

# KANSAS ASSOCIATION FOR BEHAVIOR ANALYSIS

## 2014 CONFERENCE

### Autism and Other Intellectual and Developmental Disabilities: From Research to Practice

Room 120, BEST Building, University of Kansas Edwards Campus,  
12600 Quivira Road, Overland Park, KS

Saturday, April 12, 2014

- 9:00-9:10**     **Edward K. Morris** (University of Kansas). Opening Comments
- 9:10-9:25**     **Kathryn J. Saunders** (Life Span Institute, University of Kansas). “Outstanding Contributions to Behavior Analysis in Kansas Award.” Award to **Joseph E. Spradlin** (Professor Emeritus, University of Kansas)
- 9:30-10:20**    **Dean C. Williams** (Life Span Institute, University of Kansas). “From Research to Practice: Transitions and Behavior Problems.” Session chair: **David P. Jarmolowicz** (University of Kansas)
- 10:30-11:20**   **Little Steps ABA Early Intervention Program** (University of Kansas). Session chair: **Pamela L. Neidert** (University of Kansas)
- Kelley L. Harrison**, Kimberley L. M. Zonneveld, Kristin M. Miller, and Pamela L. Neidert (University of Kansas). “Increasing Child Compliance with Essential Routine Procedures: Acquisition & Generalization.”
- Courtney R. Moore**, Joseph D. Dracobly, Megan Hafen, Danielle L. Gureghian, Kimberley L. M. Zonneveld, Claudia L. Dozier, and Pamela L. Neidert (University of Kansas). “Assessment and Treatment of Feeding Problems in Early Intervention Classrooms.”
- Joseph D. Dracobly**, Claudia L. Dozier, Adam M. Briggs, Jessica A. Foster, and Erica S. Jowett (University of Kansas). “Experts versus Caregivers: A Comparison of Indirect Assessments and Functional Analysis Outcomes.”
- 11:30-1:00**     **Poster Session.** BEST Building lobby (see submission instructions below)
- 11:30-12:00**   **Mike Wasmer** (Autism Speaks). Update on Legislative Action in Kansas
- 11:30-1:00**     **Lunch:** Gratis on site or at local restaurants (see Registration Folder)
- 12:30-1:00**     KansABA Executive Committee and KansABA Members. Meeting chair: **Edward K. Morris** (University of Kansas)

- 1:00-1:50**      **Juniper Gardens Children’s Project** (Kansas City, KS). Session chair: **Benjamin Mason** (University of Kansas)
- Rose Mason** and **Debra Kamps** (University of Kansas). “Peer Networks: Increasing Participation for Elementary School Students with ASD.”
- Stephen Crutchfield** (University of Kansas). “Electronic Self-Monitoring to Reduce Stereotypic Behavior in Middle School Students with Autism.”
- 2:00- 2:50**      **Kansas Early Autism Project** (University of Kansas) and **Community Living Opportunities** (Lawrence, KS). Session co-chairs: **James A. Sherman** and **Jan B. Sheldon** (University of Kansas)
- Todd Merritt**, Jan B. Sheldon, and James A. Sherman (University of Kansas). “Improving Independent Living Skills for People with Intellectual and Developmental Disabilities.”
- Ariana Boutain**, Jan B. Sheldon and James A. Sherman (University of Kansas). “A Telehealth Parent Training Program to Teach Self-Care Skills to Children with Autism.”
- Andrea Courtemanche**, Jan B. Sheldon, James A. Sherman and Stephen R. Schroeder (University of Kansas). “Reducing Self-Injurious Behavior in Community Settings: A Multi-Component Approach.”
- 3:00-3:50**      **Kevin Brothers** (Somerset Hills Learning Institute, Bedminster, NJ). “Operating from a Researcher-Practitioner Model in Autism Intervention: Some Expected and Unexpected Examples.” Session chair: **Edward K. Morris** (University of Kansas)
- 4:00-4:15**      **Linda Heitzman-Powell** (University of Kansas), Poster Awards and Closing Comments

### **Reception**

A reception will be held in honor of the KansABA presenters following the conference. The presenters and registrants and their colleagues, spouses, families, and friends are invited. Time: 7:30-midnight. Place 1636 Louisiana Street, Lawrence, KS. Home phone: 785-842- 8229; mobile phone: 785-330-3580.

### **Poster Session**

KansABA invites posters presenting the results of basic, translational, or applied research in any area of behavior analysis, not just in autism and intellectual and developmental disabilities. The submission requirements are those of the Association for Behavior Analysis International (ABAI) for at its annual conference (see [www.abainternational.org](http://www.abainternational.org)). Submissions that include quantitative reports of the research will receive preference (e.g., graphed results). Submissions are due by 5:00 p.m. on March 14, 2014 at [posters@kansaba.org](mailto:posters@kansaba.org). Notifications will be made by March 21, 2014. Submitters need not be KansABA members, but must be conference registrants. The posters will be displayed in the lobby of the BEST Building between 9:00 a.m. and 4:00 p.m. during the conference. The poster session, itself, will be held between 11:30 a.m. and 12:30 p.m., when the posters’ authors will be present to discuss their research. The three best posters will receive certificates of merit. The three best student posters will also receive certificates, as well as monetary awards. For suggestions about preparing effective posters, see <http://www.abainternational.org/events/annual/chicago2014/poster-presenters.aspx>.

## **Conference Registration**

Advanced registration is available online until April 6 at [www.KansABA.org](http://www.KansABA.org) or through USPS mail at The Kansas Association for Behavior Analysis, Department of Applied Behavioral Science, University of Kansas, 1000 Sunnyside Avenue, Lawrence, KS 66045. Regular registration is \$25.00 (\$20 for KansABA members); student registration is \$15.00 (\$10 for KansABA members). On-site registration is \$5 more. Cash, checks, and credit cards are accepted on site.

## **Conference Abstracts**

Abstracts of the conference presentations and posters will be included in the full KansABA program, available at the conference and at the KansABA website ([www.KansABA.org](http://www.KansABA.org)).

## **Behavior Analysis Certification Board CEUs and Certificates of Attendance**

Behavior Analysis Certification Board (BACB) continuing education units (CEUs) will be available. The CEUs are \$10.00 a session or \$40 for the full conference if you register in advance (e.g., through PayPal at [www.KansABA.org](http://www.KansABA.org)) or \$15.00 a session and \$50.00 for the full conference if you register on site. Credit cards, checks, and cash are accepted at the conference. Certificates of attendance for the full conference will be available at no cost.

## **Location, Directions, and Parking**

The University of Kansas's Edwards Campus is located in Overland Park, KS at 12600 Quivira Road, 2.3 miles south of the Quivira Road exit off of I-435. Please use the 125th Street entrance and park in the BEST Building parking lot. Parking is free.

## **Lodging**

The Courtyard by Marriott Kansas City/Overland Park (11301 Metcalf Avenue, Overland Park, KS 66201) has perhaps the most convenient lodging, but is not offering us conference rates this year. At the moment, it is offering rooms for \$109 on the Friday and Saturday nights of the conference. For this, please call the hotel directly at 913.339.9900.

## **Vendors**

With permission, KansABA allows vendors of behavior-analytic products and services to announce, display, and sell them at the conference as long as they and their products and services conform to the ethical standards of the Behavior Analysis Certification Board® [See J. S. Bailey and M. Burch (2011). *Ethics for Behavior Analysts* (2nd ed.). New York: Routledge.] KansABA does not endorse or promote these products and services and reserves the right to remove them at any time.

## **ATM**

The BEST Building has no ATM, but one is available at the on-campus gas station.

## **KansABA's Mission, Governance, and Membership**

KansABA's mission is to (a) disseminate information about the science and practice of behavior analysis, and education and training therein; (b) address issues relevant to the science and practice of behavior analysis; (c) maintain disciplinary, professional, and ethical standards; and (d) recruit and enhance interest in behavior analysis throughout the State and in the Kansas City metropolitan area, that is, Clay, Jackson, and Platte Counties in Missouri. KansABA is governed by an Executive Committee that consists of a president -- Ed Morris; a full member representative -- Linda Heitzman-Powell; an affiliate representative -- Jill Koertner; and a student representative -- Todd Merritt. The Council is assisted by a secretary -- Todd Merritt, again -- and a treasurer -- Linda Heitzman-Powell, again. In addition, KansABA has a Legislative Affairs Committee -- Nan Perrin, chair; a Membership Committee -- Jill Koertner, chair; a Web Site Committee -- Jason Hirst, chair; and a BACB Certification Committee -- Linda Heitzman-Powell and Jill Koertner, co-chairs. KansABA's membership is open to citizens of the State of Kansas and the Kansas City metropolitan area. Full Members: members who meet the requirements for full membership in ABAI (\$25 membership fee); Student Members: students who meet the requirements for student membership in ABAI (\$15); Affiliate Members: citizens of the State of Kansas and Kansas City metropolitan area who express an interest in behavior analysis in Kansas (\$25); and adjunct members: citizens in other states and countries who also express an interest in behavior analysis in Kansas (\$15).

### **Paper Presentation Abstracts**

From Research to Practice: Transitions and Behavior Problems

Dean C. Williams

University of Kansas

Chronic, severe, disruptive and destructive behaviors such as self-injury, physical aggression, property destruction, and tantrums are a major problem in persons with Intellectual and other developmental disabilities such as autism. These "challenging" behaviors present barriers to habilitation and independent living, and they are a long-standing treatment challenge. Escape and avoidance behaviors make up the single largest function underlying problem behaviors in the clinical literature, suggesting that this population is particularly sensitive to aversive stimulation. Persons with IDD are also likely to emit such challenging behaviors during transitions from one activity to another. The behavioral mechanisms that make transitions aversive in this population are not known, but treatments generally assume that environmental unpredictability is aversive to people with IDD and transitions are aversive when the upcoming event is unpredictable. Research in this area is sparse and little is known about the behavioral processes that make transitions aversive or how to reduce their aversive properties. This paper will present data from translational research program validating a laboratory model for the study of behavioral and biological variables that may underlie transition-induced challenging behaviors in IDD. A distinguishing feature of this approach is that we have demonstrated equivalent behavioral processes across pigeons, rats, and people with developmental disabilities. This increases the potential that experimental treatments derived from testing in animals and controlled experimental studies will translate to the understanding and treatment of clinically important challenging behaviors.

## Increasing Child Compliance with Essential Routine Procedures: Acquisition and Generalization

Kelley L. Harrison, Kimberley L. M. Zonneveld, Kristin M. Miller, and Pamela L. Neidert

University of Kansas

The presence of certain stimuli during essential-routine procedures (e.g., hair cuts, dental exams, etc.) may evoke noncompliance in children with intellectual and developmental disabilities (Shumacher & Rapp, 2011). This can be a serious problem particularly when a procedure requires the use of sharp objects (e.g., scissors). The study evaluates the effects of demand fading plus reinforcement for increasing compliance with essential-routine procedures. A multiple baseline across subjects design, combined with a multiple probe design, was used to evaluate the effectiveness of the intervention. To date, seven children with developmental disabilities have participated. To date, results indicate that mere exposure to the simulated environment increased compliance for three children. However, training was necessary to increase compliance for five children. Successful generalization during natural environment probes was observed for one child. However, decreases in negative vocalizations and use of physical restraint in the natural setting (e.g., salon, dental office) were observed across all participants. This research extends the literature by assessing the extent to which treatment effects generalize to the natural setting with the relevant professional implementing the procedure and by identifying relevant stimuli to facilitate generalization.

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## Assessment and Treatment of Feeding Problems in Early Intervention Classrooms

Courtney R. Moore, Joseph D. Dracobly, Megan Hafen, Danielle L. Gureghian,

Kimberley L. M. Zonneveld, Claudia L. Dozier, and Pamela L. Neidert

University of Kansas

Childhood feeding problems (e.g., food refusal, food selectivity, disruptive mealtime behavior, failure to master developmentally appropriate self-feeding skills, etc.) have the potential to disrupt the acquisition of age-appropriate feeding habits (Silverman, 2010), and children with developmental disabilities are at increased risk for developing feeding-related difficulties (Schwarz, Corredor, Fisher-Medina, Cohen, & Rabinowitz, 2001). The present study describes the assessment and treatment of various feeding problems in several young children (0-8 yrs) with developmental disabilities. For some children, an assessment was conducted to identify the relative preference level for several foods. Subsequently, differential reinforcement and escape extinction (nonremoval of the spoon) increased acceptance of nonpreferred foods. For other children, an assessment was conducted to determine how taste, texture, and vehicles (e.g., utensils) influenced feeding behavior. Subsequently, differential reinforcement, texture fading, and escape extinction was successful in increasing acceptance of higher texture foods. For still other children, backward chaining was used to establish independent self-feeding skills. A treatment package consisting of prompting, reinforcement, and response blocking was used to increase self-feeding and decrease finger feeding under typical classroom arrangements. Results suggest that the aforementioned procedures were effective at treating feeding problems in young children with developmental disabilities within the context of their early intervention classrooms.

## Experts versus Caregivers: A Comparison of Indirect Assessments and Functional Analysis Outcomes

Joseph D. Dracobly, Claudia L. Dozier, Adam M. Briggs, Jessica A. Foster, and Erica S. Jowett

University of Kansas

Functional analysis (e.g., Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994) is the most effective methodology for identifying the function of problem behavior. However, skills and resources needed to conduct functional analyses are often not available in many settings, which has resulted in the use of indirect assessments to predict the function of problem behavior. To date, researchers have found that caregiver-completed indirect assessments are not valid (i.e., they do not correspond with functional analysis outcomes; Smith et al., 2012), but it is possible that “experts” may be better at accurately completing indirect assessments. The purpose of the current study was to compare the outcomes of an indirect assessment (Functional Analysis Screening Tool; Iwata, DeLeon, & Roscoe, 2012) completed by two caregivers and two experts in functional behavioral assessment and the outcome of a functional analysis. Five children with autism who engaged in problem behavior, their caregivers, and several experts participated. Comparison of the outcomes of the indirect assessments and functional analysis outcomes suggested that experts were more likely than caregivers to identify all functions of problem behavior via indirect assessments, but sometimes identified additional functions. The use of experts for completing indirect assessments could have significant impact on their utility.

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## Peer Networks: Increasing Participation for Elementary School Students with ASD

Rose Mason and Debra Kamps

University of Kansas

Students with ASD typically fail to achieve even minimal benefit from opportunities for socialization in inclusive settings due to social and communication impairments as well as a tendency to withdraw. Implementation of evidence-based interventions such as peer-mediated social skills groups, can play an integral role in improving social skills and maximizing social opportunities for social reinforcement. The Autism Peer Network (APN) is a peer mediated intervention that includes scripted instruction, visual text cues, and reinforcement. Two multiple-baseline design studies across participants, one involving the implementation of APN during a structured social skills lesson and one implementing APN at recess, were used to determine if a functional relationship exists between APN with school staff as implementers and increases in level of communicative acts for participants with ASD. Results indicate all participants demonstrated an immediate increase in the number of communicative acts with the introduction of the intervention. Implications for practice will be discussed.

## Electronic Self-Monitoring to Reduce Stereotypic Behavior in Middle School Students with Autism

Stephen Crutchfield

University of Kansas

Many students with autism engage in a variety of complex stereotypic behaviors. While these behaviors likely present task related difficulties, they most assuredly impact the social opportunities and capital of students with autism. Self-monitoring is an intervention with empirical support for individuals with ASD to increase behavioral repertoires and decrease behaviors that are incompatible with successful outcomes. However, there has been little exploration of its utility for decreasing stereotypy. This study used a multiple baseline across two participants with an embedded withdrawal design to evaluate the functional relationship between I-CONNECT, a technology delivered self-monitoring program, and decreases in the level of stereotypy for two middle school students with ASD. Both students demonstrated a marked decrease in stereotypy with the introduction of the self-monitoring application. Results and implications for practice and future research will be discussed.

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## Improving Independent Living Skills for People with Intellectual and Developmental Disabilities

Todd Merritt, Jan B. Sheldon, and James A. Sherman

University of Kansas

An increasing number of people with intellectual and developmental disabilities have opportunities to live in apartments and homes in the community with assistance from other people. The purpose of this research was to examine whether a remote video monitoring system with cameras linked to an off-site facility, in conjunction with a token system, could be used to maintain a high level of cleanliness of three apartments. Two people with intellectual and developmental disabilities lived in each apartment. Data were recorded daily in the apartments using the video monitoring system as well as direct observations. The token system was implemented in each of the homes within a multiple baseline design. Results indicated that the video monitoring system and the token system helped participants maintain a moderate level of cleanliness of the apartments, but due to the clarity of the videos, participants maintained a higher level of cleanliness when direct observations were used as compared to the video monitoring system.

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## A Telehealth Parent Training Program to Teach Self-Care Skills to Children with Autism

Ariana Boutain, Jan B. Sheldon and James A. Sherman

University of Kansas

Although a fundamental component of effective behavioral intervention programs for children with autism spectrum disorders is parent involvement, parents are often unable to receive adequate parent training from qualified specialists due to obstacles such as cost and geographic location. One way to address this issue is to utilize telehealth technologies to remotely teach parents of children with autism to be effective behavioral teachers for their children. This study used iPad minis, FaceTime videoconferencing technology, and wireless Bluetooth ear buds to remotely deliver a parent training program to three parents of children with autism in the family home. Using a behavioral skills training-based program and a series

of multiple baseline designs, parents were taught to conduct a preference assessment and implement a graduated guidance teaching program to teach their children several important self-care skills. Preliminary results indicate that parents are able to accurately conduct preference assessments with their children after only receiving written instructions. Results also suggest that both parent implementation of graduated guidance teaching procedures and child performance of self-care skills increase following the parent training intervention.

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## Reducing Self-Injurious Behavior in Community Settings: A Multi-Component Approach

Andrea Courtemanche, Jan B. Sheldon, James A. Sherman and Stephen R. Schroeder

University of Kansas

Self-injurious behavior (SIB) is an aberrant behavior that occurs frequently among individuals with intellectual and developmental disabilities. SIB can significantly affect the lives of these individuals and their caregivers. The purpose of this research was to evaluate interventions for reducing SIB in community group homes and a special education classroom. An additional purpose was to evaluate a staff-training package (i.e., role-play, feedback, contingent money) to teach caregivers how to implement and consistently use these interventions with high levels of fidelity. All interventions were evaluated using multiple baseline designs across participants. Three individuals with SIB and three of their caregivers participated. Effective interventions (e.g., differential reinforcement) for reducing SIB were identified for all participants. Additionally, caregivers were able to learn how to use the interventions and implement them with high levels of fidelity. Results suggest that although caregivers may be proficient in using an intervention, consistent implementation of interventions may not occur unless caregivers receive frequent feedback.

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## Operating from a Researcher-Practitioner Model in Autism Intervention:

Some Expected and Unexpected Examples

Kevin Brothers

Somerset Hills Learning Institute, Bedminster, NJ

An abundance of research on a broad array of interventions, has improved the lives of people with autism over the last 50 years. For the developers of a science-based autism-intervention program (e.g., early intervention program; preschool and school programs and residential programs), the resulting volumes of research offer a bountiful table of fruitful interventions from which to design a program. This presentation will discuss some outcomes and benefits produced by operating a science-based autism-intervention program within a research-practitioner framework. The presentation will include examples of how research informed initial program design (i.e., intervention practices) and how ongoing research from within the organization continues to inform and reform intervention practices.

## Poster Presentation Abstracts

Kansas's "Addiction" to Soft Drinks:

A Behavioral Economic Approach for Guiding Public Policy

Amel Becirevic, Andrea B. Phillips, Brent A. Kaplan, and Derek D. Reed

University of Kansas

The consumption of sugar-sweetened beverages (SSB) is linked to increased risk of obesity and diabetes (Wang, Coxson, Shen, Goldman & Bibbins-Domingo, 2012). In 2008 alone, it was estimated that the annual cost of obesity was \$147 billion (CDC, 2012). An effective method of mitigating poor consumer choice for non-nutritious commodities has been through government regulations. Thirty-four states have established a tax on SSB sold in grocery stores, and the mean tax is 3.43% (Powell et al., 2009). The goal of this study was to investigate the effects of excise taxes on consumption of SSB. This study used a hypothetical purchase task to measure consumption of SSB as a function of increasing excise taxation as well as the framing of the tax. Participants were 243 undergraduates from the University of Kansas. Results show that the framing of the tax, whether hidden or transparent to the individual, was not a significant factor. Data indicate that a five cent (per ounce) tax would be most effective in curbing soda consumption while simultaneously maximizing tax revenue. It is estimated that a five cent (per ounce) tax on SSB would generate over \$627,000,000 in Kansas in 2014. Considerations for public policy are further discussed.

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The Assessment and Treatment of Selective Mutism

Adam M. Briggs, Claudia L. Dozier, Jessica C. Foster, and Louisa Hussein

University of Kansas

Selective mutism (SM) is a rare childhood disorder characterized by a persistent failure to speak under one or more environmental conditions (e.g., at school, with teachers and peers) despite speaking under other environmental conditions (e.g., at home, with parents and siblings; American Psychiatric Association, 2000). If left untreated, SM can negatively impact the school-aged child because it limits opportunities for academic involvement and social interactions (Grover, Hughes, Bergman, & Kingery, 2006). We developed a comprehensive methodology to assess the antecedent conditions under which vocal responses were likely to occur (and not occur), and results showed that the number of people present (specifically peers) was the environmental variable influencing the occurrence and non-occurrence of speech. Based on these results, we implemented a stimulus-fading procedure that targeted increasing the number of peers present that resulted in an increase in vocal responses. In addition, generalization probes were conducted to determine the point at which responding generalized to the classroom environment that contained approximately 20 peers.

## A Component Analysis of Commonly-Used Toilet-Training Procedures

Brian D. Greer, Pamela L. Neidert, Courtney R. Moore, and Elizabeth E. Brock

University of Kansas and the Munroe-Meyer Institute at the University of Nebraska Medical Center

Although systematic replications of Azrin and Foxx's (1971) procedures have proven extremely effective across a variety of populations and settings, the majority of behavioral toilet-training research has relied on complex multicomponent training packages (for a recent review, see Kroeger & Sorensen-Burnworth, 2009). Therefore, little is known regarding the effectiveness of individual toilet-training components. We investigated the combined and individual effects of three commonly used components: (a) underwear, (b) a dense schedule of sits on the toilet, and (c) differential reinforcement. When all three components were combined, we observed overall improvements in toileting performance for five of six children. We observed overall improvements for two of four children exposed to only the underwear component. Overall improvements were not observed for any child exposed to only the dense-sit schedule component or to only the differential-reinforcement component. Results suggest that underwear was sufficient for improving toileting performance for children whose performance improved during the toilet-training package. Future research examining why the underwear component was effective is recommended.

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## An Evaluation of the Effects of Presentation Modality and Consequence on Preference Assessment Outcomes

Joseph D. Dracobly, Skyler N. Rueb, and Claudia L. Dozier

University of Kansas

Researchers have found presenting actual items to be a valid method for identifying the preferences for a variety of populations (e.g., Fisher et al., 1994; DeLeon & Iwata, 1999). More recently, researchers have begun to evaluate the utility of preference assessments using pictures of stimuli (e.g., Cote et al., 2006) or a vocal tact of stimuli (e.g., Tessing et al., 2006). Commonly, using these methods, there is no presentation of stimuli following selection. The purpose of the current study was to evaluate the validity of pictorial and verbal preference assessments under immediate, delayed, and no access consequences. We conducted three administrations under each modality and consequence with preschool age children. We then conducted reinforcer assessments using high-preference items. Despite some inconsistent correspondence, results using pictures and delayed access generally matched results of actual-item, immediate access assessments. During reinforcer tests, we found stronger reinforcement effects with items identified as preferred using the pictorial and actual-item modalities and the delayed and immediate access consequences. The results of this study provide additional evidence that delayed, differential consequences can produce valid preference assessment outcomes, which may be useful when assessing preference for certain items and activities.

An Evaluation of Item Preference in Increasing Tolerance to Delays in  
Typically Developing Children

Jessica C. Foster, Claudia L. Dozier, Julie A. Ackerlund Brandt, and Steven W. Payne

University of Kansas, Penn State University-Harrisburg, and Melmark, PA

Children sometimes have a difficult time waiting for preferred items and make impulsive choices (i.e., choosing a smaller but immediate reinforcer over a larger but delayed reinforcer). Previous research (e.g., Newquist, Dozier, & Neidert, 2012) has shown that in the absence of delay fading, providing high-preferred leisure items is effective for increasing self-control (i.e., choosing a larger but delayed reinforcer over a smaller but immediate reinforcer). The purpose of this study was to compare the effectiveness of delivering low-, moderate-, and high-preferred toys during the delay on delay tolerance. Results have been idiosyncratic across participants in that (a) for three participants, all items (regardless of preference level) were effective for increasing delay tolerance, even when they were also provided when the participant made the smaller, immediate reinforcer choice and (b) for one participant, only high-preference items were effective for decreasing delay tolerance and only when the items were not also delivered for making the smaller, immediate reinforcer choice.

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Stability of Preschooler's Preference for and Reinforcing Efficacy of Edible and Leisure Items

Pamela L. Neidert, Marcella M. Hangen, Isaac Nzuki, Kelley L. Harrison,

Courtney R. Moore, and Brian D. Greer

University of Kansas and the Munroe-Meyer Institute at the University of Nebraska Medical Center

Few applied studies have examined the stability of preference assessment data over long periods of time. In this study, one multiple stimulus without replacement (MSWO) preference assessment was conducted each week with 22 typically and atypically developing children. Preference was evaluated for edible and leisure items in separate MSWO preference assessments. The items in each child's preference assessment remained constant across assessments. The total number of edible and leisure preference assessments conducted varied for each child. However, preference assessments were typically conducted for an extended period of time. Results from these preference assessments did not assess whether the preferred items functioned as reinforcers. Therefore, we are replicating the first experiment but including reinforcer assessments, which are also conducted once a week for each item included in the preference assessment for an extended period of time. Results will be discussed in terms of the stability of preschooler's preference across time as well as differences in preference stability across children and assessment type (edible or leisure). Results will also be discussed in terms of whether items identified in preference assessments continue to predict items that can be used as reinforcers. Recommendations on how frequently to assess preschooler preference will also be discussed.

## Preference and Reinforcer Efficacy of Different Types of Attention in Young Children

Amy M. Harper, Claudia L. Dozier, Julie A. Brandt, and Adam M. Briggs

University of Kansas and Penn State University-Harrisburg

The effectiveness of attention has been largely demonstrated, however, very little research isolates the reinforcer efficacy of different types of attention (e.g., praise, physical attention) on appropriate behavior. Therefore, identifying the most effective types of attention is important for efficiency. The current study (a) assesses relative preference of common types of attention (i.e., praise, physical attention, and conversation) of young children, (b) evaluates the reinforcing efficacy of these different types of attention, and (c) evaluates the reinforcing strength of these different types of attention. Results show that the majority of children (7/12) preferred conversation and physical attention as compared to praise (no children preferred praise). In addition, we validated our preference assessment by showing that under a low response requirement, most children responded at high levels for their most preferred type of attention. However, results for a few children were idiosyncratic. Finally, results for some children have shown a higher breakpoint for the most preferred type of attention as compared to the other types of attention. Implications of these findings suggest that although attention has been shown to effect behavior, specific types may be more effective and thus more research on effectively and efficiently increasing behavior is warranted.

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Increasing Child Compliance with Essential Routine Procedures:

Acquisition, Generalization, and Maintenance

Kelley L. Harrison, Kristin Miller, Kimberley L. M. Zonneveld,

Courtney R. Moore, and Pamela L. Neidert

University of Kansas

The presence of certain stimuli during essential-routine procedures (e.g., hair cuts, dental exams, etc.) may evoke noncompliance in children with intellectual and developmental disabilities (Shumacher & Rapp, 2011). This can be a serious problem particularly when a procedure requires the use of sharp objects (e.g., scissors). The study evaluates the effects of demand fading plus reinforcement for increasing compliance with essential-routine procedures. A multiple baseline across subjects design, combined with a multiple probe design, was used to evaluate the effectiveness of the intervention. To date, eight children with developmental disabilities have participated. Results indicate that mere exposure to the simulated environment increased compliance for three children. However, training was necessary to increase compliance for five children. Successful generalization during natural environment probes was observed for two children. However, decreases in negative vocalizations and use of physical restraint in the natural setting (e.g., salon, dental office) were observed across all participants. This research extends the literature by assessing the extent to which treatment effects generalize to the natural setting with the relevant professional implementing the procedure, by identifying relevant stimuli to facilitate generalization, and by assessing maintenance of treatment effects in the natural setting.

An Evaluation of the Effectiveness of and Preference for  
Differential Reinforcement and Response Cost

Erica S. Jowett, Claudia L. Dozier, and Steven W. Payne

University of Kansas and Melmark, PA

Several researchers have shown that differential reinforcement and response cost are effective procedures for decreasing problem behavior; however, there is little research comparing these procedures (e.g., Iwata & Bailey, 1974). The purposes of the current study are to (a) directly compare differential reinforcement of an alternative behavior (DRA) to response cost (RC) for increasing on-task behavior (e.g., tracing, sitting appropriately during a small-group activity) of typically developing preschool children and (b) determine child preference for these two procedures. Results of the study suggest (a) DRA and RC are equally effective in increasing high levels of on-task behavior of typically developing preschool children, and (b) RC is preferred over DRA. The results suggest that earning and losing reinforcers are equally effective procedures for increasing and maintaining appropriate on-task behavior and that more typically developing preschool children prefer RC to DRA.

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The Price of Looking Good:

A Behavioral Economic Analysis of Indoor Tanning in an At-Risk Population

Brent A. Kaplan, Amel Becirevic, Derek D. Reed, Peter G. Roma, and Steven R. Hursh

University of Kansas and the Institutes for Behavior Resources, Bethesda, MD

As of 2005, an estimated 28 million individuals used tanning facilities annually (Dellavalle et al., 2003; Kwon et al., 2002). This prevalence is increasing exponentially and accounts for more than 10% of the United States population. It is now understood that use of ultraviolet indoor tanning (UVIT) is associated with up to a 75% increase in the risk of developing melanoma, the most lethal form of skin cancer (Young, 2004). While states have begun to ban UVIT for individuals under 18, this has not been widely adopted nor does it prevent those who have recently turned 18 from engaging in such activities. Alternative government regulations have recently targeted UVIT use. For example, the Patient Protection and Affordable Care Act of 2010 mandates an indoor tanning tax, yet no research has demonstrated whether the level of tax is high enough to deter regular or seasonal tanners. We sought to extend the reach of applied behavioral economics by demonstrating its utility in empirical public policy associated with excise taxes on commodities related to health issues by evaluating the effects of taxes on the essential value of indoor tanning using a hypothetical purchase task (see Jacobs & Bickel, 2009). Results demonstrate that the current 10% tax is not sufficient in deterring regular, seasonal, or those who have never used UVIT. Implications of these results and considerations for public policy are discussed.

## Children's Autism Project

Mary Keyes and Lisa Daniel

The Homestead, Iowa

The Children's Autism Project (CAP) provides support throughout Iowa to children with autism and their families. All participants were ages 3 through 9 with a diagnosis of autism. The criterion for participant selection was involvement in CAP for 1 full year, leading to the availability of Autism Evaluation Treatment Checklist (ATEC) and Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP) scores taken at intake and 1 year from intake. Center-based direct intervention was provided 2 ½ hours per day, Monday through Friday. The direct intervention was comprehensive in nature, utilizing the principles of Applied Behavior Analysis to promote development of communication, social interaction, behavior management, and pre-academic skills. Programming for each child was developed and supervised by a Board Certified Behavior Analyst (BCBA) or Board Certified assistant Behavior Analyst (BCaBA). Parent training occurred with a BCBA or BCaBA approximately 1 hour per week. Data was taken from the ATEC and VB-MAPP. ATEC was conducted through parent interview, and VB-MAPP was conducted through direct observation and testing by the Clinic Supervisor. All participants showed gains in VB-MAPP Milestones Assessment skills, with an average increase of 30.4 points. All participants showed reduction in ATEC scoring, with an average decrease of 29.7 points.

## **KansABA Acknowledgments**

Sean Swindler, Director of Community Programs, University of Kansas Edwards Campus

The Department of Applied Behavioral Science, University of Kansas

Graduate Student Organization, Department of Applied Behavioral Science, University of Kansas

K-CART: Kansas Center for Autism Research and Treatment, University of Kansas

The Kansas Association for Behavior Analysis Executive Committee