



Southeastern Association for Behavior Analysis

DoubleTree by Hilton, Chattanooga, Tennessee

October 22–24, 2026

SEABA is a regional affiliate of the Association for Behavior Analysis,
International

SEABA 2026

The Southeastern Association for Behavior Analysis, founded in 1984, is a regional scholarly organization and an affiliated chapter of the Association for Behavior Analysis, International. It exists primarily to promote scholarly interchange in behavior analysis through its annual convention. Membership is open to anyone with a scholarly interest in Behavior Analysis.

Officer List

President

Annie Galizio
Middle Tennessee State University

President-Elect

Emily L. Baxter
University of North Carolina Wilmington

Past-President

Kathryn M. Kestner
West Virginia University

Secretary-Treasurer

Karen G. Anderson
West Virginia University

Program Chair

Jonathan E. Friedel
Georgia Southern University

Board of Directors

Catherine Williams (2023-2026)
University of North Carolina Wilmington

Sherry Serdikoff (2024-2027)
Savannah State University

David Cox (2026-2028)
Mosaic Pediatric Therapy; Endicott College

Acknowledgments

SEABA would like to acknowledge the following 2026 Exhibitors and Sponsors for their generous donations:

- The Learning Tree ABA
- Annie Galizio
- Chris Newland
- Karen G. Anderson
- Jay Hinnenkamp
- Jonathan and Sara Friedel
- Mark Galizio and Kate Bruce
- Matt Eckard
- Michael Perone
- Sherry Serdikoff (CEU Coordinator)

A special thank you to Arya Johnson and Kirsy Mullis for their help in setup and registration.

Thank you to Georgia Southern University Department of Psychology for printing the programs.

Thursday, October 22nd

7:00 - 10:00 p.m. – Opening Reception/Registration
Social with Cash Bar

Friday, October 23rd

8:45 a.m. — Opening Remarks

Annie Galizio

Middle Tennessee State University

**9:00 a.m. — Secondary Data Analyses of Behavioral Feeding
Intervention: Reflections, Reconsiderations, and Future
Directions**

Vivian F. Ibañez

University of Florida

Piazza (2008) described a framework linking the biological and social implications of feeding to behavior-analytic assessment and intervention for children with feeding disorders. Eighteen years later, methodological advances have sharpened assessment, individualized treatment selection, and outcome measurement, extending its applicability across increasingly heterogeneous clinical populations. This presentation considers how research linking multiple domains, such as physiological and behavioral mechanisms of feeding, informs applied treatment decisions, and how applied outcomes generate questions for further study. A mixture of qualitative and quantitative data from an intensive multidisciplinary feeding day program, including measures beyond mealtime observation such as gastrointestinal symptomatology and therapist-child interactions, alongside treatment outcome data from novel intervention strategies, will be presented to illustrate this translational link. Results from a qualitative study examining barriers to treatment utilization and educational content priorities among caregivers and clinicians will also be discussed, highlighting stakeholder-identified needs. Combined, these findings point to avenues for communicating big-picture outcomes with diverse communities as the field of pediatric feeding disorders continues to evolve.

10:00 a.m. — Pausing Under Fixed-Ratio Schedules: So What?

Christine E. Hughes

University of North Carolina Wilmington

Transitions between different locations, tasks, audiences, and other conditions often can evoke behavioral disruptions, ranging from procrastinating, complaining, or whining to more severe behavior of escape, aggression, or self-injury. Behavioral disruptions occur most often in transitions between favorable and less favorable conditions, known as rich-to-lean transitions. Several ways to help with behavioral transitions in homes, classrooms, and clinics have been proposed but a common one is the use of a form of advance notice - visual schedules. In this presentation, I will describe experimental research on the use of visual schedules from both applied settings and basic research labs and discuss the importance and relevance of the experimental analysis of behavior (EAB) utilizing fixed-ratio schedules of reinforcement. I also will describe recent research from our EAB lab examining methods to change behavioral disruptions produced during rich-to-lean transitions. In doing so, I hope to answer the question posed in my title.

11:00 a.m. — Break

11:15 a.m. — Follow the Evidence: Behavioral Variables Affecting Forensic Investigation Outcomes

P. Raymond Joslyn

West Virginia University

Forensic interviews and eyewitness identification are fundamental to the investigative process in the US criminal justice system. Information obtained via interviews and criminal lineups provides crucial information to law enforcement during investigations and is often a major deciding factor in determining guilt or innocence in court. However, law enforcement investigative strategies are not typically grounded in science and result in concerning rates of false confession, wrongful conviction, and other miscarriages of justice. Behavior analytic research has much to offer but is conspicuously absent in this area. This presentation introduces a program of empirical, single-case research investigating effects of behavioral variables on outcomes of these crucial investigative processes, such as the effects of question format and presentation on response accuracy during forensic interviews, participant differences (e.g., age, diagnosis), and variables

affecting eyewitness identification accuracy in photo lineups.

12:15 p.m. — Lunch

**1:45 p.m. — Alternative Organisms, Familiar Questions:
Invertebrate Research in Behavior Analysis**

Christopher A. Varnon
University of North Texas

Behavior analysis has long relied on animal models to investigate fundamental processes of learning and behavior, but the diversity of species represented in the field remains relatively limited. Invertebrates offer surprisingly practical opportunities to broaden the range of organisms investigated while allowing familiar questions about learning and behavior to be approached from new perspectives. In this presentation, I will discuss my laboratory and classroom work with invertebrates such as bees and cockroaches. I will share lessons from this work that are relevant to practitioners, scientists, and educators alike, including strategies for those interested in studying animal behavior, considerations surrounding species selection, and the importance of understanding the biology and natural history of the organisms we study. Finally, I will consider what behavior analysis can learn from related fields of animal behavior, such as comparative psychology and ethology, and how greater interaction among these fields can broaden both the organisms we study and the questions we ask about behavior.

2:45 p.m. — Joint Modeling of Behavior

Jeremy M. Haynes
Georgia Southern University

Joint modeling is a hierarchical modeling approach that involves estimating parameters across multiple assessments simultaneously (e.g., across time or tasks). Joint modeling is becoming increasingly popular to improve parameter reliability and better align statistical and theoretical models. In this talk, I will introduce joint modeling of choice data that may prove useful in characterizing patterns of decision-making across observation periods. I will also highlight limitations and cautions for behavior analysts using this approach.

3:45 p.m. — Break

4:00 p.m. — Talking with Dogs: Translational and Applied Research to Improve Human-Dog Interactions

Erica N. Feuerbacher

Virginia Polytechnic Institute and State University (Virginia Tech)

Despite our long-standing relationship with domestic dogs, up until the last two decades, relatively little literature existed regarding dog-human interactions and how to improve them, and even less from a behavior analytic perspective. Our lab has investigated translational questions regarding preference and reinforcer efficacy for dogs, including preferences for and relative reinforcing value of petting, vocal praise, and food, as well as the impacts of familiarity, the interactor, context, and stimulus magnitude. These translational studies help us better understand dogs as a species as well as individual differences, but also inform how we can most effectively and humanely interact with them. In this talk, I'll detail some of our work exploring dogs' preferences for different human interactions and what stimuli function as positive reinforcers for them, as well as what environmental or stimulus factors impact those results. We'll then look at ways to apply this knowledge in practice, including training owned dogs to as a detection force for invasive agricultural pests, as well as training dogs to participate in cooperative care procedures.

5:00 p.m. — Business Meeting

7:30 - 10:00 p.m. — Poster Session & Social with Cash Bar

Saturday, October 24th

8:30 a.m. — Indexing, Synthesizing, and Appraising Indicators of Impact for Challenging Behavior Interventions Evaluated in Behavior-Analytic Journals

Joseph M. Lambert

Vanderbilt University

This talk presents pilot data, followed by the results of a systematic review of the literature, to establish a need for documenting and describing the extent to which authors of intervention research have explicitly and implicitly measured and reported indices of impact when

evaluating interventions for challenging behavior published in behavior analytic journals. Using data-extraction methods that were both traditional (i.e., only considering formal reports of generalization, maintenance, & social validity) as well as exploratory (i.e., methods-narrative coding using a conceptual taxonomy informed by the Drabman et al. [1979] generalization map). Considerable measurement oversights precluded our ability to draw strong conclusions about the extent to which, and the circumstances under which, contemporary approaches to intervention might lead to ecologically valid and sustained behavior change following treatment termination. Notwithstanding, the residual gestalts produced by existing evidence offer silhouettes that appear to implicate critical next steps.

9:30 a.m. — Using Synchronous Reinforcement to Change Walking Speed During the Treadmill Preparation

Daniel Sheridan & John T. Rapp

Auburn University

Walking is a common form of exercise. Although current recommendations exist for walking volume (e.g., steps per day), recent research has begun to distinguish volume from intensity (e.g., “brisk” walking) as an important dimension of exercise. Increasing intensity may confer additional health advantages beyond volume measures because it shifts cardiovascular performance to more vigorous training zones. In a series of translational studies (Baruni et al., 2025, 2026; Pinkston et al., 2024; Rapp et al., 2025; Sheridan et al., 2025; Walker et al., 2025, 2026), Rapp and colleagues used synchronous reinforcement schedules with access to either high preference or low preference music for changing the walking speed of human participants as they walked on manualized treadmill during a five-component schedule. In addition to demonstrating schedule control (as defined in each study) of synchronous reinforcement schedules on walking speed and increasing heart rates for a high percentage of participants, results from these studies illustrate variability in participants’ walking speed after synchronous reinforcement was discontinued (i.e., during extinction), as well as the impact of providing rules to participants that specified how to produce access to preferred music.

10:30 a.m. — Break

**10:45 a.m. — Lessons From Basic Science on the Effects of
Punishment on Choice**

Rafaela Fontes

The University of Mississippi

11:45 a.m. - Noon — Closing Ceremony

Notes

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Posters

University Programs

A. Science, Skinner, & Surf: Ph.D. and Master of Science in Psychology at UNCW

University of North Carolina Wilmington

At the University of North Carolina Wilmington, we are dedicated to providing a well-rounded educational experience in the experimental analysis of behavior whether your subjects are human or nonhuman, in the lab or in the natural setting, engage in excessive behavior, or need behavior shaped. We have three tracks in our Master's and PhD programs (ABA, Psychological Science, Neuroscience & Behavior) in which students can study behavior analysis. All students take core courses in psychology, including statistics and research methods, and in behavior analysis, including learning, small-n design, applied behavior analysis, and conceptual foundations. All students work closely with a faculty mentor to contribute to research, including developing their own empirical thesis (Master's) or dissertation (PhD). Students in our applied behavior analysis tracks take additional courses in clinical psychology and complete ABA practica. After graduating, the ABA students are eligible to sit for the BCBA certification exam. Students also participate in a weekly graduate seminar in advanced topics in behavior analysis, regional and state conferences, and in ABAI. The following programs are ABAI-accredited: M.S. in Psychology with a Concentration in Applied Behavior Analysis, On-Campus and Ph.D. in Psychology with a Concentration in Applied Behavior Analysis, On-Campus.

B. Masters of Science (MS) in Behavior Analysis

Georgia Southern University

C. Behavior Analysis Ph.D. Program at West Virginia University

West Virginia University

The Behavior Analysis Ph.D. program at West Virginia University offers a rich history of scientific excellence and mentorship dating back to its founding in 1976 by Don Hake, Andy Lattal, Kent Parker, and Jim Shafer. Since then, the program has grown into one of the nation's leading training sites in behavior analysis, awarding nearly

one hundred doctoral degrees to students from across the United States and abroad. The faculty (Andy Lattal, Matias Avellaneda, Karen Anderson, Claire St. Peter, Kathryn Kestner, Brennan Armshaw, and Ray Joslyn) represent a breadth of expertise spanning basic, applied, and translational research. Faculty have earned major university and professional teaching and research awards, serve as editors and associate editors of leading journals, and consistently contribute to advancing behavioral science through extramural research funding. The mission of the program is to prepare scientists and practitioners who can advance understanding of the principles of behavior and apply those principles to socially significant problems. Students receive comprehensive training in the experimental, applied, and conceptual analysis of behavior through integrated coursework, mentored research, and practicum experiences. The curriculum provides a strong foundation in behavioral theory and research methodology while allowing students to emphasize basic or applied work. The Ph.D. degree program in Behavior Analysis is accredited by the Association for Behavior Analysis International Accreditation Board. WVU's Behavior Analysis program is a recipient of the Society for the Advancement of Behavior Analysis Award for Enduring Programmatic Contributions, reflecting its long-standing national and international impact.

D. Undergraduate Research Experience: Translational Research in Behavior Science at WVU

West Virginia University

The NSF-Funded REU Site for Translational Research in Behavior Science at West Virginia University offers undergraduate students a hands-on, mentored research experience in experimental psychology. The program immerses participants in laboratory-based investigations that connect basic behavioral principles to issues of social significance. Students work alongside faculty mentors from WVU's Behavior Analysis program to design and conduct research in areas such as behavioral pharmacology, relapse prevention, social behavior, and the development of effective behavioral interventions. Throughout the nine-week program, participants gain skills in scientific reasoning, research design, data analysis, communication, and collaboration. Structured activities include a three-day training in behavioral research methods, weekly seminars on contemporary issues in

behavior science, multidisciplinary workshops, a physical computing lab, and a final research symposium. The REU Site aims to expand participation in behavioral science, particularly among students from groups underrepresented in STEM, and to prepare the next generation of researchers to translate discoveries from the laboratory to applications that improve lives.

E. Behavior Analysis Master's at MTSU

Middle Tennessee State University

none

Research Posters

1. Evaluating Reinstatement with Synchronous Reinforcement Schedules

Yoneida Izaguirre, Maggie Brogan, Jacki Crew, Gunnar Goransson, Lauren Money, and Emily Baxter

University of North Carolina Wilmington

Reinstatement is a form of behavior relapse that occurs following a response-independent delivery of the reinforcer associated with the target behavior. Synchronous reinforcement schedules deliver reinforcers concurrently with target behavior, which establishes a temporal connection that supports continuous behavioral engagement. Contingent access to music selected by participants that is delivered on a synchronous schedule has been shown to effectively maintain effortful physical activity among college students. The present study evaluated if reinstatement can be observed when the reinforcer was presented using a synchronous schedule of reinforcement. Currently, 9 college-aged participants have been recruited through the university's online recruitment platform. Each participant completed a 30-minute session in which there was a basketball hoop and several other activities (e.g., drawing materials and fidget toys) available throughout. Initially, participants' active engagement in a basketball activity was reinforced (i.e., preferred music played over a speaker) using a synchronous reinforcement schedule. Following 5 minutes of reinforcement, music was no longer provided for engaging in the target behavior. A response-independent delivery of the music was provided for 30 seconds when the participant had not been engaged in the target response for 3 minutes. This continued until

3 response-independent deliveries of the reinforcer occurred or until 30 minutes elapsed. Engagement in the active response was recorded throughout to observe if reinstatement of the target occurred following the response-independent delivery of the reinforcer. Results and implications will be discussed further.

2. Publication Outcomes of BCBA-D Dissertations

Aubree Justice, Hailey Stephens, and Anna Kate Edgemon
University of Mississippi

The Board Certified Behavior Analyst–Doctoral (BCBA-D) is a doctoral designation available to BCBAs with qualifying doctoral or postdoctoral training; it is not a separate certification and does not confer privileges beyond BCBA certification. Because the designation communicates doctoral preparation, examining the dissemination of BCBA-D certificants’ dissertation research may clarify one dimension of the scholarly activity associated with it. This descriptive study of publicly available data explores what proportion of individuals who obtained the BCBA-D designation from 2018 to 2023 subsequently published their dissertations in peer-reviewed journals. Using the BACB Certificant Registry, researchers identified BCBA-D certificants. Researchers then searched ProQuest, Google Scholar, university repositories, and journal databases to locate each dissertation and potentially corresponding publications. Records were matched using author identity, dissertation title and topic, publication title, and other available bibliographic information (e.g., affiliation, coauthors). Preliminary analyses indicate that dissertation-to-article publication is inconsistent across certificants. Our methods thus far have also revealed limitations in using the public registry for historical research. Future studies should consider analyzing these same data across longer periods, surveying BCBA-D certificants, and more efficient methods for conducting historical research among BACB certificants.

3. Food Insecurity, Preference and Behavioral Economic Demand in College Students

Isaac Seneca, Daphne Kilbourne, Chloe Bellia, Caroline Knox & Wendy Donlin Washington.

University of North Carolina Wilmington

Food insecurity is prevalent among college students with

estimates across U.S. based studies ranging from 14.1% to 58.8% and an average prevalence of 32.9%. The present study examines food preference and demand among college students with a focus on food insecurity and other contextual constraints that may influence food choice. Participants complete the 10-item USDA Adult Food Security Survey Module and questions assessing relevant contextual variables. Participants also complete a virtual paired stimulus preference assessment and hypothetical purchase tasks in randomized order. The preference assessment establishes a preference hierarchy across 10 food items, including both high and low energy density food options. For the same foods, hypothetical purchase tasks assess the number of 30 g servings participants would purchase and consume across 17 increasing price points while holding relevant purchasing conditions constant. Demand is characterized using behavioral economic indices including intensity of demand (Q_0), demand elasticity (α), maximum expenditure, price associated with maximum expenditure (P_{max}), and breakpoint. Data collection is ongoing, and preliminary findings will be presented on financial and food security, and possible relations to preference and demand.

4. Barriers and Facilitators of Acceptance and Commitment Therapy and Contingency Management Mobile Health Smoking Cessation Interventions in Primary Care Settings

Charlotte Jones, Hailey Donohue, Harry Bishop, Sofia Anrecio, Melissa Bou Malham, Sionika Thayagabalu, Erika Mattar, Destiny Webb, Gabriela Baez, Ashley Dwarka, Magda Knight, Jesse Dallery, Ramzi Salloum, & Ryan Theis

University of Florida

Cigarette smoking is the leading cause of preventable death in the United States. Mobile health (mHealth) interventions offer a low-cost option to reach underserved populations, yet gaps remain in understanding their real-world application, particularly for contingency management (CM) and acceptance and commitment therapy (ACT). Thus, our goal is to gather patient perspectives on these interventions delivered in underserved primary care clinics. During an ongoing comparative effectiveness trial, we randomized current smokers to standard of care (Tobacco Free Florida), an ACT-based smartphone intervention (“iCanQuit”), or a combined ACT and CM intervention (“iCanQuit+Motiv8”).

Qualitative interviews were conducted at 6-months and analyzed using team-based deductive and inductive coding. Interviews with 22 patients across 10 clinics suggest high acceptability of the study and staff. mHealth interventions were described as userfriendly and helpful for reducing or quitting smoking, specifically mindfulness activities, self-paced levels, measurable cessation progress, and financial incentives. Barriers included technical difficulties, limited tech literacy, and an initial learning curve. Patients emphasized the importance of study staff support, suggesting that human support may be critical when implementing remote mHealth interventions. These findings will inform ongoing improvements to the trial and may guide implementation of other behavioral mHealth interventions in primary care settings.

5. Comparing the Effects of Variable and Fixed Lag Schedules on Response Variability

Morgan Treadwell¹ Kendall Sloan² Kathryn M. Kestner¹

*West Virginia University*¹*West Michigan University*²

Behavioral variability is critical for creativity, problem-solving, and skill acquisition. Procedures such as lag schedules directly reinforce variable responding but can produce higher-order stereotypy. Variable-lag schedules may mitigate the development of higher-order stereotypy frequently associated with fixed-lag schedules, but to our knowledge, only one study has directly compared fixed- and variable-lag schedules. Maintenance of variable responding during extinction also remains relatively unexplored outside nonhuman animal models, and it is currently unclear whether variable responding established under fixed- and variable-lag schedules would differ in resistance to extinction. Thus, the present study compared the effects of fixed- and variable-lag schedules on variability before, during, and after extinction. Eight adult participants completed a human-operant computer task, clicking sequences of colored circles to earn points. A two-component multiple schedule was in place during all phases. During Phase 1, responding was established on a mult fixed-lag 6 variable-lag 6 schedule. Extinction was in effect during both components of Phase 2. During Phase 3, the mult fixed-lag 6 variable-lag 6 schedule was reintroduced. Both schedules produced similar levels of variability during the first phase. Four of eight participants demonstrated a decrease in

variability during extinction, although the magnitude of decrease varied across participants. Three of the four participants whose variability decreased during extinction showed modestly greater maintenance in the variable-lag component. During Phase 3, variability returned to levels observed in Phase 1 for all four participants whose variability had decreased. Variable-lag schedules may produce more persistent patterns of variable responding in some individuals.

6. Behavioral Effects of Retatrutide in Rats: Morphine Antinociception, Body Weight, and Food Consumption

Natalia Kozic, Rishika Kuntamukkla, Tulsi Joglekar, Alyssa Moheiser, Joe Fuss, Angelina Say, & Vanessa Minervini

Creighton University

Glucagon-like peptide-1 (GLP-1) receptor agonists are widely used for treating obesity and diabetes. GLP-1 drugs can reduce self-administration of drugs of abuse, including opioids, yet it is unclear how GLP-1 drugs interact with opioid-induced pain relief. This study investigated how retatrutide, a triple receptor agonist, affects morphine antinociception. Baseline antinociceptive effects of morphine (1.78 – 17.8 mg/kg) were determined twice in male (n=7) and female (n=8) adult rats by recording tail withdrawal latency from 40, 50, and 55 °C water baths. Thereafter, rats received retatrutide (0.1 – 1 mg/kg) once per week 24 hours prior to a morphine antinociception test. Retatrutide did not significantly alter morphine antinociception for either sex. However, it caused a transient, dose-dependent decrease in body weight and food consumption in both sexes. Together, these findings suggest minimal drug-drug interaction between retatrutide and morphine regarding analgesic efficacy, supporting opioid use for pain management in patients receiving GLP-1 receptor agonists.

7. Effects of Question Difficulty and Its Interaction With Interrogation Method on Response Accuracy in Analogue Forensic Interviews

Islay Thompson, Brendan Scanlan, Samantha Moon, Ray Joslyn

West Virginia University

Eyewitness reports shape legal decision making, yet small features

of questions can influence what witnesses recall and the accuracy of their subsequent testimony. It is well-established that the way a question is asked and how the interviewer reacts to interviewee's answers can negatively affect response accuracy. To date, research has primarily examined question format and interviewer feedback, while the influence of question difficulty during forensic interviews remains underexamined, both in terms of its effects on response accuracy and its potential interaction with interviewer behavior to further influence response accuracy. Furthermore, most of the research that has examined the effects of question difficulty on response accuracy has relied on subjective ratings or participants' willingness to volunteer answers as a measurement of difficulty. The current study empirically established question difficulty by conducting a difficulty index on 800 candidate questions. Questions categorized as "easy" or "difficult" were then incorporated into an experiment evaluating how question difficulty interacts with interviewer behavior to affect response accuracy.

8. A Comparison of Two Training Techniques to Teach Behavior Coding Skills

Jacki Crew¹, Emily Baxter¹, David Eckerman¹, and Catherine Williams¹

¹*University of North Carolina Wilmington*, ²*University of North Carolina at Chapel Hill*

Train to code (TTC) is an automated training program to teach data collectors when to code behaviors. An alternative training technique is Behavioral Skills Training (BST), which is a well-documented technique to teach a variety of behaviors that includes instruction, modeling, rehearsal, and feedback. However, it is unclear which training technique is the more effective and efficient to teach when to code behaviors. We randomly assigned 12 undergraduate students to one of two groups, TTC or BST. Using a between-groups design, participants learned to score seven codes to measure teacher and learning responses during pre-recorded discrete trial training sessions. The procedure consisted of three stages. First, all participants coded a video without feedback or instruction to serve as a pretest. Second, each participants coded the same three videos until their coded met the mastery criterion. Participants in the BST group were given live coaching and feedback until minimum efficiency was

met, whereas the TTC group progressed through automated levels without live coaching. Third, all participants completed two posttests. The first was scoring the pretest video. The second assessed generality. Participants scored a new video that included coding when DTT was used to teach a different kind of skill than those shown in the training videos to assess generality. We will analyze the data and provide results and implications of the experiment during the presentation.

9. Interview Autonomy of Children Diagnosed With Autism Spectrum Disorder: An Initial Evaluation

Ryleigh K. Rosta, Samantha L. Moon, and P. Raymond Joslyn
West Virginia University

Autistic children experience elevated rates of abuse, neglect, and other forms of victimization relative to their neurotypical peers. However, they are rarely called upon to provide eyewitness testimony, often due to a lack of perceived credibility. Susceptibility to leading or biased questions presented by adults (i.e., interviewer behavior) is one variable detracting from their credibility. Few assessments have been designed to identify susceptibility to interviewer bias, and even fewer interventions have been designed to address it. The current study investigated an approach to assessment of and intervention (i.e., vocal instructions) for autistic children's susceptibility to interviewer behavior. Three autistic children, aged 6-8, watched brief clips from a children's cartoon and answered questions presented by an interviewer. Questions were either neutral or leading (i.e., suggestive, co-witness, re-questioning). After finding that all participants' response accuracy decreased when asked leading questions, explicit vocal instructions improved response accuracy for two of three participants.

10. Establishing Operations on Music Valuation: A Translational Study of Auditory Reinforcement

Hailey Stephens
University of Mississippi

Motivating operations are antecedent environmental events that temporarily alter the effectiveness of a consequence and the probability of behavior that has historically produced that consequence. Much research on motivating operations has used

traditional reinforcement schedules based on discrete responses, whereas no studies have examined motivating operations under schedules of covariation. The proposed study will evaluate temporary deprivation of auditory stimulation as a putative establishing operation using complementary measures of music valuation. Undergraduate participants who meet inclusion criteria will be randomly assigned to 0-, 1-, 2-, or 3-hr laboratory deprivation groups. Participants will complete a Music Purchasing Task, a preference assessment, and a conjugate task before and after the assigned deprivation interval. Primary dependent variables will be demand metrics based on responding in the MPT and mean force and peak force measured by the conjugate task. Planned linear-trend contrasts will evaluate whether pre-to-post responding differences vary systematically across deprivation durations. The study will also evaluate whether deprivation-related changes generalize across behavioral dimensions (i.e., behavioral demand, preference, and force) and whether conclusions about reinforcer effectiveness depend on the behavioral dimension measured.

11. Stimulus Fading for Effective Conceptual Learning

Ryan Smith, Mackenzie Fowler, Ashley Shoe, Loyal Lawandos, Catherine Williams

University of North Carolina at Wilmington

When an individual correctly identifies new examples and nonexamples of a concept, conceptual learning has occurred. Some concepts can be described in terms of must-have features, which must be present for a stimulus to serve as an example, and can-have features, which may or may not be present without affecting whether the stimulus is an example. Conceptual learning can be disrupted by including too many can-have features during differential reinforcement or adding can-have features during conceptual learning tests. In addition, using matched examples and nonexamples (same variation of all can-have features) expedited mastery during differential reinforcement but did not improve conceptual learning. Therefore, we conducted conceptual learning across three experiments using stimulus fading to gradually add can-have features while incorporating both matched and unmatched examples and nonexamples. When undergraduate students were taught two arbitrary concepts, differential reinforcement with stimulus fading produced conceptual learning

more efficiently than differential reinforcement without stimulus fading across all experiments. During Experiment 1, four of six participants demonstrated conceptual learning in the stimulus fading condition, whereas only one did so without stimulus fading. During Experiment 2, a timeout procedure followed incorrect responses; however, results remained comparable to Experiment 1. During Experiment 3, conceptual learning tests were incorporated between stimulus fading phases. Performance suggested that some fading stages were unnecessary for achieving conceptual learning. Future research should evaluate stimulus fading for teaching natural concepts and examine alternative fading sequences and other errorless learning procedures to further support conceptual learning and more advanced stimulus control.

12. A Functional Analysis of the Effects of Interviewer Behavior on Response Accuracy During Analog Forensic Interview

Samantha Moon and Raymond Joslyn

West Virginia University

In the criminal justice system, forensic interviews are an essential component of the investigative process. During these interviews, the behavior of the interviewer can have a strong influence on the accuracy of interviewee responses. In this context, interviewer behavior is comprised of antecedents (questions) and consequences (feedback for answers) presented to an interviewee. The limited behavior-analytic research in the area indicates that there may be substantial individual differences in how interviewees respond to various forensic interview styles. The current study evaluated the effects of isolated and combined antecedent and consequence manipulations on adults' response accuracy during analog forensic interviews. Participants viewed crime footage and were interviewed about events in the videos. The interviewer asked yes/no questions varying in presentation style and delivered various forms of feedback for interviewee answers (e.g., praise, statements of doubt/disagreement). We observed the greatest decreases in participant response accuracy when antecedents and consequences were manipulated simultaneously. These findings suggest that question style may exert greater control over responding when accompanied by differential consequences for interviewee responses, contrary to the common assertion that the question presentation primarily controls responding.

13. Early-Life Adversity Reduces Delay Discounting of Punishment in Rats, Irrespective of Sex

Ledesma-Castro, P., Hurtado-Parrado, C., Charry Ardila, E., Goyal, M., Spence, E., Holley, L., Richardson, C., & Coulter, T. J.

Southern Illinois University, Carbondale

Adverse childhood events (e.g., neglect and abuse) strongly predict adult neuropsychiatric disorders characterized by impulsive behavior (e.g., substance abuse). Delay Discounting (DD) is a robust model of impulsive behavior. It is the tendency for behavioral consequences to lose value as they are delayed. Despite mounting evidence of links between DD and psychiatric illnesses, and that early-life adversity (ELA) reliably predicts those illnesses, the experimental evidence of a relationship between ELA and DD using rodent models such as Maternal Separation (MS) and Limited Bedding and Nesting (LBN) is scarce and inconsistent. Concern with these models and the evidence that adverse rearing in humans often entails multiple stressors has resulted in testing MS+LBN combinations. Efforts in this direction show promise, e.g., Cifuentes et al. 2026 found that MS+LBN produced increments in DD of rewards. However, the impact of ELA on DD of punishment is unknown, notwithstanding severe negative consequences often occur long after choices have been made, e.g., smoking. We tested the effects of MS+LBN on DD of punishment in male and female Sprague Dawley rats ($n = 64$). Rats were exposed to a Discounting of Punishment Task (Liley et al., 2019). They chose between two levers providing pellets immediately across blocks of 10 trials. One produced 1 pellet without footshocks, the other 3 pellets followed by a footshock (.35 mA) with delays of 0, 4, 8, 12, 16 s, and a No-Shock block. Exposure to ELA significantly reduced delay discounting of punishment, irrespective of sex and after controlling for shock sensitivity.

14. Evaluating Response Effort Using Progressive Ratio Schedules for Math Problem Completion

Sheena Waddell, Cara Davis, Sam Fisher, and Emily Baxter

University of North Carolina Wilmington

Evaluating Response Effort of Completing Math Problems using a PR Schedule Progressive ratio (PR) schedules gradually increase

how much work a person must complete to earn reinforcement. The last completed reinforcement requirement before responding stops or the participant indicates they are done is called the breakpoint. This study examined whether PR schedules can identify which academic tasks are high or low effort. Participant preference for low-or high-effort tasks when given a choice. Two elementary school students completed single and double-digit addition and subtraction problems being low-and high-effort conditions. Students earned marbles for correctly completing problems. The number of problems required to earn a marble gradually increased. Researchers measured how much work students completed, their response rates, and their breakpoints. A concurrent chains assessment was then conducted to identify student's preferences between low-and high-effort math tasks. Both students completed more work and reached higher breakpoints in low effort conditions. However, their task preferences differed, with one student choosing low-effort problems and the other showing a mixed preference. The study suggests that PR schedules may help researchers identify relative response effort.

15. RBT® Training in Schools: Is the 40-Hour Training Sufficient?

Sabrina Olivera, Corina Jimenez-Gomez

University of Florida

As demand for behavior analytic services continues to grow (BACB®, 2025) and recent legislation seeks to reduce barriers to accessing these services in schools (e.g., Florida Statute 1003.572, Louisiana HB 872, Colorado HB 22-1260), Registered Behavior Technicians (RBTs®) increasingly work in school settings. Existing literature predominantly addresses RBT training in the home, clinic, or through asynchronous online methods, underscoring a gap in our understanding of how to train RBT services in school environments effectively. Despite the RBT credential requiring 40-hour training based on the RBT Task List, there is considerable variation in training methods and delivery. Prior research has produced mixed findings regarding the effectiveness of 40-hour training in developing performance of skills taught (Fisher et al., 2014; Forte et al., 2018). We evaluated the performance of four behavior analytic skills by six public school paraprofessionals pursuing the RBT credential across three conditions: written

instructions, written instructions supplemented with a 40-hour training program, and Behavioral Skills Training (BST). The results indicated that the 40-hour training resulted in mastery of a skill in only two of twenty-four applications. These results highlight the distinction between knowledge-based and performance-based training methodologies and how effectively each prepares trainees to implement these skills. This study also emphasizes the need to identify time-efficient and effective strategies for RBTs in schools.

16. Hold On Tight: Utilizing sEMG to Assess Grip Strength Biofeedback

Ola Barghouthi, Johnathan Knapp, Brennan Armshaw
West Virginia University

Grip strength serves as a strong indicator of overall health and muscle function. Among adults over the age of 60, roughly 50% meet diagnostic criteria for low grip strength. Such deficits in muscle strength are linked to adverse health outcomes. The leading cause of grip strength decline is sarcopenia, a musculoskeletal disease characterized by significant loss of muscle mass and strength. While sarcopenia can lead to a loss of muscle strength, physical rehabilitation has been shown to slow these effects. Specifically, resistance training and consistent engagement in home exercises tend to lead to improvements in strength and function. However, adherence to home exercises is a frequent barrier. Remote monitoring has been shown to improve medical adherence; however, appropriate measures of muscle strength can be difficult to establish. Surface electromyography (sEMG), when coupled with app-based technology, may be well suited to address this barrier. The present translational study adapts an sEMG-based goal-setting procedure originally developed for knee rehabilitation to the assessment of grip strength. Using healthy undergraduate students, this study identified appropriate parameters for arranging the goal-setting procedure, such as contraction duration and intensity. Measured amplitude values of the Flexor Digitorum Superficialis muscle were used to compare the effects of Conjugate vs Discrete feedback on participant engagement. Three participants produced higher amplitude in the Conjugate condition, three in the discrete condition, and the remaining eight were undifferentiated. Findings suggest individual differences may be relevant for selecting the feedback modality and schedule.

17. **From Expert-Driven to Capacity-Building: A Collaborative Behavioral Consultation Model for School-Based Support**

Donyelle Clark-Kennedy

Northwestern State University of Louisiana

Behavioral consultation provides an opportunity to extend behavior analytic expertise beyond direct intervention with individual students by strengthening the skills, practices, and systems of the people who support them. Research suggests that school-based consultation and coaching can promote educators' generalization of evidence-based practices beyond the conditions in which they were initially trained (LaBrot et al., 2024), while consultation approaches that account for contextual barriers and implementation variables can improve educators' implementation of behavioral interventions (Sanetti et al., 2015). Building upon these findings, this conceptual presentation introduces R.I.S.E.³Ready™, a collaborative behavioral consultation framework designed to build internal capacity among educators, students, administrators, and families. R.I.S.E.³Ready™ organizes support across four interconnected areas: Relationships, Insight and Information, Systems, and Evidence-Based Practice. The framework shifts behavioral consultation from an expert-driven model, in which the consultant primarily identifies problems and prescribes solutions, toward a capacity-building model in which behavioral expertise is integrated with the contextual knowledge and experiences of school communities. The presentation will describe the theoretical foundations of R.I.S.E.³Ready™, illustrate its application within school consultation, and propose an agenda for empirical evaluation of the framework. References LaBrot, Z. C., Smith, T., Maxime, E., & Lawson, A. (2024). School-based consultation and coaching for promoting teachers' generalized outcomes: A meta-analysis. *Journal of School Psychology*, 107, 101379. <https://doi.org/10.1016/j.jsp.2024.101379> Sanetti, L. M. H., Collier-Meek, M. A., Long, A. C. J., Kim, J., & Kratochwill, T. R. (2015). Increasing teacher treatment integrity of behavior support plans through consultation and implementation planning. *Journal of School Psychology*, 53(3), 209–229. <https://doi.org/10.1016/j.jsp.2015.03.002>

18. **Precipitated or Spontaneous $\Delta 9$ -THC Withdrawal Produces Selective Motivational Impairment in Long-Evans Rats**

Mackenzie Treadway, Morgan Cash, and Matthew L. Eckard
Radford University

Cannabinoid withdrawal disrupts motivational and attentional processes, contributing to relapse risk. Separate tasks typically measure these processes, with precipitated cannabinoid withdrawal models primarily being used as spontaneous cannabinoid withdrawal detection is more difficult. Using a novel response-alternation procedure, this study simultaneously assessed motivational and attentional disruptions during precipitated and spontaneous $\Delta 9$ -THC withdrawal. An initial cohort of Long-Evans rats ($N=15$) were trained on a response-alternation task wherein a fixed-ratio 10 schedule randomly alternated between left and right levers each trial for one hour or 50 reinforcers per session. The correct lever was signaled by 0.75-s cue light that terminated upon lever insertion, with each lever presented five times in each ten-trial block. Following stable baseline responding, subjects received twice-daily injections of $\Delta 9$ -THC (10 mg/kg, i.p.) or vehicle (1:1:18, i.p.) for eight days. On day nine, rimonabant (0.5 mg/kg, i.p.) administration precipitated withdrawal, while the spontaneous condition received vehicle. Testing continued for seven days post-withdrawal to assess disruption during cannabinoid abstinence. $\Delta 9$ -THC administration disrupted overall responding, before approximating baseline levels. On withdrawal day, only the precipitated withdrawal group showed disrupted responding with disruptions isolated to motivational measures (e.g., response rate and omissions). During abstinence, decreased response rate and increased omissions persisted in the precipitated $\Delta 9$ -THC withdrawal group. The spontaneous $\Delta 9$ -THC withdrawal group showed little-to-no disruption in responding during withdrawal and abstinence. Precipitated $\Delta 9$ -THC withdrawal globally disrupted behavior, while spontaneous $\Delta 9$ -THC withdrawal produced only slight disruptions for motivational measures. This suggests that $\Delta 9$ -THC withdrawal selectively impairs motivational processes with precipitated withdrawal producing greater disruption than spontaneous withdrawal.

19. Measuring Delay Discounting of Fungible Outcomes

Kirsi L. Mullis, Arya C. Johnson, & Jeremy M. Haynes

Georgia Southern University

Delay discounting is a measure of impulsivity assessing the decline of a reward's value the longer it is delayed (Madden & Johnson, 2010). Prior research shows that consumable commodities, such as food, elicit more impulsive behaviors than nonconsumable goods (Odum & Bauman, 2010). Our study investigates fungibility — the extent an item can be exchanged for alternative rewards — as a factor of impulsivity while holding perishability constant. In our study, college students participated in an online questionnaire consisting of two types of tasks aimed to measure sensitivity to delayed consequences: an intertemporal choice task and a wait task. The wait task is a newer task based on hypothetical purchase tasks that assess willingness to wait for a commodity at various delays rather than a willingness to pay for a commodity at various prices. In addition to investigating the discounting of commodities ranging in low to high fungibility, this study also assesses the wait task's validity in measuring delay discounting and fungibility compared to the intertemporal choice task. We did not observe differences across fungibility in either task. While this may be attributed to the task parameters of the discounting task (e.g. increments between delays), we found similar results with the wait task that assessed a wider range of delays. Additionally, measures of delay sensitivity were correlated across commodities within tasks and between the same commodities across tasks.

20. Effects of d-Amphetamine on Effort Discounting in Rats

Stephen J Cullinan, Connor Lambert, Luna McNeff Yee, and Karen G. Anderson

West Virginia University

Effort discounting refers to how a reward's value decreases as the amount of energy required to receive it increases. When the effort for a larger reward is greater than the subjective value of that reward, choice will switch to a smaller reward that requires less effort. Stimulant drugs, which are often used to treat attention-deficit/hyperactivity disorder (ADHD), but also have abuse liability, increase dopamine (DA) and have robust effects on other types of discounting where choice may be deemed

impulsive or risky. However, effects on effort discounting remain unclear. The present study was designed to determine effects of d-amphetamine on effort discounting in rats. Choice was between one food pellet delivered after a single lever press and three food pellets delivered after 3, 6, 12, 24, or 48 lever presses (presented across five blocks of trials in a session, respectively). As the effort required for the larger reward increased, choice for that option decreased. Effects of acute d-amphetamine (0.0-1.0 mg/kg, i.p.) and future directions will be discussed. Continued research in this area has implications in various behavioral disorders involving DA modulation, such as ADHD and substance abuse.

21. The Augmented Matching Law and the Cost of Switching Between Response Alternatives

Matias A. Avellaneda¹, Timothy A. Shahan²

¹*West Virginia University*, ²*Utah State University*

Even though the sensitivity parameter in the generalized matching law is generally treated as a constant, several variables are known to modulate it. These variables include the overall reinforcement rate, the cost of switching between the response alternatives, and the disparity between the stimuli signaling the currently active alternative. An extension of the generalized matching law known as the augmented matching law successfully accounted for the effect of the overall reinforcement rate and includes free parameters that presumably reflect the effects of the switching cost and the stimulus disparity. The experiment reported here used concurrent variable-interval schedules to assess the cost parameter. Rats were exposed to 140 combinations of overall reinforcement rates, relative reinforcement rates, and switching costs. The augmented matching law successfully accounted for the effect of the three variables and outperformed a competing model, but issues of practical non-identifiability were apparent. Fixing the stimulus-disparity parameter to a theoretically meaningful value remedied these issues without affecting the quality of the fits. Overall, the results support the approach of the augmented matching law but also suggest that further theoretical and methodological developments are required. The results also strengthen the connection between the choice literature in behavior analysis and the foraging literature in behavioral ecology.

22. Comparing Sensitivity to Reward Consistency in Adults With and Without ASD: Implications for Social Deficits

Garret Hack, Desiree Gray, Caeli Cormier, Andrew Smith, & Iser DeLeon

The University of Florida

Persistent deficits in social communication and social interactions are a core criterion for diagnosis of autism spectrum disorder (ASD). Social motivation theories claim that individuals with ASD value social stimuli less than do typically developing (TD) individuals, leading individuals with ASD to exhibit social deficits. However, individuals with ASD may simply attend more to non-social stimuli than TD individuals, at the expense of attending to social stimuli, leading to social deficits. We hypothesize that autistic individuals may have hypersensitivity to the consistency of reinforcement, accounting for differences in attending. Given that social reinforcers are less consistent than non-social reinforcers (e.g., asking for a book vs. reaching out and grabbing a book), hypersensitivity to consistency might lead individuals with ASD to attend more towards stimuli associated with non-social reinforcers at the expense of social stimuli, even if there is no inherently diminished value of social reinforcers per se. As a first step in evaluating this hypothesis, we administered a monetary probability discounting task to individuals with and without ASD via Prolific (a crowdsourced data platform) to compare discounting rates across the two populations. We found that participants from the ASD group exhibited slightly steeper discounting rates than TD participants. Comparison of area under the curve for each group revealed no significant differences.

23. Using a Concurrent Social Self-Administration Task to Assess Sexual and Social Partner Preference in Female Rats

Kaitlyn Thornsbury^{1,2}, Grace Bryant¹, Bayle Durrance¹, Jada Collier¹, Elizabeth DeTrana¹, Jay Hinnenkamp¹, and Ann Galizio¹

¹*Middle Tennessee State University*, ²*Auburn University*

Understanding sexual preferences in humans is essential for promoting healthy sexual behavior and addressing maladaptive behaviors, such as pedophilia. However, researching this topic in humans poses ethical and practical challenges. Therefore, rat models have emerged as a useful tool for gaining insights into

human behavior. The aim of the present study was to examine the preferences for sexual and social partners in female rats. In our experiment, we developed a modified version of the social self-administration procedure, allowing rats to press a lever to briefly open a guillotine door and access another rat through a mesh barrier. We set up a concurrent arrangement with three levers: one provided access to a potential sexual partner (an opposite-sex rat), another gave access to a potential social partner (a same-sex rat), and the third led to an empty chamber (control). We measured the allocation of responses across these three levers to assess the rats' preferences for sexual and social partners. Across sessions, we systematically altered the response requirements for each lever to determine whether preferences shifted as response effort increased. Additionally, we monitored the female rats' estrous cycles by analyzing daily vaginal cytology samples to identify whether their preferences were influenced more by sexual or social motivation. We hypothesized that the rats would be more inclined to choose the sexual partner during the sexually receptive phases of their estrous cycle, specifically during proestrus and estrus.

24. Evaluating Generalization of Teacher-Directed Participation During CLM Lessons 3-5 Within a Classroom Setting

Corynn Simon¹, Kathryn Kestner¹, Cathy Scutta²

¹*West Virginia University*, ²*CLM Center of Excellence*

This study evaluated the effects of teacher-directed instruction within the Competent Learner Model (CLM) on unprompted learner participation during generalization probes. Three elementary-aged learners participated in a concurrent multiple baseline design. Teacher-directed instruction began with CLM Lesson 3 and progressed through subsequent lessons according to mastery criteria. The primary dependent variable was correct responding during weekly generalization probes conducted by the researcher. Each probe consisted of five instructions delivered within one minute. Responses were scored as correct when initiated within 5 s without prompting or challenging behavior, as one of three predefined approximations, or as no-response. Probe instructions were selected from sets of emerging skills, with an alternate set of five skills administered every 3-4 weeks to assess responding across instruction sets. Across participants, correct responding was low during baseline and increased following the

introduction of Lesson 3, with high levels maintained as learners progressed through lessons. Approximations became infrequent, and no-responses decreased to near-zero levels during intervention. Increases in correct responding were observed across alternate probe sets. These findings provide preliminary evidence that teacher-directed instruction within CLM may support generalized, independent participation and suggest that changes in responding may emerge early in the lesson sequence.

25. A Comparison of Dependent, Independent, and Interdependent Group Contingencies Within the Good Behavior Game

Ciara Rodriguez, Samantha Moon, Ryleigh Rosta, Ray Joslyn
West Virginia University

The Good Behavior Game (GBG) is a behavioral classroom management procedure that typically uses an interdependent group contingency to decrease student disruption. In this arrangement, a classroom is broken into teams, and all students must follow the classroom rules for any of them to access reinforcement. There is a substantial evidence base that supports the efficacy of the interdependent version of the GBG. However, researchers have found that, despite its effectiveness, the interdependent GBG can present implementation barriers for teachers or be "unfair" to students. In these cases, a GBG variation using a dependent or independent group contingency may have greater social validity. Thus, the present study examined effectiveness and teacher/student preference for the GBG implemented with interdependent, independent, and dependent group contingencies in a 5th grade classroom. As a result, all three versions of the GBG were equally effective.

26. Response Dynamics of a SARSA Algorithm Across Hyperparameters

Caleb S. Spink & John Michael Falligant
Auburn University

Since the introduction of the Evolutionary Theory of Behavior Dynamics (ETBD) by McDowell (2004), a subset of behavior analysts have applied their understanding of behavior in live organisms to the outputs of behavioral simulations. These efforts

have successfully produced computational models of clinically relevant behavior, such as relapse and problem behavior; however, the ETBD lacks the customization of standard reinforcement learning algorithms used to model behavior outside of behavior analysis, including explicit policy and limited hyperparameter tuning. To address these shortcomings, we explore the use of a state-action-reward-state-action (SARSA) algorithm with a softmax policy for modeling behavior within a two-armed bandit resembling a concurrent RI-RI arrangement, with one arm representing a target response and the other representing alternative reinforcement. Before developing a computational model, it is necessary to study the behavioral properties of the algorithm. One such property is the temporal distribution of responses. Therefore, we fit outputs of the SARSA algorithm across multiple settings of schedules, magnitudes, learning rates, discount factors, and randomness to Shull's (2004) equation to quantify the proportion of responses that are bout initiations, the within-bout response rate, and the bout initiation rate.

27. Evaluating Acute Effects of, and Withdrawal From, Δ -8 Tetrahydrocannabinol on Reward Motivation in Rats

Morgan Cash, Mackenzie Treadway, Matt Eckard

Radford University

The 2018 Farm Bill increased access to cannabis derived products like Δ 8, which is used in place of Δ 9 due to its quasi-legal status. Most studies have reported dependence and withdrawal via Δ 9-THC use, not on Δ 8-THC. The study's goal determines effects of Δ 8-THC withdrawal on motivated behavior of rats and reflects mood disturbances often reported in cannabinoid withdrawal. Across two experiments, we assessed dose-dependent effects and withdrawal from Δ 8-THC on progressive-ratio (PR) performance in Long-Evans rats. Experiment 1 assessed acute effects of Δ 8-THC (0, 3, 10, 30 mg/kg, i.p.) on progressive ratio performance and body temperature using a within-subjects design (N = 8). The same subjects were used to determine acute effects of Δ 9-THC (0, 1, 3, 10, mg/kg, i.p.) as a comparison for Δ 8-THC potency. Experiment 2 assessed effects of Δ 8-THC withdrawal on progressive-ratio performance. Two groups (N = 4) were given twice daily injections of Δ 8-THC (30 mg/kg, i.p.) for 6 days with a second group (N = 4) receiving vehicle. The cannabinoid antagonist rimonabant (0.5 or 1.0 mg/kg, i.p.) was used to

precipitate withdrawal across two consecutive withdrawal sessions with one $\Delta 8$ -THC serving as a spontaneous withdrawal group. Duration of $\Delta 8$ -THC tolerance was assessed by administering the synthetic cannabinoid agonist CP55,940 (0.2 mg/kg, i.p.) every 5-7 days to all subjects. Both THC compounds dose-dependently reduced PR responding and body temperature with $\Delta 8$ -THC being 3 times less potent than $\Delta 9$ -THC. Additionally, precipitated, but not spontaneous, $\Delta 8$ -THC withdrawal reduced reinforcers earned and response rate with tolerance to $\Delta 8$ -THC persisting for 4 weeks. These data extend previous findings on the dependence liability of $\Delta 8$ -THC.

28. Select, Not Reject, Control in a Simultaneous Discrimination With Rats: Evidence From Observational Measures

Michelle K. Henault¹, Rebecca Collins¹, Lauren N. Campo¹, Tom Cariveau¹, A. Michele Curd¹, Isaac Seneca¹, Kendall Lipnick¹, Taylor Lewis², Mark Galizio¹, & Kate Bruce¹

¹*University of North Carolina Wilmington*, ²*Middle Tennessee State University*

Recent research has found that responding by rats and nonhuman primates following simple simultaneous discrimination training resulted in control by both positive (i.e., select control) and negative (i.e., reject control) stimuli. Our lab recently attempted to systematically replicate this research with rats using olfactory stimuli. Using stimulus substitution probes, we were unable to replicate the findings of previous research, such that responding under reject control was not observed for any of our rats. Using video recordings, independent observers measured interim behaviors, response latency, distance traveled, and observing responses during substitution probes and no-bait trials to further characterize potential sources of control. Similar observational data were not reported in earlier research, likely because those studies were conducted in a standard operant chamber. Our findings suggest that the subjects showed no differential responding to the S- relative to a novel S+ on exclusion probes. Moreover, the rats exhibited greater interim behavior, longer response latencies, and traversed the arena for distances that far exceeded other probe and trial types. These data confirm that responding had likely come under select control and suggests that greater analysis of interim behavior might further improve

inferences of stimulus controls.

29. Intraverbal Prompting During Picture Book Reading

A. Michele Curd¹, Lauren N. Campo¹, Tom Cariveau¹, Michelle K. Henault¹, Rebecca Collins¹, & Taylor Lewis²

¹*University of North Carolina Wilmington*, ²*Middle Tennessee State University*

Intraverbal prompts have received limited attention in the behavior analytic literature despite their ubiquity in adult-child interactions such as picture-book reading. Picture books commonly include opportunities to teach several distinct operants given the range of stimuli that appear on a page as well as those presented by the participating adult. The present study evaluated the efficacy of intraverbal prompting during picture-book reading on the development of unprompted correct responding across tact, textual, and intraverbal operants for children receiving 1:1 reading intervention in a Title-I elementary school. Experimenter-prepared picture-books allowed for the presentation of either tact, textual, or intraverbal target trials. Following incorrect responses, the experimenter presented an intraverbal prompt. Intraverbal prompts were effective such that participants always responded correctly following the prompt and we observed consistent transfer to the target antecedent conditions. These findings suggest that the use of intraverbal prompting during picture book reading can foster the development of distinct verbal operants.

30. Stimulus Control in Contingencies of Renewal and Reinstatement in a Multiple Schedule Arrangement in Rats

Rebecca Collins, Allyson Williams, Hadley Quigg, Zoe Dorman, Katherine Bruce, & Mark Galizio

University of North Carolina Wilmington

Relapse is the recurrence of previously extinguished behavior and can threaten the durability of effective behavioral interventions. Renewal and reinstatement, two robust forms of relapse, are typically studied separately using between-subject, free-operant procedures. To examine both within-subject, three female Sprague Dawley rats completed a four-phase study. In Phase 1, left-nose pokes were reinforced in the presence of one odor; in Phase 2, this response was extinguished in the presence of a

second odor; renewal and reinstatement were then tested in Phases 3 and 4. Contrary to expectations, little to no renewal occurred, and although reinstatement appeared for all rats, it was equally generalized across all scent contexts. We hypothesized both findings stemmed from the arrangement not requiring scent discrimination, and that a multiple schedule arrangement requiring differential responding to scents early on could establish each discriminative stimulus as a contextual cue. To test this, three male Sprague Dawley rats underwent a related procedure. In Phase 1, a two-component multiple schedule reinforced center-nose pokes in the presence of one scent but not another, requiring a discrimination index of at least .75 to advance. In Phase 2, this response was extinguished in the presence of one scent. Phase 3 tested renewal using the two training scents, the extinction scent, and a novel scent; Phase 4 tested reinstatement using those same scents. Renewal (ABA and ABC) was restricted to the training and extinction scents, with little to no renewal for the other two scents. Reinstatement was generally lower than renewal and context specific.

31. Failure to Demonstrate Conditioned Odor Preference With Methamphetamine in Rats

Hadley Quigg, Skylar Murphy, Liz Persuitte, Allyson Williams, Mark Galizio, & Katherine Bruc

University of North Carolina Wilmington

Conditioned place preference is a well-documented animal model of drug reward. However, little research exists on conditioned odor preference (COP) where odor acts as a contextual conditioned stimulus instead of place. We are developing a COP procedure to use in a study of transfer of function in rats. In our pilot work, 15 Sprague-Dawley rats were confined to a compartment containing an odor that was paired with either saline or methamphetamine (0.5, 1.0, or 2.5 mg/kg) over an eight-day conditioning timeline. Subjects alternated between receiving sub-cutaneous saline or methamphetamine for a total of four injections of each. Subjects also alternated between side of compartment the odor was experienced in to account for any place preference. On days 9 and 10, the odor paired with methamphetamine was presented in one compartment and the odor paired with saline in the other. During testing, subjects were initially placed in a neutral hallway connecting the two compartments and allowed to free-roam for 15

minutes. No preference for the odor paired with methamphetamine was observed. Subjects spent approximately the same percentage of time with the methamphetamine-paired odor ($M = 52.4\%$) as with the saline-paired odor ($M = 47.6\%$). Subjects spent a majority of time in odor paired compartments away from the neutral zone. There were no significant effects of dose. Next steps include modifying the apparatus and procedure to achieve conditioning. We are currently changing the odor delivery mechanism, alternating sites of injection, sites of conditioning, and scoring locomotor activity.

32. Evaluating Response Effort Using a Progressive Ratio Schedule

Nicole Aragon, Jane Hilts, and Emily Baxter

University of North Carolina at Wilmington

A progressive ratio (PR) schedule is a reinforcement procedure in which the required response increases systematically after each reinforcer delivery. A breakpoint is the last completed ratio before the subject stops responding. Although this reinforcement schedule has commonly been used to evaluate reinforcer efficacy, it may also be a useful tool for determining relative response effort. Response effort refers to the amount of force or energy output required to complete a response. The current study examined how a PR schedule can be used to evaluate response effort, as it is commonly used for reinforcer assessments. Participants engaged in tasks/exercises under two different conditions: a low- and high- effort condition. Each condition consisted of three different exercises. These exercises included bicep curls using resistance bands, a stationary bicycle, and weighted ropes. Participants' response requirements increased progressively after each completed ratio, which allowed the ratio requirements to increase as long as participants kept engaging in the exercise. Participants reached their break point sooner in the high-effort condition than the low-effort condition. Although the high-effort condition of an exercise may have been the same breakpoint as the low-effort condition, it was never a smaller break point than the low-effort condition. Implications and future research directions will be discussed.

33. Beyond Compliance: Strengthening Clinical Documentation to Support Quality and Continuity in Autism Services

Bedu Kgosi

Eleven¹¹ Behavioral Solutions

High-quality clinical documentation is integral to effective Applied Behavior Analysis (ABA) service delivery, yet documentation review is often approached primarily as a compliance function rather than as an opportunity for clinical quality improvement. In autism services, incomplete, inconsistent, or insufficiently objective documentation can limit the ability to evaluate treatment implementation, demonstrate medical necessity, monitor progress, and maintain a clear record of services delivered. This poster presents a structured quality-improvement framework for using clinical documentation review to strengthen practice within ABA service settings. The framework emphasizes systematic identification of recurring documentation concerns, including incomplete reporting, insufficient objective detail, unclear connections between interventions and treatment goals, and inadequate representation of client response to intervention. Rather than addressing these concerns solely through individual note correction, recurring patterns can be used to inform targeted staff education, clarify documentation expectations, and guide ongoing quality review. The proposed model establishes a continuous cycle of documentation review, pattern identification, targeted education, and reassessment, positioning documentation as a source of information for improving service-delivery processes. By integrating documentation review with staff development and clinical quality improvement, ABA organizations may strengthen accountability, treatment integrity, and continuity of services for children with autism. This framework offers a practical approach that can be adapted across behavioral health service settings while maintaining appropriate clinical, ethical, and organizational standards.

34. An Evaluation of the Correlation Between Speech Disfluencies and Physiological Measures Over Alternating Zoom Camera Conditions

Dimitry Williamson, Maya Pointer, Carole Van Camp, Karen Daniels, Emily Baxter

University of North Carolina Wilmington

Virtual meeting spaces (e.g., Zoom) have seen a rise in popularity recently. A common feature of virtual meetings are allowing an individual to participant with or without their camera on, and this in turn allows the participant to view themselves while engaging in conversation. This feature, however, may create new challenges in maintaining the quality of speech during meetings. These adverse effects can take form as speech disfluencies. Speech disfluencies are words that are used incorrectly and are either lexical (actual words) or non-lexical (nonsense syllables). The current study focuses on comparing the behavioral measure of speech disfluencies when participants cameras are on versus off. In the study of speech disfluencies and speaking anxiety, physiological measures such as heart rate, tonic electric dermal activity, and skin conductance response frequency are often measured. This study included behavioral and physiological measures, as well as self-reported anxiety measures to identify the relationship amongst these variables. These measures are then further evaluated to measure the degree to which they correlate. The current study aims to find if there is a correlation between behavioral and physiological when off- and on-camera speeches are given.

35. Assessing Stimulus Control of Variable and Repetitive Responding in Rats Using Olfactory Stimuli

Tristan Mitchell, Annie Galizio, Jay Hinnenkamp, Jubal Neal, Josh Spencer, and Justin Yule.

Middle Tennessee State University

Behavioral variability can be adaptive under some contexts and less beneficial in others. Variability can be directly increased through reinforcement contingencies, such as lag schedules, that target less frequent responses. Five rats were exposed to a two-component multiple schedule requiring variable responding in the presence of one scent (e.g., strawberry) and repetitive responding in another (e.g., vanilla). Subjects were required to make an observing response to the olfactory stimulus before emitting a four-response sequence across two levers, left and right (e.g., LRLR). Responding in the variability component was reinforced according to a lag 8 schedule, whereas responding in the repetition component was reinforced for repeating the previous sequence. Scent presentation within each component was systematically manipulated, including presentation with both

scents, one scent, no scents, and a scent reversal, to assess their potential role in stimulus control over the rat's responding. For all subjects, response differentiation was achieved with both scents present and with one scent present. Removal of scents and scent reversal disrupted most of the subjects' responding, although possible order effects were observed; occasional differentiation occurred with no scents present when preceded by the one scent condition. Data collection is ongoing under the reversal condition.

36. Responding by Exclusion in a Simultaneous Olfactory Discrimination: A Systematic Replication

Lauren N. Campo¹, Rebecca Collins¹, Tom Cariveau¹, A. Michele Curd¹, Michelle K. Henault¹, Isaac Seneca¹, Kendall Lipnick¹, Taylor K. Lewis², Mark Galizio¹, & Kate Bruce¹

¹*University of North Carolina Wilmington*, ²*Middle Tennessee State University*

The control exerted by the negative stimulus during simultaneous discrimination tasks has been the focus of developmental, cognitive, and behavior analytic research for decades, yet experimental demonstrations with animal models are lacking. In one example, de Souza and Schmidt (2014) reported responding by exclusion by six Sprague-Dawley rats following simultaneous visual discrimination training. The present study sought to systematically replicate by addressing several limitations described by de Souza and Schmidt. Specifically, we included olfactory stimuli, assigned distinct stimulus sets across rats, required higher levels of accuracy during baseline trials, and included a greater number of probes. Five Sprague-Dawley rats completed baseline simple discrimination training, which included the simultaneous presentation of two distinctly scented lids in a large arena. Flipping one scented lid (S+) revealed a sugar pellet whereas flipping the other lid (S-) revealed no pellet. Once the subject responded with greater than 90% correct during three consecutive baseline sessions, 12 novelty (novel S-) and 12 exclusion (novel S+) probes were conducted. All subjects correctly responded above chance levels during novelty control probes; however, correct responding during exclusion probes was inconsistent and included the omission of any response during 35 of 60 probes across all subjects. The current findings suggest that simple discrimination training produced responding primarily

under select control. The current findings do not systematically replicate those of de Souza and Schmidt.

37. Teaching Truth Identification with and without Say-Do-Correspondence

Carson Cain¹ Lindsey Ives² Amy Polick²

¹*University of Florida*, ²*Florida State University*

This study sought to compare two teaching methods for teaching truth-identification as a receptive skill for one participant, “Andrew”, a 5-year-old boy receiving ABA services. The study utilized an adapted alternating-treatment design embedded within a multiple probe and baseline to compare the methods of least-to-most (LTM) and least-to-most with say-do correspondence (LTM+SDC). Designated truth-telling stimuli related to “eating” and “having” were assigned to each teaching condition. For each trial, an array was presented to Andrew containing three non-truths and one truth-telling stimuli and he was asked to “point to who is telling the truth”. For teaching the LTM truth stimuli, correct answers were prompted through a prompt hierarchy of partial prompt (gesture) and then a full prompt (model). For teaching the LTM+SDC truth stimuli, correct answers were prompted through the aforementioned prompt hierarchy, but contained an explanation of the say-do correspondence in the stimuli (i.e. “Look he said he had an apple and he does have an apple!”). On average, the LTM condition required 10.5 sessions to achieve mastery and LTM+SDC an average of 4.5. The results of the study showed that LTM+SDC proved to be the more efficient method of teaching simple truth-identification when compared to LTM.

38. Correlational Research Between Pre-Speech Planning and Post-Speech Anxiety Scores

Maya Pointer, Dimitry Williamson, Dr. Emily Baxter, Dr. Karen Daniels, Dr. Carol Van Camp

University of North Carolina Wilmington

Speech disfluencies are spaces in speech filled by a word, phrase, or sound, such as “like,” “um,” “uh,” or “you know,” used in a way that is generally considered grammatically incorrect, rather than continuing a sentence in a grammatically correct way (ie. “The

winter is totally my favorite time of year.” vs. “The, um, winter is, like, totally my favorite time of year.”). The purpose of the broader project is to decrease the occurrence of speech disfluencies using awareness training, in which a participant is made aware of their use of speech disfluencies and given an alternative behavior. Before delivering a speech, each participant is provided with a speech planning sheet to organize their thoughts. Participants are allowed to bullet point individual ideas to address in their speech, and each speech planning sheet has pre-separated sections to further discourage participants from scripting their speech (writing out what they plan to say to read verbatim). This analysis compares the amount of planning participants did before their speeches (measured in words per minute) and how they scored themselves on an anxiety scale, with planning as an independent variable and anxiety scores as a dependent variable. Results to be discussed in further detail in the final poster.

39. Demonstrating Hierarchical Conceptual Learning

Layal Lawandos, Ryan Smith, Catherine Williams

University of North Carolina Wilmington

Hierarchical concepts consist of broader classes that contain subclasses, such that the correct classification of a stimulus is under the discriminative control of the level of the hierarchy being assessed. Hierarchical conceptual learning has occurred when novel stimuli are accurately classified at multiple levels of a conceptual hierarchy. Limited prior research has demonstrated hierarchical learning, and existing research has not evaluated hierarchical learning in which subordinate concepts are defined by multiple must-have physical features. This study demonstrated hierarchical learning where the first hierarchical level was two concepts defined by three must-have features, and the second hierarchical level was only defined by a shared history of reinforcement. The procedure consists of five phases. Phase one and phase two each taught a concept with a different background color for each phase. Phase three put both concepts under discriminative control of these concepts. Phase four taught the second hierarchical level which included both concepts within an equivalence class. Then phase five tested the categorization of stimuli into each class. Although this procedure produced hierarchical conceptual learning for some participants, the majority did not progress beyond phase three. These results

suggest that establishing contextual control over conceptual responding may be an important prerequisite for hierarchical conceptual learning. Future research should explore and evaluate procedures to more efficiently establish this form of discriminative control.

40. Contingency Discrimination: Evaluation of the Effects of Auditory Stimulus and a Contingency-Discrimination Criterion on Resurgence

Tirado, G., Molnar, A., Santos, M., Villalobos, A. M., Avila-Rozo, D., Du, J., Ross, M., Kuroda, T., & Podlesnik, C. A.

University of Florida

Resurgence refers to the reappearance of a previously extinguished behavior when alternative reinforcement conditions are worsened. Recent studies have found resurgence is induced by changes in alternative reinforcement contingencies, such as rate and magnitude, yet it remains unclear how participants discriminate these changes to guide responding. The present study evaluated whether a multiple-choice questionnaire (MCQ) for contingency discrimination, combined with the presence or absence of background music, would affect resurgence of target responding. Participants responded by selecting on-screen buttons labelled with different symbols to earn points across a three-phase resurgence procedure. The MCQ required participants to identify the source of reinforcement using multiple-choice questions referencing interface symbols, improving discrimination of which response produced reinforcement. In the Control condition, participants instead solved math problems unrelated to reinforcement contingencies. Sessions were conducted with or without background music. In Phase 1, target responding increased across all groups while alternative responding stayed low, with no differences between conditions. In Phase 2, target reinforcement was removed and alternative reinforcement introduced. Target responding fell to near zero, confirming successful extinction, while alternative responding rose, slightly more so in MCQ groups. In Phase 3, when alternative reinforcement was eliminated, target responding resurged across all conditions. The MCQ without music mitigated resurgence relative to other groups, while the group with both conditions showed the greatest resurgence, target responding

remained highly variable. Alternative responding declined but persisted more in MCQ groups. Overall, findings suggest requiring contingency discrimination influences resurgence of target responding.

41. Replication and Extension: Transfer of Novel Functions Across Class Members in Rats

Zoe Dorman, Becca Collins, Hadley Quigg, Elizabeth Persuitte, Taylor Lewis, Skylar Murphy, Allyson Williams, Mark Galizio, Katherine Bruce.

University of North Carolina Wilmington

Evidence for functional class formation in nonhuman animals is limited, but recent research has demonstrated class formation in rats using simple discrimination reversals and delayed stimulus probes (DSPs). Further, Mason et al. (2025) reported preliminary evidence for transfer of a novel discriminative function across class members in two rats. The present study replicates and extends Mason et al. by addressing methodological concerns reported in that study. Twelve Sprague Dawley rats were trained with odor stimuli to nosepoke in a center port using simple discrimination training, repeated discrimination reversals, and DSPs to establish functional stimulus classes. Once classes were formed, rats received novel discriminative response training in which one member from each class (X1, Y1) was associated with either the left or right response port. Once performance was stable, reinforcement probability was thinned from 100% to 67% to reduce the discriminability of future nonreinforced probe trials. Transfer of function (TOF) to class members that had not received direct left-right training was assessed using nonreinforced probe trials. Responding in accordance with trained left and right members would indicate transfer of novel function. TOF probe results from seven rats showed variability across subjects, with percent correct responding ranging from approximately 39% to 87%. Two subjects demonstrated consistent performance above 75% correct, meeting criteria for TOF. Subjects with 75% correct or lower will proceed to a second experimental phase involving multiple exemplar training and subsequent re-probing. These findings contribute to evaluating procedures for demonstrating transfer of function and functional equivalence class formation in rats.

42. An Experimental Analysis of Remembering in Pufferfish Using a Delayed Match-to-Sample Task

Alexandra Rahal¹, Simone K. Welch, Tristen D. Little¹, Lisa Kovalanchik², Bethany Brodbeck², & Andrew J. Bulla¹

¹*Georgia Southern University - Armstrong*, ²*University of Georgia Marine Extension Service Aquarium*

This study evaluated remembering and memory processes in four adult pufferfish using a delayed match-to-sample (DMTS) task to test the cross-species generality of behavioral principles. The methodology follows a four-phase training progression, including (1) marker training, (2) target training, (3) match-to-sample (MTS) training, and (4) DMTS testing. The data presented in the current poster illustrate the ongoing progression of pre-training and match-to-sample training, highlighting individual procedural modifications, such as refining ring sizes to prevent startle responses, adjusting reinforcement mechanics, and implementing errorless learning protocols to stabilize reinforcement rates. Current efforts remain focused on establishing steady-state performance during baseline MTS training before formally introducing delay intervals to evaluate the pufferfish retention function.

43. The Development and Utility of An Open-Source Application for Fail-Safe k

Arya C. Johnson², Thurka Thillainathan¹, Jonathan E. Friedel², Kevin Yu¹, Madeline Asaro¹, Taylor Manuge¹, Victoria Scott¹, Aman-Preet Randhawa¹, and Alison D. Cox¹

¹*Department of Applied Disability Studies, Brock University*,

²*Department of Psychology, Georgia Southern University*

Fail-safe k is an application developed to aid visual analysis of single-case experimental designs. Fail-safe k is based off of the fail-safe n, which was developed to examine the validity of meta-analyses by analyzing the number of null-result studies that would need to exist but remain unpublished to invalidate the pattern of effects in the published literature. Fail-safe k applies a similar principle, it is the number of sessions with behavior identical to baseline that would be required to cancel out an observed treatment effect. Previously, calculating fail-safe k required strong familiarity with disparate computational systems

and proved difficult. We developed a fail-safe k application that removes these barriers and provides, not only a numerical output, but also a graph depicting a visual representation of what fail-safe k represents in relation to the data (the number of sessions required before the treatment had no effect). . This will aid researchers and clinicians in making phase-transition decisions by providing statistical backing to their visual analyses. The fail-safe k application provides a user-friendly and cost-effective alternative to current methods of evaluating single-case experimental designs. The current presentation seeks to demonstrate the usage and validity of the tool, as well as provide attendees with access to the tool for use in their own work for further validation.

44. Examining "Other" Behavior During Reinstatement: Considering the Role of Preference Assessments

Ines Melin, Mercedes Machinski, Isabel Rosa-Irizarry, and Emily Baxter

University of North Carolina Wilmington

Reinstatement is a behavioral relapse phenomenon that occurs when a previously extinguished behavior recurs following a response-independent delivery of the associated reinforcer. The current project compared two reinstatement data sets to examine the role of a preference assessment in selecting other activities available concurrently to the target behavior during sessions. Both studies had similar procedures in a human operant laboratory including college-aged participants, activity options, and timing of each baseline, extinction, and reinstatement section. The key difference between each method is that Study 1 incorporated an individualized preference assessment for other available activities while the Study 2 did not. This comparison provides an opportunity to evaluate whether incorporating a preference assessment influences the effectiveness of reinstatement procedures. Findings may contribute to a better understanding of how individualized preference assessments can be incorporated into behavioral procedures and may inform future research examining the role of preference assessment in reinstatement. Results and implications will be further discussed.

Notes

Notes

[illegible]

Notes



**Southeastern Association
for Behavior Analysis**