recruited during the January 2026 SCSHA conference. Results indicate that many SLPs in SC do not alter care approaches for individuals with PDD and coexisting dysphagia compared to those with other types of dementia. Verbal education was the most common training method (78.95%) followed by modeling, demonstration, and teach-back (42.11%) to reinforce learning. Specific to the SCSHA results, 2 of 5 participants reported training the familial caregivers of PDD patients differently than familial caregivers of patients with other dementia types. One person elaborated indicating that the education provided is more based on the motor and cognitive progression of Parkinson's Disease itself. Although it was a small sample size, it appears that SLPs in South Carolina are well established in their use of familial caregiver training to those with dementia and coexisting dysphagia.