

5/25/2009
6:00 p.m. - 7:30 p.m.
North Hall A
AUT

1. Does Nanny 911 Really Work? The Efficacy of a Short-term Intervention on Long-term Outcomes for Behavior Problems in Children with Autism. (N/A; Applied Behavior Analysis) EVELYN M. FLAHERTY (Eden II Programs), Frank R. Cicero (Eden II Programs)

Abstract: Popular television series such as Nanny 911 and Supernanny that deal with unruly children and their parents have portrayed that intense short-term behavioral interventions improve children's disruptive behavior. Although much is known about the efficacy of parent training in methods of Applied Behavioral Analysis (ABA) to reduce children's behavior problems, less is known about the effectiveness of these short-term interventions in the home for parents of children with autism. The following study examines the effectiveness of an in-home, short-term parent-training model in treating behavior problems in children with an autism spectrum disorder. Participants were parents and their children ages 6-18 who displayed one or more disruptive behaviors such as aggression, noncompliance, or tantrums. A 7-10 session ABA parent-training model was employed and consisted of behavioral recommendations and procedures, therapist modeling, and parental practice with the techniques. Results showed that disruptive behaviors were significantly reduced from baseline levels after just 2 sessions of intervention. Further improvements in behavior were noted after the full course of treatment and at follow-up.

2. Naturalistic Language Intervention for at-risk siblings of children with ASD. (DDA; Applied Behavior Analysis) THERESA L MACFARLAND (Vanderbilt University), Ann P. Kaiser (Vanderbilt University)

Abstract: The study analyzes the effects of a parent-implemented naturalistic language intervention, Enhanced Milieu Teaching (EMT; Kaiser, 1993), on the communication skills of two young at-risk siblings of children with ASD. The study was conducted using a multiple baseline design across EMT strategies with intermittent generalization probes across untrained activities and children. The intervention was replicated across two-parent child dyads.

The results indicated that both parents were able to perform the EMT strategies in play with their children in their home. In addition, one parent was able to generalize strategies to untrained activities. Neither parent was able to generalize skills to their other child with ASD. Such generalization did occur after a few brief, direct coaching sessions were provided. Effects of the intervention on the at-risk siblings included increases in the number of utterances and diversity of language. Changes were also observed in the children's play skills, imitation skills, and general functioning.

The findings support previous naturalistic language research. This study further extends the literature on teaching parents naturalistic language strategies, working with at-risk siblings, planning for generalization of strategies, and the possible effects of naturalistic language intervention on other areas of development.

3. Increasing Teacher-student Engagement Using Structured Practice and Feedback. (EDC; Applied Behavior Analysis) GEOFFREY D. DEBERY (The Eden II School), April J. Bramell (Devereux New Jersey), Kendra Warren (Devereux New Jersey), Louis K. Darley (New Jersey Center For Autism)

Abstract: Research in the field of Applied Behavior Analysis has demonstrated a strong relationship between response opportunities and student learning. In the current study, response opportunities were conceptualized as teacher-student engagement and operationally defined with 8 specific instructional components. The Behavior Skills Training (BST) method (instruction, modeling, rehearsal and feedback) was utilized to train accurate teacher-student engagement to 19 instructional staff members (collectively teachers) at an approved private school for students with autism. Data were collected on teacher-student engagement with 'consistent implementation' of greater than 90% of one minute intervals being the primary dependent

variable. An ABAC design was used. The intervention consisted of (1) structured practice in which the authors modeled all 8 instructional components for teachers and then teachers practiced modeled components and (2) structured feedback that consisted of 15-minute observation sessions (same as baseline) followed by a feedback session during which teachers were informed of performance (with and without supervisory presence). Experimental control was demonstrated via a reversal design during the no feedback condition (return to baseline conditions). The results demonstrated an average 49% increase in teacher-student engagement when structured feedback was provided with supervisory presence.

4. A Comparison of Different Methods for Collecting Data on Students' Performance During Discrete Trial Teaching. (DDA; Applied Behavior Analysis) LAURA HARPER DITTLINGER

(University of Houston, Clear Lake), Dorothea C. Lerman (University of Houston-Clear Lake), Genevieve M Fentress (University of Houston-Clear Lake), Taira Lanagan (Center for Autism and Related Disorders), Susie Balasanyan (Center for Autism and Related Disorders, Inc.), Lynn Williams (Center for Autism and Related Disorders, Inc.)

Abstract: Data collection and progress monitoring are an integral part of effective teaching. Educators use many different forms of data collection. Methods that provide greater precision (e.g., recording the prompt level needed on each instructional trial) are less practical than methods with less precision (e.g., recording the presence or absence of a correct response on the first trial only). However, few studies have examined which method will best suit client needs. In this study, precise data collected by therapists while working on skills with four children were re-analyzed several different ways to determine if less labor intensive methods would be adequate to make programmatic decisions. Results suggested that, for most of the children and targeted skills, less precise methods of collecting data would have led to similar conclusions about the effectiveness of the intervention.

6. The Analysis of Multiple Treatments to Increase the Rate of Trial Presentation of Paraprofessional Staff in an EIBI Program. (EDC; Applied Behavior Analysis) KRYSTL GIORDANO (ACES), Cara M. Cappalli (ACES - EIBI)

Abstract: Early Intensive Behavioral Intervention programs have consistently proven to be effective in educating young children with autism. One approach often utilized in this type of program is Discrete Trial Instruction. Discrete Trials are most often delivered in educational settings by trained paraprofessional staff. Some of the intensity of this programming lies in the correct presentation and repetition of trials. Much research has been conducted on increasing staff performance in highly controlled or university settings. However, in non-university settings, staff motivation to complete trials at an appropriate rate can be an ongoing challenge. The purpose of this study was to examine the effects of multiple treatments on the behavior of entry level paraprofessionals in a public school, EIBI setting. Within this study, we examine a baseline rate of trial presentation per staff member, followed by a series of conditions designed to increase this rate. Independent variables include self-monitoring/reporting, the setting of personalized goals, and anonymous public posting.

7. Discrete-trial Teaching and the Effectiveness of DTkid in Staff Training. (N/A; Applied Behavior Analysis) IWONA KUBACH (Highfield Centre), Sigmund Eldevik (Center for Early Intervention, Oslo, Norway), J. Carl Hughes (Bangor University, Wales), Corinna F. Grindle (University of Wales Bangor, UK), Rachel Lowe (Bangor University, Wales), Dimitra Tavoulari (Bangor University, Wales)

Abstract: Evidence suggests the effectiveness of Early Intensive Behavioral Interventions, and in particular Discrete Trial Teaching (DTT), in increasing the skills and reducing the symptoms of autism. Delivery of effective DTT relies heavily on adequate training of tutors. Recent technological advances have led to the development of a computer simulation program, DTkid, as a staff-training tool, providing a way for tutors to learn and practice DTT skills without exposure to vulnerable children. The present study looks at the effectiveness of DTkid as a training tool with ten novice tutors at a school for children with autism. Tutors completed a set of baseline measures to assess the extent of their knowledge on DTT procedures. DTkid was then used to train the tutors in matching and receptive procedures, before repeating the baseline measures at post-testing. The results showed significant improvements in tutors declarative knowledge and practical skills

following exposure to DTkid at intervention, supporting the utility of DTkid as a training tool for novice tutors of children with autism.

8. Behavioral Definitions: Is a Picture Worth a Thousand Words? (N/A; Applied Behavior Analysis) ROBIN M. KUHN (University of North Texas), Shahla Ala'i-Rosales (University of North Texas), Jesus Rosales-Ruiz (University of North Texas)

Abstract: The purpose of this study is to help us refine our practices with regard to defining behavior and enhance our measurement tools to aid in observer and staff training. This research will assess which modality of behavioral definition (textual or textual augmented by video exemplar) is more effective in terms of accuracy, consistency, and agreement both within and across observers. Participant observers (undergraduate college students) will be exposed to behavioral definitions accompanied either by written examples and non-examples or video examples and non-examples. Observers will then score video using the behavioral definition provided. Results regarding observer accuracy, consistency, and agreement will help us assess which method of defining behavior may be more effective. (Data to be collected.) Applied implications of this research may be brought to bear in our development of measurement tools and our training of staff and observers. The study also has methodological relevance in that it encourages an examination of the process by which we define behavior and replicate research.

9. Comparing Two Methods for Training Parents with Children with Autism to Implement Pivotal Response Treatment. (N/A; Applied Behavior Analysis) Daniel Adam Openden (Southwest Autism Research & Resource Center (SARRC)), RACHEL MCINTOSH (Southwest Autism Research and Resource Center), Alexis N. Boglio (Southwest Autism Research and Resource Center)

Abstract: Parent empowerment programs have been shown to have a positive effect on both children and families, but little is known as to what type of parent education models are most effective. Additionally, in light of shortages of therapeutic personnel, techniques to increase the efficiency of training parents promises to be an important way to meet the need of children diagnosed with autism spectrum disorders (ASDs). The purpose of this study was to examine the effectiveness of two methods for training parents to implement intervention with their children. Families of children diagnosed with or at-risk for ASD were randomly assigned to 1 of 2 conditions: a parent training program with guided video observation only training (GVO), or a parent training program with guided video observation plus in-vivo parent coaching (GVO + PC). Posttreatment assessments indicated that both conditions resulted in improvements in parent-child responsiveness and the parents' fidelity of implementation. Comparisons of the 2 treatment conditions indicated that the GVO + PC group's improvements were greater than those from the GVO only group. The clinical and social significance of these findings is discussed.

10. The Relationship of Training and Job Satisfaction in Behavioral Therapist Retention (N/A; Applied Behavior Analysis) ALYSSA RYLANDER (California State University, Northridge), Joanna Norstedt (California State University, Northridge), Diane Morovati (California State University, Northridge), Ellie Kazemi (California State University, Northridge)

Abstract: Most of the research in applied behavior analysis (ABA) and children with autism focuses on improving treatment for these children. There has been no research in this field on the employees providing services and, with the increasing number of children with autism, there is need to rapidly train and place individuals in the field to provide ABA services. Consequently, there is a common knowledge amongst employers of behavioral agencies that therapist retention within companies is a problem. Research in other fields has shown that low quality training of new employees is related to low job satisfaction. As a result, job satisfaction is related to therapist turnover. This study looked at the relationship of training, job satisfaction, and therapist turnover. We hypothesized that therapists who report intentions to leave a company will report lower total hours of organized training and lower satisfaction with the quality of that training. Furthermore, total training hours will be related to job satisfaction. Participants from multiple behavioral agencies in southern California anonymously completed online measures. Results confirmed our hypotheses. Identifying factors related to therapist retention will aide employers in understanding therapists' needs to increase retention within the company and provide consistent care to families.

11. The Effects of Parent and Staff Training Program on Language Acquisition in Naturalistic Intervention Procedure for Children with Autism. (EDC; Applied Behavior Analysis) YUNO TAKEUCHI (Keio University), Hitomi Kuma (Keio University, Japan), Yoshiko Hara (Keio University), Hiroshi Sugawara (Keio University), Jun'ichi Yamamoto (Keio University, Japan)

Abstract: The effects of parent and staff training for children with autism are demonstrated in several studies, but there are few studies which examined the effect of language acquisition in naturalistic intervention procedure. The purpose of the present study was to develop the training program for parents and students-therapists to acquire the naturalistic ABA intervention and evaluate the “indirect” effects on the language development of the children. The program was consisted of (1) a lecture of basic knowledge about naturalistic ABA method and the procedure of the training of verbal behavior, (2) training for analyzing behaviors by using video in naturalistic and interactive setting and (3) role-playing of interaction. We measured the basic knowledge about naturalistic ABA procedure, the self-efficacy assessment, the therapist-skill check sheet, fidelity of implementation and social validity assessment. Additionally, the behaviors of the children in free play sessions were also observed and analyzed at pre- and post training program. As a result, each measurement score improved and the positive interactions of both parents and student-therapist with the children in free play sessions increased. The results suggests that parent and therapist training was effective even in naturalistic ABA intervention procedure.

12. Maintenance of Intervention Outcomes in Functional Communication Training: A Quantitative Synthesis of Research. (DDA; Applied Behavior Analysis) TRACI ELAINE RUPPERT (University of Nevada-Las Vegas), Renee K. Van Norman (University of Oregon), Matthew Tincani (Temple University), Deborah Russell Carter (Boise State University), Shannon Crozier (University of Nevada, Las Vegas), Kim McArthur (University of Nevada-Las Vegas)

Abstract: The purpose of this study was to systematically evaluate the literature with respect to the degree to which response maintenance was evaluated as a component of functional communication training (FCT) intervention, including the extent to which procedures were implemented to promote response maintenance. Twenty-six single subject studies on FCT were quantitatively evaluated for (a) inclusion of data on response maintenance, (b) evidence of procedures to promote maintenance, (c) timing and duration of maintenance data reported, and (d) the degree of behavior change maintained. Results indicated that seven studies (26.9%) met Carr et al.'s (1999) definition for reporting maintenance. Only two of the seven studies reporting maintenance data also reported procedures for promoting maintenance. The mean number of sessions for which maintenance data were reported was 4.2 over a mean number of 21.9 weeks. Overall mean percentage of nonoverlapping data points across participants, settings, and behaviors was MPND 86% (range, 18% – 100%), suggesting that, when measured, levels of responding established with FCT tended to maintain after partial or full withdrawal of intervention. Results highlight the need for future FCT researchers to evaluate response maintenance and to explore specific strategies to promote response maintenance when FCT is the intervention of choice.

13. Congruence Between Contingency Space Analysis and Functional Analysis Results. (EDC; Applied Behavior Analysis) NORM DAHL (Melmark), Juan-Carlos Lopez (Melmark), Jen Joyce (Melmark), Bradley John Bartosiewicz (Melmark)

Abstract: The use of contingency space analysis allows clinicians to estimate if a contingent relation exists between behaviors and events that follow. The analysis is completed with direct observation data that are easily collected in natural environments; the summary data can be calculated without advanced statistical analysis tools and are amenable to graphing for visual inspection. Although the use of contingency space analyses as described by Martens et al. (2008) provides a compelling argument for the utility of such an approach, little empirical evidence is available to support the validity of inferences clinicians may draw from direct observation data subjected to this form of analysis. The present study is designed to compare results generated using contingency space analyses with the results of traditional consequent-based analyses completed for 3-5 students with autism who display challenging behaviors. All students attend a private residential school in southeast Pennsylvania. Similarities and differences in the inferences clinicians may draw from the results of contingency space analyses and functional analyses will be discussed. Benefits and limitations of each approach will also be discussed in relation to the data collected in this study.

14. Evaluation of Interruption and Redirection Procedures to Decrease Vocal Stereotypy in Young Child with Autism. (N/A; Service Delivery) LIBA GAJDOS (wm+a (Williams Marijan and Associates)), James C. K. Porter (wm+a (Williams Marijan and Associates)), Simmi Santha (wm+a (Williams Marijan and Associates))

Abstract: Vocal stereotypy, especially when exhibited in high rates may interfere with skill acquisition, and can be viewed as socially unacceptable behaviour. The evaluation of the efficacy, as well as the effectiveness of the available treatments to decrease vocal stereotypy is essential for successful reduction of these disruptive behaviours. Ahearn, Clark, MacDonald, and Chung (2007) used verbal response interruption and redirection (RIRD) procedures to decrease vocal stereotypy in children with autism. This treatment resulted in decreased levels of vocal stereotypy, as well as increased levels of appropriate communication. Kodak and Karsten (2008) extended this research by comparing motor and verbal RIRD procedures. Their research showed that both procedures were effective in reducing levels of vocal stereotypy. The current study was designed to replicate and extend the findings of these researchers by comparing the two RIRD procedures in an alternating treatment design to reduce vocal stereotypy in a 6 year old child with autism. The results are consistent with previous findings that both verbal and motor RIRD procedures are effective in reducing vocal stereotypy. Levels of vocal stereotypy reduced substantially with both verbal and motor RIRD, when compared to baseline rates, with vocal RIRD showing slightly greater reductions. Future research should replicate this study with larger sample size in order to further substantiate the efficacy of these procedures.

15. Teaching Appropriate Alternatives to Disruptive Behavior During Unexpected Events. (DDA; Applied Behavior Analysis) PAUL SHREIBER (Somerset Hills Learning Institute), E. Dennis Machado (Somerset Hills Learning Institute), Sandra R. Gomes (Somerset Hills Learning Institute), Kevin J. Brothers (Somerset Hills Learning Institute)

Abstract: For many children with autism, interruptions to daily routines can set the occasion for disruptive and other inappropriate behavior. This poster describes the procedures used to teach Marcus an 11 year-old boy to use appropriate verbal and motor responses when unexpected events occurred. Staff observed Marcus engage in disruptive and other stereotypic behavior whenever preferred items (e.g., Play Station, VCR) were inoperable. The purpose of this program was to teach Marcus to engage in an appropriate repertoire of behavior when unexpected changes occurred to his daily routine. The data show that Marcus initially responded inappropriately each time the Play Station or VCR did not function properly. After teaching, Marcus demonstrated the skill of asking his teacher to fix the Play Station and/or VCR in the absence of disruptive and stereotypic behavior on 100% of the opportunities. Over time the reinforcement shifted from the device being fixed and Marcus gaining access to the preferred item, to Marcus being rewarded via his individualized motivation system for appropriately making a different choice. Marcus demonstrated the target response on 100% of the opportunities in each of the subsequent conditions.

16. Assessment of Hand-to-head Self-injury and Appropriate Hand Use with Protective Equipment. (N/A; Applied Behavior Analysis) Barbara Hoffmann (Alpine Learning Group), Bridget A. Taylor (Alpine Learning Group), Wayne Fisher (Munroe-Meyer Institute, UNMC), KATHLEEN COOPER (Alpine Learning Group)

Abstract: The participant was a nine year old boy with autism with a history of severe self injurious behavior (e.g., slapping face, punching ears) that occurred at a high rate throughout the day in many contexts. A functional analysis indicated that it served multiple functions. Due to lack of behavior change using reductive procedures, it was necessary to protect the participant from injury. Use of a protective helmet yielded less than desirable results, as the participant shifted responding to hit areas not protected by the helmet. Arm splints were used that prohibited the participant from bending at the elbows, thereby preventing hand-to-head contact. The present analysis examined rates of hand-to-head self injury, other topographies of self injury, and appropriate hand use (e.g., manipulating toys, feeding self) in two conditions: with arm splints and without arm splints. Data were collected during 10 minute sessions consisting of brief demands (i.e., five simple discrete trials) alternating with brief access to leisure activities (e.g., TV). In both conditions, self injury was ignored and the participant wore protective equipment (e.g., helmet). Data indicate near zero rates of

hand-to-head self injury in the “with splints” condition, and similar rates of appropriate hand use in both conditions.

17. Evaluating the Effects of a DRO Plus Response Cost Procedure on Aggression and Non-compliance. (EDC; Applied Behavior Analysis) ALLISON STUBITS (RCS Learning Center), Christina M. Boyd-Pickard (RCS Learning Center), Denise Rizzo (GBABA)

Abstract: The purpose of this study was to evaluate the effectiveness of a DRO plus response cost procedure in reducing severe aggressive behavior and non-compliance in a 12 year old girl with autism. In the first condition a DRO procedure was used in which the student was reinforced for the absence of aggression and non-compliance following specified time intervals. In the second condition a response cost was introduced in addition to the DRO in which one highly preferred item was removed from the child’s classroom following any instance of aggression or non-compliance. The student’s classroom contained various highly reinforcing items that the student had earned throughout the course of the school year. Items were reintroduced into the child’s classroom for compliance and intervals without aggression. Data indicated that the DRO plus response cost was effective in reducing the rate of aggression and non-compliance as well as the duration of non-compliance to near zero rates. Limitations and suggestions for future research are discussed.

18. Indirect Effects of Positive Practice Overcorrection. (N/A; Applied Behavior Analysis) LINDSAY C. PETERS (The New England Center for Children), Rachel H. Thompson (New England Center for Children), Nicole M. Rodriguez (New England Center for Children - West. New England College), Amy Constantine (New England Center for Children), Catia Cividini-Motta (New England Center for Children)

Abstract: Positive practice overcorrection (PP OC) (Foxx & Azrin, 1972), involves the interruption of problem behavior followed by a period of physically guided practice of an appropriate alternative response and has been shown to be effective in the reduction of self-stimulatory behavior (e.g. Foxx & Azrin, 1973, Harris & Wolchick, 1979). The effects of this procedure on preference for the prompted response, however, have not yet been investigated. The purpose of the current research was to first evaluate the effects of PP OC on both motor stereotypy and the appropriate alternative response practiced. In addition, relative preference for the prompted task versus the unprompted task was also measured. A reversal and a multiple baseline designs were used. One 17-year-old male with autism living in a residential school participated. All sessions included 5 min during which the participant was free to engage in all measured topographies of behavior. After the identification of high (HP) and low (LP) preference vocational activities, PP OC was implemented contingent upon motor stereotypy in the presence of each activity individually. Preference probes, where both items were concurrently available with a different therapist, were conducted every 4 sessions, 2 with the HP activity and 2 with the LP activity. Results showed PP OC to be effective in reducing stereotypy across activities, that appropriate engagement with the activities increased with the implementation of PP OC, and that the implementation of the procedure did not disrupt preference for either item.

19. Manipulation of Establishing Operations and Contingencies in a Functional Analysis of Perseverative Comments. (N/A; Applied Behavior Analysis) KATE E. FISKE (Kennedy Krieger Institute), Heather K. Jennett (Kennedy Krieger Institute), Nicole Marchetto (Kennedy Krieger Institute)

Abstract: Research on the effects of establishing operations (EOs) on behavior in functional analyses indicates pre-session conditions may alter the reinforcing effectiveness of consequences (Vollmer & Iwata, 1991). Functional analyses have been used to identify the maintaining variables for perseverative verbalizations (e.g., Ewing et al., 2001-2002), and we extended previous research by examining the effects of the presence of an EO on perseverative language. The participant was a 13-year-old female diagnosed with disruptive behavior disorder, autistic disorder, anxiety disorder NOS, and depressive disorder NOS who exhibited perseverative comments about body image. We hypothesized that when the EO for escape from demands was present, the contingent delivery of attention would maintain the comments. A multielement design alternating the consequence for comments, nested within a reversal design assessing the presence of the EO, supported our hypothesis that the behavior only occurred when the EO was present. Over time, comments in the attention condition with EO present decreased to match levels observed with escape extinction, indicating the behavior was maintained by escape. Further assessment confirmed the delivery of

attention with escape did not produce differentiated responding compared to escape. This procedure has implications for the future study of idiosyncratic responding in functional analyses.

20. Decreasing Aggression Toward a Household Pet in a Young Child with Autism. (N/A; Applied Behavior Analysis) RYAN BERGSTROM (Center for Autism and Related Disorders, Inc.), Jonathan J. Tarbox (Center for Autism and Related Disorders, Inc.), Katharine Gutshall (Center For Autism and Related Disorders)

Abstract: DRO procedures have been implemented successfully to reduce a wide array of behaviors such as aggression, self injury, and other challenging behaviors. The present study applied a DRO procedure to a novel challenging behavior, specifically to decrease aggression toward a family dog. One child with a diagnosis of autism was included in this study. A DRO procedure was implemented using a reversal design to demonstrate experimental control. Results demonstrated that this intervention was effective in reducing the target behavior and the duration of the DRO interval was successfully increased to 10 minutes in length.

21. A Modified Habit Reversal Procedure: The Additive Effects of Attention to Increase a Competing Response. (EAB; Applied Behavior Analysis) ERIN PERRY (The University of Southern Mississippi), Brad Dufrene (The University of Southern Mississippi), Kim Martell (The University of Southern Mississippi)

Abstract: The purpose of this study was to evaluate the usefulness of a brief functional analysis of motor tics for developing treatment for a 12-year-old male diagnosed with Asperger's Disorder and Tourette's Disorder. Results from the brief functional analysis indicated an attention component for motor tics. Following the brief functional analysis, a modified, simplified habit reversal procedure was developed based on the results from the brief functional analysis. A time series multielement design was used to evaluate analysis indicated and contraindicated treatments. Treatment analysis indicated substantial reduction in rate of tics during the analysis indicated treatment. Inter-observer agreement and procedural integrity data were acceptable. Results are discussed in terms of the treatment utility of functional analysis for tic disorders.

22. Manipulating Analogue Functional Analysis Procedures to Account for the Synergistic Effects of Motivation. (DDA; Applied Behavior Analysis) NATHAN LAMBRIGHT (Rutgers University), Amy Hansford (Rutgers University), Jill A. Szalony (Rutgers - DDDC), David Kieval (Rutgers University), Shara Marrero (Rutgers University), Suzannah J. Ferraioli (Rutgers University), Kimberly Sloman (Rutgers University), Robert LaRue (Douglass Developmental Disabilities Center)

Abstract: Traditional models of functional analysis procedures typically involve the manipulation of a single motivating operation at a time. While these manipulations allow practitioners to identify single and multi-operant behavior, they do not test for behavior that is better accounted for by the synergistic effects of multiple MO's. In the current investigation, a traditional functional analysis was conducted to address screaming. The results of the analysis indicated that the behavior was multioperant in nature. However, anecdotal report indicated that a false positive function may have been identified. To test this, a modified procedure was developed to test if there was a synergistic effect for restricted access and escape functions. Conditions included traditional demand and tangible conditions, a demand condition with tangible items provided during breaks and a demand condition with noncontingent access to tangible items. The data indicate that rates of screaming were significantly higher in the demand condition and with tangible items provided during escape as compared to the other conditions. These results suggest that maladaptive behavior was primarily maintained by restricted access, however, this motivation increased in the presence of demands.

23. Effects of Pre-session Matched Stimulation on Stereotypy. (N/A; Applied Behavior Analysis) KATE DESMOND (May Institute), Katherine Gilligan (The May Center for Child Development), Stephanie Orman (The May Institute)

Abstract: Research has demonstrated that treatments focusing on matched stimulation may effectively reduce automatically maintained stereotypy. Providing matched stimulation may change rates of stereotypy by altering motivating operations. The purpose of this study was to implement a pre-session stimulation treatment to assess potential satiation effects of free access to less stigmatizing stimulatory behavior. The

procedure was implemented, prior to work sessions and included 5 minutes access to a box containing items designated as matched stimulation. Baseline consisted of data collected on stereotypy throughout the typical school day. Results of the assessment indicated that pre-session stimulation had no effect on stereotypy. Although rates of stereotypy were high during matched stimulation, rates of stereotypy directly following and 30 minutes after remained at levels similar to baseline. Pre-session matched stimulation was not an effective treatment for stereotypy and did not serve as an abolishing operation. Results of the current study suggest that the use of pre-session stimulation may not be an effective approach for all individuals even when stimulation is topographically matched.

25. Integrating Applied Behaviour Analysis Teaching Methods into Education for Children with Autism. (EDC; Applied Behavior Analysis) CORINNA F. GRINDLE (Bangor University, UK), Richard P. Hastings (Bangor University, UK), Maria Saville (Bangor University, UK), Elin Walker-Jones (Bangor University), Hanna Kovshoff (University of Southampton)

Abstract: The ABA class at Westwood School in the UK offers intensive ABA programmes for ten pupils with significant ASD in a mainstream school context. Children attend the centre for 6 hours a day, five days per week during school terms (total in-school instruction equates to 30 hours a week). Throughout the day, the curriculum is delivered during one-to-one lessons which alternate with small-group activities. Most children, as their skills develop, also spend increasing amounts of time in a mainstream class, usually with their same-aged peers. Each child is accompanied by an ABA therapist, who shadows the child and unobtrusively prompts and reinforces the child when necessary (e.g., for peer interactions, following group instructions and classroom routines and participating in such activities as circle time and music).

A systematic evaluation of the outcomes for children in the ABA Centre is being conducted. The children's skills are evaluated in the classroom, usually just a few days into their ABA education and then approximately every 12 months thereafter, using a variety of standardized tests. This presentation summarizes some preliminary results on children's gains in intellectual functioning, communication skills and adaptive behaviour.

26. Southeastern Pennsylvania Autism Resource Center (SPARC): Designing an Effective Social Skill Group Using Empirically Validated Approaches. (N/A; Applied Behavior Analysis) CHERIE ANN FISHBAUGH (Southeastern Pennsylvania Autism Resource Center), Corinne M. Murphy (West Chester University), Jennifer E. Dawson (SPARC), Phillip K. Duncan (West Chester University)

Abstract: Students with autism spectrum disorders have difficulty acquiring, maintaining, and generalizing appropriate social skills such as looking at speaker/listener, initiating a conversation, and sustaining a conversation. Arranging social opportunities in the natural environment is a critical, but challenging, component of effective social skill training programs. Another challenge is finding empirically validated treatment approaches focusing on social skill development. A need exists for empirically validated social skill development programs. This poster will identify the process taken to develop a social skill program for students, ages 3-12 years, as well as provide initial evidence collected on the effectiveness of the program as measured by student outcomes. The poster will also include 1) application process 2) development of social skill objectives 3) participant grouping 4) protocol development and 5) data collection. The poster emphasizes the planning, implementation and evaluation of a social skills program provided by SPARC. The poster will highlight areas of future research.

27. Preliminary Outcomes of Children with Autism who Received Community-based Behavioural Intervention: Short-term Follow-up. (CSE; Applied Behavior Analysis) E. ALICE PRICHARD (York University), Adrienne M. Perry (York University)

Abstract:

Research based on data from multiple sites in Ontario has demonstrated that community-based treatment for children with autism, Intensive Behavioural Intervention (IBI), is associated with reductions in autism symptom severity and improvements in cognitive and adaptive functioning and developmental rate. Despite the demonstrable success of IBI, very few studies have followed children up years after termination of treatment.

The purpose of this study was to follow up children who have previously received IBI from a community program in Ontario. This poster will present data on 40 children ranging in age from 5 to 12 who were discharged from the program 1 to 5 years ago. The varying outcomes of these children in terms of cognitive and adaptive functioning, autism severity, academic skills, and social emotional functioning will be presented. Changes made from exit to follow-up will be detailed for all children and predictors of outcome from the discharge date from IBI will be outlined. Developmental trajectories for a minority of children from entry of IBI to exit to follow-up will be available. In addition, we will present some qualitative data from interviews with parents about other services that their children have received and the important changes that their children made in IBI.

28. Comparing Apples to Apples: Examining the Impact of Community-Based EIBI for Children with Autism using Inclusion Criteria Employed by Model Programs. (N/A; Applied Behavior Analysis) HELEN E. FLANAGAN (York University), Adrienne M. Perry (York University), Nancy Freeman (Surrey Place Centre)

Abstract: Additional research is needed that examines the effectiveness of Early Intensive Behavioral Intervention (EIBI) in community settings. Previous research suggests that community-based EIBI is effective but may produce smaller changes than model EIBI programs. However, comparisons between model programs and community-based programs are confounded by differences in inclusion criteria.

This study examined changes over time in 19 children who received community-based EIBI and 19 individually-matched Waitlist controls. Similar to a number of model programs, we only examined outcomes for children who were under 48 months of age and had adaptive ratio composite scores greater than 35 at intake.

Prior to the treatment or waitlist period, groups did not differ with respect to age, autism severity, or adaptive functioning. The duration between test periods was longer for the EIBI group, but duration was not significantly correlated with outcome.

At time 2, children in the IBI group had significantly higher IQ scores and significantly milder autism severity. Adaptive scores were higher for the IBI group in Communication and Socialization, but not Daily Living Skills, domains. Similar to model EIBI programs, approximately 40% of the EIBI group had very good outcomes, versus 10% of the Waitlist sample.

29. Increasing Appropriate Transitions in an Adult with Autism Through a Shaping Procedure and Antecedent Instructional Modifications. (DDA; Applied Behavior Analysis) HAROLD MAHECHA (Eden II Programs), Niall James Toner (Eden II Programs)

Abstract: The purpose of this case study was to demonstrate the effectiveness of a graduated DRA procedure in addressing problem behavior displayed by a 35 year old male with autism during morning transitions entering his adult day program. In baseline, the participant would display problem behaviors in the form of aggression, refusal to walk, dropping to the floor and screaming. These behaviors resulted in transitions with a duration of up to 45 minutes and often in the need for physical restraint. Functional assessment data revealed that the function of problem behavior was escape maintained. In treatment, a DRA procedure was initiated where the participant received a highly preferred reinforcer for partial transitions. In order to facilitate the reinforcement contingency, the SD was changed from “let’s go to class” to “let’s go get (reinforcer).” The requirement of the DRA was lengthened every three consecutive successful trials until ultimately the reinforcer was withheld until the participant appropriately transitioned to his classroom desk. Results indicate that transition duration reduced to a maximum of 5 minutes and the need for physical restraint reduced to zero. This study demonstrates how a relatively simple behavioral procedure can be employed to significantly improve the quality of life of an adult with autism as well as decrease the potential for sensitive situations in the community.

30. CANCELLED: “Stimulus Fading and Differential Reinforcement for the Treatment of Public Bathroom Phobia in a Youth with Autism.” (N/A; Applied Behavior Analysis) CHRISTINA COLON

(Achievement Center), Lynne Oregina (Achievement Center), Robert Gulick (Achievement Center), Thomas P. Kitchen (Achievement Center / Mercyhurst College), Phillip J. Belfiore (Mercyhurst College), Monica Weaver (Achievement Center)

Abstract: Treatment of phobias has proven to be problematic for clinicians and researchers who work with children diagnosed within the autism spectrum. Parauresis, the fear of public restrooms, is the specific phobia being examined in this study. Our participant is a child diagnosed with autism whose public bathroom phobia has limited his ability to interact within community settings for 1 year. The subject has a history of engaging in tantrums (in the form of yelling, spitting, and crying) when prompted to use public restrooms. In this investigation, we applied stimulus fading and differential reinforcement of alternative behaviors and differential reinforcement of other behaviors as the independent variables. Stimulus fading included gradually increasing exposure to public restrooms while reinforcing the absence of tantrums. Reinforcement was also contingent upon the subject approaching the public restroom without engaging in tantrums. The dependent variable being measured is the number of unprompted approaches to a public bathroom. Utilizing a changing criterion design, preliminary data suggest that the treatment is successful in increasing public bathroom use and community outings.

31. Teaching Appropriate Behavior During Dental Examination. (DDA; Applied Behavior Analysis) SANDRA R. GOMES (Somerset Hills Learning Institute), E. Dennis Machado (Somerset Hills Learning Institute), Paul Shreiber (Somerset Hills Learning Institute), Kevin J. Brothers (Somerset Hills Learning Institute)

Abstract: Some children with autism display difficulty tolerating dental examinations. Such was the case for, Nick, a seven-year-old child with autism who presented significant challenging behavior that prevented examination by his dentist.

Capitalizing on Nick's successful history of acquiring skills with shaping, a dentist practice program was implemented. Through shaping, Nick successfully acquired the skill of engaging in appropriate dental-visit behavior while at his school. Nick displayed generalization of these skills across people and settings within the school. Assessment of these skills at the dentist office, however, indicated that Nick did not generalize his skills to that setting.

In this study, sequential modification was used to program for Nick's success at the dentist. Initially, steps of the shaping procedure that took place at school took place in the dentist's office. Systematically, the presence and involvement of the trainer and teacher were faded as the presence and involvement of the dental hygienist and dentist was increased until Nick displayed appropriate behavior during a dental visit.

32. Use of a Token System to Reinforce Healthy Snack Choices. (DDA; Applied Behavior Analysis) PATRICIA EGAN (SUNY College at Plattsburgh, NY), Laci Charette (SUNY Plattsburgh)

Abstract: An ABAB design was used to evaluate the effects of a token system to increase selection of healthier snack options over the course of two years. The participants were 10 children with autism spectrum disorders. Some children were more likely to choose the healthy alternative when tokens were in effect, but when tokens were withdrawn, they resumed eating the less healthy option.

33. Reducing Bowel Accidents During Overnight Hours: The Effects of Manipulating Undergarments. (DDA; Applied Behavior Analysis) KATIE ALLEN (The Childrens Foundation)

Abstract: Bowel and urinary continence is an important milestone for both typical children and children with developmental disabilities. However, this skill can be difficult to teach throughout the night while individuals are asleep. Results of a recent study (Simon & Thompson, 2006), assessing undergarment types, found that different undergarments were associated with different levels of continence in typical children. Based on those results, this study examined the effects of wearing a diaper, underwear, or no garments during sleeping hours on the continence of a 9 year old boy with Autism in a residential setting. An ABC design was used to evaluate the effect of each undergarment on two dependent measures: percent continence and frequency of bowel accidents. Results indicated an increase in continence in the condition in which no garments were worn. In the no garments condition an increase in continence during sleeping hours generalized and also produced a higher percentage of both urinary and bowel continence during waking hours.

34. Shaping Community Participation in an Adolescent with Autism. (N/A; Applied Behavior Analysis)
RYAN GOVER (Evergreen Center), Gordon A. DeFalco (Evergreen Center)

Abstract: Community outings and changes in daily routines can be very difficult for some adolescents with autism. The purpose of this study was to evaluate the effectiveness of a shaping procedure in facilitating non-routine community field trips in a male adolescent student with a diagnosis of autism who displayed serious maladaptive behavior when community outings were scheduled. A multiple baseline design across three outing types, functional, food, and leisure were used to assess the shaping procedure. During baseline, the student would attend Dunkin Donuts™ but refused to participate in any other outing (e.g., pumpkin picking, Target™ store shopping, etc.). A shaping procedure was used to increase physical proximity to specific community locations using trips to Dunkin Donuts™ as a reinforcer. There were 4 shaping steps for each location type and criterion was achieved when the student participated in a functional activity at the outing location (e.g., eating at a restaurant, making a purchase at a department store, bowling at a bowling alley, etc.). The shaping procedure resulted in increased community outings with less time required to reach criteria for each specific outing and across outing types.

35. Decreasing Grocery Store Problem Behaviors of Children with Autism by Increasing Involvement in the Shopping Task. (EDC; Applied Behavior Analysis) Ashley Greenwald (University of Nevada, Reno), Holly Seniuk (University of Nevada, Reno), SHANNON SPRINGER (High Sierra Industries), W. Larry Williams (University of Nevada, Reno)

Abstract: One major problem reported by parents of children with autism is their inability to take their child to the store without the child engaging in embarrassing tantrum behaviors. Two children participated in this study: an 8-year-old girl diagnosed with autism and a 6-year-old boy diagnosed with autism. Direct observations prior to implementation indicated that both children displayed tantruming behavior (e.g., hitting, kicking, screaming, running, and dropping) maintained by access to tangible items in the store. The procedure involved in-home training of matching word or picture cards to a tangible item and then placing the item in a shopping bag. The children were also taught to push a cart for a sustainable amount of time. These two skills were then generalized to the grocery store. The intervention utilized a changing criterion design to gradually increase in-store time. Preliminary results indicate that for both participants involvement in shopping tasks increased while tantruming behaviors decreased in both frequency of occurrence and duration.

36. Teaching an Adolescent with ASD to Compose an Email. (N/A; Applied Behavior Analysis)
ALLISON LETCHER (Families for Effective Autism Treatment (FEAT) of), Jamie Rose Feddock (FEAT of WA), Sara J. Pahl (Families for Effective Autism Treatment (FEAT) of Washington)

Abstract: Communicating and reporting important information such as events of an individual's day can be a difficult skill for some learners with ASD. The use of email is one tool we use in the Transitions for Teens program to teach adolescent clients with ASD how to communicate important information to others. Before reporting important information in an email, clients must also learn how to navigate a web-based e-mail service. Data presented on the Standard Celeration Chart will demonstrate how the use of forward chaining and prompt fading procedures helped teach an 18-year-old adolescent girl with a diagnosis of ASD to navigate a web-based email service and compose an email. The email composition included reporting events of the client's day, while also including the client's likes and dislikes. Intervention was provided at our center in a 1:1 instructional arrangement and in the community during the Transitions for Teens program at Families for Effective Autism Treatment (FEAT) of Washington.

37. Teaching an Adolescent to Tact Environmental Triggers and Private Events to Help Improve Self-management Skills. (N/A; Applied Behavior Analysis) SARAH PROCHAK (Families for Effective Autism Treatment (FEAT) of Washington), Jamie Rose Feddock (FEAT of WA), Sara J. Pahl (Families for Effective Autism Treatment (FEAT) of Washington)

Abstract: Learning how to tact known, and potential environmental triggers, in a variety of settings is an important skill for improving self-management behaviors with clients that are learning how to manage or

regulate their problem behaviors independently. Identifying triggers and private events are not only skills that are needed to help cope with stressful situations, but also gain independence and control over one's environment. Discussing stressful situations in a structured setting provides the client the opportunity to identify these triggers without yet having to engage in them in the natural environment. This poster will demonstrate how we taught a 13-year-old female client diagnosed with Smith-Lemli-Opitz Syndrome and ASD, how to tact known and potential triggers in her environment, while also tacting private events that may correlate with overt responses or problem behaviors. Data collected on problem behaviors and tacting triggers as they occurred in the natural environment or community setting will be presented using the Standard Celeration Chart. Intervention was provided at our center in and in the community during the Transitions for Teens program at Families for Effective Autism Treatment (FEAT) of Washington.

38. The Effects of Learning a Series of Intraverbals in the Description of Objects. (VRB; Applied Behavior Analysis) Gladys Williams (CIEL, Spain), Luis A. Perez-Gonzalez (University of Oviedo), Monica Rodriguez Mori (CIEL, Spain), Anna Beatriz Queiroz (Applied Behavioral Consultant Services), Daniel Carvalho de Matos (Applied Behavioral Consultant Services), KIMBERLY VOGT (Columbia University Teachers College)

Abstract: The purpose of this investigation was to determine the effectiveness of a procedure based on intraverbals (“Where does the cow live?- In the farm”) and their symmetry (“Which animal lives in the farm?- The cow”) to teach children with autism to describe novel objects. The procedure consisted of selecting one stimuli belonging to a category (i.e., animals), and creating a booklet with a total of ten intraverbals referred to that stimuli. First, we run a baseline phase with different stimuli within and out of the category. The training was done with only one of the stimuli and it consisted of teaching the intraverbals, the symmetry and a probe where the child had to say all the characteristics of the stimuli with visual cues. After the child learned the objective, we run the baseline again to see if the learned behavior emerged with the untrained stimuli.

39. Fluency and Agility: Outcomes of Teaching Background Knowledge to a 9 Year-Old Boy with Autism. (N/A; Applied Behavior Analysis) TERESA MCCANN (Organization for Research and Learning), Holly Almon-Morris (Organization for Research and Learning)

Abstract: Children with autism often lack fluent language skills related to general knowledge about places, people, and things common in their communities. These dysfluent tact and intraverbal repertoires often restrict student participation in general education curriculum and limit conversation topics. However, teaching every background information concept would require extensive effort and time. Designing instruction related to “infinite” instructional topics should target the goal of agility. Instruction should proceed with the goal of learners “learning to learn” by acquiring new information with less effort and in less instructional time. This poster will present data on applying Fluency Based Instruction to improve the background information of a 9 year-old boy with autism. Inadequate progress in a language Direct Instruction program called for more specialized instruction to improve his rate of acquisition of sequentially controlled targets. Charted performance data on the Standard Celeration Chart indicate the learner not only reached predicted frequency aims for the Hear/Say learning channel (Fabrizio & Moors, 2003), but he also achieved agility. Student performance data will also show the learner passing empirically validated outcomes related to retention, endurance, stability, and application.

40. The Effects of Figurine Role-Play in Teaching Simple Games with Rules to a Child with Autism. (N/A; Applied Behavior Analysis) COURTNEY LANAGAN (FirstSteps for Kids, Inc.)

Abstract: While a breadth of research has documented the efficacy of behavioral approaches in expanding language and communication skills in children with autism, comprehensive treatment for social deficits appears more elusive. Numerous studies have described the use of applied behavior analysis technology and procedures to increase social behavior, with focus on participants' responses to peers' initiations and the use of independent play initiations. However, relatively little behavioral research has looked at the development of the actual play content that may be used once play with peers has been initiated. The purpose of the current presentation is to describe our efforts to evaluate the efficacy of a different teaching procedure to promote novel play repertoires. A multiple baseline design was used to evaluate the effects of role-playing with figurines to teach three different simple games with rules. In-vivo probes were conducted throughout

the intervention phase to assess for generalization. Results suggest figurine role play was effective in developing new play behaviors, which may serve to expand the current body of play skills training programs.

41. Go up! Language and Communication Skill Acquisition in a Young Boy with Autism (EDC; Applied Behavior Analysis) ROSEMARY A. CONDILLAC (Brock University), Lisa Danielle Giewercer (Surrey Place Centre and Brock University), Jessica Rae Wood (Family Relations and Human Development Program, University of Guelph), Paul Szikszai (Surrey Place Centre)

Abstract: Autism is a developmental disorder characterized by qualitative impairments in socialization and communication along with restricted and repetitive behaviour and interests. Behaviour analytic interventions for Autism typically emphasize the development of communication skills, social skills, and language development. There are many different modalities of intervention that can be used, however there is limited knowledge regarding which intervention to use with which children at which skill levels. In clinical practice a multi-modal approach is often used, however there has been limited study on the effectiveness of combinations and/or sequencing of approaches. This poster will present a detailed case study of a young boy with Autism who began intensive behavioural intervention (IBI) with only 1 consonant sound and did not have any gestural or augmentative communication skills. We implemented a series of modalities in his training (e.g. picture exchange, sign language, echoic training) including combinations of modalities. We will present the progression of his intervention and skill acquisition using a within-series single subject design. The results provide empirical support for the use of multi-modal communication training and the importance of re-introducing modalities of communication that had previously been unsuccessful.

42. Teaching Children with Autism to Ask Questions About Unknown Auditory Stimuli (VRB; Applied Behavior Analysis) Gladys Williams (CIEL, Spain), MONICA RODRIGUEZ MORI (CIEL, Spain), Manuela Fernandez Vuelta (CIEL, Spain), Catherine Mallada (CIEL, Spain), Carmen Rodriguez-Valgrande (CIEL, Spain), Amy Davies Lackey (Hawthorne Country Day School), Heather Carew (David Gregory School), Stephen John Wuensch (David Gregory School)

Abstract: The purpose of this intervention was to teach several children with autism to ask questions about unknown auditory stimuli. All of them had some basic verbal behavior (echoic repertoire, mands, tacts, and intraverbals); however, they did not ask questions about unknown stimuli. We used a multiple baseline design across materials (pictures, items in the house, and items in the community). The procedure consisted of asking the children to select items they were familiar with. Sometimes the words were presented in a different language and the children were taught to ask "What is (unknown word)?" The results indicated that, in the condition of selecting items, the procedure was effective to teach children to ask a question about the unfamiliar word.

43. Incorporating Voice Output Devices into Communication Modality Assessments for Non-verbal Children with Autism. (DDA; Applied Behavior Analysis) JULIA BARNES (Institute for Child Development, Binghamton University), Stephanie Lockshin (Institute for Child Development), Courtney A Pooler (Institute for Child Development, Binghamton University)

Abstract: Since the provision of assistive technologies was mandated by the Individuals with Disabilities Education Act Amendments of 1997 and the Assistive Technology Act of 1998, the use of voice output communication aides (VOCAs) with students with autism has increased (Mirenda, 2003). Given the increased interest in this technology, service providers may be asked by parents or school administrators to proffer opinions about the appropriateness of a VOCA for a child with autism. While there are a handful of studies supporting the use of these devices with individuals with autism (Lancioni, O'Reilly, Cuvo, Singh, Sigafos, and Didden, 2006), selecting a modality that enables nonverbal children with autism to effectively communicate with others requires careful, individualized assessment.

At the Institute for Child Development in Binghamton, New York, assessments are routinely conducted with nonverbal and minimally verbal children with pervasive developmental disorders who have not demonstrated a clear preference for a specific communication modality. The aim of this poster is to present the method used in conducting the assessments and the results from communication modality assessments that incorporate VOCAs with other traditional modalities such as manual signs, PECS, and unaided speech.

Discussion will focus on the educational implications of students' preferences for VOCA's and other alternative or augmentative communication systems.

44. Effects of Video Modeling on Improving Social Skills in Adolescent with Autism (EDC; Applied Behavior Analysis) SANDRA M. CERFE (Eden2/Genesis), Mary Ellen McDonald (Hofstra University), Peter SturmeY (Queens College, CUNY)

Abstract: Individuals with Autism Spectrum Disorders (ASD) often exhibit deficits in communication and socialization skills including displaying inappropriate affect and failing to initiate and maintain conversation with other persons. This study investigated the effects of instruction and video modeling on increasing verbal and non-verbal (touch) skills on 2 students with autism. The students viewed videos that targeted four verbal and five nonverbal (touch) skills and modeled the targeted behaviors. Video modeling was effective in training rapid skill acquisition. Both participants reached criteria in the verbal scenario, but not in the non-verbal (touch) scenario. Targeted behaviors were not generalized outside the study environment. Findings support previous research on using video modeling to improve social skills for persons with autism.

45. The Effects of Video Modeling in Teaching Play Skills to Children with Autism. (N/A; Applied Behavior Analysis) VIRGINIA S. WONG (Hawthorne Country Day School, Manhattan Annex), Amy J. Davies Lackey (Hawthorne Country Day School), Marisa Savard (Hawthorne Country Day School, Manhattan Annex)

Abstract: We examined the effects of a video modeling intervention on independent play using simple toys with 3 children with autism using a multiple baseline across subjects design. Each child watched a videotape showing a typically developing peer play with a toy. After viewing and learning the play skill in small increments from the video, the children played with the toy independently. For all children, independent play skills were enhanced through the implementation of video modeling.

46. The Effects of a Video Modeling Procedure on Increasing Accurate and Choral Responding During Group Instruction with Children with Autism. (EDC; Applied Behavior Analysis) JORDAN FREEMAN (QSAC), Ronald Lee (QSAC)

Abstract: Video modeling has been demonstrated to be an effective and efficient means of increasing a variety of social and language skills with students with autism. Video modeling may also serve as an efficient means for increasing adaptive classroom behavior for groups of students. In the present study, the application of video modeling was extended to instruction provided to small groups of children (i.e., pairs) diagnosed with autism. A multiple-baseline-across pairs of students experimental design was used to evaluate the effects of video modeling on the accuracy of responding to task demands and responding chorally with a peer. During baseline and treatment phases reinforcement was provided for accurate and choral responding. During treatment each pair of students were also exposed to a video model of accurate and choral responding prior to the session. The results are discussed in terms of conducting group instruction with children with autism, instructional efficiency, observational learning, and the transfer of stimulus control.

47. Teaching Social Initiation Skills to Children with Autism via Video Modeling. (N/A; Applied Behavior Analysis) CRYSTAL RINGENBERG (St. Cloud State University)

Abstract: Autism is a pervasive developmental disorder generally characterized by deficits in multiple developmental domains. These deficits include language, imitation, play skills, and social skills (American Psychiatric Association, 1994; Whalen & Schreibman, 2003). The purpose of this investigation was to determine if a video modeling procedure would increase appropriate social initiations in children with autism. This investigation was successful in teaching two of the three participants using video modeling to make social initiations.

48. Teaching Children with Autism Play Skills Using Video Modeling. (N/A; Applied Behavior Analysis) MAGDA STRZYZ (Centre for Early Intervention Step by Step), Monika M. Suchowierska (Warsaw School of Social Psychology)

Abstract: Play skills are a very important part of social life in typically developing children. Children with autism often have difficulties learning how to play, how to organize time when they are alone. There are few techniques of teaching play skills: modeling, activity schedules, chaining, videomodeling. Videomodeling is a very fast and effective procedure for teaching more complex skills. A person watches a video model and imitates it. The present study was designed to show that videomodeling is a useful procedure for teaching children with autism play skills. A multiple baseline design across 3 plays was conducted. Two children with autism – a 3-year-old boy and a 5-year-old boy– participated in this study. During the learning phase children individually watched a video of the model performing a play. Each child was taught one play every school day. Once a week testing probes were performed. Results show that videomodeling is an effective and efficient procedure for teaching children with autism playskills.

49. Effects of Video Modeling for Teaching "Pretend Play" in Children with Autism. (EDC; Applied Behavior Analysis) YOSHIKO HARA (Keio University), Hitomi Kuma (Keio University, Japan), Nozomi Naoi (Keio University), Hiroshi Sugawara (Keio University), Jun'ichi Yamamoto (Keio University, Japan)

Abstract: It has proved that one of the central problems in autism is the deficiency in general symbolic capacity and pretend play. In the present study, the following two points were investigated; 1)what methods are the most effective for teaching pretend play? 2)what type of children with autism have specially deficit in pretend play? The pretend plays were taught to 3 preschoolage children with autism by using video modeling, prompting and reinforcement. Results suggested that there were two types of children. One type children had difficulties in social interactions although they could perform pretend play with toys for another objects, appropriate function or properties, while second type of the children, on the other hands, have difficulties to use toys for pretending play but they could engage in easy play and had skills of social interactions. Although video modeling is more effective in the first type of the children, for the second type of the children, training of social interactions would be needed before introducing video modeling.

#488 International Poster Session

5/25/2009
6:00 p.m. - 7:30 p.m.
North Hall A
BPH

50. Effects of Cocaine on Automaintained Responding: Modulation of Tolerance Development by Duration of Food Delivery. (EAB; Experimental Analysis) AMY DURGIN (Western Michigan University), Lindsay Porter (Western Michigan University), Kelly P. Bradley (Western Michigan University)

Abstract: The current study examined in five pigeons whether duration of food delivery influenced the pre- and post-chronic effects of cocaine (1.0-17.8 mg/kg) on the automaintained key pecking. Under the automaintenance procedure, 6-s key illuminations in one color were followed by 3-s food deliveries and 6-s key illuminations in another color were followed by 9-s food deliveries. Pre-chronic administrations of cocaine produced dose-dependent decreases in mean percent trials (key illuminations) as a function of duration of food delivery. Following pre-chronic drug testing, the birds were exposed to daily injections of 5.6 mg/kg cocaine for 20 consecutive sessions, after which post-chronic testing occurred. As in pre-chronic testing, cocaine produced dose-dependent reductions in mean percent trials with a response and mean responses per session. Comparing pre- and post-chronic dose-response curves indicated that tolerance developed to the disruptive effects of cocaine. Duration of food delivery modulated the post-chronic effects of cocaine, in that mean trials with a response and mean total responses were higher during trials followed by 9-s food deliveries than during trials followed by 3-s food deliveries. Across the final five sessions of exposure to 5.6 mg/kg cocaine, both measures also were higher during trials followed by 9-s key illuminations than during trials followed by 3-s food deliveries. These results, which are compared to prior findings with conventional operant conditioning procedures, indicate that duration of food delivery modulated the development of tolerance to cocaine's disruptive effects of automaintained responding.

51. Differential Sensitization and Tolerance to the Effects of d-Amphetamine on Random-interval and Random-ratio Schedules. (N/A; Experimental Analysis) WESLEY P THOMAS (Utah State University), Amy Odum (Utah State University)

Abstract: The contingencies arranging reinforcement may play a role in determining whether tolerance or sensitization to the effects of a drug will occur. In a previous study we were interested in seeing if random-interval (RI) and random-ratio (RR) responding can produce differential sensitization and tolerance to the effects of d-amphetamine in rats. With an interval schedule, the relationship between responding and reinforcement is relatively nonlinear, and a relatively low rate of responding will still earn the maximum available food. In a ratio schedule, responding is directly related to the rate of reinforcement, resulting in rate-decreasing drug effects being incompatible with reinforcement. In that study we found sensitization developed on the RI schedule and neither tolerance nor sensitization developed on the RR schedule. In the current experiment, we were interested in replicating those results but with pigeons as subjects. The RI and RR phases of the experiment are ongoing.

52. Assessing the Putative Anxiolytic Effects of Kava Administration in Rats Using the Elevated Plus Maze (EPM). (EAB; Experimental Analysis) STEPHEN H. ROBERTSON (James Madison University), P. A. Halsey (James Madison University), Sherry L. Serdikoff (James Madison University)

Abstract: The elevated plus maze (EPM) consists of two open-arms and two closed-arms and is a popular rodent model of anxiety. The anxiolytic and anxiogenic properties of various drugs have been documented using the EPM with the former leading to decreases in open-arm avoidance and the latter leading to increases in open-arm avoidance. The current study employs this methodology to study Kava, a nutraceutical advertised and sold as a sedative and anxiolytic drug. In animal models of anxiety, some researchers have indicated that Kava reduces anxiety when administered in acute doses; however, only chronic dose have been shown to alleviate anxiety in human populations. In this study, which employed an extension of the Solomon four-group design, the efficacy of chronic and acute administration of Kava was assessed using the EPM after three weeks of treatment. Preliminary data showed a main effect for testing history but no discernable drug effects. However, additional data collection following repeated conditions with longer tests and over a range of doses provide a more complete picture of Kava's potential utility in treating generalized anxiety disorder.

53. Within-session Discount Functions in Rats with Randomly Ordered Delays. (EAB; Experimental Analysis) ELIZABETH WATTERSON (UNC Wilmington), Carla Marie Huff (UNCW), A. Scott Handford (UNC Wilmington), Raymond C. Pitts (University of North Carolina Wilmington), Christine Hughes (University of North Carolina Wilmington)

Abstract: Eight Sprague-Dawley rats responded in a "self-control" experiment. Sessions consisted of five, 12-trial blocks. Within each block, there were six forced-choice and six free-choice trials. On free-choice trials, responses on one retractable lever produced 0.02 ml of sugar water immediately (i.e., the small reinforcer); responses on the other retractable lever produced 0.08 ml of sugar water after a delay (i.e., the large reinforcer). Delays associated with the larger reinforcer ranged between 0 and 40 s and were presented randomly across blocks within a session. Four rats had experience with an ascending sequence of delays prior to switching to the random sequence; whereas, four rats started with the random sequence. Acquisition of delay discount functions occurred in all rats over several months of exposure to the random-delay sequence. The delay functions of the four rats with the ascending-delay experience appear to show more control by delay than the functions of the rats without such a history. After establishing a stable baseline, effects of saline and d-amphetamine were determined and compared to effects of similar drugs from studies in which the more typical ascending-delay sequence was utilized.

54. Relationship Between Delay Discounting and Demand for Sucrose, Cocaine, or Remifentanyl. (EAB; Experimental Analysis) MIKHAIL KOFFARNUS (University of Michigan), James H. Woods (University of Michigan)

Abstract: There is extensive evidence that human drug abusers discount delayed rewards to a greater degree than people who do not abuse drugs, and popular models of delay discounting and drug abuse are commonly used in experimental animals. However, there is relatively little evidence as to whether these procedures to

measure discounting of delayed rewards and drug taking in experimental animals share the same relation that is seen in humans. In the present experiment, we chose to compare delay discounting measures in rats to demand for drugs of abuse or sucrose pellets. Rats were trained on a delay discounting task, followed by an assessment of demand for sucrose pellets, followed by an assessment of demand for self-administered cocaine or remifentanyl, followed by a reassessment of delay discounting performance. Final data detailing the degree to which performance on each of these tasks correlate is yet to be collected.

55. Using the Elevated Plus Maze (EPM) to Assess the Putative Anxiolytic Effects of Valerian.

(N/A; Experimental Analysis) P. A. HALSEY (James Madison University), Stephen H. Robertson (James Madison University), Sherry L. Serdikoff (James Madison University)

Abstract: The elevated plus maze consists of two open-arms and two closed-arms and is a popular rodent model of anxiety. The anxiolytic effects of various drugs have been documented using the elevated plus maze. Specifically, drugs that have anxiolytic effects will increase open-arm activity. Valerian is an herbal supplement believed to have anxiolytic effects and the current study employed an extended Solomon four-group design to test the efficacy of acute and chronic administration during 5-minute tests in the elevated plus maze. Preliminary data show that during the posttest, animals that were not pretested made more entries into and spent more time in the open arms than animals that were pretested. There were no reliable differences between drug conditions at the doses tested. Additional data from 10-min tests and over a range of doses provide a more complete analysis and have implications for the use of valerian in the treatment of generalized anxiety disorder.

56. Amphetamine-induced Deficiencies in Reward Sensitivity in Rats and Hamsters. (EAB; Experimental Analysis) LESLIE M WISE (Dept of Psychology, 4620), Valeri Farmer-Dougan (Illinois State University)

Abstract: The study compares the learning behavior of two species of rodents during low dose amphetamine exposure. The behaviors of rats and hamsters have never been directly compared under identical conditions. Further, differences in the sensitivity to reward and work effort of these two species during either baseline or amphetamine conditions has never been examined. In this study, the behavioral effects of low doses of amphetamine were examined using a concurrent variable interval schedule with both the operant conditioning chamber and the open field foraging chamber. The reinforcement model, the Matching Law, and The Behavioral Momentum Law were used to analyze the data. Implications of the study are critical to society in both the correct and responsible use of amphetamines as a pharmaceutical as well as for information in the fight against the abuse of amphetamines and amphetamine analogs.

57. Reliability of Quantitative Urinalysis Testing for Cocaine Abstinence Reinforcement Procedures.

(OBM; Applied Behavior Analysis) MICK J. NEEDHAM (Johns Hopkins University), John Crandall (John Crandall), Kenneth Silverman (Johns Hopkins University)

Abstract: Abstinence reinforcement using qualitative urinalysis testing can be effective in promoting cocaine abstinence in many, but not all patients. Preston and colleagues (1997) developed a potentially sensitive cocaine abstinence reinforcement intervention that arranges reinforcement based on amounts of decreases in benzoylecgonine (BZE) concentrations across days. The method involves the use of quantitative urine testing, which requires manual dilutions of urine samples that have BZE concentrations that exceed the measurable limits of the testing instrument. This follow-up study to data collected in 2005 was designed to assess reliability of this quantitative testing method involving manual dilutions. To assess the human error introduced by manual dilutions, reliability coefficients obtained during this quality assurance procedure were compared to the test-retest reliability coefficients for samples that did not require manual dilutions. Although occasional human errors were made, the procedures were successful in maintaining reliable results across multiple staff members for both undiluted and diluted samples. The results of this replication suggest that quantitative testing can be used appropriately in arranging abstinence reinforcement, however, the occasional errors suggest that staff and patients should be encouraged to request retesting of questionable results.

58. Some Discriminative Properties of Cocaine and Caffeine: Effects of A2a, D1, and D2 Receptor Antagonists. (EAB; Experimental Analysis) KATY M ORCHOWSKI (Allegheny College), Stephanie Ogilbee (Allegheny College), Rodney D. Clark (Allegheny College)

Abstract: Six female Zucker rats were trained to discriminate cocaine (3.0 mg/kg) from caffeine (10.0 mg/kg) IP injections under a fixed ratio ten (FR10) schedule of water presentation. Once response rates stabilized and the subjects reliably discriminated each drug (85% correct), the adenosine A2a receptor antagonist SCH58261, the dopamine D1 antagonist (+) SCH23390 and D2 receptor antagonist Raclopride are administered. It is hypothesized that the discriminative effects of both caffeine and cocaine share subjective effects that may be mediated through both dopamine and adenosine sites. To determine whether these sub-receptors were responsible, at least in part, for the discriminative effects of cocaine and caffeine generalization gradients and antagonism data are presented.

60. A Comparison of Mefloquine and Phencyclidine in a Place Preference Procedure in Rats. (EAB; Experimental Analysis) SARAH SNIDER (Allegheny College), Rodney D. Clark (Allegheny College)

Abstract: The present experiment compared the reinforcing properties of Phencyclidine (PCP), and Mefloquine Hydrochloride (MFQ) using the Conditioned Place Preference (CPP) paradigm. Largely based on classical conditioning, the CPP procedure consists of pairing a particular context (NS) with the effect of a drug (UCS). Conditioning allows the context itself to take on the properties of a (CS) with reinforcing properties. Presumably, if the drug's effects are reinforcing, the animal will "prefer" the drug-paired context even in a non-drugged state. MFQ is an FDA approved anti-malarial prophylaxis that has been known to cause similar side effects to those of Phencyclidine (PCP) intoxication. Since it has been previously reported that PCP causes place preference, it was hypothesized that MFQ would produce similar results because of complementary effects of the drugs. In a between subjects design, PCP (0.17, 0.3, 0.56 mg/kg) and MFQ (1.0, 3.0, 5.6 mg/kg) were paired with either a checkered or black chamber in a three chambered apparatus. Conditioning occurred for ten days, and on alternating days saline was paired with the opposite chamber. Food was also used as a primary reinforcer to provide a control condition. The results suggested that MFQ did not produce any appreciable preference for the drug-paired chamber.

61. Progesterone Modulation of the Discriminative Stimulus Effects of Triazolam in Healthy, Pre-menopausal Women. (N/A; Experimental Analysis) SHANNA BABALONIS (University of Kentucky), Joshua A. Lile (University of Kentucky), Catherine A. Martin (University of Kentucky), Thomas H. Kelly (University of Kentucky)

Abstract: Previous research from our and other laboratories suggests that the effects of sedative drugs among women may be enhanced during the luteal phase of the menstrual cycle and following pre-treatment with the neurosteroid, progesterone. This ongoing study builds on the previous research by examining whether sensitivity to the discriminative stimulus effects of triazolam is enhanced by progesterone pre-treatment. The drug discrimination procedure has been described as an in-vivo receptor function assay and has been used in previous research to examine putative neuropharmacological mechanisms associated with the stimulus effects of drugs. After triazolam discrimination has been established (training dose: 0.25 mg/70 kg triazolam), test doses (0.00, 0.06, 0.12, and 0.25) of triazolam are administered alone and in combination with oral progesterone (200 mg). Prior (baseline) and subsequent to (30, 60, 90, 120, 150 minutes) drug administration, participants complete assessments consisting of drug discrimination task (post-dose only), cardiovascular measures, verbal reports of drug effect, and computer tasks designed to assess psychomotor and impulsive-like behavior. Drug effects are analyzed using a repeated measures ANOVA with triazolam dose, progesterone dose and time as factors. It is hypothesized that progesterone will enhance sensitivity to the discriminative stimulus effects of triazolam. Supported by RR-15592, DA-024127.

#489 International Poster Session

5/25/2009
6:00 p.m. - 7:30 p.m.
North Hall A
DDA

62. Descriptive Analysis of the Prevalence of Various State Funded Community Based Behavioral Interventions within Maryland. (CSE; Service Delivery) JAMES C. TOLAN (Comprehensive Developmental Services, LLC), William E. Stanley Jr. (Humanim, Inc.), Jessica L. Shriner (Humanim, Inc.), Karyn H. Tolan (Comprehensive Developmental Services, LLC)

Abstract: In recent years, principles of applied behavior analysis have been increasingly framed within a philosophical approach to the delivery of support services termed “Positive Behavior Supports (PBS).” PBS’s combined emphasis on personal choice and proactive supports has been embraced by advocacy groups for persons with developmental disabilities, and this in turn has influenced how public funds for community based behavioral support services for persons with developmental disabilities are being allocated. Although regional programs offering community based behavioral supports to this population often summarize the prevalence of various challenging behaviors, prevalence of supports is rarely provided. A database has been maintained concerning person and support characteristics for community based behavioral interventions rendered within the Central Region of Maryland since 1998.

The present analysis focuses upon the prevalence of various proactive and reactive interventions contained in 330 behavioral support plans developed over two fiscal years. Reliability checks were completed on 10% of all entries and ranged from 97.4% to 100% agreement. The results indicate that although reactive supports, such as analogue reinforcement, were the most prevalent interventions across support plans (63%), over 50% of the protocols referenced at least one organized set of proactive supports (i.e., photographic communication training, activity sampling).

63. Assessing Value of Qualitatively Different Reinforcers in Children with Developmental Disabilities Using Preference Assessment and Behavioral Economic Procedures. (AUT; Applied Behavior Analysis) JENNIFER L. BREDTHAUER (Auburn University), M. Christopher Newland (Auburn University)

Abstract: The relationship between reinforcer effectiveness and response requirement has important implications for maintaining treatment effects of individuals with developmental disabilities. Tustin (1994) and DeLeon et al. (1997) suggested that reinforcer effectiveness when requirements increase should be assessed frequently as part of treatment. However, it is unclear whether commonly used preference assessments make accurate predictions about reinforcement effects under varying response requirements. Behavioral economic procedures using demand curve analysis may provide new methods to identify reinforcers under these conditions. Specifically, the exponential demand model (Hursh & Silberberg, 2008) can provide a single quantitative measure of essential value. In the present study paired-stimulus preference assessment was completed with edibles and tangibles before a behavioral economic reinforcer assessment was conducted with children with autism and other developmental disabilities. Participants dropped blocks into a slotted box for access to the preferred item. The fixed ratio schedule increased across sessions with a 1.5 step size. Results indicated that participants’ preference did not consistently change when paired-stimulus hierarchies were compared to maximal responding on the behavioral economic assessment. While elasticity of demand was not always consistent for reinforcers at low and high magnitudes, the exponential demand model could be applied after normalization for some reinforcers.

64. Further Evaluation of a Delayed Time-out Procedure in the Treatment of Problem Behavior. (AUT; Applied Behavior Analysis) WILLIAM J. HIGGINS (Munroe-Meyer Institute, UNMC), Robert R. Pabico (Marcus Institute), Brian J. Feeney, (Munroe-Meyer Institute, University of Nebraska Medical Center), Henry S. Roane (University of Nebraska Medical Center & Munroe-Meyer Institute), Rebecca A. Veenstra (Munroe-Meyer Institute, University of Nebraska Medical Center)

Abstract: Previous research has demonstrated that punishment procedures are most effective when implemented consistently and immediately following a response. However, immediate implementation of punishment may not always be practical. For example, parents may be unable (e.g. in a moving vehicle) or unwilling (e.g. in public) to implement punishment procedures, leading to intermittent or delayed delivery of the contingency. The current investigation evaluated the effectiveness of a punishment procedure on immediate and delayed schedules of implemented to decrease destructive behavior exhibited by a 6-year-old

boy diagnosed with PDD-NOS. Both schedules were shown to be effective at decreasing aberrant behavior. Moreover, when given a choice, the participant consistently selected the delayed punishment procedure. Across the analysis, interobserver agreement data were collected on at least 25% of sessions and average agreement was 80% or higher across conditions. Results will be discussed in terms of the effectiveness of delayed punishment procedures in decreasing aberrant behavior.

65. Assessment and Treatment of Elopement Maintained by Automatic Reinforcement (N/A; Applied Behavior Analysis) EMILY D. SHUMATE (Kennedy Krieger Institute and The Johns Hopkins University School of Medicine), Stephanie A. Contrucci Kuhn (Westchester Institute for Human Development)

Abstract: Elopement is a potentially deadly behavior that often results in the individual being placed in more restrictive settings to maintain their safety (Garner, 1991). Little research has been published evaluating the assessment and treatment of elopement (Tarbox, Wallace, & Williams, 2003). The purpose of the current investigation was to (a) identify the maintaining function of elopement behaviors for a 9-year-old male with autism and intellectual disabilities using an analogue functional analysis, (b) evaluate treatment components, and (c) generalize the treatment to the community. Treatment components consisted of differential reinforcement of other behaviors, competing stimuli, safety harness, and a punishment procedure. Results of the functional analysis suggested that elopement was maintained by automatic reinforcement. Treatment components were then evaluated and generalization was conducted within a multielement design embedded within an ABCACDE design. Treatment components were sequentially added until elopement was suppressed to an acceptable rate. With the implementation of all the treatment components, near zero rates of behavior were observed and the treatment was generalized with his parents and zero rates of behavior were observed.

66. Using Course Assessments to Train Teachers in Functional Behavioral Assessment (FBA) and Behavioral Intervention Plans (BIP) Techniques. (EDC; Service Delivery) Eun Joo Kim (Assistant Professor), Moira Anne Fallon (Associate Professor), JIE ZHANG (SUNY Brockport)

Abstract: As the need to train more teachers to work in inclusion classrooms increases, college instructors are required to identify and implement course assessments measuring their effectiveness in training practices. One area of particular need is training teachers to work with students with disabilities, including those students with autism. These students are increasingly being served in the inclusion classroom setting. The purpose of this poster presentation is to explore the use of course assessments in the pre-service level training of teachers working in inclusion classrooms. Such course assessment should meet the professional standards set forth by the Association for Behavior Analysis (ABA) and the Council for Exceptional Children (CEC). The course assessments discussed will be in training teachers who currently hold general education certification in obtaining special education training, specifically in developing Functional Behavioral Assessment (FBA) and Behavior Intervention Plans (BIP). Field testing data will also be included for these pre-service level teachers (N=65) over a four year period of time. The poster presentation will also include recommendations for institutions of higher education to utilize or adapt similar course assessments into their training programs.

67. Concurrent Schedules of Reinforcement and Adjusting Demand Requirements: Year Three Summary Results. (CBM; Applied Behavior Analysis) Jessica Frieder (Utah State University), Stephanie M. Peterson (Idaho State University), CARRIE M. BROWER-BREITWIESER (Idaho State University), Elizabeth Dayton (Idaho State University), Stuart M Mullins (Idaho State University), Shilo Smith-Ruiz (College of Southern Idaho)

Abstract: A summary of results from the first, second, and third year of a 3-year Federal grant project funded by the Institute of Education Sciences, Serious Behavior Disorders-Special Education Research Grants Program will be presented. Project participants included students with a variety of disabilities, all presenting severe escape-motivated problem behavior, ages 5 to 12 years, and grades K-6 in four school districts across the state of Idaho. Summary results of initial analyses and choice-making interventions that pitted compliance, break requests, and problem behavior against each other will be presented. Summary data will be

presented for one participant. Social validity data will be highlighted, as will follow-up data to demonstrate the participant's progress over time.

68. Analysis of the Effects of Choice Making on Toy Play. (N/A; Applied Behavior Analysis)
COURTNEY FLEMING (The Ohio State University), Sheila R Alber-Morgan (The Ohio State University),
Quinn Vickers Montgomery (The Ohio State University)

Abstract: The opportunity to choose has been shown to increase task engagement of individuals with developmental disabilities in social contexts. However, literature on the effects of choice on activity engagement during social interactions is minimal, and has often been conducted in situations outside of typical classroom routines. The purpose of the current investigation was to a) extend literature on choice by integrating choice making opportunities into existing play routines of children with developmental disabilities and b) provide empirical evidence of a treatment package targeted to increase functional play that could feasibly be implemented by educators. Two students receiving special education services in an integrated preschool classroom serving both students with and without disabilities participated in the study. Four students without disabilities served as controls in play dyads. An alternating treatments design compared effects of choice, peer-choice, and no-choice on duration of play. Students expressed choice by touching the picture or saying the name of the item, and stimuli selected were presented to both students. No contingencies were in place for target behavior. Taken together, results for both participants suggest that 1) opportunity to choose served to increase engagement, and 2) that choice and relative preference may have increased functional play.

69. Analysis of Problem Behavior in Response to Item Restriction Within Symmetrical “Do” and “Don’t” Requests. (CBM; Applied Behavior Analysis) Nathan Call (Marcus Autism Center), DANA SWARTWELDER (Marcus Autism Center)

Abstract: Requests may be phrased as “do” or “don’t,” with some evidence that “do” requests result in greater rates of compliance and decreased problem behavior (Neef et al., 1983; Adelinis & Hagopian, 1999), and other studies (Fisher et al., 1998) finding no difference in problem behavior between request formats. Fisher et al. hypothesized that request format was less important than whether the request restricted preferred activities. In the present analysis, “do” and “don’t” requests were equivalent in response effort, and restriction of preferred items was manipulated within both formats. Interobserver agreement data were collected for over 20% of sessions and always exceeded 80% agreement. Unlike previous findings, “do” requests that interrupted an ongoing activity were associated with higher rates of problem behavior. The participant, a 15-year-old male with a brain injury and PDD-NOS, engaged in problem behavior only following a “do” request to engage in a low preferred activity. Zero rates of problem behavior were observed in the “don’t” condition, even when compliance resulted in restricted access to preferred activities. These results suggest that problem behavior in response to requests for this participant was maintained by negative reinforcement in the form of escape from the low preferred activity.

70. A Meta-analysis of Clinical Interventions for Pica. (AUT; Applied Behavior Analysis) DAVID MCADAM (University of Rochester), Jonathan Breidbord (Autism Research Centre, University of Cambridge), Michelle Levine (University of Rochester), Don E. Williams (Texana BTTC)

Abstract: Pica is an eating disorder characterized by consumption of non-food items or compulsive eating of edible and non-edible items. Individuals who display pica have been found to eat a wide variety of items including glass, cigarettes, pebbles, metal screws, excessive amounts of food items such as ice or baking soda, and non-edible plants. This poster will present a meta-analytic review of the scientific strategies for clinical treatment of pica published between 1975 and 2008. Both descriptively summary and a quantitative meta-analysis will be presented. For the quantitative meta-analysis data on both Percentage of Non-overlapping data (PND) and Percentage of Zero data (PZD) will be summarized. Based on criteria of evidence-based practice, three behavioral interventions (i.e., differential reinforcement, non-contingent reinforcement, overcorrection) have well-established clinical efficacy; two other behavioral interventions (i.e., physical restraint and response blocking) and nutritional (e.g., mineral supplementation) approaches show probable

clinical efficacy based on limited experimental evidence. Recommendations for the evidence-based treatment of pica and future research will be provided.

71. The Effects of Computer Practice on Academic Skills for Children with Moderate to Intensive Disabilities. (N/A; Applied Behavior Analysis) JULIE EVERHART (The Ohio State University), Ju Hee Park (The Ohio State University, Department of Special Education), Sheila R Alber-Morgan (The Ohio State University)

Abstract: A multiple baseline across behaviors design was used to examine the effects of a computer-based intervention on the acquisition and maintenance of academic skills by young children with moderate to intensive disabilities. The intervention required the students to practice academic skills (e.g., letter and number identification) using individualized computer games that provided immediate feedback for each response. For each learning trial, three choices appeared on the computer screen. If the child selected the correct answer, the next screen provided positive feedback (e.g., Right answer! Good job!), and a new learning trial was presented. If the child made an incorrect response, the next screen provided corrective feedback and repeated the learning trial. At the end of each five-minute practice, the teacher assessed acquisition by presenting the child with flash card prompts and recording their responses. Results demonstrated increased acquisition and maintenance of basic skills. Limitations, future directions, and implications for practice will be discussed.

72. Interactions Between Brief Analogue Functional Analysis and Functional Communication Skills in an Outpatient Clinic. (CBM; Applied Behavior Analysis) NEALETTA HOUCHINS-JUAREZ (Vanderbilt Kennedy Center Behavior Analysis Clinic), Jennifer Lynne Bruzek (Vanderbilt University), Kathleen J. Miller (Vanderbilt University), Craig H. Kennedy (Vanderbilt University)

Abstract: The Behavior Analysis Clinic at the Vanderbilt Kennedy Center provides behavioral services to children and adolescents with neurodevelopment disabilities and problem behavior. A brief Analogue Functional Analysis (AFA) is conducted during an initial 90 minute session to determine potential functions maintaining problem behavior. Data from the brief AFA, along with caregiver interviews and descriptive assessments are used to develop Behavior Intervention Plans. However, there are some limitations when using the brief AFA. Data from brief AFA's can be susceptible to false-negative, false-positives, as well as a lack of discrimination between test conditions. We will present data that illustrates a potential correlation between false-negatives during brief AFA's, behavioral function and the level of functional communication skills of each child. Implications of our results will be discussed in relation to level of communication skills and outcomes of the brief Analogue Functional Analysis.

73. Decreasing Ruminative Vomiting Using Noncontingent Reinforcement. (N/A; Applied Behavior Analysis) ANNA E. CHIRIGHIN (Kennedy Krieger Institute), Stephanie A. Contrucci Kuhn (Kennedy Krieger Institute), Louis P. Hagopian (Kennedy Krieger Institute), Brandy Swain (Kennedy Krieger Institute)

Abstract: Ruminative vomiting is the voluntary regurgitation and reswallowing of previously ingested food (Dudley, 2002). Long-term effects of rumination include malnutrition, dehydration, gastric disorders, weight loss (Winton & Singh, 1983), tooth decay, (Singh, 1981) and possibly mortality (Rast, 1981). Little research has been published on the behavioral treatment of rumination. However, the research that has been conducted suggests differential reinforcement, dietary manipulations and oral hygiene procedures are effective in reducing rumination. In the current study, the effects of post meal gum were evaluated in a 7-year-old girl who was admitted to an inpatient unit for the treatment of severe behavior problems, including rumination. Results of functional analyses suggested rumination was, in part, maintained by automatic reinforcement and, in part, by access to positive reinforcement in the form of edible stimuli. Data gathered across the day suggested the probability of rumination was greater post-meals. Initially, Lily was taught to chew gum using a changing criterion design and a task analysis. The effects of the gum on post meal rumination were then evaluated using a reversal design. With the intervention in place, rumination was significantly decreased. In addition, generalization sessions were conducted in Lily's home environment, during which low rates of rumination maintained.

74. The Effects of Video Feedback on Correct Implementation of Treatment Components During Caregiver Training. (N/A; Applied Behavior Analysis) Yanerys Leon (Kennedy Krieger Institute), SungWoo Kahng (Kennedy Krieger Institute), Nicole Lynn Hausman (Kennedy Krieger Institute), Jessica

Becraft (Kennedy Krieger Institute), MARIANA I CASTILLO IRAZABAL (Kennedy Krieger Institute / University of Maryland)

Abstract: Caregiver training is an essential component of behavioral interventions for children with severe problem behavior. The ultimate success of an intervention is generally a function of the extent to which caregivers implement the treatment accurately and reliably. Typically, caregiver training consists of several components including instruction, modeling, rehearsal, and verbal feedback during and following training sessions (Mueller et al., 2003). In some instances, this standard training is insufficient in producing acceptable implementation of treatment programs. In the current investigation, video-feedback was evaluated in conjunction with a standard caregiver training package. The father of a child admitted to an inpatient facility for the assessment and treatment of severe problem behavior served as a participant for this study. Initially, caregiver training consisted of the standard training package. After the caregiver failed to meet mastery criteria (i.e., 80% correct implementation) for several treatment components, video-feedback was added to the training package and evaluated in a multiple-baseline design. It was determined that video-feedback in conjunction with the standard training package was an effective component in training a caregiver to accurately implement a treatment program. Interobserver agreement was collected for one-third of sessions and averaged above 80%.

75. Precision Teaching and Speed Reading. (VRB; Applied Behavior Analysis) GUNN LOKKE (University College of Ostfold, Norway), Jon A. Lokke (University College of Ostfold, Norway), Erik Arntzen (Akershus University College)

Abstract: Speed-reading techniques are widely used and generally accepted, but few reports on its effectiveness have been made. In one of few studies on the effectiveness of speed reading, students on average doubled their reading speed (Schmidt, 1972). Calef et al. (1999) conclude that measurable changes in reading eye movements and reading speed accompany successful completion of a speed-reading course in normally developed students. We have found no reports on the use of the techniques in children with retardation. We present the use of speed-reading and Precision Teaching procedures in a 14 year old boy with mild mental retardation and reactive attachment disorder. At baseline his average reading speed at school was 80 correct wpm with 4 learning opportunities, and 42 correct and 2 LOs at home. After four and 12 weeks respectively, average wpm increased to 150 correct and 1 learning opportunity at school and 100 correct wpm and 2 LOs at home.

76. Evaluation of Choice Making in the Assessment of Young Children with Problem Behavior. (N/A; Applied Behavior Analysis) JOHN F. LEE (University of Iowa), Jay W. Harding (University of Iowa), David P. Wacker (University of Iowa), Wendy K. Berg (University of Iowa), Kelly M. Schieltz (University of Iowa)

Abstract: We evaluated changes in choice making over time during concurrent-operants conditions to show preferences, pre- and post-treatment, across two classes (tangible and attention) of positive reinforcement. The participants were 2 preschool-aged children who had developmental delays and displayed problem behavior maintained by both positive and negative reinforcement. The concurrent choice options varied the availability of parent attention and access to preferred toys. Time allocation within choice conditions was evaluated within a reversal design, and sessions were conducted in the children's homes by their parents. Inter-rater agreement was conducted across 30% of sessions and averaged 97%. Pre-treatment results showed that both children had distinct preferences as demonstrated by stable patterns of allocation, with one child allocating time to choice options associated with parent attention and the other child allocating time away from parent attention. However, during post-treatment probes using the same concurrent-operants conditions, neither child showed stability in choice allocation suggesting that changes had occurred in their preference.

77. Teaching Peer Reinforcement and Grocery Words: Acquisition of Non-target Stimuli and Observational Learning. (EDC; Applied Behavior Analysis) ANN KATHERINE GRIFFEN (University of Kentucky), Donald M. Stenhoff (University of Kentucky), Robert Pennington (University of Kentucky)

Abstract: A multiple probe across behaviors design, replicated across participants, assessed the effectiveness of constant time delay in teaching appropriate peer reinforcement and grocery words to 3 elementary students with moderate intellectual disabilities in a small group instructional arrangement. Additionally, pretests and posttests assessed the acquisition of the participants' observational learning (acquisition of peers' grocery words) and non-target stimuli (related information supplied by the teacher in the consequent event). Results indicate that the participants learned (a) to appropriately reinforce peers, (b) to read their grocery words, (c) some of the target stimuli of their peers, and (d) much of the non-target stimuli associated with their own grocery words and their peers' grocery words. Errors for the delivery of reinforcement to peers significantly decreased across conditions (12.2%, 3.8%, and 0.1%). Maintenance data indicate that the participants maintained their target grocery words at high levels of accuracy.

78. Comparing Two Methods of Quantifying Behavior-consequence Relations: Yule's Q and Contingency Space Analysis. (N/A; Applied Behavior Analysis) BLAIR PARKER HICKS (Vanderbilt University), Nealetta Houchins-Juarez (Vanderbilt Kennedy Center Behavior Analysis Clinic), Craig H. Kennedy (Vanderbilt University)

Abstract: Several methods of analyzing descriptive data to investigate behavior-consequence relations have been proposed and debated in recent years. Determining a statistic derived from the odds ratio, known as Yule's Q (Yule & Kendall, 1957), is one such method that is gaining increased recognition as the standard for quantifying behavior-consequence relations in children with developmental disabilities (Yoder & Feuer, 2000). An alternative method that has received relatively less attention but that nevertheless shows promise is Contingency Space Analysis (CSA; Gibbon, Berryman, & Thompson, 1974; Matthews, Shimoff, & Catania, 1987; Martens, DiGennaro, Reed, Szczech, & Rosenthal, 2008). CSA involves a comparison of conditional probabilities and conveniently provides a visual representation of the sequential relation. In the present study, data collected during a descriptive assessment are analyzed using both methods and subsequently compared. Results indicate that each method suggests different conclusions in regards to identifying possible reinforcers for problem behavior. Advantages and disadvantages related to each method are specified.

79. A Brief Method for Identifying the Least Restrictive Level of Mechanical Restraints Prior to Restraint Fading. (AUT; Applied Behavior Analysis) Samantha Hardesty (Kennedy Krieger Institute), Lynn G. Bowman (The Johns Hopkins University School of Medicine), DAWN E. CONNOLLY (Kennedy Krieger)

Abstract: Programmatic restraints are often necessary to minimize the risk associated with severe self-injurious behavior (SIB). Given the restrictions mechanical restraints have on adaptive behavior, restraint fading is often an important treatment goal (Fisher, Piazza, Bowman, Hanley, & Adelinis, 1997). Mechanical restraints are faded by systematically modifying the rigidity of the restraints over time (e.g., changing the number or thickness of stays within each sleeve). Identification of a less rigid level of restraint prior to fading may help facilitate a more rapid fading process. Currently, no method exists for identifying which levels of restraint are optimal to begin restraint fading. Within the current study, 6 conditions were evaluated prior to the onset of the restraint pre-fading analysis with an 8-year-old male diagnosed with autism. Similarly to Wallace and colleagues (1999), data were collected on SIB and food consumption. Results identified 4 thin stays as a level of restraint associated with the highest percentages of adaptive behavior and lowest levels of SIB. A pre-fading analysis was conducted and results suggest that the probes conducted prior to the pre-fading analysis were effective in identifying a less intrusive level of restraint. Reliability data were collected for least one-third of observations and averaged above 80%.

80. The Use of a Comprehensive Behavioral Treatment Package for the Treatment of Elopement Behavior as Evidenced by Developmentally Disabled Children. (AUT; Applied Behavior Analysis) STEPHANIE A JOHNSON (STAR, Inc.)

Abstract: The purpose of this study was to evaluate a comprehensive behavioral treatment package designed to effectively and durably eliminate or reduce elopement behavior, as evidenced in the developmentally disabled population. Three developmentally disabled children, ranging in age from 6.2 to 10.3 years, took part in a comprehensive behavioral treatment program, which included such behavioral techniques as Differential Reinforcement of Incompatible Behaviors (DRI), Premack Principle, Structured Instructional Training,

Motivational Home/Community Token Economy, Stimulus Control and Self-Management Strategies, and Videotape Self-as-a-Model instruction. The treatment package was sequentially administered to each child, using a multiple baseline across subjects design. Results indicated that the treatment program was successful in reducing the frequency, as well as the duration, of elopement events for all three subjects.

81. The Effects of Differing Reinforcement Schedules on Pica Behavior in Adolescents with Developmental Disabilities. (N/A; Applied Behavior Analysis) ERIN FAGAN (Evergreen Center), Lawrence L. Lockwood (Evergreen Center), Gordon A. DeFalco (Evergreen Center)

Abstract: Pica behavior is a serious and potentially harmful act. Students engaging in pica behavior are at an increased risk for gastro-intestinal problems, choking, or poisoning. This study examines the effects of two different reinforcement schedules, Non-contingent reinforcement and differential reinforcement of other behavior, in an attempt to treat pica behavior. Prior to the study, participants' rates of pica behavior were at relatively high levels. During the study participants were reinforced with small edibles throughout the course of the day depending on the reinforcement method in place at that time. The frequency of attempted pica for two adolescent males with developmental disabilities was assessed using a reversal design. A parametric analysis comparing different 10, 15, and 20 minute intervals of reinforcement delivery for each schedule of reinforcement was implemented to determine the most effective schedule in reducing attempted pica. Results showed different rates of pica between the two reinforcement conditions but no difference within each reinforcement schedule between 10, 15, and 20 minute reinforcement delivery.

82. Increasing Attending Time for Children with Developmental Disabilities. (N/A; Applied Behavior Analysis) TARA-LYNN BURBEE (Evergreen Center), Gordon A. DeFalco (Evergreen Center)

Abstract: Attention to task is often difficult for children to incorporate into their daily routines. This may be even more challenging for those children with developmental disabilities and other learning difficulties. The purpose of this study was to determine if attending to task could be taught through the use of a standard shaping procedure to three students in a North Eastern Community Based Residential School. A changing criteria design was used to assess the shaping procedure in increasing the time attending to task. Attending to task was defined as the duration of attending from start of task until off task behavior occurred. Baseline data revealed that all three students had limited attending time of fewer than three minutes per task. Preferred reinforcers were chosen by the students to earn during the intervention. Interventions began with 10 seconds added to the individuals' mean attending time during baseline. Baseline duration plus 5 minutes was desired for all three participants. Results indicated attending time increased to varying degrees, using shaping.

83. Idiosyncratic Functions: An Evaluation of Problem Behavior Maintained by Interruptions of Free-operant Behavior or Transitions. (N/A; Applied Behavior Analysis) ALLISON T. SCHULTZ (Kennedy Krieger Institute), SungWoo Kahng (Kennedy Krieger Institute), Nicole Lynn Hausman (Kennedy Krieger Institute), Kristin Kiel (UMBC), Chris Dillon (Kennedy Krieger Institute)

Abstract: One reason that a treatment might be ineffective is because an individual displays problem behavior maintained by idiosyncratic operant functions not typically assessed in functional analyses (Fisher, Adelinis, Thompson, Worsdell, & Zarcone, 1998). This failure to identify behavioral function may necessitate further analyses to determine additional variables that may maintain problem behavior. The purpose of the current study was to examine if the problem behavior of a 13-year-old girl diagnosed with mild mental retardation and pervasive developmental disorder-NOS was maintained by regaining access to interrupted activities or by escaping transitional demands. An Interruption Assessment was conducted to test for problem behavior maintained by interruptions from ongoing activities. A second Interruption Assessment was then conducted to assess problem behavior occasioned by "do" and "don't" requests that were incompatible with ongoing preferred activities. These interruptions required the participant to transition to either another preferred activity or to a nonpreferred activity. Results from these assessments showed that problem behaviors occurred at comparable levels when transitioning to a preferred activity or nonpreferred activity, suggesting that the transition rather than the interruption of the ongoing preferred activity evoked problem behavior.

#490 International Poster Session

5/25/2009
6:00 p.m. - 7:30 p.m.
North Hall A
EAB

84. The Effect of Screen Flicker Rate on Hens' Discrimination of Visual Stimuli. (N/A; Experimental Analysis) RENEE RAILTON (University of Waikato), T. Mary Foster (University of Waikato, New Zealand), William Temple (University of Waikato)

Abstract: The use of television and computer screens for presenting stimuli to animals is increasing as it is non-invasive and can provide precise control over the stimuli. However, conventional (CRT) television and computer screens have been designed for the human visual system and have a flicker rate of 50-60Hz. Domestic hens' critical flicker fusion frequency ranges between 80-90Hz. Thus stimuli presented on CRT screens may appear a series of flickering images to them. This study aimed to investigate whether hens' discrimination between two stimuli was affected by altering the flicker rate of a CRT screen. Hens' were trained in a conditional discrimination (to 85% correct over 5 sessions) between a black circle and cross presented on a CRT screen, with the screen refresh rate set at 100Hz. The hens accuracy on this discrimination decreased as the refresh rate of the CRT screen was decreased. These results imply that the change in flicker rate changed the appearance of the stimuli enough to affect their discrimination.

85. CANCELLED: Reinforcing and Punishing Effects of Environmental Enrichment for North American River Otters. (N/A; Experimental Analysis) SARAH E. REISBERG (Franklin & Marshall College), Meredith J. Bashaw (Franklin & Marshall College), Julie Grove (Maryland Zoo in Baltimore)

Abstract: Activity budgets of captive animals often differ from those of wild conspecifics, and may include persistent stereotypic or abnormal behaviors. Captive carnivores are particularly likely to develop stereotypies because the contingency between hunting and food is reduced or absent. Environmental enrichment can change these behavior patterns in carnivores, but enrichment success is variable and rarely complete. We implemented two enrichment techniques for North American river otters (*Lontra canadensis*) to determine whether 1> enrichment reinforced target behaviors and locations within the exhibit and 2> enrichment reduced stereotypic and abnormal behaviors by creating more naturalistic contingencies. Enrichment did increase desired behaviors and placing enrichment in a portion of the exhibit increased the time animals spent there. However, enrichment did not consistently reduce stereotypic and abnormal behaviors. Stereotypies that were associated with food-related cues decreased during enrichment, but flipping, an established stereotypy no longer dependent on food-related cues, did not change (though a decreasing trend in flipping suggests longer intervention may have produced greater success). Our results imply that enrichment is more effective as a reinforcer than a punisher, and its effectiveness as a punisher may be determined by the extent to which undesirable behaviors have become emancipated from their original eliciting stimuli.

86. A Modified Fading Procedure for Teaching Tolerance to Delayed Rewards. (N/A; Experimental Analysis) JEFF S. STEIN (University of Kansas), Patrick S. Johnson (University of Kansas), Adam T. Brewer (University of Kansas), Monica T. Francisco (University of Kansas), Gregory J. Madden (University of Kansas)

Abstract: Previous studies have demonstrated that a fading procedure has successfully increased tolerance to delayed reinforcers in pigeons (Mazur & Logue, 1978; Logue, et al., 1984). Currently, the extent to which this effect may generalize across species is unknown. Using rats as subjects, the present study seeks to replicate the findings of Mazur and Logue (1978) using a modified fading procedure. Rats in the control group (n = 4) choose between a small, immediate food reinforcer and a large, delayed food reinforcer. Rats in the experimental group (n = 4) receive training in which they initially choose between a small and large reinforcer presented after equal delays. Over the course of 300 sessions, the delay to the small reinforcer is gradually titrated, by increments of .05 s, according to a percentile-like schedule. The criterion to adjust the delay requires that the subject has chosen the large, delayed reinforcer on at least 59 out of the last 60 free choice trials. Additional data to be collected.

87. Reward Sensitivity and Individual Competitiveness in an Open Field Group Foraging Paradigm. (TPC; Experimental Analysis) VALERI FARMER-DOUGAN (Illinois State University), Christopher Sorric (Illinois State University)

Abstract: Relations between competitive status and reward sensitivity across groups and individual rats were examined. Pre- and post- foraging competition tests were conducted. The 5 groups of 5 randomly grouped rats foraged for food delivered to opposite corners of an open field using a series of conc VT VT schedule ratios. Reward sensitivity, bias and competitiveness scores were obtained for individual rats. Percentages of competitive and foraging behaviors were collected for each rat during foraging sessions. Using reward sensitivity estimates, rats were regrouped into highest to lowest groups (N=5). The regrouped data were examined for differences in pre- and post-competition scores and competitive behaviors. Moderate correlations were found between competitiveness and reward sensitivity. Significant behavioral differences were found across the groups: Highest ranked rats showed more feeder-related competition. Lowest ranked rats engaged in more rearing and bottom foraging. The link between competition and reward sensitivity is discussed.

88. The Disruptive Effects of Negative Incentive Shifts Involving Reinforcer Delay and Magnitude in Rats. (N/A; Experimental Analysis) COLLEEN M. WHITE (College of Charleston), Chad M. Galuska (College of Charleston), Tammy Wade-Galuska (University of South Carolina-Salkehatchie)

Abstract: Negative incentive shifts in reinforcer magnitude engender excessive pausing on fixed-ratio (FR) schedules (Perone & Courtney, 1992). The present study seeks to extend this finding to situations involving transitions between immediate and delayed reinforcers. Six rats earned food pellets by lever pressing according to an FR 30 schedule. A two-component multiple schedule operated. In the immediate component (e.g., right lever), a pellet was delivered immediately upon completion of the FR. In the delay component (e.g., left lever), completion of the FR produced a signaled delay after which a pellet was delivered. Components irregularly alternated yielding four transitions: delay-delay; delay-immediate; immediate-immediate; immediate-delay (the negative incentive shift). Across conditions the delay was manipulated (15, 30, 60, 90 s). In some conditions the reinforcer magnitude associated with one of the components was increased (e.g., 3 pellets). Responding was primarily controlled by the upcoming conditions of reinforcement. Rats paused longer when the upcoming reinforcer was delayed, and paused longer with increasing delays. The immediate-to-delay transition produced a slightly longer median pause than the delay-delay transition. Pausing during the immediate-to-delay transition could be exacerbated when the immediate component produced a larger reinforcer and attenuated when the delay component produced a larger reinforcer.

89. Variability in Domestic Hens' Behaviour in Extinction Sessions Following Sessions with a Fixed Ratio Schedule. (N/A; Experimental Analysis) LEANNE NESHAUSEN (University of Waikato), James McEwan (University of Waikato)

Abstract: Initially domestic hens were trained to peck a square stimulus presented on a computer screen under a fixed-ratio 5 schedule of reinforcement to receive 30 reinforcers per 10-min (approximately) session. Once responding was stable there were several 40-min extinction sessions. After the extinction sessions the fixed-ratio 5 was re-established for several sessions, followed by further extinction sessions, this sequence was repeated three times. The time and location of every peck on the screen was recorded. Results showed that response structures that developed during the fixed ratio remained in extinction, at least for the duration of previous reinforcement sessions. After approximately 10 minutes, pecks in extinction became more variable in terms of rate and location on the screen. There were no 'extinction bursts' in pecking. Variability overall was similar for all the extinction sessions, but response rate reduced over sessions. In the second and third extinction sessions of each series responding tended to occur more as 'peaks'; that is, short periods of increased responding with periods of non-responding between peaks. These alternating reinforcement and extinction series had little effect on peck variability overall, but did have some effect on peck rate in extinction sessions.

90. How Effective is it to Motiv-aid Staff? (AUT; Applied Behavior Analysis) CHERYL J. DAVIS (Consultant), Ben Bruneau (Crossroads School for Children), Michele D. Brock (Crossroads School for Children), Mary Rosswurm (Crossroads School for Children)

Abstract: Reducing problem behavior in children with disabilities is most often our biggest challenge in working with our clients. Training staff in-vito and in-situ has often produced better results for our clients, but what do we do when that is not effectively changing behavior? Using technology has been helpful, but is there empirical data to show the effectiveness of technological aids? This poster will present data that shows implementing a Motivaider with staff to prompt positive verbal reinforcement with a child with autism reduced problem behavior by over 50% during the first week. Additional data will be collected to determine the long term effects of this treatment.

91. Identification of Functional Relations From Multiple Baseline Data with Delayed Change in the Dependent Variable. (TPC; Experimental Analysis) REBECCA G. LIEBERMAN (Vanderbilt University), Paul J. Yoder (Vanderbilt University), Brian Reichow (Yale University), Mark Wolery (Vanderbilt University)

Abstract: Background: We examined whether steepness of slope, consistency of latency of change, and expectancy of delayed change affect experts' judgment of a functional relation in the MBL-P design where delay in change of slope is present, to what extent experts agree, and characteristics of data where ratings indicate a functional relation. Method: Thirty-eight experts completed a survey composed of 16 figures containing 3 graphs in MBL format. Results: Experts rated graphs with steep slopes ($d=1.02$) and consistent latency of change ($d=0.43$) as showing more evidence of functional relations. Graphs creating expectancy of delayed change were more likely to be judged as showing functional relations if there was a steep slope ($d=0.52$). The average total agreement between pairs of experts was 0.4 ($SD=0.2$). The proportion of expert pairs that were in agreement at .80 or above was 0.04. The figure with an average rating that indicated a confident inference of a functional relation illustrated consistent latency of change, steep trend lines, and contextual information designed to create expectancy of delayed change in the DV. Conclusions: Findings may guide visual analysts to be more consistent in judgments of functional relations when there are delayed changes in the dependent variable.

92. Go/no-go Procedure with Compound Stimuli and Emergent Conditional Relations in Children with Autism. (AUT; Experimental Analysis) CÁSSIA LEAL DA HORA (Universidade de São Paulo), Paula Debert (University of Sao Paulo - Brazil)

Abstract: Matching-to-sample procedure is widely used for establishing emergent conditional relations. However, adventitious control by location, rather than the conditional control, can be established with this procedure in individuals with autism. The aim of this study was to evaluate whether emergent conditional relations could be established in autistic children with a go/no-go procedure with compound stimuli. In the go/no-go procedure only one operandum is used. One autistic child which showed adventitious control by location in matching-to-sample was trained to establish conditional relations with the go/no-go procedure with compound stimuli. During training, responses emitted in the presence of specific stimulus compounds (A1B1, A2B2, B1C1 and B2C2) were followed by reinforcer. Responses emitted in the presence of other compounds (A1B2, A2B1, B1C2 and B2C1) were not. In tests, new configurations (BA, CB, AC, and CA) were presented resembling tests usually employed in equivalence studies. Participant took 50 training sessions to reach accurate performances. The participant exhibited emergent relations consistent with symmetry, transitivity and equivalence only after several repeated training and test sessions. In most of the training sessions participant responded to all compounds. These results show that refrain from responding is difficult to be established with the go/no-go procedure in children with autism.

93. Equivalence Class Formation of Preposition Locations for Undergraduate College Students. (AUT; Experimental Analysis) DANIEL C DEROSA DEROSA (Western Connecticut State University)

Abstract: Sidman (1971) proposed a method of teaching reading comprehension using existing teaching methods, called Equivalence. A matching-to-sample task was used to strengthen conditional relations for comprehension of written text. A convenience sample of undergraduate students at a northeastern university

was randomly assigned to the Match-to-sample (MTS) group or the In Vivo (IV) group. The present study employed a match-to-sample task with the response topographies differing by group. In the teaching phase participants in the MTS group were asked to identify pictorial depictions of preposition locations in an array. A picture of the preposition corresponding to the sample appeared during each trial. Participants were informed of the correctness or incorrectness of each response. Mastery criterion was defined as five consecutive correct responses for each preposition location for each exemplar of that preposition. Tests for reflexivity, symmetry, transitivity and equivalence were conducted. In the MTS condition the test for equivalence was the same as the teaching phase for the IV condition and vice versa. A comparison of the number of trials required for mastery for each group was analyzed. The findings from this study will direct a future investigation focusing on children diagnosed with autism.

94. Contextually Controlled Derived Relational Intrusions Following Training. (VRB; Experimental Analysis) PAUL GUINThER (University of New Mexico), Michael J. Dougher (University of New Mexico)

Abstract: A contextually controlled interrelated conditional discrimination training procedure was used to produce subsequent contextually controlled semantic false memory phenomena. All participants completed identical contextual discriminative training on a computer during the first phase of the experiment, during which a set of memory-test words participated in an equivalence class with one Set of words (S1) in Context 1 (C1) and participated in an equivalence class with a different Set of words (S2) in Context 2 (C2). Context consisted of the background color of the screen along with the font in which the words were presented. During a second phase of the experiment, the memory test words were presented for a free recall memory test. Half of the participants completed the free recall memory test in C1 and the other half of the participants completed the free recall memory test in C2. Although all participants were shown the same memory-test words for study, an interaction was demonstrated in which participants accidentally recalled S1 words with an elevated frequency when tested in C1, whereas they accidentally recalled S2 words with an elevated frequency when tested in C2. These results indicate that semantic relationships, and hence the particular false memory phenomena exhibited during the recall of semantic material, can be brought under contextual control.

95. Effects of Instructions and Descriptions, with or without Acquisition and Transfer Criterion, in a Conditional Discrimination, Matching to Sample Task. (VRB; Experimental Analysis) Emilio Ribes-Iñesta (Universidad de Guadalajara), ALEJANDRA ZARAGOZA SCHERMAN (University of Manitoba)

Abstract: Three experiments were designed to evaluate the effect of criterion or non-criterion instructions and response descriptions use, on substitutive interaction contingencies. 32 university students (both genders) participated voluntarily in the study. Participants were randomly assigned to 6 experimental and 2 control groups. The experimental task consisted of a matching to sample procedure. Experiment 1 evaluated the effect of criterion instructions (Group 1) or non-criterion instructions (Group 2) on intramodal, extramodal, extrarelatational and extradimensional transference tests in a first phase; as well as the effect of non-feedback training followed by the same transference tests in a second phase. Experiment 2 evaluated the effect of criterion (Group 5) and non-criterion (Group 6) response descriptions in a first phase; and the same non-feedback training and transference tests in the first and second phases. Experiment 3 evaluated the joint effect of criterion instructions and response descriptions (Group 7) and non-criterion instructions and response descriptions (Group 8), and the same second phase and transference test as in experiments 1 and 2. Groups 3 and 4 served as control groups.

Group 3 was administered non-correction instrumental training and group 4 was administered correction instrumental training. Data shows better transference test performance in the second phase of groups 1, 4, and 6. Results are discussed in terms of the linguistic and discrimination interactions each procedure allows for.

Keywords: contingency substitution, descriptions, instructions, transference, matching to sample.

96. Concurrent and Concurrent Chains Schedules of Reinforcement and Punishment in Human Subjects. (N/A; Experimental Analysis) Harold L. Miller Jr. (Brigham Young University), JASON VANDER HORST (Brigham Young University)

Abstract: Human subjects played a computer game in which concurrent variable-interval variable-interval (conc VIVI) schedules of reinforcement arranged for on-screen changes and the delivery of coins from a

nearby device. A separate set of conc VIVI schedules of punishment was subsequently introduced in compound with the schedules of reinforcement. Under these schedules, effective responses produced on-screen changes and the necessity to deposit coins into a nearby device. In a second experiment subjects were first exposed to a different game containing a concurrent chains procedure in which the initial links were conc VIVI schedules and the terminal links were variable-time (VT) schedules of reinforcement. Later, VT schedules of punishment were compounded with the VT schedules of reinforcement in the terminal links. We report the results in the comparative context of existing models of distributed choice on both concurrent and concurrent chains schedules, including melioration.

97. Meta-choice in the Positive and Negative Situation. (N/A; Experimental Analysis) MAYUKO HORI (Kwansei Gakuin University), Tsuneo Shimazaki (Kwansei Gakuin University)

Abstract: The present study examined the preference between forced choice situation which consists of a single alternative and free choice situation which consists of multiple alternatives with concurrent-chains schedule. Such a choice between choice situations is called meta-choice. In this study, two conditions of acquisition or loss of points were set. The acquisition condition was the condition that points were added to as a result of choice behavior (positive situation) and the loss condition was the condition that firstly participants were given specific points, and then that points were lost as a result of choice behavior (negative situation). Most of the past study used experimental situations in which participants get reinforcers as a result of choice behavior. In addition to this, it is necessary to demonstrate that the situation which contains multiple alternatives has the reinforcement value even if it is under the aversive situation like the loss condition in this study. As a result, in both of the acquisition condition and the loss condition, higher preference for the free choice situation were consistently observed. The present study suggested that presenting multiple alternatives has the reinforcement value.

98. A Comparison of Antecedent and Consequent Interventions Incorporating Choice. (N/A; Applied Behavior Analysis) BRITNEY NICOLE BURTON (The University of Southern Mississippi), Heather Sterling-Turner (University of Southern Mississippi), Lauren Lestremou Harpole (The University of Southern Mississippi), Laura L Needelman (University of Southern Mississippi), Nichole Weakley (University of Southern Mississippi)

Abstract: Antecedent and consequent interventions incorporating choice have been shown to increase desirable behavior and decrease problem behavior. However, no comparative research on antecedent and consequent strategies involving choice has been conducted to date. The purpose of the presentation will be to discuss a recent investigation in which an alternating treatments design (ATD) was used to compare the effects of a common antecedent strategy (choice of task sequence), a common consequent strategy (choice of reward), and an escape extinction strategy. The goal of the investigation was to determine which strategy would result in a lower percentage of disruptive behavior and a higher percentage of task engagement for 3 preschool-aged males with developmental delays and escape-maintained problem behavior. Results showed that all 3 treatment strategies reduced problem behavior and increased task engagement, with no one treatment condition producing better effects. The methods, results, limitations, and implications of the investigation will be discussed in the presentation. Participants will benefit from the session because they will gain information related to the use of choice-related intervention strategies in a school setting.

100. Effects of the Manipulation of Reinforcer and Response Dimensions in a Self-control Training (N/A; Experimental Analysis) Amanda Rana Ferreira (Universidade Federal do Para), EMMANUEL Z. TOURINHO (Universidade Federal do Pará)

Abstract: We manipulated reinforcer and response dimensions (reinforcer quality, reinforcer rate, reinforcer delay and response effort) in a self-control training. Eight 12 or 13-year-old participants were exposed to math problems in two concurrent schedules of reinforcement, in four experimental conditions: assessment of difficulty with math problems, baseline, training, and post training. Results showed that when only one dimension was in effect, responses were controlled by the favorable values. When two dimensions were in direct competition (e.g. rate x quality), responses were controlled by rate value (one participant), effort value (one participant) and quality value (six participants). Four participants showed impulsivity in the beginning of

the self-control training and went through the training. Four participants did not show impulsivity and were exposed to maintaining sessions. Impulsive participants emitted self-controlled responses in the end of the training. In the post training assessment, all participants were exposed to direct competition between the delay and other two dimensions not manipulated in the training (or maintaining) sessions. Four participants showed impulsivity when delay competed with effort, but not when it competed with quality or reinforcer rate. These results suggest that the stability of self-control repertoires was conditioned to specific reinforce or response dimensions.

101. The Effects of Conditioning Toys as Reinforcers on Intervals of Toy Play, Stereotypy and Passivity for Two Children with Autism. (AUT; Applied Behavior Analysis) R. Douglas Greer (Columbia University Graduate School and Teachers College), SAMANTHA G BRODLIEB (Teachers College, Columbia University), Lin Du (Teachers College, Columbia University)

Abstract: We examined the effects of conditioning construction toys as reinforcers for play on the stereotypy, passivity and toy play of 2 seven-year-old males diagnosed with autism using a delayed multiple probe design. The participants functioned from pre-speaker to emergent reader/ writer levels of verbal behavior. The dependent variables included the numbers of intervals of appropriate toy play, stereotypy and passivity. Initial probe data showed the students engaged in frequent emissions of stereotypy and infrequent emissions of appropriate toy play in a free play setting prior to the implementation of the stimulus-stimulus pairing procedure. After the initial probe, toys were conditioned as reinforcers during stimulus-stimulus pairing sessions and students were observed in separate free play probe sessions. Results showed that when toys were conditioned as reinforcers, both students engaged in higher levels of appropriate toy play and significantly less stereotypy.

102. Correspondence Training and Two Types of Feedback: Say-do Correspondence or Task Precision. (N/A; Experimental Analysis) CARLOS MARTINEZ MUNQUIA (University of Guadalajara), Angela K Avila Hernandez (University of Guadalajara), Maria Elena Rodriguez (University of Guadalajara)

Abstract: Lloyd (2002) have argued that correspondence training may be controlled by multiple and different contingencies. Previous research combining matching-to-sample tasks and correspondence training procedures have shown that this may be the case since say-do correspondence feedback does not promote task acquisition. Therefore, a study was designed to evaluate the functional role of two types of feedback: one promoting say-do correspondence and other promoting task acquisition. Twenty college students participated. They were divided into four groups (three experimental groups and one control group). Group 1 and 2 received feedback on say-do correspondence and task precision, respectively. Group 3 received both types of feedbacks. Performance under transfer tests was similar for groups 1 and 2. However, group 3 showed better transference than groups 1 and 2. Data suggest that correspondence training combined with feedback on task precision can lead to task performance referred in the literature as “verbal”, “goal-oriented” or “higher-order” type.

*Lloyd, K. (2002). A review of correspondence training: suggestions for a revival. *The Behavior Analyst*, 25 (1), 57-73.

103. Reciprocity of Responding As Determinant of Partial-Altruistic Behavior In Humans (N/A; Experimental Analysis) Emilio Ribes-Iñesta (University of Guadalajara), NORA RANGEL (University de Guadalajara, Mexico), Lizbeth Pulido Avalos (University of Guadalajara), Ulises Valdez (University of Guadalajara), Elizabeth Ramírez (University of Guadalajara), Carlos Jimenez (University of Guadalajara), Mayra Hernández (University of Guadalajara)

Abstract: Eight female, 19 to 39 year old university students were randomly distributed in eight dyads (each participant had a confederate peer in the dyad). Participants were not informed that their peer was an experimenter's confederate. In a situation of partial altruism, dyads solved a visual puzzle on two synchronized computers screens. Participants and confederates could track the performance of his/her peer, and place pieces in either puzzle. A within-subject design was used, comprising two individual baselines and five experimental phases, each one involving a specific confederate's behavior toward a peer in the dyad: the percent of reciprocal placing of pieces in the peer's puzzle. Dyads were randomly distributed in two different groups. Dyads in Group 1 were exposed to an ascending order of the percentage of reciprocity by the

confederate (0, 25, 50, 75, 100%), and dyads in Group 2 were exposed to a descending order (100, 75, 50, 25, 0%). Results showed that participants placed their pieces in the peer's puzzle in similar proportion to which confederates reciprocally placed their pieces in the participants' puzzles.

104. Compensatory Conditioned Responses to Coffee Cues in Heavy Coffee Drinkers in a Reversal-replication Design. (BPH; Experimental Analysis) CAITLYN A BOROWICZ (Youngstown State University), Stephen Ray Flora (Youngstown State University)

Abstract: Increases in body temperature, blood pressure and other autonomic responses are unconditioned responses to caffeine at relatively high doses; 600 mg or more per bout in humans. However, these responses are more likely to occur when caffeine tablets are ingested and less likely when equivalent amounts of caffeine are consumed in coffee. One possibility is that regular coffee drinkers develop compensatory conditioned responses to the smell and taste of coffee that counteract the unconditional responses to caffeine. In regular coffee drinkers previous research has found that the smell and taste of coffee have functioned as conditioned stimuli producing compensatory conditioned responses in the form of decreased salivation, as opposed to the unconditioned response of increased salivation. A reversal replication design was used in the current study to investigate compensatory conditioned responses to coffee cues by comparing the effects on blood pressure and body temperature of caffeine ingested by tablet and in coffee compared to responses to placebo and decaffeinated coffee.

105. Distinctiveness and Serial Position of Wins: Effects on Win Rate Recall and Willingness to Gamble. (CSE; Experimental Analysis) Stephen Ray Flora (Youngstown State University), CAITLYN A BOROWICZ (Youngstown State University)

Abstract: People typically have a better recall of items early in a sequence (primacy effect), late in a sequence (recency effect), or of items made distinctive. Compared to losses, wins in a casino are salient, or distinctive. Heavy gamblers frequently report early wins as important in establishing a pattern of gambling. The distinctiveness of early wins could artificially inflate their rate of occurrence during recall. Wins could also become more distinctive if they occur in rapid succession, rather than being spread apart. These factors may make problem gamblers falsely remember the number of their wins, and lead them to believe winning is more likely than it actually is contributing to chronic gambling. The present study investigated these possibilities. Participants are given repeated opportunities to bet on the turn of a card. The sequence and distinctiveness of wins systematically varied across participants. Dependent variables are whether or not participants chose to bet on each trial, participants' recall of number of wins, and participants' willingness to increase their wager on a final coin toss.

106. Probability Sequence Affects Choice on a Probability Discounting Task. (N/A; Experimental Analysis) AUGUST F. HOLTYN (Western Michigan University), Julie M Stine (Western Michigan University), Cynthia J. Pietras (Western Michigan University)

Abstract: Within a probability discounting paradigm, subjects are repeatedly presented with a choice between a small, certain amount and a large, uncertain amount. Within a block of trials, the value of the certain outcome is systematically manipulated until the subject deems both amounts to be equivalent in value (i.e., an indifference point is determined). The probability is manipulated across blocks of trials to obtain a series of indifference points. Probabilities are typically presented in both an ascending and descending sequence. The current study randomly assigned participants from two different age groups (college students and older adults) to either an ascending or descending probability sequence. Hyperbolic discounting functions were fit to indifference points to assess rates of discounting. The rate of discounting in the ascending group was higher (i.e., choice was more risk averse) than that in the descending group, with this difference being more pronounced in the older adults. These results suggest that the order of presentation of probabilities during a probability discounting task can affect the rate of discounting.

#491 International Poster Session

5/25/2009

6:00 p.m. - 7:30 p.m.

North Hall A

EDC

107. Behave Away: A Maintenance Manual (How to Problem-Solve Challenging Behavior While Helping Yourself Cope) (DDA; Service Delivery) JOHN KOSMOPOULOS (York Central Hospital)

Abstract: "Behave Away" is a user-friendly, "how-to" manual provided to parents, caregivers and staff at the end of involvement to increase the likelihood of self-management and problem-solving while decreasing the likelihood of relapse and re-referral. This maintenance manual offers individuals the resources to systematically approach future behavioral challenges in a cogent way (i.e., prevention checklists, assessment and data collection methods to determine the function of behavior, function-based strategies, etc.) while helping themselves cope with everyday stressors in supporting someone with behavioral challenges through the use of cognitive-behavioral and acceptance-based techniques.

108. The Acquisition of Social Skills of Preschool Children as a Function of the Training of Teachers and Students. (TBA; Applied Behavior Analysis) MARCO W. SALAS-MARTINEZ (University of Veracruz, Mexico), Esperanza Ferrant Jimenez (University of Veracruz), Cintia S. Aguilar Salazar (University of Veracruz), Jocelyn Pitoll Garcia (University of Veracruz), Claudia Nakazona Peña (University of Veracruz)

Abstract: The National Program for Preschool Education (NPPE, 2004) is organized on the basis of competences. Besides of being subjective, it does not specify knowledges, skills and attitudes that teachers should possess, nor the activities to perform, nor identify the basic repertoires that require children to learn the knowledge and social skills identified by the program (NPPE, 2004). The purpose of the study was to evaluate the effect of the training of teachers and students in acquiring social skills for preschool students. Participants were 12 students who were enrolled in the third grade of a kindergarten school. Their aged ranged between 3 and 5 years old, with a low economical level. Two teachers also participated in the research. Once the students and teachers' competences were behaviorally defined, a Within and Between Subjects Experimental Design, was implemented. Teachers were trained in both: the establishment of basic repertoires of students, and on the skills and activities that they need to perform in order the children acquire knowledge, skills and social attitudes. The statistical data show that the purpose of the study was reached.

109. Enhancing Data Collection Procedures for IEP Goals. (DDA; Applied Behavior Analysis) REBECCA RENEE WISKIRCHEN (ACCEL), Christina Barosky (ACCEL), Bryan J. Davey (ACCEL), Jonathan Evans (ACCEL), Bradley Reed (ACCEL), Eli Lozada Jr. (ACCEL), Pamela Bolding (ACCEL), Jimmy R. Smith (ACCEL)

Abstract: Data collection is a pillar of Applied Behavior Analysis. Data collection procedures in classrooms document student progress in terms of academic, social and behavioral objectives. Classrooms often use data collections systems that are inefficient and inaccurate. These systemic issues arise from a lack in training, inadequate supervision, time constraints on staff, poor organization, immeasurable objectives and inaccurate prompting procedures. The presentation will highlight the changes in data collection and prompting procedures across 4 classrooms within a private special education day school. Improved data collection procedures include the use of timely and accurate recording methods. This was accomplished through direct training and modeling. To facilitate student learning opportunities staff were trained to contrive situations and record outcomes. Further, staff were taught 3-Step-Prompting procedures to promote skill acquisition and compliance. IEP objective data will be presented for the 4 classrooms. Results demonstrate that these approaches lead to a significant number of objectives being mastered.

110. Effects of Parent Training on Parents' Use of Praise and Child's Spoken Words. (AUT; Applied Behavior Analysis) QUINN VICKERS MONTGOMERY (The Ohio State University), Moira Konrad (The Ohio State University), Cuong (Ken) Luu (The Ohio State University)

Abstract: While it is important to study intervention strategies that can be used by teachers and clinicians, it is equally important to study effective strategies that can be used by parents within the home setting. Given the fact that parents are often involved in, if not in charge of, coordinating services for their children, studies involving effective and time efficient training strategies for parents are of absolute importance.

The purpose of this study was to examine the effects of a parent-training package on (a) parents' use of general and behavior-specific praise statements and (b) the number of spoken words used by a child with autism. The package consisted of training, feedback, and praise. A multiple baseline design was used to determine the effects of the parent-training package across two participants, the parents of the child with autism. The results of this study indicate that training, feedback, and praise were effective in increasing the praise used by the parents.

111. The Effects of Using the Good Behavior Game and Goal Setting to Increase the Rates of Praise of Teachers of Students with Disabilities (N/A; Applied Behavior Analysis) CLINTON SMITH (University of Memphis), David Bicard (The University of Memphis), Sara C Bicard (University of Memphis)

Abstract: Six teachers were trained to provide praise statements to students at a summer camp for students with disabilities. A reversal design was utilized to assess the effects of the good behavior game and goal setting on rate of praise statements made by the teachers. The good behavior game consisted of teachers divided into two teams and the number of praise statements for each on the team was added together for a weekly total. The team with the most points at the end of each week earned a snack at a local ice cream establishment. The goal setting condition included the good behavior game in addition to the teachers setting a daily goal for the number of praise statements. The rate of praise statements increased during the good behavior game conditions ($M=0.96$ and 0.79) when compared to baseline ($M=0.61$). The rate of praise statements during the goal setting conditions ($M=1.13$ and 1.2) were higher than baseline and the good behavior game conditions. Goal setting for praise statements resulted in higher rates of praise statements than just utilizing the good behavior game alone or baseline. Future research should address the effects of goal setting and attainment on praise statements and the effects of reinforcer assessment or survey in conjunction with the good behavior game and goal setting on praise statements.

112. Promoting Reflection in Teacher Preparation Programs: A Multi-Level Model. (N/A; Experimental Analysis) CANDACE MARY SAWYER (University of Northern Iowa), Susan Etscheidt (University of Northern Iowa)

Abstract: The preparation of reflective teachers is a complex process requiring structured and sequential opportunities throughout the program of study. This poster session presents a paper discussing a variety of models for conceptualizing reflectivity in teacher preparation programs. Based on these frameworks, a three-level model of reflection for students in the University of Northern Iowa's teacher preparation program is described. The levels include reflection of technical competence, informed and reasoned analysis, and ideological inquiry. Reflective opportunities provided to prospective teachers include self-evaluation of lesson planning and delivery, reflective journals for personal theory-building, and pedagogical seminars. Concurrent, multimodal opportunities to promote reflective practice begin early in the preparation program and are continued through the student teaching experience. Specific examples and discussion guides are presented, and recommendation for teacher preparation programs are offered.

113. Accountability in Training and Practice: Documenting Response to Intervention Outcomes. (N/A; Service Delivery) SHANNON MCGUIRE (University of Cincinnati), Jennifer Hailley (University of Cincinnati), Renee Hawkins (University of Cincinnati), Jennifer L Meek (University of Cincinnati)

Abstract: With an increased emphasis on prevention, early intervention, and accountability in schools, Response to Intervention (RtI) has emerged as a way to link assessment to intervention and effectively meet students' needs. Based on the principles of applied behavior analysis and single case design, RtI relies on valid and reliable progress monitoring to make empirically-based decisions about intervention effects and services for students. School psychologists entering the field need to be well prepared in all of these areas in order to effectively support RtI service delivery. However, little research has focused on RtI preservice training. The current presentation will describe the training model and structured practicum experiences of a school

psychology program emphasizing RtI training. The presentation will provide a summary of the intervention outcomes for school-aged (K-12) students (N = 108) served by trainees (N = 35) from the 2005-2006, 2006-2007, and 2007-2008 school years. Summary statistics will be reported for student progress in response to the behavioral and academic interventions collaboratively developed by trainees through the RtI process. Outcome data will be used to evaluate trainee skill and training program effectiveness. Discussion will highlight the challenges and suggestions for future research on preservice training in RtI.

114. Student Research at Gonzaga University 1978-2009. (TBA; Applied Behavior Analysis) THOMAS FORD MCLAUGHLIN (Gonzaga University), Kimberly P. Weber (Gonzaga University), K. Mark Derby (Gonzaga University), Anjali Barretto (Gonzaga University), Randy L. Williams (Gonzaga University)

Abstract: The basic data presented are the publication and presentation data authored by students from Gonzaga University's behaviorally-based Special Education Program.

The overall outcomes indicated that student publications and presentations were highest (52) during the 2001-2005 time period. Student publications and presentations ranged from 0 to 27 for the other five designated time periods.

Gonzaga University's Special Education Program's students published in peer reviewed journals such as Child & Family Behavior Therapy, Corrective and Social Psychiatry, International Journal of Special Education, B. C. Journal of Special Education, Education and Treatment of Children, Reading Improvement, Remedial & Special Education, Journal of Applied Behavior Analysis, Behavior Modification, Journal of Physical and Developmental Disabilities, Behavioral Interventions, Journal of Positive Behavioral Interventions, Journal of Behavioral Education, and Psychology in the Schools.

Presentations were made at the Northwest Association for Behavior Analysis conferences, Council for Exceptional Children, the Annual Virginia Beach Conference on Behavior Disorders, the Third Focus on Behavior Analysis in Education Conference, the Association for Behavior Analysis conventions, and the Student Intercollegiate Research Conference.

115. Teaching Two 9 Year-Old Students Diagnosed with Autism the Structural and Functional Components of Writing. (AUT; Applied Behavior Analysis) JENNIFER L KNIPLING (Teachers College), Petra Wiehe (Teachers College Columbia University), R. Douglas Greer (Columbia University Graduate School and Teachers College)

Abstract: We examined the effect of a functional writer immersion program on the descriptive and structural components of writing. A multiple probe design across two participants was used. The participants were two elementary school students diagnosed with autism. For the probes, students were given a series of 6 pictures and told to write as much as they could about the pictures. They were given no feedback on their performances. A writer immersion manding program was then implemented. Students were required to write their requests for desired items or activities throughout the day in complete sentences on small strips of paper. These papers were then exchanged for the desired item or activity. Students were given feedback on the structural components of their writing, and continued to participate in the written mands program until they had 90% accuracy in their structural components across two consecutive days. The students were then given the same series of worksheets with the same instructions as a post-probe. Results showed an increase in the number of words and tacts used to describe the pictures while the percentage of correct structural elements remained the same or increased.

116. Using an Organizational Protocol to Facilitate Math Word Problem Solving in Children with Developmental Disabilities. (DDA; Applied Behavior Analysis) WENDY L. KOZMA (BEACON Services/Evergreen Center), Gordon A. DeFalco (Evergreen Center)

Abstract: Math word problems are used to evaluate a student's ability to apply mathematical skills to practical experiences. The process of solving a word problem requires the student to approach the task tactically, applying a variety of problem solving steps and strategies, and to choose and carry out appropriate mathematical operations with accuracy. Students with developmental disabilities have difficulty in acquiring and applying the skills required to accurately solve word problems. The first purpose of the current study was to validate a Direct Instruction curriculum, Corrective Mathematics, as an effective methodology for teaching math word problems. The second purpose of the study was to validate an organizational protocol that was

introduced when students had difficulty solving math word problems. Six students with developmental disabilities between 12 and 20 years of age participated in the study. Students were assessed after every 5 lessons. An alternating treatment design was used to evaluate problem solution after review of every 5 lessons using either remediation or an organizational template. Result indicated that students frequently required remediation sessions to effectively meet criteria. Use of an organizational protocol proved effective in enabling them to reach criteria.

117. Daily On-task Behavior Reports and Homework Tracking Sheets System to Increase Academic Success. (AUT; Applied Behavior Analysis) Heidi Maurer (Kentwood High School), Stephen Litster (Kentwood High School), RICK SHAW (Behavior Issues)

Abstract: A homework tracking sheet was created to report home daily for assignments, upcoming projects, on-task and nondisruptive behaviors, and teacher comments. Baseline data was collected across the school day from the teachers rating on-task and nondisruptive behaviors on a 5-point likert scale. A criterion was then established above baseline (differential reinforcement of high rates) for students to earn rewards or lose privileges if the daily and weekly goals were not met. Students had to write down their homework for that day, have teachers rate and sign the sheet, check-in at the end of the school day with an adult, and have parents review and sign. Students graphed their ratings during the end of the day check-in with a mentor teacher. The daily and weekly rewards and consequences occurred at school and at home for having the sheet signed and meeting the goals. Students were successful in decreasing challenging behaviors and detentions/suspensions, and increasing appropriate behaviors and grades.

118. Using a Backwards Chain to Teach Students a Morning Routine. (AUT; Applied Behavior Analysis) SAMARA COHEN (Teachers College Columbia University), Victoria Sterkin (Teachers College Columbia Univ.), R. Douglas Greer (Columbia University Graduate School and Teachers College)

Abstract: This study used a multiple baseline design across participants to determine if a backwards chain was effective for teaching students how to independently perform the behaviors in a morning routine that was completed daily upon arrival to school. Two five-year-old females and one six-year-old male participated in this study. These students were chosen due to their lack of performing any morning routine behaviors upon arrival to school at the beginning of the school year. They were selected from the members of a kindergarten classroom that used the CABAS® system of instruction, in a school that was located in a suburb of a large metropolitan area. All three participants were diagnosed with Autism. Each one functioned at the pre-listener level of verbal behavior, one participant was a pre-speaker, and two were emergent speakers (Greer & Keohane, 2005). After an initial baseline in which correct responding was 0%, a backwards chain was implemented. Results showed a functional relationship between using a backwards chain and students independently completing a morning routine.

119. A Functional Relationship Between Multiple Exemplar Instruction and the Emergence of the Naming Capability with Elementary School Students Diagnosed with Autism. (AUT; Applied Behavior Analysis) Nicole Luke (Columbia University Teachers College), RAPHAEL VIEIRA VASCONCELOS (Teachers College, Columbia University)

Abstract: This study assessed the effects of the Multiple Exemplar Instruction procedure on the emergence of the Naming capability with two male elementary school students diagnosed with autism. The study used a multiple probe across participants design. A probe was initially conducted to assess the performance of both participants in four different response topographies (matching, pointing, tacts and intraverbals). All stimuli used were 2-D. After the probe, Multiple Exemplar Instruction (MEI) was implemented, which consisted of rotating instruction between all four responses. Learn Units were used, which means that correct responses were reinforced and incorrect responses received feedback and corrections. Once criterion was met in MEI, a post-probe was conducted to assess the emergence of Naming. The results showed a functional relationship between the MEI procedure and the emergence of the Naming capability with both participants.

120. Peer Tutoring as a Tactic to Teach Vocabulary. (AUT; Applied Behavior Analysis) KIMBERLY N MOSCA FRANKLIN (Columbia), Mindy Bunya Rothstein (Teachers College Columbia University)

Abstract: A delayed multiple baseline across participants was used to examine the effectiveness of peer tutoring on teaching tutors novel vocabulary. Two 4-year-old participants were chosen from a preschool that served children diagnosed as preschoolers with disabilities and also children that were typically developing, to participate in this study. The participants were listeners, speakers, and beginning readers. They first were taught the process of peer tutoring. Following mastering the peer tutoring process, each tutor was given novel vocabulary words to teach a peer that neither the peer, nor the peer tutor had been taught previously. A probe was conducted to ensure that neither of the students had the vocabulary in their repertoire before starting the peer tutoring sessions. Probes were conducted on the tutor following each peer tutoring session to evaluate if they were learning the vocabulary words. Peer tutoring showed to be an effective tactic to teach both participants new vocabulary.

121. Something from Nothing: The Role of Automatic Reinforcement and Pairing in the Acquisition of Language. (AUT; Service Delivery) AMANDA W DOLL (Hawthorne Country Day School), Tina Marie Covington (Hawthorne Foundation)

Abstract: In the past decade, there has been a line of research in the verbal behavior analysis community investigating how the very early vocal behaviors of children, such as babbling and parroting, are converted into the rudimentary verbal operants of echoics, mands, and tacts. This line of research includes questions of "automatic reinforcement" as a maintaining variable for early babble, and whether a vocal stimulus-stimulus pairing procedure may be able to induce vocalizations in young children for whom the "language window" might otherwise seem to be closing. This poster reviews a single-case systematic replication combining elements from three seminal papers on vocal pairing. One young child with autism participated. Eight months of data were collected on five separate target vocalizations. For all but two targets, there was no measured intervention effect. However, for two targets, there were some improvements both across time and with the introduction of increased delay between teacher-model and preferred-event delivery.

122. Picture Reader: Using Video Modeling, Picture Cues, and Matrix Training for Novel Task Instruction. (AUT; Applied Behavior Analysis) SEAN M TOBYNE (Praxis, Inc.), Karen L. Mahon (Praxis, Inc.), Elise A. Warecki (Praxis, Inc.), Amanda M. Lockerbie (Praxis, Inc.), Dana Hurlbut (Praxis, Inc.), David Pasterchik (Abilities Software)

Abstract: A software program utilizing video modeling and picture cues implemented matrix training to teach novel single-step tasks to developmentally disabled children. Participants in this study were 8 to 21 years of age, diagnosed with autism spectrum disorder, and enrolled in a private school serving that population. Pretests were conducted to assess incoming students' ability to complete a set of one-step tabletop tasks using a still photo as a cue. Using a constructed response matching to sample (CRMTS) task, participants who failed the pretest were taught one of the failed tasks at a time in a computer-based environment. In training, the student was required to select a still photo of a completed task in the presence of a video model of the task being completed. Upon completing training, posttest tabletop sessions were administered to assess whether or not computer-based training facilitated students' completion of the task using only a still photo as a cue. Results showed that instruction not only succeeded in transfer of the trained task to the tabletop, but for some students, accurate tabletop performance among untrained tasks also emerged. These results suggest that the Picture Reader program is highly effective in teaching novel tasks. Supported by grant #HD046289

123. Use of Response Cards to Teach Telling Time to Students with Moderate to Severe Disabilities. (N/A; Experimental Analysis) CHANNON KAYE HORN (University of Kentucky)

Abstract: Relative efficiency of hand raising and response cards within the context of an ABAB design when teaching time to middle school students with moderate to severe disabilities. Effects of the two strategies were assessed on four dependent variables: (a) student active responding, (b) on-task behavior, (c) inappropriate behavior, and (d) acquisition of the target behavior. Results indicated that the response card condition resulted in higher levels of active responding and on-task behavior and lower levels of inappropriate behavior when compared to hand raising conditions. Published in *Education and Training in Developmental Disabilities*, 2006, 41(4), 382-391.

124. Picture Reader: Performance Generalization following Video Modeling and Picture Cue Training. (AUT; Applied Behavior Analysis) DANA HURLBUT (Praxis, Inc.), Karen L. Mahon (Praxis, Inc.), Elise A. Warecki (Praxis, Inc.), Amanda M. Lockerbie (Praxis, Inc.), David Pasterchik (Abilities Software)

Abstract: Following successful training of novel one-step tasks using the Picture Reader program, six students with autism diagnoses, between the ages of 11 and 21 participated in follow up studies of generalization. The original computer-based training included a combination of video modeling and picture cue use in establishing completion of a single action-object task (e.g., open box). After receiving this training, students were able to successfully complete tabletop tasks using only picture cues. Upon completion of training for a single novel task, many students demonstrated emergent performances on untrained tasks. The studies presented here are follow ups to the original single-task training. Students were assessed for across-setting generalization, across-object generalization, multi-step task completion, and completion of tasks using iconic (instead of pictorial) representations of tasks. All students who passed the original single-step tasks demonstrated generalization; however, the patterns of generalization showed variability across students. Possible explanations for these patterns will be discussed. Supported by Grant #HD046289

125. A Comparison of Teaching Interventions on the Rate of Skill Acquisition and Maintenance. (AUT; Applied Behavior Analysis) LISA TERESHKO (ACES- EIBI), Cyndi Giordano (ACES- EIBI), Krystl Giordano (ACES- EIBI)

Abstract: Teaching stimuli in isolation and then introduced in a discriminative set has been a successful strategy for teaching academic skills to children with autism. The purpose of the current investigation was to compare the rate of acquisition when stimuli are first taught in isolation with the rate of acquisition when stimuli are introduced in sets. Six male students and one female student, ages 7 to 12, diagnosed with autism participated. The dependent variable was the rate of skill acquisition. The independent variable was the number of stimuli introduced initially. Results suggest introducing stimuli in sets to begin teaching leads to a higher rate of acquisition. Results are also suggested for maintenance.

126. Using Choice and Picture Cues to Decrease Prompt Dependence in Adolescents with Autism. (AUT; Applied Behavior Analysis) ANTHONY FOGLIA (CUNY Queens College), Carolyn S. Ryan (Institute for Children with Autism and Queens Coll)

Abstract: The present study compared the effects of assignment of tasks vs. choice of tasks to reduce prompt dependence in adolescents diagnosed with Autism. Attention as a maintaining factor for prompt dependence was also examined. Two adolescents (male and female, ages 13 and 14 respectively), took part in this study within a specialized day school for children with Autism. Baseline measured latency of task initiation after cue delivery for tasks that were assigned through verbal and gestural stimulus prompts without reinforcement. Intervention compared tasks assigned through pictorial cues to tasks initiated by use of a pictorial choice board in an alternating treatment design. Each task was ranked in preference order from previous assessment and presented in quasi random fashion. Attention was delivered by the presentation of contingent praise and noncontingent positive attention. Results show attention was the maintaining variable for prompt dependence. Latency of task initiation was reduced when students were given the opportunity to choose tasks and received contingent attention.

127. Teaching Prephonics to a Student Who is Nonvocal and has a Moderate Intellectual Disability. (DDA; Applied Behavior Analysis) DAWN H. DAVIS (Georgia State University), Laura D. Fredrick (Georgia State University), Rebecca E Waugh (Georgia State University), Robert Gama (Georgia State University), Paul A. Alberto (Georgia State University)

Abstract: Students with Moderate Intellectual Disabilities (MOID) learn to read many words through sight-word instruction; however, this approach does not give them strategies for reading untaught words they encounter in their environment. Students who are also nonvocal have even fewer opportunities to learn to read untaught words in their environment. A phonics approach to reading teaches students letter sounds and blending skills allowing students to generalize these skills to read untaught words. One systematic, explicit

approach to phonics instruction that includes teaching letter sounds and blending skills is Direct Instruction (DI). Pilot studies show, however, that students with MOID have difficulty mastering blending skills even when instructed with DI programs. To increase the probability that students with MOID would learn blending skills we developed a prephonics instructional sequence modeled after Direct Instruction that includes developing fluency with letter-sound correspondences before teaching blending skills and then testing for generalization of blending skills with untaught words made up of taught letter sounds. A changing criterion design embedded within a multiple baseline across sound sets was used. A student who was nonvocal demonstrated mastery of blending skills by making selections from distracter arrays designed to indicate exact location of errors.

128. A Comparison of Stimulus-stimulus Pairing Procedures with Young Children with Language Delays. (AUT; Applied Behavior Analysis) REBECCA S. RAAS (The ABRITE Organization), Janice Doney Frederick (The ABRITE Organization), Ginger R. Wilson (The ABRITE Organization)

Abstract: Research suggests that stimulus-stimulus pairing may increase sound production in children with autism, yet has shown mixed results (Esch et al., 2005, Miguel et al., 2002). A procedural variable that requires further investigation is the delivery of the preferred stimulus immediately upon echoing the experimenter. The purpose of the current study is to compare two stimulus-stimulus pairing procedures: 1) a stimulus-stimulus pairing procedure cited in previous studies, with the removal of a changeover delay, and 2) a stimulus-stimulus pairing procedure with direct reinforcement. Participants were children under the age of 3 with language delays. A multiple baseline across sounds was employed, and experimental conditions included baseline, stimulus-stimulus pairing (procedure 1), and stimulus-stimulus pairing with direct reinforcement (procedure 2). Miguel et al. (2002) suggests that long-term maintenance did not occur in participants exposed to a stimulus-stimulus pairing procedure. In the current study, the maintenance of sound production was examined by tracking the emission of the target sound after the pairing procedure, as well as the tracking of echoics and mands to investigate the possible transfer of the target sound to other verbal operants.

129. Use of Script Fading to Increase Spontaneous Conversation Skills. (AUT; Applied Behavior Analysis) JENNIFER E. CONNELLY (New York Center for Autism Charter School), Jamie Pagliaro (New York Center for Autism Charter School), Hannah E. Hoch (REED Academy), Julie Fisher (New York Center for Autism Charter School)

Abstract: Limited conversation skills may predispose children with autism to failed social interactions with peers. They often demonstrate deficits in their ability to initiate conversation and respond to conversational statements made by others. This study used script fading to increase the conversation skills of three participants with autism, ages six to eight years. The participants, all of whom attended an ABA-based charter school for children with autism and participated in general education classes for at least thirty minutes daily, were taught to converse with one another during a group activity. No typical peers were present during sessions. In baseline, the participants demonstrated low rates of both spontaneous initiations and responses to conversational statements. Following introduction of a script fading procedure, data showed an increase in both scripted and unscripted initiations and responses. Results suggest that script fading procedures can increase spontaneous conversation. Qualitative improvements and generalization would be important goals for future research.

130. A Comparison of Interspersed- vs. Massed-trial Training: Effectiveness, Mechanism(s), and Preference (DDA; Applied Behavior Analysis) Claudia L. Dozier (University of Kansas), BROOKE ASHLEY JONES (University of Kansas), Erica Severtson (University of Kansas), Stacy A. Lauer (University of Kansas)

Abstract: When evaluating the effectiveness of teaching strategies, one important variable is the order and composition of training trials that are presented. Several researchers have shown that interspersal of previously acquired (maintenance) tasks among new (acquisition) tasks is a superior training procedure as compared to a massed-trial procedure (Dunlap, 1984; Neef, Iwata, & Page, 1977; Schroeder & Baer, 1972), but the mechanism(s) by which interspersing previously mastered items with acquisition items has not been systematically assessed. The purpose of the current study is to (a) attempt to replicate the findings of previous

research showing the superiority of interspersed-trial training with young children with and without developmental disabilities, (b) systematically assess the effects of high-density vs. low-density reinforcement and high stimulus vs. low stimulus variation on acquisition during interspersed-trial training, and (c) evaluate which teaching strategy is most preferred by participants. Results of the current study suggest that (a) massed-trial training is equally effective to interspersed-trial training with individuals without developmental disabilities, (b) acquisition under both conditions occurs in the absence of reinforcement (i.e., when error correction alone is delivered), and (c) all participants have shown a preference for interspersed over massed-trial training procedures regardless of whether reinforcers are delivered.

#492 International Poster Session

5/25/2009

6:00 p.m. - 7:30 p.m.

North Hall A

TBA

131. The Effects of Weekly Workshops on the Graduate Student's Usage of APA Style. (N/A; Applied Behavior Analysis) LAUREN S. MORRELL (The Chicago School of Professional Psychology), Traci M. Cihon (The Chicago School of Professional Psychology), John W Eshleman (The Chicago School of Professional Psychology)

Abstract: Educators often assume that a graduate student in psychology has had experience with formal writing and is familiar with American Psychological Association (APA) guidelines for writing. In fact, many undergraduate psychology programs require a research methods class where students prepare a research proposal. This is often students first and possibly only experience with APA Publication Manual Style (Smith & Eggleston, 2001). This study examined the effects of weekly workshops on students' use of APA Publication Manual Style. Students met individually once a week to discuss various activities and assignments they completed on an individual basis. A multiple baseline across participants with replications across skill sets design was used to demonstrate experimental control. Results are discussed regarding the effects of the weekly workshops on post-quizzes and written assignments.

132. Behavior Analysis Training Systems. (N/A; Applied Behavior Analysis) KELLY STONE (Western Michigan University), Caitlin Elizabeth O'Boyle (Western Michigan University), Robert Sheffey (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: Behavior Analysis Training System Mission Statements.

The goal of BATS is to increase the number of Behavior Analysts effectively working toward the well-being of humanity. This includes saving the world with behavior analysis in a continuous manner.

The goal of the Behavior Analysis Training System is to produce, place, and maintain competent behavior analysts so they can "Save the World with Behavior Analysis."

BATS Subsystem Mission Statement

The mission of the Behavior Analysis Training System is to facilitate the improvement of the quality, accuracy, and timeliness of the overall system. This is accomplished by improving performance within and across all subsystems. Improved performance will be obtained through increasing system accomplishments, minimizing the number of and responding in a timely manner to disconnects, and improving the quality and accuracy of system products.

133. Organizational Behavior Management Supervisory System. (N/A; Applied Behavior Analysis) CALVIN J GAGE (Western Michigan University), Erik D. Lerdal (Western Michigan University), Miles K Bennett (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: The mission of the OBM system is to provide supplemental information about their OBM projects to Master's level students that were unable to take the advanced systems course or future students if the course is not offered. The timely use of the information provided by the system will improve the quality, timeliness, and usefulness of the OBM projects being created by the students.

134. GRE Preparation Course. (N/A; Applied Behavior Analysis) AMANDA JEAN KOWALSKI (Western Michigan University), Karolina Paszek (Western Michigan University), Jonathan Anthony (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: This course is designed to help students study for the Graduate Record Exam (GRE) and prepare for graduate school using performance management and self-management techniques. Each week students complete various tasks including preparing study materials for the GRE, creating a vitae/resume, and creating a personalized graduate school timeline. This course provides guidance, instructional materials, study tips, testing strategies, and other relevant information pertaining to the GRE. The GRE Preparation course provides students with tight behavioral contingencies to keep them from procrastinating on important pre-graduate tasks! After taking this course students will have a better mastery of the skills and concepts presented on the Graduate Records Examination and will have also prepared documents and other various materials necessary for graduate school applications. The graduate student instructors of this course have been consistently working on continuous quality improvement of the system. Pre and post GRE practice test data have been collected and the course continues to be updated to best fit the needs of the students.

135. The Language Facilitation Training System- Icon Exchange. (N/A; Applied Behavior Analysis) MICHELLE GAGLIANO (Western Michigan University), Rebecca A Markovits (Western Michigan University), Austin Mifsud (Western Michigan University), Lydie Biedron (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: The mission of the Language Facilitation Training System is to give children with little to no functional language a way to communicate using an icon exchange system based off of Frost & Bondy's Picture Exchange Communication System (PECS).

136. Intermediate Practicum. (AUT; Applied Behavior Analysis) TIALHA NOVER (Western Michigan University), Rebecca M. O'Gorman (Western Michigan University), Amiee Howard (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: Graduate students with experience in system management, course presentation, and supervision of graduate and undergraduate students over discrete-trial techniques for children diagnosed with autism spectrum disorders.

Undergraduate students with additional experience and supervision over discrete-trial implementation for children diagnosed with autism spectrum disorders, who are trained and knowledgeable for admission into the advanced practicum level experience.

137. Behavioral Research Supervisory System. (N/A; Applied Behavior Analysis) TIFFANY MARIE SMIECINSKI (Western Michigan University), Kelli Perry (Western Michigan University), Russell P Buero (Western Michigan University), Lindsey M Donovan (Western Michigan University), Brittney M Vallender (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: The purpose of the Behavioral Research Supervisory System is to monitor students' progress on various projects, ensuring that they complete weekly tasks. The timely completion of tasks allows the students to maintain and improve the projects over the course of the semester

138. Advanced Autism Practicum. (AUT; Applied Behavior Analysis) JOSEPH T SHANE (Western Michigan University), Abby Ferree (Western Michigan University), Amanda Smith (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: The Advanced Autism Practicum is the final course in a series of three practica designed to teach undergraduate students to accurately and effectively implement Discrete-Trial Therapy with preschool-aged children with autism. A prerequisite of this course is completion of the Basic and Intermediate Autism Practica. Only those students who show exceptional skill and performance are considered for the Advanced Practicum. The practicum takes place in a preschool classroom for children with Early Childhood Developmental Delays. One purpose of the Advanced Practicum is to give the students the opportunity to

write an original procedure that will be implemented with the child they implement Discrete-Trial with in the classroom. To accomplish this, the students are required to analyze the child's specific skill deficits, to write a procedure to help with one or more of these areas, to evaluate its effectiveness, and revise any aspect of that procedure to increase its effectiveness. Each student also receives the opportunity to write a set of sub-phases for a procedure that their child is unable to master. Finally, the students also receive relevant information on different aspects of behavioral treatment including an introduction to functional assessments as well as training in effective and ineffective therapies.

139. Academic Self-Management. (N/A; Applied Behavior Analysis) MATT BRODHEAD (Western Michigan University), Madeline Budzen (Western Michigan University), Megan R Baumgartner (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: Self-Management is an undergraduate psychology course and a subsystem within the Behavior Analysis Training System at Western Michigan University. The goal of Self-Management is to help students gain self-management skills that can be applied to academic tasks as well as their everyday lives. The course is a one credit class that meets for 1.25 hours once a week. Students earn points contingent on behaviors listed on their task verification forms (TVFs); these aid in eliminating procrastination by holding the students accountable with proof of academic task completion. Students are also responsible for completing a self-management project that focuses on increasing or decreasing a behavior that improves the quality of their life. Students share tactics, techniques, and procedures during class discussion that aid in the success of their projects. Student activities include completing performance contracts and TVFs, demonstrating proof of their accomplished tasks, and presenting performance graphs.

140. Pre-Practicum. (AUT; Applied Behavior Analysis) JOSEPH NORCROSS (Western Michigan University), Kelly Marie Hanlon (Western Michigan University), Kelly Wood (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: The Autism Pre-Practicum is a subsystem of the Behavior Analysis Training System (BATS) which is a system in Western Michigan University's Psychology Department. The purpose of the Autism Pre-Practicum is to develop a basic discrete-trial training repertoire in undergraduate and graduate students prior to their entrance into the Croyden Avenue School Practicum. Students in the Croyden Practicum work one-on-one with a child in a pre-primary impaired (PPI) classroom implementing discrete trials. All students within BATS must participate in the Croyden Practicum. Undergraduate psychology students at Western Michigan University may opt to take the Croyden Practicum to fulfill their practicum requirement. The Autism Pre-Practicum is a pre-requisite from the Croyden Avenue School Practicum. For graduate students, training occurs during their first summer in BATS. For undergraduate students, training occurs the semester before they enter the Croyden Practicum. The Pre-Practicum focuses on training in implementation of discrete trials but covers all rules and policies of the PPI classroom at Croyden and the roles and responsibilities of each student. Training includes lectures, articles, video instruction, video modeling, live modeling, and role play with feedback. Role play with feedback is the main emphasis of the training. This is a one credit course.

141. The Behavior Systems Analysis Project. (OBM; Applied Behavior Analysis) MAEGAN KARAS (Western Michigan University), Elizabeth Saur (Western Michigan University), Alicia Olson (Western Michigan University), Matthew Semelbauer (Western Michigan University), Richard W. Malott (Western Michigan University)

Abstract: The production of students who can obtain a mastery level in the application of behavior systems analytic skills and OBM skills to a variety of applied setting through the practical experience of working at a real organization. The BSA Project is a two-credit course designed as a practical and advanced experience in systems analysis. This course is a supplement to the Survey Behavioral Analysis Research PSY 4600 course. Students will apply the principles and concepts from Organizational Behavior Management (OBM) that have been taught in PSY 4600 to this project. A crucial aspect of this project is that it is not hypothetical; all the problems, data and interventions should be real. Students are going to do a thorough study/analysis in a chosen setting, collect real data, and actually implement possible interventions. Common interventions

consist of graphic feedback, monetary rewards, training or job aides. Students will be operating within the organization under the supervision of a psychology MA student. The MA student is supervised by Dr. Malott.

142. Studying as Fun and Games: Effects on College Students' Quiz Performance (EDC; Applied Behavior Analysis) Nancy A. Neef (The Ohio State University), CHRISTOPHER J. PERRIN (The Ohio State University), Alayna Theresa Haberlin (The Ohio State University), Lilian C. Rodrigues (The Ohio State University)

Abstract: We evaluated college students' participation in a game activity for studying course material on their subsequent quiz performance. Students were divided into 4 teams. Each week, students from two teams generated questions pertaining to the reading assignments before class. Each member of the two teams took turns posing questions to members of the opposing team for 20 min. The team that answered the most questions correctly was declared the winner and earned a bonus point. The effects of the game on subsequent weekly quiz performance was evaluated using a multi-element design in which pairs of teams alternated weekly between games and discussing individual project assignments with a graduate associate. The results showed that during almost all class periods, the mean percentage correct on quizzes was higher for the teams that engaged in games than for teams that discussed application projects.

143. The Effects of Cooperative Learning Groups on College Students' Quiz Performance in an ABA Course. (EDC; Applied Behavior Analysis) JU HEE PARK (The Ohio State University, Department of Special Education), Cuong (Ken) Luu (The Ohio State University), Sheila R Alber-Morgan (The Ohio State University)

Abstract: Most of college courses have depended on a traditional lecture which has been criticized for the failure in leading students to be active participants in class. Instructors have contrived useful strategies that may help students be more actively engaged in instruction. One of those strategies is including small-group activities as a part of the course requirement, which requires students to work together to solve problems or to complete tasks related to the topic covered in class. The purpose of this study was to examine the effects of small-group activities on college students' performance in weekly quizzes in an introductory applied behavior analysis course. All students alternately participated in the following three experimental conditions: (a) cooperative learning group condition, (2) cooperative learning group condition with a group contingency for bonus points, and (3) a control condition in which no group activity was provided. Limitations, future directions, and implications for practice will be presented.

#493 International Poster Session

5/25/2009
6:00 p.m. - 7:30 p.m.
North Hall A
TPC

144. The Correspondence Between Information Gathered During Parent Interviews, Behavioral Data, and FBA Determined Functions of Behavior. (CBM; Service Delivery) JILL MCDANIEL (Vanderbilt University), Nealetta Houchins-Juarez (Vanderbilt Kennedy Center Behavior Analysis Clinic), Craig H. Kennedy (Vanderbilt University)

Abstract: Gathering behavioral data via direct observation for children with disabilities and problem behaviors can be difficult. An accepted alternative to these data are standardized parent interview forms, such as the Nisonger Child Behavior Rating Form. Forms such as these are assessed for reliability and validity, but given their role as a substitute for direct behavioral data, measurements of the correspondence between what is reported on the form and what is actually seen in observation are rarely made. Conversely, unstructured parent interviews, such as those administered in functional behavior assessments, may result in a different set of data regarding parent perception of behavior. These data also may or may not be congruent with what direct behavioral data reveal. Additionally, it is unclear the extent to which these tools are capable of accurately identifying behavioral functions. In this study, the congruence between parent interview forms, behavioral data, and behavior functions is examined.

145. Defining Reinforcement: Is Delay Relevant. (N/A; Applied Behavior Analysis) KELLY P. BRADLEY (Western Michigan University)

Abstract: In providing formal definitions of reinforcement, some behavior analysts specify that the reinforcing stimulus must immediately follow the operant response. Others do not require such immediacy. A survey sent to members of the editorial boards of the Journal of Applied Behavior Analysis, the Journal of the Experimental Analysis of Behavior, The Behavior Analysis, the Analysis of Verbal Behavior, and the Journal of Organizational Behavior Management in 1991 found no consistent agreement regarding whether receipt of grant money, delayed several months relative to submission of the proposal that was funded and accompanied by an increase in the rate of proposal writing, should be considered as a reinforcer. Similarly, no consensus was apparent regarding whether respondents excluded delayed response-consequence relations from their definition of reinforcement. The present study replicated this earlier survey, with very similar results. These results indicate that today, like 17 years ago, behavior analysts do not agree on how reinforcement should be defined. Given the term's importance in behavior analysis, this is surprising and perhaps unfortunate.

146. The Rubber Hand Illusion as Verbal Behavior and Conditional Discrimination. (EAB; Experimental Analysis) BRADY J. PHELPS (South Dakota State University)

Abstract: When people feel tactile stimulation on one of their hands that is stationary and obscured from view while simultaneously viewing an artificial-rubber hand receiving the same type of stimulation, they will commonly come to report that the rubber hand is their own hand. The self-report of an altered body position is due to conflicting information from our kinesthetic, somatosensory and visual sensory systems. This effect has been termed the rubber hand illusion (RHI) and has been the subject of many studies from a cognitive neuroscience perspective. The RHI can be reconceptualized as self-report of body position, with the altered self-report being a function of primarily internal SDs from kinesthetic events interacting with somatosensory events that are primarily external SDs and visual events that are external SDs. The stimulus control from the internal and external events alters self-report as in a conditional discrimination. The self-report of body position is compatible with an analysis of verbal behaviors.

147. The Skinnerian Concept of Efficient Behavior. (N/A; Theory) Ieda Maria Bertola Mazzo (UEL - Universidade Estadual de Londrina), Jocelaine Martins Silveira (UFPR - Universidade Federal do Paraná), MAURA ALVES NUNES GONGORA (UEL - Universidade Estadual de Londrina), Paulo Cesar Morales Mayer (UEL - Universidade Estadual de Londrina)

Abstract: This report presents the result of an exam of Skinnerian texts, developed with the aim of making explicit the criteria with which Skinner uses the term efficient to qualify behaviors. Some texts in which he most uses this term were examined: those that deal with reinforcement contingencies, contingency planning and cultures survival. It was verified that Skinner tends to use the expression "efficient behavior" in reference to two themes: 1 – possibilities or reinforcement chances and 2 – cultural behavior and cultures survival. In the first case, he uses the term to qualify: operant responses, specific operant response classes and special behavior repertoire that present better possibilities of producing environmental reinforcing consequences. In the second case, the author names as efficient the behavior that produces, not only reinforcing consequences, but also socially relevant cultural consequences. It was observed, still, that the criteria here made explicit constitute part of the arguments with which Skinner defends the contingency planning as the only way of assuring the learning of efficient human behavior. These results are important as guidelines for interventions in different contexts, aiming at promoting more efficient behaviors.

148. A Behavioral Interpretation of Maslow's Hierarchy. (DEV; Theory) BREANN E. PLAMOWSKI (Salem State College), Darlene E. Crone-Todd (Salem State College)

Abstract: Little research has been done on the connection between Behaviorism and Humanism, or on the reasons why people conduct genealogy research. The current research proposes that there is a relationship between the levels of Maslow's Hierarchy and the type of reinforcement that is most effective for increasing behavior due to motivating operations. Participants (n=121) were genealogy researchers who completed an

online survey related to past and current reasons for engaging in genealogy research, as well as questions relating to hypothesized primary, conditioned and generalized reinforcers. The questions from the survey were derived from, and were analyzed through both a behavioral (motivating operations) humanistic (Maslow's Hierarchy) framework. The results indicate that there is a relationship between various types of reinforcement and the levels Maslow's hierarchy. Specifically, as individuals provide verbal reports consistent with higher humanistic levels, they also report that conditioned and generalized reinforcers are more likely to affect their behavior. This is important for understanding the relationship between humanism and behaviorism, and that humanistic approaches can be explained on the basis of behavioral principles.

149. Influences on Perceptions of Self-Efficacy in Behavior Interventionists. (AUT; Service Delivery) ROBERT W BURNS (California State University, Northridge), Marnie Nicole Shapiro (California State University, Northridge), Ellie Kazemi (California State University, Northridge)

Abstract: The growing number of persons diagnosed with autism spectrum disorder (ASD) results in more individuals coming into the field of applied behavior analysis (ABA) to work with children with ASD. Thus, it is imperative for researchers to explore the variables that impact ABA interventionists. Previous research has shown a negative relationship between perceptions of case severity and perceptions of therapeutic self-efficacy. We hypothesized that the relationship between perceptions of case severity and perceptions of therapeutic self-efficacy is because perceptions of case severity mediates the relationship between perceptions of therapeutic self-efficacy and knowledge about ABA and ASD. In other words, increased amounts of knowledge about ABA and ASD are related to low perceptions of autism severity, which in turn is related to increased perceptions of therapeutic self-efficacy. A sample of ABA interventionists completed an anonymous on-line survey. Preliminary results support our hypothesis suggesting that increasing knowledge of ABA and ASD may lead to increased perceptions of self-efficacy. These findings have direct implications for material to be emphasized while training of behavior interventionists.

150. Cultural and Individual Influences on Individual and Group Rates of Temporal Discounting. (EAB; Theory) SHAWN R. CHARLTON (University of Central Arkansas), Caitlin Porter (University of Central Arkansas), Laura Crocker (University of Central Arkansas)

Abstract: In his seminal paper Selection by Consequences Skinner argued that behavior is shaped at individual, cultural, and evolutionary levels of selection. While natural selection is a distinct process, there is significant overlap between individual and cultural selection. In this poster, we present the data from an experiment testing the cross-cultural changes in individual and group rates of temporal discounting. Specifically, we examine the rate of discounting for money for Americans of European descent, Americans of Asian descent (Chinese), and Chinese students attending their first semester of school in America. Due to cultural contingencies, it is hypothesized that the Chinese students will have the lowest discount rates in the group discounting condition. However, due to individual contingencies, the Americans of Asian descent will have discount rates comparable to those of the Americans of European descent. This pattern of findings would suggest that temporal discounting, a behavior with a known physiological component, is influenced by cultural, individual, and physiological changes. The applied importance of this information for working with individuals from distinct cultural contingencies will be discussed.