

# North Carolina Association for Behavior Analysis 33rd Annual Conference

*February 24-25, 2022  
Virtual Conference*

## **Thursday, February 24th**

**Session 1 (Workshop) – Camille Kolu**

**NCABA Award Presentations**

**Session 2 (Invited Address): Carol Pilgrim**

**Session 3 (Invited Address): Cynthia Anderson**

**Session 4 (Invited Address): Shannun Kunnavatana**

**Session 5 (Student Symposium): Chaired by Alaina Swick**

## **Friday, February 25th**

**Session 6 (Workshop) – Nicole Gravina**

**Session 7 (Invited Address): Danielle LaFrance**

**Session 8 (Invited Address): Shahla Alai-Rosales**

**Session 9 (Invited Address): Caio Miguel**

**NCABA Business Meeting: Election Results for 2022**

## **Acknowledgements**

A special thank you to ABS Kids, Carolina Center for ABA & Autism Treatment, and Mosaic for being our Gold-level sponsors this year. We want to also thank Achieve Beyond Pediatric Therapy and Autism Services, Black Applied Behavior Analysis, Caring Hearts Behavioral Services, Compleat Kidz, Delta Behavioral Group, and Del Mar Center for Behavioral Health for sponsoring this conference as well.

*The NCABA Executive Committee would like to thank all the presenters and conference participants who have made the 33<sup>rd</sup> Annual Conference such a success.*

*We also appreciate any feedback you would like to give us when submitting your CE Submission/ Conference Evaluation online.*

## Thursday - February 24<sup>th</sup>, 2022

8:45-9:00	<b>Conference Log In</b>
9:00-12:00	<p>‡* Session 1 (Workshop): <b>Camille Kolu, PhD, BCBA-D</b> Cusp Emergence  <i>Adapting our Applied and Ethical Practice to New Needs: A Post-Trauma Approach to Supporting Individuals Using Behavioral Tools in Diverse Settings</i></p>
12:00-1:00	<p><b>Lunch Break</b>  <i>(View information provided by our sponsors on our website and enjoy your Snack Magic Box)</i></p>
1:00-1:30	<p>Welcome to the 33<sup>rd</sup> Annual NCABA Conference  <b>Monique Baker, MA, BCBA</b> NCABA President, Effective Interventions</p> <ul style="list-style-type: none"> <li>· <i>Student Scholarship Award</i></li> <li>· <i>Technical Utilization Award</i></li> <li>· <i>Do Things Award</i></li> <li>· <i>Fred Keller Excellence in Behavior Analysis Award</i></li> <li>· <i>Lifetime Achievement Award</i></li> </ul>
1:30-2:30	<p>‡* Session 2 (Invited Address): <b>Carol Pilgrim, PhD</b> University of North Carolina Wilmington  <i>Discourse in 2022: Some Observations from a Radical Behaviorist</i></p>
2:40-3:40	<p>‡* Session 3 (Invited Address): <b>Cynthia Anderson, PhD, BCBA-D</b> May Institute  <i>Feasibility Matters: Why Behavior Analysts Should Conduct Feasibility Research and How to Do It</i></p>
3:50-4:50	<p>‡* Session 4 (Invited Address): <b>Shanun Kunnavatana, PhD, BCBA-D</b> Easterseals UCP of NC and VA  <i>Mind the Gap: Using Evidence-Based Practice to Assess Challenging Behavior</i></p>
5:00-6:30	<p>Session 5: NCABA Conference Student Symposium  Chair: <b>Alaina Swick</b>, NCABA Student Representative, University of North Carolina Charlotte</p> <ul style="list-style-type: none"> <li>· <b>Sarah Hayes, MA</b>, East Carolina University (<i>The Impossible Dream: Collaborative Function-Based Assessment and Intervention Planning in the General Education Setting</i>)</li> <li>· <b>Amber Flannigan, BA</b>, East Carolina University (<i>Using Behavior Therapy to Reduce Maladaptive Behaviors with Multiple Functions for a Child with Autism</i>)</li> <li>· <b>Melissa Tapp, MEd</b>, University of North Carolina Charlotte (<i>Increasing Intervals of Mask Wearing for a Child with Autism in School</i>)</li> <li>· <b>Janet Sanchez Enriquez, MS, BCBA</b>, University of North Carolina Charlotte (<i>Using the Verbal Operant Experimental Analysis to Support Culturally/linguistically Diverse Speakers with Autism</i>)</li> <li>· <b>Alanna Ferguson, BA</b>, University of North Carolina Wilmington (<i>Assessing the Aversive Functions of Stimuli Associated with Rich-to-Lean Transitions</i>)</li> </ul>

## Friday - February 25<sup>th</sup>, 2022

8:45-9:00	<b>Conference Log In</b>
9:00-12:00	<p>‡* Session 6 (Workshop): <b>Nicole Gravina, PhD, BCBA-D</b> University of Florida  <i>Promoting Quality Feedback Conversations in Supervision</i></p>
12:00-1:00	<p><b>Lunch Break</b></p>
1:00-2:00	<p>‡* Session 7 (Invited Address): <b>Danielle LaFrance, PhD, BCBA-D</b> West of Elemetry  <i>Programming for Generativity: Using Multiple Exemplar Instruction &amp; Multiple Exemplar Training</i></p>
2:10-3:10	<p>‡* Session 8 (Invited Address): <b>Shahla Alai-Rosales, PhD, BCBA-D, LBA</b> University of North Texas  <i>Contingencies of Joy: Meaning, Ethics, and Methods</i></p>
3:20-4:20	<p>‡* Session 9 (Invited Address): <b>Caio Miguel, PhD, BCBA-D</b> California State University, Sacramento  <i>Demystifying the Motivating Operation</i></p>
4:30-5:30	<p><b>NCABA Annual Business Meeting – Open to All Members</b></p>
5:30	<p><b>Submit CE Form Online After Final Session – NCPA CE Seekers MUST Submit Online CE Form Today</b></p>

‡ NCPA Approved Category A Credits Available for Licensed Psychologists

\* BACB Approved CE Available for certified Behavior Analysts

## **Poster Submissions**

*We want to acknowledge all the practitioners and researchers who spent a great deal of time and effort preparing their poster submissions before the conference was moved to a digital format. We would like to share that information with our members by providing the submitted abstracts below. Thank you to all who continue to advance the work of behavior analysis in our state.*

### **-Professional Group-**

#### **The Effect of Publicity on Client Acquisition for a Niche ABA Provider**

*Kellie Syfan, MEd, BCBA (Applied Behavioral Happiness LLC)*

Niche ABA companies can have trouble finding clients because they work outside of the most common ABA model (insurance payor, children with an autism diagnosis) and their target demographic is likely unfamiliar with ABA or may not have ABA services covered by their insurance. As well, due to the publicity challenges of the field, advertisements and classic marketing may be out of budget and/or may not be effective. Applied Behavioral Happiness tested using publicity as a tool for increasing client acquisition for three reasons: (1) publicity exposure addresses the challenges listed above, (2) publicity generally costs less than classic marketing methods, and (3) publicity can improve the outreach and status of the field as a whole through positive dissemination which is integrated into The Ethics Code for Behavior Analysts. Data show that having a presence in the media likely increased the number of quality client inquiries, sales conversation rate (SCR), and decreased client acquisition cost (CAC).

#### **The Utilization of Stimulus-Stimulus Pairing to Establish Stimulus Control of Vocal Speech Sounds**

*Lauren Broadwell, MS, BCBA, Richard Dowdy, MA, RBT, and Elizabeth Peterson, BA, RBT (Carolina Center for ABA and Autism Treatment)*

Autism spectrum disorder (ASD) is characterized by impairments in social communication and interactions, and restricted and repetitive stereotyped behavior (DSM-V, 2013). These impairments often appear as deficits across multiple areas, including vocal speech production. This team sought to increase the rate of vocal speech sounds as well as to establish stimulus control over an echoic response in a participant. This participant presented as non-vocal during the initial assessment and the following few months of treatment. Following the use of reinforcement and stimulus-stimulus pairing (S-S Pairing), vocal speech sounds made by the participant increased.

#### **Client Choice in Selecting Treatment Methods**

*Grace Dailey, MA, BCBA, Michelle Moore, MA, BCBA, & Abbey Jordan, BA, RBT (Carolina Center for ABA and Autism Treatment)*

An unfortunate reality is that practitioners often select treatment methods for their clients based on feasibility for the practitioner and/or stakeholders. Historically, stakeholders have been the main recipients of questionnaires used to measure the social significance of treatment methods selected. Including direct recipients of treatment in the social validity evaluation process is arguably as imperative as stakeholders and practitioners, if not more so. Dr. Greg Hanley published a paper (Hanley, 2010) detailing an approach to objectively measure social validity with direct recipients of programming. Social validity is essential to effective programming because, in the words of Dr. Hanley, "efficacy without adequate social acceptability is a recipe for marginalization," the antithesis of the work of behavior analysts. This work explores one way to incorporate non-vocal individuals into social significance assessments by pairing treatment options or items with a certain color based on Kelly et al (2014). Inviting direct recipients to participate in the social significance evaluation process involves permitting them time to experience certain treatments or treatment items and then allowing them to choose which they prefer, thus increasing acceptability of treatment methods used for those directly participating in treatment.

#### **The Utilization of Stimulus-Stimulus Pairing to Establish Stimulus Control of Vocal Speech Sounds**

*Kaitlyn Hancock & Martin Ivancic, PhD, LP, BCBA-D (J. Iverson Riddle Developmental Center)*

The rate of stereotypy for a man with autism during an on-going activity was measured after four novel requests unrelated to the stereotypy were introduced. The stereotypy reduced dramatically with the introduction of each new requirement and gradually rose to higher stable levels after increased experience with the demand condition. Lindsley (1996) suggested that operant behavior experiencing external influence (occasion, form, speed, repetition) may be less free to occur. Treatments using external conditions to reduce stereotypy might require varying those requirements (e.g., Charlop et al., 1986) to minimize satiation that might allow the stereotypic response to occur more freely.

## **Adjusting Data Collection Procedures in Applied Settings to Account for Variables Influencing the Accurate Measurement of Client Mastery in Skill Acquisition Targets**

*Cassidy Leovic, BS, RBT, Amberlea Villafane, BCBA, Melissa Monti, MEd, BCBA (Carolina Center for ABA and Autism Treatment)*

There is currently a gap in the literature for quantifying influential variables outside of therapist control that affect the accuracy of our current data collection technology. Our intervention proposes a means of quantifying these variables and modifying data collection to accommodate them. The participant is a male in elementary school who displays great variability in skill acquisition and challenging behaviors related to the presence of numerous, previously unquantifiable variables. Each variable is scored independently and then a derived score is achieved which ranks the presence of these variables identifying “green”, “yellow”, or “red” data collection periods. We are currently in the beginning of our intervention teaching receptive identification of emotions via the stoplight procedure. “Green” stoplight data will be compared to a control of skill acquisition conducted using traditional means of data collection without consideration of influential variables. The long-term goal is to quantify the effect of influential variables as a means of reducing variability and increasing the success of all interventions. We hypothesize that “green” stoplight targets will show more stable responding and faster mastery than traditional methods.

### **-Graduate Student Group-**

#### **Can Matching Associations Lead to Acquisition of Intraverbals**

*Breanna Spencer, MEd, Jessica Day, MS, BCBA, & Breana Dutcher, BCBA (Effective Interventions)*

The current literature supports teaching the intraverbal operant with a tact-intraverbal transfer procedure, or varied methods of error correction and prompt fading. The current study examines teaching matching associations as the initial operant, then progresses to tact and intraverbal associations and feature, function and class fill-ins. This study evaluates the impact of the teaching sequence as it relates to the acquisition of intraverbal skills in a client with autism. As the study progressed through each step of the teaching sequence, steps were able to be introduced simultaneously, which shortened the total length of intervention. The duration of intensive teaching for each operant decreased as each step was introduced. The progressive intervention of teaching steps resulted in increased skill acquisition over time and many targets requiring no intensive teaching when the intraverbal phase was reached. Following these data, the learner began to emit novel responses to intraverbal questions that were not probed or taught, demonstrating generality of responses. Achieving a strong repertoire of intraverbal skills will result in the learner’s ability to engage in complex social interactions, develop and maintain significant relationships, and communicate more effectively with a greater variety of listeners.

#### **Functional Behavior Assessment of Pica Maintained by Idiosyncratic Function**

*Elizabeth Thuman, BA, Natalie Shuler, PhD, BCBA-D, Melanie Bachmeyer-Lee, LP, PhD, BCBA-D, Gracie Medcalfe, RBT, and Sydney Montierth, RBT (Center for Pediatric Behavioral Health; University of North Carolina Wilmington)*

We conducted a functional-behavior assessment on the ingestion of sand (i.e., pica) of a ten-year-old female. The assessment included indirect assessment (e.g., caregiver interviews), descriptive observations, an individualized functional analysis, and a competing-items assessment. Based on the outcomes of indirect and descriptive assessments, therapists designed a functional analysis to test interactions between antecedents and consequences that may impact the likelihood of pica. The procedure involved placing a potential pica item in the room and monitoring attempts to access it. Therapists took safety precautions of sifting the sand, only making a small amount available during each session, and limiting the number of sessions per day. Therapists included conditions in which attention was and was not freely available, items were and were not present, reprimands and physical redirection were and were not provided contingent on attempts to consume sand, and therapists were and were not present. The outcomes of this assessment indicated that in the presence of therapists and tangible items, pica was unlikely to occur, regardless of the availability of attention as an antecedent or consequence. Based on these outcomes, therapists tested several competing items both in the presence and absence of therapists to determine if pica could be prevented through competing items alone.

#### **A Systematic Review of Simultaneous Prompting and Prompt Delay Procedures**

*Alexandria Brown, BA & Tom Cariveau, PhD, LP, BCBA-D (University of North Carolina Wilmington)*

A considerable body of research has shown the effectiveness of simultaneous prompting procedures in promoting the transfer of stimulus control. Interestingly, simultaneous prompting is very similar to prompt delay procedures although the former does not include any explicit attempt to transfer stimulus control (i.e., the prompt is never faded). Nevertheless, research suggests that simultaneous prompting is effective, but also sometimes even more efficient, than procedures that include fading of prompts (e.g., prompt delay). This finding is particularly noteworthy as simultaneous prompting conditions may also result in nearly errorless learning since the opportunity to emit errors would be restricted to probes. The current poster synthesized the findings of 11 articles comparing simultaneous and prompt delay procedures across seven behavior analytic and educational journals. Overall, the findings suggest that simultaneous prompting and prompt delay procedures were similarly efficient, although the simultaneous prompting condition was associated with fewer errors and minutes to mastery in approximately 70% and 65% of comparisons, respectively. Additional research is

needed to better describe the conditions in which traditional prompt delay or prompt fading procedures are necessary to produce transfer of stimulus control.

### **A Comparison of Prompting by Exclusion and Single-Stimulus Prompting in Auditory Visual Conditional Discriminations**

*Paige L. Ellington, BA, Tom Cariveau, PhD, LP, BCBA-D, Alexandria Brown, BA, & Delanie Fetzner, BA (University of North Carolina Wilmington)*

Training arrangements that include selection-based responses (e.g., matching to sample) may be more likely to result in responding under irrelevant sources of stimulus control characterized by position or stimulus biases. Although several training recommendations should be considered (see Green, 2001), prompting procedures may be particularly relevant to ensure responding is controlled by the relevant conditions. Learning by exclusion procedures typically include the presentation of one or more defined (i.e., trained) relations and the undefined relation. Under these conditions, the participant should select the undefined comparison when presented with an undefined sample by rejecting the already defined comparisons. The current study compared two prompting procedures on the acquisition of auditory-visual conditional discriminations for a child with autism spectrum disorder using an adapted alternating treatments design. In both conditions, an observing response produced an auditory sample followed by three visual comparisons. In the single stimulus prompting condition, the correct comparison is presented alone. In the prompting by exclusion condition, the correct comparison is presented with two defined comparisons. The findings of three direct comparisons suggest that both procedures were effective and differences in efficiency were negligible. Limitations and future directions will be discussed.

### **Implementation of Procedures for Effective Wiping Hygiene**

*Jessamine Crespo, MA, RBT, MacKenzie Foster, BA, RBT, Francesca Jauregui, BA, RBT, Rose Merritt, MS, RBT, Caison Smith, MA, BCBA (The Carolina Center for ABA and Autism Treatment)*

There is a clear lack of literature regarding how to teach wiping hygiene after a bowel movement. The present study is a comparative analysis between two clients with the same need to learn how to wipe using prompt level specific to each client to teach wiping in the bathroom. Additionally, wiping was taught in the natural environment to increase the independence of proper wiping hygiene after a bowel movement. This study included two participants, a 4-year-old male and 9-year-old female both diagnosed with autism spectrum disorder. The intervention took place primarily in the clinic for the 4 y/o participant and strictly in the home setting for the 9 y/o participant. This study focused on wiping skills after a bowel movement while using prompt levels specific to each client. The data from this intervention indicates progress in relation to the skill of wiping. There is zero graphical progress that has been demonstrated in bathroom wiping hygiene. However, observations across clinicians indicate anecdotal progress is being made by both clients when demonstrating bathroom wiping hygiene. While the clients may not be making graphically supported progress, it is still early in the intervention phase. There is not enough supporting data to conclude whether or not the intervention is effective at its current stage. The team will continue to collect data and modify the program as needed to meet client specific needs.

### **Can Natural Environment Training Be Used to Teach Tolerance Skills Similar to an SBT Approach while Decreasing Problem Behavior?**

*Amanda Boling BS, RBT & Kelly Creasman MA, BCBA (Effective Interventions)*

The current study uses repeated measures to gain functional control over the behavior. Once one behavior was stabilized, then another behavior was introduced. When targeting the specific items, the instructor contrived situations in which the participant was motivated to request the particular item, but not necessarily when the individual is happy, relaxed, and engaged. Ghaemmahami et al. (2016) completed a multiple baseline design across contexts with 2 participants, and 1 participant completed a concurrent operant AB design. The purpose of this study was to replicate a program similar to Ghaemmahami et al. (2016) because a contingency-based delay was used to teach tolerance skills for the delay of reinforcement. A contingency was presented, plus an alternative activity during the delay to learn tolerance skills. Beaulieu et al. (2018) discussed a multi-element design during the functional analysis and used a changing criterion design to evaluate treatment. The current study sought to replicate functional communication training similar to Beaulieu et al. (2018). Ruppel et al. (2021) used a nonconcurrent multiple baseline design to evaluate functional control over problem behavior. Functional control was gained by repeated measures for the functional communication response, tolerance, and cooperation (Ruppel et al., 2021).

### **Teaching Color Tacts to a Child Diagnosed with ASD**

*Jordayn Price, MA & Kaitlin Faassen, MA (Carolina Center for ABA and Autism Treatment)*

According to prior research, mand and tact training alone were not successful in teaching identification of colors. The multi component treatment package utilized examines the effectiveness to teach color tacting using cold probes, listener discrimination training and tact training to teach colors and to expand the language repertoire more effectively than previous interventions. The present intervention also focuses on generalization skills using multiple exemplar training for a tact to mand transfer procedure to account for generalization and maintaining of colors taught. Results displayed effectiveness for identifying colors and increase of communication when utilizing listener discrimination training, tact training, and a tact to mand transfer procedure. The young child was able to identify five

of the six colors taught by the end of the intervention. During a follow up phase, the individual was able to identify all six colors taught and was able to generalize to other preferred and novel items.

**Behavior Skills Training as a Technology to Teach Behavior Technicians to Implement Natural Environment Training**

*Roxanne Toussaint, BS & Catie Eason, MA, BCBA, Jessica Piazza, PhD, BCBA-D, LBA (Endicott College; Behavioral Consulting for Autism)*

The purpose of this study was to investigate the effectiveness of behavior skills training (BST) as a method to increase both the quality and frequency of natural environment training (NET) trials by behavior technicians. Participants were registered behavior technicians working in an early-intervention clinic for children diagnosed with autism spectrum disorder. A nonconcurrent, multiple-probe design was conducted across three participants. Each participant was instructed to conduct NET to target mand, tact, and motor imitation operants with their client. Dependent measures included participant adherence to a performance checklist, frequency of teaching opportunities, and frequency of maladaptive behaviors displayed by the clients. In addition, participant feedback regarding training experience and utility was collected via survey. Subject 1 responded positively to intervention and maintained competency of target skills three weeks post-training. Generalization measures required each participant to demonstrate learned skills with a novel client. Results suggest BST has potential to serve as an effective technology to improve the method of delivery of NET.

***See You Next Year at the 34<sup>th</sup> Annual NCABA Conference in Winston-Salem, NC!***

***Callie Plattner-Past President, Monique Baker-President, Shanun Kunnavatana-President Elect, Nina Deese-Vice President, Leigh Ann Strain-Secretary, Nancy Poteet-Treasurer, Sarah Pope-Member at Large and ABAI Liaison, Jacqueline Hamilton- Member at Large, Alaina Swick-Student Representative, Jamie Clary-Website Editor, Fred Spooner-NCABA Board Advisor, Ruth Hurst-NCABA Board Advisor, Duke Schell- NCABA Board Advisor, Selene Johnson-PPR Committee Member***