

# autism autism autism autism

**January 22–24, 2010**

## **conference 2010**

**Translational Science  
and Effective Practice**

**The Association for Behavior Analysis International (ABAI)** was founded in 1974 to contribute to the well-being of society by developing, enhancing, and supporting the growth of behavior analysis theory, research, education, and practice. ABAI's annual Autism Conference provides a forum for the discussion of current behavior analysis research on and treatment for autism and related disorders.

## Schedule Overview

All events are on the Gold Level, East Tower.

### Friday, January 22, 2010

Registration and Continuing Education	12:00 p.m.–7:00 p.m.
Poster Set-Up	3:30 p.m.–5:00 p.m.
Opening Reception	6:00 p.m.–9:00 p.m.
Poster Session, Exhibitors, and Bookstore	6:00 p.m.–9:00 p.m.
Author Signing	8:00 p.m.–9:00 p.m.

### Saturday, January 23, 2010

Registration and Continuing Education	7:00 a.m.–6:00 p.m.
Opening Remarks and Introductions	8:00 a.m.–8:15 a.m.
Session 1	8:15 a.m.–11:45 a.m.
Exhibits/Bookstore	11:45 a.m.–1:15 p.m.
Lunch	11:45 a.m.–1:15 p.m.
Poster Set-Up	11:45 a.m.–1:15 p.m.
Session 2	1:15 p.m.–4:45 p.m.
Poster Set-Up	5:00 p.m.–5:30 p.m.
Exhibits/Bookstore	5:00 p.m.–7:00 p.m.
Poster Session 2	5:00 p.m.–7:00 p.m.

### Sunday, January 24, 2010

Registration and Continuing Education	7:00 a.m.–1:00 p.m.
Bookstore	8:00 a.m.–1:00 p.m.
Session 3	8:15 a.m.–12:00 p.m.

## Become a Member of ABA International!

Join the more than 5,000 members of ABA International and enjoy the benefits of belonging to the premier organization dedicated to the field of behavior analysis.

As an ABAI member, you'll receive several benefits:

- New and insightful information in ABAI's publications including our flagship journal, *The Behavior Analyst*, and the membership newsletter, *Inside Behavior Analysis*.
- Reduced registration fees for the annual convention, workshops, and specialized conferences, as well as discounted pricing for ABAI publications and conference DVDs.
- The opportunity to apply for Professional Liability Insurance coverage. Log in to your ABAI portal and learn more.
- Involvement opportunities in ABAI's committee work and special interest groups.
- A network of peers with whom to share challenges and solutions.
- 24/7 access to ABAI's on-line Membership Directory.
- Representation for behavior analysts' interests in government policy making.
- Opportunities to support the involvement of students in behavior analysis.
- Free and confidential résumé posting on Jobs in Behavior Analysis.

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# **The Association for Behavior Analysis International's 2010 Autism Conference**

## **Translational Science and Effective Practice**

We are pleased to welcome you to ABAI's 2010 Autism Conference in Chicago, Illinois. The main focus of the conference will be to present behavior analysts, parents, educators, and other care providers with resources and information on effective practice and the practical application of behavior analysis science for helping people with autism spectrum disorders. Each session is designed to engage the audience and includes a question and answer discussion period during which guests will have the opportunity to openly speak with an expert.

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# Acknowledgements

## Conference Program Committee

The 2010 Autism Conference program would not be possible without the dedicated contributions of the Program Committee. We thank them for their time and efforts.

Program Committee Co-Chairs:

Gregory P. Hanley, Ph.D., BCBA (Western New England College) and  
Travis Thompson, Ph.D. (University of Minnesota)

## CE Coordination for BACB

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(Association for Behavior Analysis International)

## Graphic Design

Martin Burch



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# About the Association for Behavior Analysis International

## Purpose

To contribute to the well-being of society by developing, enhancing, and supporting the growth and vitality of behavior analysis through research, education, and practice. ABAI encompasses contemporary scientific and social issues, theoretical advances, and the dissemination of professional and public information. Advancing behavioral science and its application has become an international effort, as witnessed by the countries represented by our members.

ABAI is a membership organization that provides a forum for 31 special interest groups, maintains a mutually beneficial relationship with 68 affiliated chapters located across the U.S. and around the world, and organizes an annual convention in addition to other conferences and events. ABAI publishes three scholarly journals, distributes a triannual newsletter, provides support for continuing education credits, and accredits behavior analysis graduate training programs.

## Background

ABAI was founded in May 1974 at the University of Chicago. The first annual convention was held the following year. Past presidents of the Association are Nathan H. Azrin, Donald M. Baer, Sidney W. Bijou, Marc N. Branch, A. Charles Catania, Thomas S. Critchfield, Barbara C. Etzel, Judith E. Favell, Richard M. Foxx, Sigrid S. Glenn, Israel Goldiamond, Gina Green, Don F. Hake, Linda J. Hayes, William L. Heward, Philip N. Hines, Brian A. Iwata, James M. Johnston, Kennon A. Lattal, Ogden R. Lindsley, M. Jackson Marr, Frances K. McSweeney, Jack Michael, John C. (Jay) Moore, Edward K. Morris, Henry S. Pennypacker, Michael Perone, Carol Pilgrim, Ellen P. Reese, Masaya Sato, Beth Sulzer-Azaroff, Janet S. Twyman, and Julie S. Vargas.

## Membership

ABAI has more than 5,000 members from nearly 50 countries. Membership information and applications are provided on pages 139-146.

## ABAI Diversity Policy

The Association for Behavior Analysis International seeks to be an organization comprised of people of different ages, races, nationalities, ethnic groups, sexual orientations, genders, classes, religions, abilities, and educational levels. ABAI opposes unfair discrimination.

## **ABAI Executive Council**

### **President (2008–2011)**

Raymond G. Miltenberger, Ph.D., BCBA (University of South Florida)

### **Past President (2007–2010)**

William L. Heward, Ed.D., BCBA (The Ohio State University)

### **President-Elect (2009–2012)**

Patrick C. Friman, Ph.D. (Father Flanagan's Girls and Boys Town)

### **Experimental Representative (2008–2011)**

Michael J. Dougher, Ph.D. (University of New Mexico)

### **International Representative (2009–2011)**

Maria Martha Hübner, Ph.D. (University of São Paulo)

### **At-Large Representative (2007–2010)**

Kurt Salzinger, Ph.D. (Hofstra University)

### **At-Large Representative (2009–2012)**

Kathryn Saunders, Ph.D. (University of Kansas)

### **Applied Representative (2009–2012)**

Timothy R. Vollmer, Ph.D., BCBA (University of Florida)

### **Past Student Representative (2007–2010)**

Erick M. Dubuque, M.A., BCBA (University of Nevada, Reno)

### **Student Representative-Elect (2009–2012)**

Sarah Dunkel-Jackson, M.S., BCBA (Southern Illinois University)

### **Student Representative-Elect (2008–2011)**

Josh Pritchard, M.S., BCBA (University of Nevada, Reno)

### **Chief Executive Officer**

Maria E. Malott, Ph.D. (Association for Behavior Analysis International)



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e-mail [abareg@fit.edu](mailto:abareg@fit.edu) or call (321) 674-8382

SI-396-609

## Program Schedule

### Friday, January 22, 2010

6:00 p.m.–9:00 p.m.

Opening Reception, Poster Session,  
Exhibitors, Bookstore, and Author Signing

### Saturday, January 23, 2010

8:00 a.m.–8:15 a.m.

#### *Opening Remarks*

Gregory P. Hanley, Ph.D., BCBA (Western New  
England College) and Travis Thompson, Ph.D.  
(University of Minnesota)

#### ***Session 1 Chair: Gregory P. Hanley (Western New England College)***

8:15 a.m.–9:15 a.m.

#### *Early Behavioral Intervention and Family Psychological Adjustment*

Bob Remington, Ph.D.  
(University of Southampton)

9:15 a.m.–10:15 a.m.

#### *A Comparison of Methods for Collecting Data on Students' Performance During Discrete Trial Teaching*

Dorothea C. Lerman, Ph.D., BCBA  
(University of Houston-Clear Lake)

10:15 a.m.–10:30 a.m.

Break

10:30 a.m.–11:30 a.m.

#### *Intensive Early Behavioral Intervention and Brain Development*

Travis Thompson, Ph.D.  
(University of Minnesota)

11:30 a.m.–11:45 a.m.

#### *Discussion and Audience Q&A*

Craig H. Kennedy, Ph.D., BCBA  
(Vanderbilt University)

11:45 a.m.–1:15 p.m.

Lunch

#### ***Session 2 Chair: William L. Heward (The Ohio State University)***

1:15 p.m.–2:15 p.m.

#### *Augmentative Communication Strategies With Children With Autism and Severe Disability*

Joe Reichle, Ph.D. (University of Minnesota)

2:15 p.m.–3:15 p.m.

#### *A Standardized Approach for Individualizing School-Based Interventions for the Challenging Behaviors of Students With Autism*

Glen Dunlap, Ph.D.  
(University of South Florida)

- 3:15 p.m.–3:30 p.m. Break
- 3:30 p.m.–4:30 p.m. *Identifying Effective and Preferred Behavior-Change Programs: A Case for the Objective Measurement of Social Validity*  
Gregory P. Hanley, Ph.D., BCBA  
(Western New England College)
- 4:30 p.m.–4:45 p.m. *Discussion and Audience Q&A*  
Dorothea C. Lerman, Ph.D., BCBA  
(University of Houston-Clear Lake)
- 4:45 p.m.–5:15 p.m. *Autism Special Interest Groups for Parents and Professionals*
- 5:30 p.m.–7:00 p.m. Poster Session

**Sunday, January 24, 2010**

***Session 3 Chair: Travis Thompson  
(University of Minnesota)***

- 8:15 a.m.–9:15 a.m. *The Science and Practice of Discrete Trial Training: Why Some Teaching Procedures Are More Effective Than Others*  
Kathryn Saunders, Ph.D. (University of Kansas  
Parsons Research Center)
- 9:15 a.m.–10:15 a.m. *Assessment and Treatment of Feeding Problems in Autism*  
Cathleen C. Piazza, Ph.D.  
(Munroe-Meyer Institute)
- 10:15 a.m.–10:30 a.m. Break
- 10:30 a.m.–11:30 a.m. *Health Conditions in Antecedent Assessment and Intervention*  
Craig H. Kennedy, Ph.D., BCBA  
(Vanderbilt University)
- 11:30 a.m.–11:45 a.m. *Discussion, Audience Q&A, and Concluding Remarks*  
Gregory P. Hanley, Ph.D., BCBA (Western New England College) and Travis Thompson, Ph.D. (University of Minnesota)



# Registration and Continuing Education

## General Information

The Registration and Continuing Education desks are located on the on the Gold Level in the East Tower of the Hyatt Regency Chicago. Hours are as follows:

Fri., Jan. 22	12:00 p.m.–7:00 p.m.
Sat., Jan. 23	7:00 a.m.–6:00 p.m.
Sun., Jan. 24	7:00 a.m.–1:00 p.m.

Badges are required for entrance to all conference events. The speakers will be presenting in the Grand Ballroom A and B on the Gold Level of the East Tower. A map is available on page 152.

## Continuing Education for Certified Behavior Analysts and Licensed Psychologists

ABAI is approved by the Behavior Analyst Certification Board (BACB) to offer Type 2 continuing education (CE) to certified behavior analysts who have already passed their exam and have been issued a current and valid certification number. ABAI is also approved by the American Psychological Association (APA) to offer CE for psychologists. ABA International maintains responsibility for its CE program and its content. Conference attendees can earn from 1 to 9 credit hours for a fee of \$10 per credit. Payment can be made at the conference registration desk.

To receive CE, attendees must:

- Pick up a CE packet (Sign-in and sign-out sheets and evaluation form) from the CE desk.

- Attend the entire event.
- Sign in and out of the event with the ABAI staff members located near the door of the room. Staff members are unable to sign sheets for attendees entering over five minutes late or leaving more than five minutes early.
- Complete and return the evaluation form provided to you by an ABAI staff member.
- Pay the credit fee of \$10 per credit.
- Provide a BACB certificant number (BACB CE only).

Continuing education certificates will be posted to attendees' portals no later than February 12, 2010.

Participants are encouraged to complete the event evaluation survey that will be e-mailed to registrants immediately following the event.

Payment for CEs may be made at the conference, or later via fax or mail. You may submit payment via fax or mail to:

Association for Behavior  
Analysis International  
550 W. Centre Ave., Suite 1  
Portage MI 49024-5364  
Fax: (269) 492-9316

Please direct questions about CE to [mail@abainternational.org](mailto:mail@abainternational.org).

## About Poster Sessions

### Poster Session Schedule

Presenters may set up their posters in Columbus Hall on the Gold Level in the East Tower from 3:30 p.m. to 5:00 p.m. for the Friday session and from 11:45 a.m. to 1:15 p.m. and 4:30 p.m. to 5:00 p.m. for the Saturday session. Presenters must remove posters immediately following each session.

### Categories of Poster Content

Presenters were asked to categorize their session as experimental analysis, applied behavior analysis, service delivery, or theory.

#### *Experimental Analysis:*

representative response (can include verbal behavior in humans); any species; theoretically driven; data-based; activity carried out under auspices of research protocol; ultimate function: disseminate artifact (contingent on peer review) that contributes to generalizable knowledge about fundamental processes.

#### *Applied Behavior Analysis:*

behavior selected on basis of its social significance; human emphasis; intervention driven with treatment orientation; data-based; activity carried out under auspices of research protocol; development of new technology; ultimate function: disseminate artifact (contingent on peer review) that contributes to generalizable knowledge about how/why interventions, service delivery systems, or their components achieve desired goals; function of any manipulation or

analysis is to go beyond demonstrating that environmental manipulations will produce desired goals by identifying how/why interventions, service delivery systems, or their components achieve those goals.

*Service Delivery:* behavior selected on basis of its social significance; human emphasis; intervention driven with treatment orientation; frequently but not necessarily supported through fee for service arrangement/staff position; extension of existing technology to new setting or population; not predominantly undertaken to disseminate an artifact that contributes to generalizable knowledge-even though it may include data-based decision making; predominantly a case history, illustration, description, or demonstration rather than analysis of how principles may be applied in interventions, service delivery systems, or their components to achieve desired goals; function of any manipulation/analysis is to apply environmental manipulations to produce desired goals rather than to identify how/why interventions, service delivery systems, or their components achieve those goals.

*Theory:* abstract; conceptual; integrative statements about organizations of facts; interpretations; mathematical models/quantitative analyses; can also include historical and philosophical analyses or reviews.

# Exhibitors and Organizational Members

Be sure to visit the ABAI Exhibits in Columbus Hall on the Gold Level in the East Tower of the Hyatt Regency Chicago. ABAI exhibitors and organizational members prepare a description of their work and services to introduce themselves to the larger ABAI community. The inclusion of this material is not an endorsement, authorization, sponsorship, or affiliation by ABAI of these organizations or their work and services or of the content of the material they present.

## Exhibit Hours:

Friday, January 22	6:00 p.m.–9:00 p.m.
Saturday, January 23	11:30 a.m.–1:30 p.m.
	5:00 p.m.–7:00 p.m.

Following are descriptions of some of the 2010 Autism Conference exhibitors. ABAI Organizational Members have been approved by the Organizational Review Committee as being aligned with ABAI’s mission to develop, enhance, and support the growth and vitality of behavior analysis. If you are interested in exhibiting or becoming an organizational member, please contact our office at [convention@abainternational.org](mailto:convention@abainternational.org) or via telephone at 269-492-9310.

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<b>ABA International</b>	550 West Centre Ave., Suite 1 Portage, MI 49024 269-492-9310 269-492-9316 (fax) <a href="mailto:mail@abainternational.org">mail@abainternational.org</a> <a href="http://www.abainternational.org">www.abainternational.org</a> <b>Booth Number: 100</b>
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The Association for Behavior Analysis International is a nonprofit professional membership organization with the mission to contribute to the well-being of society by developing, enhancing, and supporting the growth and vitality of the science of behavior analysis through research, education, and practice. Visit our booth to learn about ABAI events, activities, and the benefits of ABAI membership including access to professional liability insurance and ABAI journals.

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<b>ABAI Special Interest Groups</b>	550 West Centre Ave., Suite 1 Portage, MI 49024 269-492-9310 <a href="http://www.abainternational.org/Special_Interests/autism.asp">www.abainternational.org/Special_Interests/autism.asp</a> <a href="http://www.abainternational.org/Special_Interests/parent_professional_partnership.asp">www.abainternational.org/Special_Interests/parent_professional_partnership.asp</a> <b>Booth Number: 101</b>
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The Autism Special Interest Group brings together individuals who specialize in or are interested in the application of behavior analysis to the education and treatment of autism across the lifespan. The Parent Professional Partnership Special Interest Group serves both parents of children with autism and related disabilities as well as interested professionals seeking information from ABAI.

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**Autism Spectrum Therapies**  
*ABAI Organizational Member*

6001 Bristol Parkway, Suite 200  
Culver City, CA 90230  
310-641-1100  
Barredondo@autismtherapies.com  
www.autismtherapies.com  
**Booth Number: 114**

Autism Spectrum Therapies is one of the leading providers of one-on-one services for individuals with autism spectrum disorders in southern California. Our customized programs address the various needs of children, their families, schools, and communities.

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**Autism Training Solutions**

3019 Kamakini  
Honolulu, HI 96816  
808-349-0645  
emaley@autismtrainingsolutions.com  
www.autismtrainingsolutions.com  
**Booth Number: 111**

Autism Training Solutions aims to enlighten, excite, and educate parents and professionals about the best practice methods for teaching individuals with autism and related disabilities using on-line training videos. Designed and created by professionals with a combined 28 years experience, the on-line trainings are delivered through entertaining, yet educational, videos using actual footage of professionals and students.

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**Behavior Analysis Online,  
Department of Behavior Analysis,  
University of North Texas**

1155 Union Circle #310919  
Denton, TX 76203-5017  
940-565-2561  
BEHVDLinfo@unt.edu  
<http://courses.unt.edu/behv/>  
**Booth Number: 210**

The on-line courses in the Behavior Analysis Online Program were designed to meet the needs of human service professionals and other individuals who do not have access to a university that offers a curriculum in behavior analysis or who cannot meet the scheduling requirements of on-campus courses.

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**Behavior Tracker Pro**

17 Greystone Drive  
Mountaintop, PA 18707  
570-332-2285  
steve@behaviortrackerpro.com  
www.behaviortrackerpro.com  
**Booth Number: 107**

Behavior Tracker Pro (BTP) is a software program for therapists, teachers, parents, and aides to collect behavioral data from the iPhone, iPod Touch, or Blackberry device. Frequency and duration, ABC, and High Frequency data collection are all supported. Data is graphed automatically and can be exported for graphing in Excel or our new BTP Portal!

---

**Center for Advanced Learning, Inc.**

3953 S. McCarran Boulevard  
Reno, NV 89502  
775-826-3111  
kberens@mac.com  
www.thecenterforadvancedlearning.com  
**Booth Number: 208**

Our consultation and training program is designed to help parents establish their own intensive, home-based ABA programs. During this process, a Center for Advanced Learning (CAL) Board Certified Behavior Analyst (BCBA) assists you in the hiring, training, and supervising of a team of interventionists. Your BCBA will train your team in ABA techniques and the CAL Instructional Model—designed to promote fluency, learner flexibility, and generalization of skills.

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**Florida Institute of Technology**

2202 So. Babcock Street, Suite 101  
Melbourne, FL 32901  
321-674-8340  
abareg@fit.edu  
<http://aba.fit.edu>  
**Booth Number: 108**

Learn ABA any time, any day! Florida Tech Behavioral Science and Technology offers a comprehensive program in behavior analysis completely on line. All courses meet the instructional requirements for certification as a Board Certified Behavior Analyst (BCaBa). Offered 100% on line, user friendly format, and no special computer skills are needed. Visit <http://aba.fit.edu> for more information or call (321) 674-8340.

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**Health Net Federal Services**

2025 Aerojet Road  
Rancho Cordova, CA 95742  
916-985-8205

autismdemonstrationproject@Healthnet.com  
www.healthnetfederalservices.com

**Booth Number: 109**

Health Net Federal Services, LLC partners with the TRICARE Regional Office North to provide quality health care to active duty, National Guard and Reserve, retirees, and military families in the TRICARE North Region.

---

**Hope Network Behavioral Health**

3075 Orchard Vista Drive SE  
Grand Rapids, MI 49546  
616-762-1913

creil@hopenetwork.org  
www.hopenetwork.org

**Booth Number: 105**

Hope Network's Center for Autism provides the most comprehensive outpatient services across West Michigan for families struggling with autism and other neuro-developmental disabilities, as well as learning disabilities, attention deficit hyperactivity disorder, and social/emotional disorders. With all of our specialists in one location, we provide treatment from a multidisciplinary approach and reduce stress on the entire family.

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**NSU Mailman Segal Institute  
for Early Childhood Studies**

3301 College Avenue  
Ft. Lauderdale, FL 33314  
reeve@nova.edu  
www.nova.edu/msi

**Booth Number: 205**

The Mailman Segal Institute offers a variety of course series meeting the certification requirements to become a BCaBa or BCBA through a variety of disciplines, including education and psychology at the undergraduate, Master's, and doctoral level.

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**National Autism Center**  
*ABAI Organizational Member*

41 Pacella Park Dr.  
Randolph, MA 02368  
877-313-3833  
info@nationalautismcenter.org  
www.nationalautismcenter.org

**Booth Number: 106**

The National Autism Center is dedicated to serving children and adolescents with autism spectrum disorders by providing reliable information, promoting best practices, and offering comprehensive resources for families, practitioners, and communities. In 2009, the National Autism Center completed an unprecedented multi-year effort—the National Standards Project—to establish a set of standards for effective, research-validated educational and behavioral interventions for children on the spectrum.

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**Professional Crisis Management Association, Inc.**

10269 NW 46 Street  
Sunrise, FL 33351  
954-746-0165  
pcma@pcma.com  
www.pcma.com

**Booth Number: 206**

Professional Crisis Management (PCM) is a behavioral crisis management system used with children and adults who exhibit disruptive, aggressive, and self-injurious behaviors. PCM is prevention oriented and includes a complete system of physical intervention procedures based on active feedback and learning. The Professional Crisis Management Association has provided expert training, certification, and consultation to education and human service professionals worldwide for over a quarter century.

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**Rethink Autism**

19 W. 21<sup>st</sup> Street, Suite 403  
New York, NY 10010  
646-257-2919 Ext. 202  
info@rethinkautism.com  
www.rethinkautism.com

**Booth Number: 112**

Rethink Autism makes effective and affordable treatment tools available to parents and professionals everywhere. Our web-based program provides an individualized ABA-based curriculum for the child or individual, hundreds of dynamic instructional videos of best practice teaching interactions, step-by-step training modules, automated progress tracking, and on-line professional support.

---

**Spectrum Technologies**

4711 Seven Lakes Place  
Powell, OH 43065  
866-828-9128  
info@spectrumtechnologies.org  
www.spectrumtechnologies.org  
**Booth Number: 207**

Spectrum Technologies' mission is to provide the highest standards of Web-based technology, treatment curricula, and therapy materials. Our Autism Applied Behavior Analysis (ABA) Web Consultant is a Web-based ABA video training and therapy curriculum providing real-time lesson plans from the child's previous performance, scanned data, progress reports, scheduling, behavior data, maintenance, generalization, progress e-mail alerts, and more. Designed for parents, professionals, and organizations. Help is just a click away.

---

**STAR Autism Support**

6663 SW Beaverton-Hillsdale Highway, #119  
Portland, OR 97225  
503-297-2864  
information@starautismprogram.com  
www.starautismprogram.com  
**Booth Number: 203**

STAR Autism Support provides curriculum materials, workshops, and training to school and agency staff who work with students with autism. Our mission is to help others successfully implement research-based applied behavior analysis techniques. We want every child with autism to receive effective instruction!

---

**Wellspring Autism Network**

16713 Roscoe Boulevard  
North Hills, CA 91343  
888-51-NETWORK  
amascarinia@wellspring.com  
www.WellspringAutismNetwork.com  
**Booth Number: 110**

Wellspring Autism Network is a national consortium of like-minded ABA Providers that specialize in the treatment of children with autism spectrum disorders and developmental disabilities. Wellspring has contracts with national health plans and behavioral health companies that are looking for qualified ABA providers to treat their clients. By joining this influential network, you automatically gain immediate representation with health plans and will be on their list of ABA service providers eligible to receive clients.



---

**Wells Fargo Insurance Services USA, Inc.**

8651 Market Street  
Youngstown, OH 44512  
330-726-8861

Mike.dercoli@wellsfargo.com  
www.wellsfargo.com

**Booth Number: 200**

Wells Fargo Insurance Services USA, Inc. has entered into a partnership with ABAL to provide all members of the organization the opportunity to purchase a complete and competitive professional liability insurance program. We can offer this coverage to ABAL members of all disciplines of psychology and behavior analysis. Our program, which is exclusive to ABAL, can be customized for desired limits and can pick up coverage for you no matter where you currently have coverage or even if you have never purchased professional liability insurance before. We even have reduced rating for part-time professionals. Please stop and visit us at the Wells Fargo booth!

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**William Beaumont Hospital's Hope Center**

1695 W. 12 Mile Road, Suite 120  
Berkley, MI 48072  
248-691-8104

jmcgillivray@beaumont Hospitals.com  
www.beaumont Hospitals.com/hope

**Booth Number: 104**

The hands-on parent education at the Hope Center offers a broad array of interventions from the field of applied behavior analysis to treat children with autism. The Hope Center offers a family focused approach. We provide behavioral consultation, a 12 week parent training program, a center-based EIBI program, and a toilet learning clinic.

## **Jobs in Behavior Analysis**

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- Post an anonymous résumé
- Create job alerts for new positions

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autism  
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January 22

**friday**

**opening reception**

**poster session**

**exhibitors**

**bookstore**

**author signing**

## **#1 Opening Reception, Poster Session, Exhibitors, Bookstore, and Author Signing (8:00 p.m.—9:00 p.m.)**

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6:00 p.m.—9:00 p.m.

Columbus Hall

- 1. An Insight Into Autism in Africa** (AUT Autism; Theory) MORGAN CHITIYO, Lawrence K. Ametepée and Jonathan Chitiyo (Southern Illinois University, Carbondale); and Beatrice A. Adera (Penn State Harrisburg)

The prevalence rate for autism appears to be on the rise in the United States. This has triggered a flurry of research in the area, resulting in us getting closer to an understanding of this otherwise esoteric condition. Today, different research-validated interventions such as applied behavior analysis (ABA) have been developed which have helped many children overcome the challenges stemming from this disorder. Despite this positive trend, few studies about autism in Africa have been published. This presentation will provide the participants with an insight into what is currently known about autism in Africa. The participants will be able to identify the characteristics of autism among children in Africa, the prevalence rate, demographics, and some possible moderating variables that may be peculiar to children with autism in Africa. Specifically, the presenters will identify behaviors that have been observed among children with autism in different African countries and discuss possible moderating variables such as poverty and the impact of Western culture. This presentation is based on an examination and synthesis of extant research about autism in Africa. The presentation will help researchers tailor ABA interventions to meet the needs of children with autism in Africa.

- 2. Behavior Analysis Training System** (AUT Autism; Applied Behavior Analysis) KELLY STONE and Richard W. Malott (Western Michigan University)

This is a recruitment poster for the graduate training program under the direction of Dr. Richard Malott at Western Michigan University. The behavior analysis training system (BATS) program is based on the service provider/practitioner model, and has a strong emphasis in the area of autism. The overall goal of the BATS program is to facilitate the improvement of the quality, accuracy, and timeliness of the overall system by improving performance within and across all subsystems through increasing system accomplishments, minimizing disconnects, responding to them in a timely manner, and improving the quality and accuracy of system products.

- 3. Reducing Stereotypy by Improving Teacher's Implementation of Discrete Trial Teaching: A Systematic Replication** (AUT Autism; Applied Behavior Analysis) LUCY VANESSA MARINEZ, Jennifer Bush, Lauren Fouts, and Carlos F. Aparicio (The Aurora School)

Discrete-trial teaching (DTT) individualizes and simplifies teaching for children with autism. A recent study improved the implementation of DTT in three teaching aides by delivering instructions, feedback, and rehearsal.

It showed that increasing the accuracy of implementation of DTT resulted in systematic decreases in student stereotypy across three teacher-student dyads, but it did not conduct a functional analysis to identify the function of stereotypy, leaving unclear the behavioral mechanisms by which improved DTT reduced stereotypy. The present paper is a systematic replication of that study that aimed to identify the function of stereotypy behavior. During baseline, staff members conducted the student's programs as usual. Then, a functional analysis was conducted to identify the function of the student's stereotypy. After that, a trainer executed the Dib and Sturmey (2007) four-step procedure to increase the accuracy of teacher's implementation of DTT. Our results were consistent with findings showing that this procedure is effective in increasing the accuracy of teacher's implementation of DTT. We will discuss the importance that identifying the function of stereotypy has for the interpretation of the Dib and Sturmey results.

**4. The Role of Continuous and Discontinuous Measurement in the Discrete-Trial Teaching Procedure** (AUT Autism; Applied Behavior Analysis) HEATHER M. CHANDLER (The Aurora School)

The discrete-trial teaching procedure is often used to treat children with autism. Trials consist of presenting a discriminative stimulus and the student is prompted to respond, which produces a reinforcer or an error correction. Two methods are used to measure the student's performance. The continuous method measures responding and prompt level in every trial which is difficult for the teacher. A less costly method is the discontinuous measurement where data are only recorded for a subset of trials. The influence of these methods on skill acquisition and maintenance within behavioral treatment programs was recently assessed. The present study is a follow-up of that study. Multiple skills in different behavioral programs were trained in children with autism. Half of the skills were measured in every trial and the other half were measured only in the first trial. Rigorous mastery criteria were used to assess differences between discontinuous and continuous measurements of performance. The results were analyzed and discussed; supporting evidence against some of the claims made regarding the influence of continuous and discontinuous measurement can be evaluated.

**5. An Applied Behavior Analysis Summer Program in the Natural Environment: Factors That Affect Program Development** (AUT Autism; Service Delivery) DENNIS CROWLEY (Macon County Mental Health Board & Millikin University); Kristen Deeanne Braun and Debbie Floyd (Macon County Mental Health Board); and Amy Shymansky (Washington Park District)

This project examined the evolution of programming and some of the factors that affect program effectiveness and participant progress across multiple summer sessions for two participants. The two participants were

served during four consecutive summer sessions, beginning in 2006. A county-based community mental health board funded and designed short-term services for children with clinical diagnoses of autism spectrum disorders, other developmental disabilities or co-morbid conditions and utilized applied behavior analysis (ABA) as the treatment of choice (service delivery model presented in Jacksonville, 2009; Phoenix, 2009). Thirty-eight total participants have been served across the four summer sessions in their natural environments (e.g., home, daycare). Inspection of the children's individual programming illuminates how factors such as participant skill level, in-home tutor characteristics, and number of service hours per week, affects programming decisions and participant progress. The two participants received services in different settings (i.e., home versus daycare), which is discussed relative to program efficacy. Interobserver percentage agreement is discussed, ranging from 75% to 100%. Qualitative parent and staff reports are also presented. Performance data and qualitative reports suggest tutor characteristics tended to be a salient factor affecting participant progress.

**6. Enhancing Reliability Measures of the Autism Diagnostic Observation Schedule** (AUT Autism; Applied Behavior Analysis)  
CLARISSA S. BARNES (Southern Illinois University) and John M. Guercio (TouchPoint Autism Services)

The Autism Diagnostic Observation Schedule (ADOS) is a diagnostic tool used in the assessment of autism spectrum disorders. Some clinical problems have been noted by administrators of the test related to the coding of some of the items in the schedule. A number of the items on the inventory involve the coding of observations that are somewhat subjective, making inter-rater reliability an issue. The following project used two reliability observers trained in applied behavior analysis. Observations of children's behavior were conducted using the existing guidelines for the administration of the ADOS assessment. A second condition was implemented whereby each of the areas of the test was modified to include operational definitions of each of the areas of observation. The results indicated a disparity in the inter-observer reliability scores that were obtained for both of the conditions. Outcome data on the interobserver reliability scores for the observers under both conditions will be reported as well as implications for future research.

**7. Sprouts: An Intensive Early Intervention Program**  
(AUT Autism; Service Delivery) MANDI K. MARTINEZ-DICK  
and Rachel Miller (Illinois State University-The Autism Program)  
and Karla J. Doepke (Illinois State University)

Intensive behavioral intervention (IBI) service providers track child progress, but do not monitor the effects of improved child skills on family functioning. The reductions in problem behavior and increases in child

functioning due to IBI services can positively impact family functioning across in-home and community activities. Many instruments compare family relationships with normative samples (e.g., the Parent Stress Index). The Family Well-Being Checklist was generated to create a measure of change in family behavior across contexts. Parents rate (on a five-point scale) the changes they have experienced in the past year in their ability to perform behaviors important to family functioning. The questionnaire includes 28 items divided into five categories: community events, family activities at home, social events, parent well-being activities, and parent relationships. An initial factor analysis of categories based on N=90 checklists showed a two factor solution with areas clustering as hypothesized. Thirteen families completed the checklist at intake and after one year of service, showed an increase in participation in community events ( $p < .05$ ,  $t = 2.25$ ). Data collection and analysis are ongoing. Results aid in communicating the importance and benefits of IBI services to funding agencies and governmental bodies.

**8. IBI Changes in Child Abilities Have a Positive Impact on Family Activities: Initial Data From the Family Well Being Checklist, a Behaviorally Anchored Rating Scale of Family Functioning**

(AUT Autism; Service Delivery) JOHN HOCH (University of Minnesota); Nancy G. Schussler and Erin M. Cote Holton (Behavioral Dimensions Inc.)

Intensive behavioral intervention is recognized as an established treatment for autism spectrum disorders by the National Standards Project (National Autism Center, 2009). As part of The Autism Program of Illinois State University, the Sprouts program has been developed to meet the needs of children ages 3-5 with a diagnosis of an autism spectrum disorder. Sprouts uses applied behavioral analysis, discrete trial training, pivotal response training, and the picture exchange communication system. Sprouts targets the following areas: communication, pre-academic skills, independence, social interactions, play skills, and functional routines. In addition, Sprouts coordinates services with other service providers and prepares children to transition to kindergarten. Each child in the Sprouts program receives 2 1/2 hours of intervention five days a week, including two hours of group intervention and 30 minutes of individual intervention. Additionally, parents participate in a weekly support group. Curriculum used in this program includes the STAR program (Arick, Loos, Falco & Krug, 2004) and Storybook-based Curriculum (Fetherston & England, 1998). The children also receive speech and language services two days a week. To assess the effectiveness of the program the ASIEP-3 evaluation system, Vineland-II Adaptive Behavior Scales, and BASC-SOS classroom observations will be used. These data will be presented.

**9. The Real Value of Therapy Hours—Objectively Measured and Demonstrated** (AUT Autism; Experimental Analysis) JILL GILKERSON, Jeffrey A. Richards, and Dongxin Xu (LENA Foundation)

Specialists recommend that children diagnosed with autism participate in at least 25 hours per week of intervention. Although research has shown that intervention time is correlated with improved outcomes, before now there has been no way to efficiently measure the language environment a child experiences inside and outside of therapy. The language environment analysis (LENA) system automatically analyzes up to 16 hours of audio recording data, generating estimates of the number of 1) adult words spoken to or near the child, 2) turn-taking interactions the child engages in with an adult, and 3) vocalizations the child produces. The present study included 209 daylong recordings from 48 children 16-48 months of age diagnosed with autism. For each recording, parents indicated the times of day the children were in therapy. Statistical analyses compared age-standardized language input, interaction and production during therapy hours compared to the rest of the day and compared to non-therapy days. Results indicate that count estimates for adult words, conversational turns, and child vocalizations were significantly higher during therapy time compared to time outside therapy. This technology could be used to demonstrate optimal language environments to parents and to monitor the implementation of intervention strategies in the home.

**10. An Examination of the Brief Autism Mealtime Behavior Inventory as an Accurate Measure of Feeding Problems Among Children With Autism Spectrum Disorders** (AUT Autism; Applied Behavior Analysis) SHELLY N. HARKER, William G. Sharp, David L. Jaquess, and Laura Donnan (Marcus Autism Center)

Children with autism spectrum disorders (ASD) exhibit behavioral inflexibility that can negatively impact multiple areas of adaptive functioning. Feeding is an important area commonly disrupted among these children; however, limited research has examined specific topographies and rates of atypical feeding behaviors exhibited among this population. Previous studies examining feeding difficulties specific to children with ASD have relied primarily on indirect methods of assessment, such as informant questionnaires. The Brief Autism Mealtime Behavior Inventory (BAMBI) is a promising measure designed specifically to identify the topography and rate of feeding difficulties unique to children with ASD. Although determined to be reliable and valid for measuring overall mealtime problems, the standardization process of this measure did not involve direct observation of mealtime behaviors or a comprehensive assessment of dietary variety. Furthermore, cut-off scores or severity ranges were not identified. The purpose of the current study was to investigate the clinical utility of the BAMBI by examining the



relationship between obtained scores, dietary variety measured by a food preference inventory, and feeding behaviors obtained through direct observation among a sample of 32 children with ASD. Findings are discussed in relation to the assessment and treatment process for children with ASD and severe feeding problems.

**11. Play as a Developmental Domain: Guidelines for Assessment and Intervention** (AUT Autism; Service Delivery) SUZANNE FOSTER-SANDA, Ellen McClur, Caley Arzamarski, Jacquelyn Briesch, Sarah Wertheim, Rachel Horvitz, and Karin Lifter (Northeastern University)

Play has important implications for child development, particularly for young children with autism spectrum disorders (Pierce-Jordan & Lifter, 2005). Typically regarded as a natural activity base in the service of other domains, we propose the consideration of play as an independent developmental domain for the purpose of assessment, intervention, and curricula development. Practitioners will be introduced to empirically derived descriptions of play as they relate to evidence-based assessment and intervention strategies. The link from assessment to intervention will be highlighted by understanding play development as an evidence-based curriculum in which developing children express qualitatively different capacities and skills over time (Lifter, 2000). This poster will describe guidelines for using the curriculum from the developmental play assessment (DPA): 1) to inform assessment activities; 2) to develop targeted play goals; 3) to implement child-focused interventions; 4) and to monitor children's responsiveness to play interventions. Strategies for modifying targeted play activities to match children's developmental levels and individual needs will be addressed. Evidence from ongoing research efforts (e.g., Lifter et al., 2005; Bissinger, 2009) will demonstrate how increased regard for play as a developmental domain can account for developments and interventions in the play, language, and social skills of children with autism.

**12. Parental Stress: Its Links With Socioeconomic Factors and the Steps Before Gaining Access to Intensive Behavioral Intervention** (AUT Autism; Service Delivery) MÉLINA RIVARD (Université du Québec à Montréal); Céline Mercier (Département de Médecine Préventive, Université de Montréal); Claudel Parent-Boursier (Université du Québec à Montréal); Gilles Lemaire (Centre de Readaptation Montérégie Est) and Sylvie Gladu Gladu (Directrice des Services Professionnels, Centre de Réadaptation Montérégie Est)

Although the intensive behavioral intervention (IBI) is recognized as a best practice for children with autism spectrum disorders (ASD), due to constraints in resources, few of them have access before entering school to IBI services that correspond fully to the model, in terms of precocity of intervention, length, number of hours per week, and sufficient specialist

services. Many children and families remain for long periods on waiting lists for services, and have to wait beyond the age of ideal point of entry to receive the IBI. This lack of accessibility to effective and early intervention contributes to the distress of families and could have a negative impact on the efficacy of IBI and on the integration at school of children with ASD. This study evaluated the stress and distress of families before receiving IBI and documented the link with socioeconomic factors, the time passed on waiting list for services, while controlling for degree of severity of autistic symptoms in the children. These preliminary results enlighten pre-treatment variables that can impact its subsequent effectiveness. The data collection for the first year will be completed this October.

**13. Investigation of Web-Based Curriculum Builder on Treatment Integrity in Parent Implementation of Behavior Analytic Intervention** (AUT Autism; Applied Behavior Analysis) Sherry A. Oldenburg (North Dakota Center for Persons with Disabilities); JOSHUA K. PRITCHARD (JKP Analysts, LLC); Brent A. Askvig (North Dakota Center for Persons with Disabilities); and Megan J. Doerr (JKP Analysts, LLC)

As the rate of autism diagnoses explodes, so too does the number of children with autism in areas with no access to professionals capable of providing treatment. In an age in which development and sophistication of computer, video, and communication technology is rising exponentially, it is not surprising that companies are developing on-line curriculum, management, and training solutions for parents to combat the lack of access to behavior analysts. However, there is an important concern: Can this solution train parents to provide a high enough level of treatment quality? In this investigation, we provide four families in rural North Dakota access to a popular web-based treatment platform and examine the impact of it on their provision of behavior analytic treatment to their children. In instances in which treatment integrity is insufficient, we utilize remote video conferencing by a behavior expert on a weekly basis to determine the effect this supplemental consultation has on treatment provision. As we are in the preliminary stages, we will review the current literature on telemedicine and in that context discuss the data collected to date and possible implications on the future treatment for children with autism, specifically that utilizing tele-health technology.

**14. A Treatment Provision Model for Behavior Analytic Services to Underserved Geographical Regions** (AUT Autism; Applied Behavior Analysis) Molly L. Dubuque, COURTNEY H. BAKER, and Joshua K. Pritchard (JKP Analysts, LLC)

One of the greatest barriers to autism treatment today is access to qualified behavior analytic providers. Many children diagnosed with autism are in geographical locations so distant from the closest provider that the consultant's travel cost is prohibitive. To add salt to the wound,

funding sources are now available for many of these families, but there are no professionals available to fill the positions! JKP Analysts, LLC has initiated a remote consultation model using Tricare's Autism Demonstration funding stream to provide applied behavior analytic treatment to under-served areas. By hiring and training local autism tutors and supplementing a typical workshop model with weekly video-conference supervision, treatment has been successful. As a requirement and benefit of working as a local tutor, they are provided with the on-line courses to qualify for the BCABA exam. We will describe the importance of developing local talent to combat geographic barriers and some of the details of this solution for underserved populations as well as some of the requisite technologies and skills. Data from current cases highlighting the deceleration of behavioral excesses and acquisition of academic skills will be displayed. Discussions of barriers and tips on how to successfully emulate this model will be provided.

**15. HANDS in Autism Training: Participant Self-Report of Training Efficacy**  
(AUT Autism; Service Delivery) NOHA MINSHAWI (Indiana University School of Medicine); Iryna V. Ashby and Naomi Swiezy (Christian Sarkine Autism Treatment Center at Riley)

Transportability of ABA-based interventions in educational settings is of great value. The Helping Answer Needs by Developing Specialists (HANDS) in Autism summer program trains teachers and classroom staff to implement ABA-based interventions using coaching and mentoring in an analogue classroom setting. The training introduces school personnel to new concepts and techniques, as well as improves their application of previously learned skills. Participants in the week long training provided feedback at the end of the training and at the three month follow-up on the 20 strategies covered. Participants rated whether a concept was new to him or her, whether the strategies were being applied at follow-up, and whether the use of previously learned strategies had improved. At follow-up, 9 of the 20 strategies taught were reported as being used by at least 70% of participants. Of those nine strategies, five were reported to be improved upon by at least 50% of participants and only one was reported as new to 50% of participants. Less than 10% reported that they required prompting or review to implement these strategies. The data indicate that based on this training, participants are learning and applying new skills and improving upon previously learned material. Study implications and future directions will be discussed.

**16. An Innovative Approach to Improving Transition Outcomes for Young Adults With Autism** (AUT Autism; Service Delivery) DEBORAH FISHER and Gila R. Shusterman (Jewish Foundation for Group Homes)

Young adults with autism transitioning from the funded educational system typically rely on school-based placement processes to identify and help them enroll in a vocational, academic, or traditional day habilitation program. Unfortunately, many are not able to achieve this before they age out of educational entitlements. Some individuals are still developing the competencies needed to be successful in the desired program. Sometimes a family's perceptions of their child's needs and abilities are not well-aligned with the young adult's actual potential for participation in vocational services or employment. The meaningful opportunities for successful transitions (MOST) program is a new, innovative transitional program that provides young adults with autism and other developmental disabilities—and their families—a year of intensive, transition-focused services and case management to facilitate successful transitions to appropriate settings. MOST serves as a portal to the adult disability services community by introducing resources and collaborating with community agencies. MOST participants receive support in developing skills and competencies in independent living, transportation, and community integration, as well as opportunities for paid and volunteer employment. This poster will provide case studies of three MOST participants, including a description of their incoming skills, interventions, and transition outcomes.

**17. Qualitative Analysis of Aggressive Behavior in a Residential Program for Persons With Autism Spectrum Disorders** (AUT Autism; Applied Behavior Analysis) CLARISSA S. BARNES and Sadie L. Lovett (Southern Illinois University)

The prevalence of unwanted behavior in the autism population is an area that has received some attention in the literature. An area that has not received a great deal of attention is specificity related to the severity of aggressive responding in groups of individuals with an autism spectrum disorder (ASD) that reside in congregate group living arrangements. The present study seeks to examine the intensity of aggressive responding across a sample of 70 adolescents and adults with ASDs. The methods employed involved administering the overt aggression scale to staff members working with the individuals that were targeted for ratings. The staff that provided the ratings served in a supervisory capacity and had worked with the individuals in question for extended periods of time. The results of the surveys will be presented along with a continuum to stratify those individuals that fell in the mild, moderate, or severe range with respect to their aggressive responding. Results and implications for future research will be presented as well.

## **18. A Long Way to Go: Autistic Children in China Need Applied Behavior Analysis** (AUT Autism; Applied Behavior Analysis)

HANG WU (University of Kansas)

This presentation introduces the current social environment of autistic children in China in terms of the tools of professional diagnosis, transformation of treatments, community service, the professional education, and government support. The presentation also reviews the introduction and development of applied behavior analysis as a professional field in the past decade in China. In addition, this presentation addresses the problems Chinese autistic families still have to face: First, there are no formalized education programs for children with autism in the Chinese universities, even though there are some treatment programs in larger city hospitals and private schools. ABA is not well developed as a professional field in Chinese universities. Second, since there is a lack of systematic statistics, no reliable data can be provided to indicate the magnitude of the problem. Third, appropriate diagnostic tools are needed to help children with autism. As a populous country with a number of children with autism spectrum disorders, China needs to develop these diagnostic tools as soon as possible.

## **19. HANDS in Autism Training: “Assessment of Knowledge-Expanded” as a Measure of Knowledge of Educators**

(AUT Autism; Service Delivery) IRYNA V. ASHBY and Naomi Swiezy (Christian Sarkine Autism Treatment Center at Riley); and Noha Minshaw (Indiana University School of Medicine)

Knowledge and use of evidence-based interventions, like applied behavior analysis (ABA), by educators who work with individuals with an autism spectrum disorder is a primary component in disorder treatment (National Research Council, 2001). Based on the importance and need of a training that would assist with such knowledge and skill acquisition, Helping Answer Needs by Developing Specialists (HANDS) in Autism developed a 5-day long program for teachers (both special and general education), paraprofessionals, SLPs, OTs, and other educational professionals that focuses on teaching practical application of ABA-based interventions in educational settings through hands-on coaching and mentoring in addition to traditional didactics. To measure the level of knowledge of participants with a varying backgrounds prior to the training, as well as their acquisition and retention of theoretical and practical knowledge immediately and several months after the training. Assessment of Knowledge-Expanded (AOK-E)—a 37-item scale—was designed to cover such areas as assessment and programming, goal development, teaching and behavior interventions, data collection and analysis, socialization, and generalization among other topics. Analyses of the AOK-E of 72 participants across two years and their implications and a demonstration of the efficacy of training based on these results will be discussed.

- 20. An Applied Behavior Analysis Summer Program in the Natural Environment: Assessment, Programming, and Outcomes** (AUT Autism; Service Delivery) DENNIS CROWLEY (Macon County Mental Health Board & Millikin University); Kristen Deeanne Braun (Macon County Mental Health Board); Amy Shymansky (Washington Park District) and Debra A. Floyd (Macon County Mental Health Board)

A county-based community mental health board funded and designed short-term services for children with clinical diagnoses of autism spectrum disorders, other developmental disabilities, or co-morbid conditions and utilized applied behavior analysis (ABA) as the treatment of choice (service delivery model presented in Jacksonville, 2009; Phoenix, 2009). Thirty-eight participants were served across four summers in their natural environments, with 20 participants served in 2009. Participants range in age from 2 to 14 years. This project examined the types of programming, how the participants' programs were developed, and the efficacy of the summer program. Assessment procedures, which included a home visit, interview, behavioral observation, and testing, served as the basis for the individual children's program development. The Vineland Adaptive Behavior Scale data were collected in 2009 and also utilized during the assessment process. Generally, programming focused on increasing social skills, academic knowledge, and adaptive functioning skills. In addition, several children required adjunctive programming to decrease problematic behaviors. Outcome data were collected for each participant relative to the individual's targeted objectives and program. Qualitative parent and staff report were also collected for each individual. Preliminary examination of the summer 2009 data suggests that all children showed gains across the 8-10 week session.

- 21. Examining the Relationship Between Oral Motor Exercises and Speech Production Ability in Children With Autism** (AUT Autism; Applied Behavior Analysis) MARY JANE WEISS (DDDC, Rutgers University); Laura Prestia, Barrie Jakobovics, Ivy J. Feldman, and Cecelia McCarton (The McCarton Center); and Thomas L. Zane (The Center for Applied Behavior Analysis at The Sage Colleges)

A wide variety of treatment approaches are available for children with autism, many of which are not evidence-based. It is important to research the potential utility of many commonly used, but not yet empirically supported, treatments. One approach commonly used to treat apraxia and articulation problems in learners with autism is oral motor exercises. Oral motor exercises are said to improve the ability to make sounds. Theoretically, passing the exercises should predict sound production, and failing the exercises should predict the inability to vocalize the sounds. In addition, it should be associated with the ability to make the sounds in functional contexts such as reading word lists and engaging in

conversation. This poster will examine the relationship between capacity for articulation/functional production of sounds and the ability to do oral motor exercises in ten learners with autism.

**22. Advantages and Limitations of PECS Instruction for Children With Autism: A Synthesis of Extant Literature** (AUT Autism; Theory) ROBIN H. LOCK, Lan Liu-Gitz, and Stacy L. Carter (Texas Tech University)

The picture exchange communication system (PECS) is the subject of an ever-expanding body of research. Although highly promising results have been reported, conflicting findings concerning efficacy, treatment fidelity, and generalization into home and school settings remain problematic. This synthesis of extant literature used multiple paradigms to analyze PECS for children with autism. The analysis included examining concepts using metalanguage, dissecting communication according to function using Skinner's *Verbal Analysis of Behavior*, and cross-examining PECS targeted communication acts through components of language. By linking all three paradigms, the analysis revealed that PECS intervention matches well with children who lack joint attention, who fail to demonstrate a clear understanding of the reciprocal nature of communication, and/or who lack a clearly identifiable means of communication. The design of the PECS program tightly links the communication act with immediate reinforcement. In turn, it makes PECS highly effective in teaching "request" in children with autism. But the efficacy of PECS is limited when measured with traditional language evaluation. Data from existing research also support these conclusions. This synthesis offers implementation problem explanations and provides suggestions for alleviation in educational settings through appropriate matching of intervention to characteristics of the child.

**23. The Effects of Precision Teaching on the Acquisition of Math Skills Across Three Learning Channels in Students Diagnosed With Autism** (AUT Autism; Applied Behavior Analysis) MARGARITA METOYER (The Chicago School of Professional Psychology); Tara A. Glavin and Melissa Twarek (The Hope Institute Learning Academy); and Megan N. Morien and Jenna K. Nikula (The Chicago School of Professional Psychology)

With the surging need in the United States for evidence-based educational practices, as discussed by Moran and Malott (2004), effective instruction techniques have increasingly been adapted as part of school curricula in recent years. Precision teaching (PT), founded by Ogden Lindsley (1992), has been used to evaluate fluency in academic subjects by using practice, measurement, and recording of specific behavioral outputs, also known as learning channels (Haughton, 1980). The field of PT has various studies evaluating learning channel fluency in typical populations (Nancarrow, 1983), and math drill effects on math performance (Raggio & Bitgood,

1982). However, there is limited research on the comparison of celeration within learning channels and the acquisition of math fluency in students with a diagnosis of autism. The present study examined the effects of PT on the acquisition of math skills across three learning channels. See/Say worksheets, Hear/Say timings (Haughton, 1980) and Say All Fast Minute Every Day Shuffled (SAFMEDS) cards (Graf & Lindsley, 2002) were used throughout the study with nine participants diagnosed with autism, enrolled in The Hope Institute Learning Academy and Satellite Program in Chicago for elementary school and high school students diagnosed with developmental disabilities.

**24. Predictors of Adaptive Behaviour Outcomes Following 12 Months of Intensive Behavioural Intervention (IBI) in Children With ASD and Severe Intellectual Disabilities** (AUT Autism; Applied Behavior Analysis) JO-ANN M. REITZEL (McMaster Children's Hospital); Jane Summers (Behaviour Therapy Consultation Service); Lonnie Zwaigenbaum (Alberta Health Services); Peter Szatmari and Daniel Lee (McMaster University); Julia Frei (University of Ottawa); and Stelios Georgiades and Eric Duku (McMaster University)

While many children with autism have made impressive gains with intensive behavioural intervention (IBI), not all children experience clinically meaningful improvements (Smith et al., 2000; Sallows and Graupner, 2005; Perry et al., 2008). There is a great deal of heterogeneity among children with autism, and young children with differing autism spectrum disorders (ASD) symptomatology and intellectual disability (ID) are not often studied in relation to response to IBI. Furthermore, little is known about the predictors of adaptive behaviour outcomes. Twenty-seven children (mean age at intake = 51 months) with independent diagnoses of autism and severe ID participated. They received 12 months of IBI in a community-based IBI program. Preliminary results indicated that cognitive functioning and mastery of the early learning measure were predictive of Vineland adaptive behaviour scale (VABS) composite and communication domain scores, but not the daily living and socialization domain scores. Age at intake to IBI and childhood autism rating scale (CARS) scores were not predictive of the VABS composite score or the VABS domain scores. Improvement on VABS composite and communication domain scores are important indicators of improvement in day to day functioning for children with ASD, and may be clinically significant indicators that IBI is effective treatment.



- 25. An Update of the Data on the Developmental Patterns of Specific Language and Learning Skills of Typically Developing Children as Measured by the ABLLS-R** (AUT Autism; Theory) JAMES W. PARTINGTON (Behavior Analysts, Inc.); and Joshua K. Pritchard, Megan J. Doerr, and Melissa Nosik (University of Nevada, Reno)

Practitioners who work with children diagnosed with autism spectrum disorders (ASD) are often asked to compare the developmental levels of a child with ASD to those of typically developing children. Data will be presented on the patterns of acquisition of basic language and learning skills of typically developing children ranging in age from six months to five years of age. These data will provide criterion-based measures that can be used to help identify specific skill differences between children with ASD and typically developing children.

- 26. How to Increase the Number of Therapists for ASD Children: Manual Development and Quality Control** (AUT Autism; Applied Behavior Analysis) YOSHIKI NAKANO (Tokyo Seitoku University) and Mari Kashio (Nakayoshi Kids Station)

There is an urgent need to provide underserved children with autism with 20-40 hours of intensive treatment. We developed a compact, but comprehensive, training manual for novice therapists. The 190-page manual has 12 chapters: what is autism; selecting target response; defining target response; reinforcement and punishment; challenging behaviors and functional analysis; decreasing challenging behaviors by differential reinforcement, extinction, time-out, response cost, and overcorrection; discrete trial training; prompting and fading; shaping and chaining; stimulus discrimination training; generalization; and facilitating generalization. The training involves lecturing and practicum. A trainee and a senior therapist visit and administer a three-hour intensive treatment for a child at home two to three times a week. The trainee observes teaching and managing by the senior therapist, records the child's responses to the senior therapist's intervention, teaches a few tasks with supervision and feedback, records the child's responses to his or her own teaching, uses a log book, expands teaching to a maximum of three hours, and has a final exam by senior therapists and a supervisor. After graduation, the novice therapist independently practices individual programming and teaching, and participates in a weekly one-hour clinic meeting with a child, parents, all team members, and a supervisor. Trainee responses and graduation assessment data will be presented.

**27. Providing Choice Opportunities to a Child With ASD During a Home-Based Intensive Behavioral Program in Turkey** (AUT Autism; Applied Behavior Analysis) BURCU ULKE KURKCUOGLU (Anadolu University) and Gonul Kircaali-Iftar (Tohum Autism Foundation)

Opportunities to a Child With ASD During a Home-Based Intensive Behavioral Program (OCIDEP) is an early and intensive behavioral intervention program for children with autism spectrum disorders (ASD) mainly based on Lovaas (2003). OCIDEP has been carried out as home- and center-based interventions since 2006 in Turkey. Each child in the program is served by two paraprofessional or professional educators, one consultant, and one program coordinator. Discrete trial teaching procedure with errorless teaching components is utilized to teach imitation, matching and sorting, receptive and expressive language, play, self-help, and arts and crafts skills. Furthermore, different types of choice opportunities such as activity choice and material choice are provided in the program. The purpose of this poster is to share how the choice opportunities are provided to one young boy with ASD throughout the home-based OCIDEP implementation. The participant has been provided with six different types of choice opportunities during various skill-building and free-time activities. At the poster presentation these choice opportunities with examples, opinions of the educators regarding providing these opportunities, and future recommendations will be shared with the conference attendees.

**28. Development of a Rapid, Interactive Screener for Young Children At-Risk for Autism Spectrum Disorders: The Rapid-ABC** (AUT Autism; Service Delivery) Opal Y. Ousley, Ph.D. (Emory University School of Medicine); Rosa Arriaga (Georgia Institute of Technology); MICHAEL J. MORRIER (Emory University School of Medicine); and Gregory Abowd (Georgia Institute of Technology)

Autism spectrum disorders (ASD) are characterized by deficits in reciprocal social interactions, communication, and restricted repetitive behaviors (APA, 2000). Parents report delays in development before 24 months of age (Chawarska et al., 2007), yet professionals often do not provide a diagnosis until between 48-60 months of age (Wiggins et al., 2006). Research into the early concerns of parents shows that language and social delays are the primary concerns prior to 24 months (Chawarska et al., 2007; Pinto-Martin et al., 2008). Yet, pediatricians often do not assess for an ASD on a regular basis, with only about 8% reporting to do so (Dosreis et al., 2006). The American Academy of Pediatrics (2007) recommends screening all young children for an ASD at 18- and 24-months of age. Current screening tools (i.e., M-CHAT, CSBS: Infant-Toddler Checklist) rely on parent report and do not include an interactive

component. This poster will describe the development of Rapid-ABC, an interactive, 4-minute screening tool for healthcare providers to implement during well baby check-ups. Results indicate the Rapid-ABC can distinguish children at-risk for ASD from typically developing infants and toddlers, and children who fail the Rapid-ABC qualify for a diagnosis of ASD through confirmation using the ADOS-T (Luyster et al., 2009).

**29. Word Learning in Children With Autism: The Role of Gestural Cues and Social Referencing** (AUT Autism; Experimental Analysis) KRISTINA PATRICK and Amy E. Booth (Northwestern University)

Word learning in typically developing children is facilitated by gestural cues and other socio-pragmatic information. We asked whether word learning in children with autism might be impacted by their delayed ability to use and follow gestures. Children between 2 and 10 years old who were diagnosed with an autism spectrum disorder were taught novel words for unfamiliar objects while the experimenter gazed at, pointed to, touched, or manipulated the target while at the same time ignoring a paired foil. Children were successful at mapping the words to their referents in the point, touch, and manipulate conditions, but not the gaze condition, when tested immediately after training. Performance in all conditions fell precipitously after a delay of approximately one week, but children continued to perform particularly poorly in the gaze condition. Somewhat surprisingly, these results suggest that children with autism are capable of taking advantage of gestural cues in a word learning context as long as they involve a manual component. The fact that looking at the target during training did not correlate with word learning further suggests that, as is the case among typically developing toddlers, these gestures do not reduce merely to attention-grabbing devices in this population.

**30. Feeding Problems of Children With Autism Spectrum Disorder** (AUT Autism; Theory) BOOYEOL CHOI, Jeong Hyun Choo, and Kyong-Mee Chung (Yonsei University)

The purpose of this study is to examine the feeding behaviors of children diagnosed with autism spectrum disorders (ASD). The participants were 127 caregivers who have children with ASD aged from 1 to 12 (100 boys and 27 girls). A feeding questionnaire developed by the author and Childhood Eating Behavior Inventory (CEBI) were administered. The results from CEBI showed that 41 participants (32.3%) fell in the clinical level of total score, and 80 participants considered their children to have feeding problems. The results from the feeding questionnaire demonstrated that food selectivity (26%) was the most frequent and feeding problems were followed by problematic behaviors (18.1%), chewing problems (15%), and extended mealtime (8.7%). Four types of problematic behavior were reported: spitting (22.8%), playing with food

(18.1%), running away (15%), and vomiting (15%) were reported. Caregivers tried to cajole (18.9%), to feed when children wanted (11.8%), to reprimand children (6.3%), and to feed children frequently (5.5%) to deal with children's feeding problems. These results showed that many children with ASD have feeding difficulties and various behavior problems during mealtime. Yet, caregivers do not seem to know how to deal with feeding problems effectively. Presently there is a need for parent training in diverse coping tactics to deal with feeding problems. Parent-training could help caregivers learn coping strategies for feeding problems.

**31. Effects of Training Teachers of Children With Autism to Self-Monitor the Implementation of Behavior Intervention Strategies on Treatment Integrity** (AUT Autism; Applied Behavior Analysis) ANGELA ATHENA MOUZAKITIS (Hunter College)

In order to maintain appropriate levels of treatment integrity in the implementation of behavior support plans for children with autism, research supports the need for written performance feedback bi-weekly provided by a school psychologist or behavior consultant. As this feedback is needed on each student's behavior support plan, it can be a costly undertaking. The study evaluates the levels of treatment integrity that can be obtained when teachers are trained to self-monitor their own treatment integrity of their students' behavior support plans.

**32. Beginning of the ABA Development in France** (AUT Autism; Applied Behavior Analysis) VINCA RIVIERE (Université Charles De Gaulle) and Mélissa Becquet (Université Lille 3)

The French government agreed to the opening of a center in the north of France in June 2008. In this center (called the "Camus Center"), 20 children aged 0 to 22 years old are treated by applied behavior analysis 35 hours per week. The program is realized in all of the children's life settings (e.g., home, school). This agreement was given for two years. This experimentation is very important in France because applied behavior analysis is considered as mistreatment. Medical professionals don't understand why applied behavior analysis treatment is used as a single treatment instead of using several therapies with different professionals. They think that it's very expensive because each child requires a lot of therapists. This center collaborates with the URECA Laboratory (behavior evolution and learning laboratory) from Lille 3 Université. The aim of this experimentation is to show the importance of BCBA certification to develop early intervention and promote applied behavior analysis.

**33. Demonstrating Program Effectiveness in a Parent-Mediated Infant Toddler Program Using the Assessment of Basic Language and Learning Skills-Revised** (AUT Autism; Applied Behavior Analysis) JAMIE HUGHES and E. Flotkoetter (Summit Autism Services)

Research indicates that empiric-derived interventions, such as applied behavior analysis (ABA), during a child's early development (0- to 3-years old) may: 1) prevent or reduce the long-term impact of a child's developmental disability on his ongoing growth and development; 2) increase the probability he will be able to participate in typical developmental, academic and social activities in natural environments; and 3) improve the likelihood he will no longer require specialized services. A parent-mediated infant/toddler program (e.g., toddler parent training program) was developed to better meet the needs of infants and toddlers diagnosed with autism or at risk for autism, receiving services through several early childhood intervention service (ECI) programs in south Texas. This program placed a heavy emphasis on the development of play and functional communication skills, parent training in reducing problematic behaviors, and generalization of acquired skills across caregivers in the child's natural environment. The assessment of basic language and learning skills-revised (ABLLS-R) is a criterion-referenced assessment, curriculum guide, and skills tracking system for children with language delays (Partington, 2008). The ABLLS-R was administered to each child enrolled in the parent-mediated program. Outcome data demonstrate significant positive results for at-risk infants and toddlers with an increase in overall independence across all skill areas and in the likelihood of placement into a less restrictive environment upon transition out of the ECI program. The program design and data collection methods illustrate the usefulness of a parent-mediated intervention.

**34. The Effects of a Direct Instruction Language Program on Parent and Teacher Reports of Behavior** (AUT Autism; Service Delivery) SUZANNE MAIN-WEGIELNIK and Jessica Blutstein (Andrus Children's Center)

Developmental delays in language acquisition and social communication have consistently been identified as primary deficits in children diagnosed with autism spectrum disorders (ASD) (American Psychiatric Association, 2000). A recent and growing body of research has shown promising results for the use of direct instruction (DI) programs in schools for the remediation of oral language skills, specifically in children diagnosed with ASD (Ganz & Flores, 2008). The current study examines the relationship between parent/teacher reports of behavior and ongoing participation in a DI program for language deficits in a sample of children diagnosed with ASD in a special education elementary setting. The current study, using a single subject design, measures the child's acquisition of language skills, parent reports of behavior before and after the child's participation in the

DI program, and teacher reports of behavior measured weekly. It is hypothesized that children will exhibit a decrease in maladaptive behaviors and an increase in pro-social behaviors as they continue to master language skills presented in the DI language programs.

**35. Measures of Impulsive Behavior and Autism Traits in an Adult Non-Clinical Sample** (AUT Autism; Applied Behavior Analysis) MELISSA LIVERMORE and Ruth M. Hurst (University of North Carolina, Wilmington)

This study investigated relationships between autism traits and impulsivity in a non-clinical sample of 415 young adults. Autism traits were measured using the autism spectrum quotient (AQ), a self-report measure designed to quantify the degree to which an adult with normal intelligence has traits associated with the autism spectrum. Impulsivity was assessed using a one-dimensional behavioral measure, the delay discounting task (DDT), and a multidimensional self-report measure, the Barratt Impulsiveness Scale-11 (BIS). Contrary to expectations, AQ scores were not significantly correlated with measures of delay discounting or the BIS, although several correlations between AQ domains and BIS factors were discovered. Additionally, no significant differences in performance on the DDT were detected between an AQ high score group (participants who endorsed the most autism characteristics) in comparison to an AQ low score group (participants who endorsed the least autism characteristics). As anticipated, there were no significant correlations detected between the BIS and DDT, suggesting that these measures are not assessing the same dimensions within the construct of impulsivity. Future research should continue this investigation to better understand how the construct of impulsivity may relate to autism spectrum disorder characteristics.

**36. Computerized Self-Control Training Procedures** (AUT Autism; Applied Behavior Analysis) Sarah M. Dunkel-Jackson and JAMES W. JACKSON (Southern Illinois University)

Self-controlled choice-making is an essential skill required for individuals with disabilities to decrease impulsive responding and increase adaptive functioning. While table-top, self-control training procedures can be effective at supporting optimal choice-making, their implementation can be time and labor intensive. Furthermore, these traditional methods may lack the strict treatment fidelity and reinforcer availability (e.g., movies, songs, and Web sites) that more modern, computerized methods provide. The current presentation demonstrates a flexible, computerized self-control training program dedicated to increasing the self-controlled repertoires of individuals with disabilities. Implementation barriers and successes will be discussed.

**37. A Statistical Comparison of Effect Size Metrics for Single-Subject Experimental Designs Used in Autism Research** (AUT Autism; Applied Behavior Analysis) OLIVER WENDT (Purdue University)

This poster will report the results from a statistical comparison of different effect size metrics to quantify treatment effect in single subject experiments (SSEs) of autism research. SSEs are typically examining pre-treatment versus post-treatment performance within a small sample of participants, or treatment versus no treatment conditions across individuals. The adoption of evidence-based practice (EBP) demands greater accountability and more reliable, objective results which has led to increased scrutiny of how SSE research is analyzed. Objective outcome measures are emphasized, especially “magnitude of effect” indices or “effect sizes” (ES). Including ES in published research displays the relative strength of various treatments. ES are also needed to summarize outcomes from SSEs for inclusion in meta-analyses. Two general types of statistical-summary strategies have been proposed for assessing magnitude of effect in SSEs, non-regression and regression approaches. Regression approaches determine efficacy of SSEs by using linear-regression techniques to model repeated observations. The resulting  $R^2$  regression ES can be converted to Cohen’s  $d$ , a popular ES in group designs. Non-regression approaches use the amount of non-overlapping data as an indicator of performance differences, i.e., the extent to which data in baseline versus intervention phases do not overlap is an accepted indicator of treatment effect.

**38. A Parent Education Program to Further Enhance the Developmental Growth of Infants At-Risk for Autism** (AUT Autism; Applied Behavior Analysis) CASANDRA NGUYEN and Erin McNerney (Autism Spectrum Therapies)

Children are being diagnosed with autism at very young ages. Current research has focused on identifying specific markers, or skill deficits in infants that may be indicative of a child being at-risk for a diagnosis of autism. In order to address these deficits, intervention needs to begin as early as possible. The present study presents the preliminary findings of a parent education program to help “at-risk” infants reach appropriate developmental milestones. Participants were parents of 28 infants classified as “at-risk” or assessed by the local regional center to demonstrate global developmental delays. The intervention program provided parents with information regarding typical infant development, and taught parents behavioral-based strategies to facilitate communication and social-interaction skills. Parents were taught strategies to encourage development of skills that previous literature has suggested are hallmark signs of a later diagnosis of autism. This study presents the overall program model and outcome data on parents’ fidelity of implementation of

specific strategies taught, and children's gains in communication and social skills. Results demonstrated overall gains were observed in the 28 children across five developmental areas: expressive language skills, receptive language skills, cognitive skills, and social/emotional skills.

**39. The Learning Team Approach** (AUT Autism; Applied Behavior Analysis)  
ALEXANDRA PETZ and Tara A. Glavin (Hope Institute Learning Academy)

Interventions for students with autism must be designed to meet the specific learning and behavioral needs of the student, implemented on a timely basis, provided by a highly qualified teacher or specialist, and monitored to determine progress and achievement of desired outcomes. The development of learning teams draws from several notable processes including response to intervention (RtI), positive behavior interventions and supports (PBIS) and professional learning communities (PLC). Learning teams meet at least three times weekly to review current levels of student performance and compare them to projected levels of achievement. Those who are already achieving above the goal level may be in need of an individual learning plan (ILP) to facilitate optimum growth. The ILP is a document that sets forth progress goals for a student who is achieving below predicted levels as evidenced by standardized tests, curriculum-based assessments, teacher observation, and other relevant data. The ILP includes the intervention(s) and specifies duration and frequency. We will study the effectiveness of the learning team approach based on the number of ILPs developed for academic and behavioral needs of students with autism, compared to the number of ILPs that were successful. The results of this study will further support the current body of research stating that a team approach to interventions for students with autism is more successful than individual staff approaches. Learning Teams development is meant to augment the IEP process, further differentiating instruction and supports to assure that the student is optimally successful in achieving IEP goals.

**40. Parenting Stress in Families With Children With Autism: A Theoretical Perspective from ABC-X Model** (AUT Autism; Theory) CHUNYAN YANG  
(University of Delaware)

Parenting children with autism is a highly stressful commitment. Whereas a variety of programs have been developed to improve the well-being of children with autism, few support parents in stressful situations. This poster presentation reviews empirical studies on parental stress in families with children with autism. The purpose is to understand the complexity of stressful situations parents face and to explore effective ways to support families. Based on ABC-X model of family stress theory (Hill, 1949), diverse perspectives about parenting children with autism are overviewed. Studies of families with children with autism are reviewed to



support the core components in the theory (stressors, family's definition and resources). Three main stressors are identified: disruptive autistic symptoms, high educational involvement, and heavy financial burden. Various stress coping strategies used by parents and social resources supporting families are discussed from an international perspective. Practical recommendations for professionals working with parents of children with autism are also provided. They include stressor-targeted prevention and intervention strategies, parent education, and social network support. The importance of parent educational programs is highlighted because of its pervasive influence to all three core components of ABC-X family stress model.

**41. Project TASK: An Inclusive Kindergarten Model for Students With Autism** (AUT Autism; Service Delivery) JUDAH B. AXE (Simmons College)

The purpose of Project TASK was to develop and evaluate a comprehensive program for kindergarten children with autism. Across the four years of the study a total of 42 children with autism from the model program and 21 students with autism recruited from four local school districts participated. Measures included standardized assessments for receptive and expressive language, cognitive functioning, social behavior, adaptive behavior, and academic achievement. Direct observations of child and teacher behavior (e.g., engagement, social interaction, prompt level) were conducted once a month for a minimum of 6,100 minutes per year for each student. Outcomes from Project TASK include an increase in scores on standardized assessments across all areas and improved levels of appropriate engagement in observed classroom activities as compared to the comparison subjects. Inter-observer agreement measures for the direct observations yielded mean levels of at least 90%. Initial results indicate reading mastery and social skills instruction; behavioral interventions and the use of naturally occurring learning opportunities to practice IEP objectives were effective in promoting achievement of kindergarten children with autism spectrum disorders in inclusive settings. This project may contribute to the establishment of more effective educational programs for children with autism spectrum disorders with reduction in the cost of services.

**42. ABA Teaching in Inclusive Classrooms: Explicit Instruction for Students With Autism Spectrum Disorders** (AUT Autism; Service Delivery) DEBRA A. LEACH (Winthrop University)

This poster presentation provides a framework for using applied behavior analysis (ABA) teaching strategies in inclusive classrooms to provide the explicit instruction students with autism spectrum disorders (ASD) may need. The framework is based on the original ABA dimensions presented by Baer, Wolf, and Risley in 1968 and draws on the teaching approaches

from a variety of ABA interventions that have been developed for students with ASD since that time. Procedures for conducting assessments to develop appropriate goals for social interaction, communication, behavior, academics, and independent functioning are included. A template for developing ABA teaching plans is included along with several sample lesson plans for practitioners to use or modify. Suggested methods for data collection and analysis that are useful and meaningful within the general education classroom provide a variety of options to monitor progress in an efficient, effective manner. The poster also includes instructions for how to set up a collaborative team including the general education teacher, special education teacher, parents, paraprofessionals, and related service providers.

#### **43. Community of Kindness: An Approach for Integration of Those With ASD** (AUT Autism; Applied Behavior Analysis)

T. J. GLAHN (The Children's Foundation)

Students with autism spectrum disorders need to learn to be successful within diversified types of communities. All communities across settings should incorporate a central premise that guides the climate to produce a universal community driven by evidence-based educational practices—practices that systematically and routinely impart leadership skills congruent with a Community of Kindness. This premise provides a climate of kindness that permits each community member to learn and utilize specific leadership strategies. Community of Kindness understands the need to teach all community members the importance of cohesive leadership and community membership. The inclusion of the individuals with ASD depends on the instructional components of each community to impart and support:

- The ability to compromise;
- Self-monitoring skills to promote self-change;
- Mutual agreements to negotiate, not demand;
- Power of alternatives for accepting there are alternate ways.

These identifiable skills and patterns of responding that utilize specific leadership skills have been documented throughout the social skills programmes imparting these measurable skills across four students with ASD. The outcome data and student records will be presented. And yes, *kindness* can be and should be empirically embraced and imparted by developing leader qualities in all students.

**44. Communication Repair Used by Verbal Students With Low-Functioning Autism** (AUT Autism; Applied Behavior Analysis) YOSHIHISA OHTAKE (University of Okayama)

This session will present the results of an investigation of the repair strategies used by elementary-aged verbal students with low functioning autism (N = 8) when they faced spoken request, gestural request, not attending and not responding, and wrong response. The data collection was conducted in request contexts contrived by the communication partner during free play and continued until six episodes for each of the four types of communication breakdowns had been collected. The students were assessed on two occasions with approximately a year in between. The results indicated that, in the both assessment occasions, they were more likely to repair communication breakdowns and use a lengthy communication when the type of breakdown was spoken request. In addition, they were more likely to modify the original communication forms and include communication forms referring to what they want when the type of breakdown was wrong response. The author will discuss the importance and the ways of contriving communication breakdowns, understanding the repair competences, and teaching effective repair strategies for students with low-functioning autism.

**45. Applied Behavior Analysis at George Mason University** (TBA Teaching Behavior Analysis; Applied Behavior Analysis) THEODORE A. HOCH, Johannes Rojahn, Michael M. Behrmann, and Kristy Lee Park (George Mason University)

This presentation describes the applied behavior analysis training program at George Mason University in Fairfax, Virginia. Location, coursework, practica, faculty, practicum supervisors, training stipends, cooperative arrangements, and more are presented. Additionally, potential students or other applicants are provided with contacts to gain additional information for this excellent program.

**46. The Effect of Naming on Decision Making in Teachers of Students With Autism** (TBA Teaching Behavior Analysis; Applied Behavior Analysis) SUSAN MARIANO-LAPIDUS (Mercy College); Christine M. Kelly (Graham-Windham, Children's Learning Center)

The most crucial element of teaching students with autism is decision making. This is even more pressing in applied behavior analysis as teachers are continuously engaged with student data. Yet, there is a paucity of teacher training methodologies available to assist teachers to develop the verbal repertoires required to make higher level data-based teaching decisions. The present investigation used a time lagged multiple probe design to study the effect of a teacher training protocol on the accuracy and level of decision making for classroom teachers of preschool

students with autism. A methodology that used a multiple exemplar instructional history was used to generate joint stimulus control of teachers' speaker-listener behavior that resulted in the naming capability. The teachers that participated in the study were fully licensed by New York State. They had little to no formal training in the science and methodology of applied behavior analysis. Results are reported in the pre- and post-performance of the number of teacher-produced novel, accurate decision making facts and the academic gains of students in criterion met, trials to criterion, and gains on standardized assessments.

**47. The Correlation Between Verbal Operants and Play in Preschool Dyads** (VRB Verbal Behavior; Applied Behavior Analysis) SUZANNAH J. FERRAIOLI (Rutgers University); and Meredith Bamond and Mary Jane Weiss (Douglass Developmental Disabilities Center, Rutgers)

Because of characteristic delayed or absent communication in individuals with autism, language skills are commonly targeted in behavioral programming. The verbal behavior approach has been particularly utilized for creating specific language goals (i.e., mands, tacts, echoics, and intraverbals). Although it is not central to the diagnosis of autism, many children also display deficits in play, especially in the areas of flexible, creative, and imaginative play. To date, no research has evaluated the relationship between verbal operants and specific types of play in either typically developing children (peers) or children on the autism spectrum (targets). In the current study, play samples of dyads (target with peer, target with target, peer with peer) from an integrated preschool were examined for the overlap of verbal operants with levels of play (i.e., solitary, parallel, associative, and cooperative). Between-group differences and trends in the correlation between verbal behavior and play types will be discussed.

**48. Increasing Engagement of Children With Autism During Parent-Child Picture Book Reading** (VRB Verbal Behavior; Service Delivery) NOREEN M. DONOVAN and Lisa Coyne (Suffolk University)

Parent storybook reading with young children has been shown to positively impact children's overall language development. Young children with autism are often delayed in language skills. Phase 1 of this investigation explores differences in quality of storybook reading between 30 mothers of typically developing children and 30 mothers of 3- to 6-year-old children with autism spectrum disorders. During Phase 2, mothers of autistic children were randomly assigned to view an instructional training demonstrating engagement skills or a control video, and subsequently both groups read non-worded picture books with their children at baseline, after the video, and at one month follow-up to assess maternal engagement behaviors (in particular, directing attention, imitation, and praise). Data collection is ongoing. Although results are not

significant, preliminary findings suggest that mothers of typically developing children report feeling more engaged during storytelling than mothers of autistic children during Phase 1 of the study. During Phase 2, mothers of autistic children in the experimental group reported that their children interacted more during storytelling than those viewing the control video. Implications of using video to train parents of children with autism to engage more during storytelling will be discussed.

- 49. Speech Pathology Special Interest Group** (VRB Verbal Behavior; Applied Behavior Analysis) Jamie M. Severtson (Trinity Services, Inc.); BARBARA E. ESCH (Esch Behavior Consultants, Inc.); and Tracie L. Lindblad (Four Points, Inc.)

The mission of the Speech Pathology Special Interest Group is to promote 1) dissemination of behavioral-oriented speech and language research and 2) application of evidence-based practices relevant to the full range of services provided by speech and language professionals. This collaboration between speech pathologists and behavior analysts has strong benefits for consumers of our services to treat speech, language, and swallowing disorders. In addition, it enhances communication between our related professions through conference presentations, collaborative research, workshops, publication of treatment protocols and materials, and many other venues.

- 50. The Use of Organizational Behavior Management Techniques in Human Service Settings** (OBM Organizational Behavior Management; Service Delivery) JEANA L. KOERBER, Krystyna A. Orizondo-Korotko, and Heather M. McGee (Western Michigan University)

This poster will describe the literature that has been published in the *Journal of Organizational Behavior Management* (JOBM) that utilizes performance improvement strategies in human service settings. Organizational behavior management (OBM) techniques have been used to improve many processes and practices in human service settings. A brief literature review of JOBM shows that OBM techniques have been utilized to increase supervisors' work enjoyment (e.g., Green, Reid, Passante, & Canipe, 2008), to reduce staff turnover and absenteeism (e.g., Boudreau, Christian, & Thibadeau, 1993; Strouse, Carroll-Hernandez, Sherman, & Sheldon, 2003), and to analyze how to effectively train staff (e.g., Fleming, Oliver, & Bolton, 1996; Methot, Williams, Cummings, & Bradshaw, 1996; Reid & Parsons, 1996), among many other things in human service settings. The purpose of the poster will be to demonstrate the utility and importance of utilizing OBM techniques in human service settings in order to maximize work enjoyment and productivity. Important tools, methods, and techniques for improvement will be discussed.

**51. Evaluation of Headsprout Early Reading Programme as a Literacy Teaching Aid in the School Environment** (EDC Education; Service Delivery) SHIH-YU WANG (Bangor University, Wales)

Reading is an important ability of academic learning for individuals acquiring information from written signals, letters, and words. Poor reading ability affects 75% of academic learning such as science and math ability. It leads to student boredom at school, playing truant, and doing something worse. Some instructions that have been used on improving reading skills include fluency-based instruction, direct instruction, and precision teaching in school. However, a new computer-based learning programme, Headsprout, emphasizes the convenience and the benefits of reading training in both home and school. Therefore, the aim of this study is to evaluate the effectiveness of the Headsprout early reading programme implemented in the school environment as a literacy teaching aid and the effectiveness of the programme's focus on five important reading components. The outcomes demonstrated that the Headsprout early reading programme effectively improves letter naming, phonemic awareness, fluency and accuracy, vocabulary, and comprehension.

**52. Outcomes of an Undergraduate Internship Program in Autism Spectrum Disorders: A Preliminary Analysis** (EDC Education; Service Delivery) TRACY LOYE MASTERSON and Rachel Zammito (John Carroll University); Kristine Turko (Mount Union College); and Julie Knapp and Francine Dimitriou (Cleveland Clinic Center for Autism)

With rates of autism spectrum disorders (ASD) continuing to rise, advanced level undergraduate students represent a relatively untapped resource that could increase the capacity of service providers for the autism community. In collaboration with the Cleveland Clinic Center for Autism (CCCA), selected students (n=12) at partnering universities (John Carroll University and Mount Union College) participated in an internship program during the 2009 spring and summer. Select students had the opportunity to participate in one of three tracks specializing in ASD: (1) center-based applied behavioral analysis classroom, (2) community-based behavioral treatment program, and (3) center-based research. Preliminary outcome data were analyzed (i.e., intern outcome evaluations, internship satisfaction ratings, and reflection papers). Across all rating categories, interns rated the internship as very good to excellent. Supervisors rated the majority (92%) of interns favorably on a variety of dimensions (e.g., motivation, responsibility, etc.); subsequently, the majority of interns have maintained involvement in working with children with ASD through CCCA. Interns also made qualitative comments regarding internship strengths; data will be utilized to enhance the internship program and provide guidance for other institutions considering similar collaborations.

Internships between universities and autism centers are mutually beneficial; outcome data suggests that students, organizations, and clients have benefited from the collaboration.

- 53. Using an iPod Touch to Teach Functional Routines and Self-Management Skills to a Student With Autism Spectrum Disorder** (EDC Education; Applied Behavior Analysis) Lindsey Ridenour (Genoa-Kingston School District); Jesse (Woody) Johnson and Erika Blood (Northern Illinois University); and Karen Simmons and STARLINE CROUCH (Genoa-Kingston School District)

An elementary student with autism spectrum disorders was taught to use an iPod Touch to assess video models of a series of three skills associated with independence and success in school settings: completion of functional routines, completion of independent work, and appropriate participation in cooperative learning groups. An intervention package consisting of video modeling and self-monitoring was sequentially implemented across three skill areas in the context of a multiple baseline across behaviors design. The student showed significant improvements in each skill when the iPod Touch intervention was implemented.

- 54. The Effects of Public Posting on Staff Behavior to Increase Completion of Educational Programs for Children With Autism** (EDC Education; Applied Behavior Analysis) JENNA K. NIKULA, Nell Maltman, Melissa Twarek, and Tara A. Glavin (The Hope Institute Learning Academy)

Educational programming for individuals with autism consists partially of one-on-one instruction focusing on specific targets (e.g., imitation, labeling objects, sight words). Consistent and frequent program implementation and data collection aids in acquisition and maintenance of targets for children with autism and allows staff to make data-based programming decisions. Supervisors in applied school settings often report that educational staffs frequently fail to run and complete student programs which subsequently hinder the desired progression for those students. The results of this study will be used to further a research base on feedback manipulations to alter staff behavior. This study will assess the effectiveness of a public posting strategy designed to increase the percentage of programs implemented correctly throughout the school day. Graphs depicting the percentage of programs completed will be displayed in a public area in each school setting. Two specialized educational settings for children with autism (one elementary and one high school) will be utilized. A multiple-baseline design across classrooms will show treatment effects. This research will help determine the extent feedback in public posting improves staff completion of educational programs.

**55. Adults With Autism Living in Their Own Homes: The Translation of “Safe and Happy” on the Delivery of Long-Term Support** (CSE Community Interventions, Social Ethical Issues; Service Delivery) Timothy D. Cripps and CARLOS V. GONZALEZ (Behavioral Services of Tennessee)

A comprehensive program rooted in the science of behavior analysis was used for the design of long-term support that allows eight adults with autism and displaying severe behavior problems to live successfully in their own houses. The design involved the close participation of the individuals, parents, and family members who initially helped to identify several critical components of each individual support and then participated in the quality assurance of each program. The model involved an innovative integration of all systems in a residential services agency including, but not limited to, staff selection, training, scheduling, monitoring, incident management, alert and crisis team dispatch systems, the tracking of habilitative outcomes, remote monitoring of staff performance, performance evaluations, and parents’ access to the daily service operations. This integration allowed the program to deliver services in a unique, efficient, and effective manner. Specific components of support, satisfaction measurement, and federal and state monitors’ evaluations are discussed.

**56. Employment Support for Students With Autism** (CSE Community Interventions, Social Ethical Issues; Service Delivery) MICHELLE LAROCQUE (Florida Atlantic University) and Dawn Hicks (Stand Among Friends)

Increasing numbers of students with autism are entering postsecondary educational institutions. The numbers of students with autism transitioning from high school to higher education is expected to increase even more in the decades to come due to increased implementation of federal laws. However, these students are often not prepared to enter the workforce, despite earning degrees. This presentation will present the unique, collaborative efforts of a non-profit agency and a university in addressing pre-employment and employment skills of young adults with autism. We will discuss how we utilized technology, role play, and scripts to prepare individuals for résumé writing, interviewing, and social skills in the work place.

**57. Evaluation of Video-Based Training and Feedback for Teaching Behavior Techniques to Technicians** (CSE Community Interventions, Social Ethical Issues; Applied Behavior Analysis) MELISSA NOSIK and W. Larry Williams (University of Nevada, Reno)

Training individuals to a competency level is critical for improving behavior and teaching skills to individuals with developmental disabilities. The expense and time involved in conducting training often limits the



amount that can be provided to staff members in various settings, which include day centers, private home tutors, and residential treatment homes. This study will evaluate two staff training methods for their effectiveness based on the staff member's ability to implement the procedures after being trained using these methods. Two video-based instructional videos will be shown and two different types of feedback will follow. In method A of feedback the learner will watch a model staff with a model person being given feedback after implementing the procedure they just learned, there will exemplars and non-exemplars demonstrated. In method B they will watch the same examples of implementation as method A, but staff being trained will have to identify mistakes that were made on their own and enter them into a computer-based training. Participants will be evaluated after receiving the instructional component of the training as well as after each type of feedback was delivered. Natural environment probes will be completed after participants reach 90% competency implementing the procedure with a model.

**58. Honey I Shrunk the World! BSTN Portal Innovating Residential Health Care Since 2000** (CSE Community Interventions, Social Ethical Issues; Service Delivery) Carlos V. Gonzalez and CLAYTON R. CEA (Behavioral Services of Tennessee)

An effort of incalculable scope has placed the software engineers of Wibsoft and the behavior analysts of Behavioral Services of Tennessee together to produce innovative human services software, "The Portal". The Portal allows the completion and synchronization of critical service tasks using Web-based software. Now regular staff and key agency supervisors can produce and monitor multiple records simultaneously in multiple locations. The system allows information sharing with an efficiency never seen before in the field of residential services. Guardians can access comprehensive information in real-time for greater peace-of-mind regarding the care of loved ones. In seconds, clinicians can complete complex root analyses for medication variances, high risk incidents, behavioral measures, and more. This fast access of information aids in immediate responding to and mitigating patient crises in an efficient and effective manner. The Portal increases the ability to provide and maintain an environment that actively promotes health, safety, and greater quality of life. This is a dream come true that really takes service delivery into the 21<sup>st</sup> Century. An automatic alert system helps prevent staff from sleeping on duty. Automatic scheduling of workers in multiple locations based on their availability and training qualifications maintains human resource efficiency and client safety. Multivariable tracking of medication variances, staff and client injuries, client sleep patterns, client behavior problems, reportable incidents, overtime contribution, staff training, clients' completion of daily activities and much more.



autism  
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**January 23**  
**saturday**

**opening remarks**

**invited presentations**

**poster session**

**exhibitors**

**bookstore**

## #2 Opening Remarks

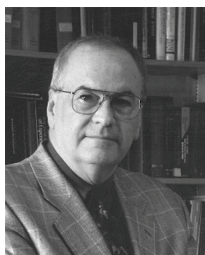
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8:00 a.m—8:15 a.m.

### Opening Remarks and Introduction

Travis Thompson, Ph.D., University of Minnesota

Gregory P. Hanley, Ph.D., BCBA, Western New England College



Travis Thompson received his Ph.D. in psychology at the University of Minnesota. He has conducted research, clinical practice, and teaching at the University of Minnesota, Vanderbilt University's John F. Kennedy Center, and the University of Kansas Medical Center. He is currently Supervising Psychologist at the Minnesota Early Autism Project in Maple Grove, MN, an early intensive behavioral intervention home-based therapy program. He has been an invited speaker in 47 states throughout the US and 14 foreign countries. He has published 230 articles and chapters and 30 books. His most recent books, *Making Sense of Autism* (2007), *Straight Talk About Autism* (2008), and *Freedom From Meltdowns: Dr. Thompson's Solutions for Children With Autism* are published by Paul H. Brookes. He is a Fellow in ABAI and past-president of the APA Division of Psychopharmacology and Substance Abuse and Division of Intellectual and Developmental Disabilities. He received the Research Award (AAIDD), Distinguished Research Award (ARC US), the Academy of Mental Retardation Career Scientist Award, the Edgar Doll Award and the Ernest Hilgard Award (APA), and Society for Advancement of Behavior Analysis's Impact of Science on Application Award. He is the grandparent of a 12-year-old with an autism spectrum disorder.



Gregory Hanley, Ph.D., BCBA, has over 19 years experience applying the principles of learning to improve socially important behaviors of children and adults with and without disabilities. Dr. Hanley is currently an Associate Professor of Psychology and Director of the Behavior Analysis Doctoral Program at Western New England College. Dr. Hanley has published over 50 articles in peer-reviewed journals in areas such as the assessment and prevention of problem behavior, teaching tactics for young children, and evidence-based values. Dr. Hanley is the Editor for *Behavior Analysis in Practice* and a past Associate Editor of *The Behavior Analyst* and the *Journal of Applied Behavior Analysis*. He was the 2006 recipient of the B. F. Skinner New Researcher Award by Division 25 (Behavior Analysis) of the American Psychological Association and was appointed a Fellow of the Association in 2007.

### #3 Invited Presentation

8:15 a.m.—9:15 a.m.

(BACB/PSY CE credit offered for this event.)

#### **Early Behavioral Intervention and Family Psychological Adjustment**

Bob Remington, Ph.D., University of Southampton



A growing body of empirical evidence attests to the benefits of early behavioral intervention (EBI) in the education of children with autism, and an ever-growing army of professional behaviour analysts is being assembled to deliver it. Because service delivery takes place in children's homes and schools, families are necessarily a major component of the treatment context, and family members may play key roles in the

intervention process. Although the importance of parents as therapists is often emphasized, their wider family roles and commitments are less frequently considered. Parents—and their children with autism—have important relationships with grandparents, siblings, and other family members. Although such factors may be central to the success of any intervention, a detailed and sensitive consideration of the family context is not typically seen as a critical component of good behavioral practice. This presentation will review the family adjustment literature on such issues as the decision to opt for EBI, the psychological and practical benefits and costs of commitment to an EBI program, and the long-term impact of EBI on the family.

If, as a result of its demonstrable effectiveness, EBI becomes more readily available through public provision, family issues will loom larger. In the future, it will be increasingly important to ensure not only that parents fully embrace a behavioral stance to the education and management of their children, but also that they have the psychological tools required to maintain their commitment to the values that led them to EBI in the first instance.

Publications authored by Bob Remington will be offered at the bookstore:

*The Challenge of Severe Mental Handicap: A Behaviour Analytic Approach*  
*Addictive Behaviour: Cue Exposure Theory and Practice*

More information regarding Dr. Bob Remington's publications is available starting on page 128.

#### #4 Invited Presentation

9:15 a.m.—10:15 a.m.

(BACB/PSY CE credit offered for this event.)

##### **A Comparison of Methods for Collecting Data on Students' Performance During Discrete Trial Teaching**

Dorothea C. Lerman, Ph.D., BCBA, University of Houston-Clear Lake



Data collection and progress monitoring are critical to effective teaching. A number of methods are commonly used to collect data on students' performance during discrete trial teaching. Methods that provide greater precision (e.g., recording the prompt level needed on each instructional trial) are more cumbersome to use than methods with less precision (e.g., recording the presence or absence of a correct response on the first trial only). However, the degree of precision needed to adequately monitor progress has not yet been thoroughly evaluated. In this presentation, commonly used data collection methods will be described, along with relevant research findings on these methods.

Dorothea Lerman is currently a Professor of Psychology at the University of Houston-Clear Lake (UHCL), where she coordinates a Master's program in applied behavior analysis and serves as Director of the UHCL Center for Autism and Developmental Disabilities. She received her doctoral degree in psychology from the University of Florida in 1995, specializing in the experimental analysis of behavior. Her areas of expertise include autism, developmental disabilities, functional analysis, teacher and parent training, and treatment of severe behavior disorders (e.g., aggression, self-injury).

Dr. Lerman has published more than 60 research articles and chapters; served as an Associate Editor for *The Journal of Applied Behavior Analysis* and *Research in Developmental Disabilities*; and is the founding Editor of *Behavior Analysis in Practice*. She was named a fellow of the Association of Behavior Analysis International in 2008. She also was the recipient of the 2007 Distinguished Contribution to Applied Behavioral Research Award and the 2001 B. F. Skinner Award for New Researchers, awarded by Division 25 of the American Psychological Association.

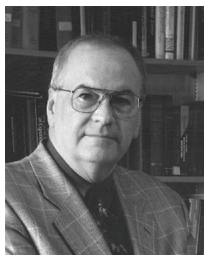
## #5 Invited Presentation

10:30 a.m.—11:30 a.m.

(BACB/PSY CE credit offered for this event.)

### Intensive Early Behavioral Intervention and Brain Development

Travis Thompson, Ph.D., University of Minnesota



Early intensive behavioral intervention (EIBI) has a major impact on social, language, and intellectual development of many children with autism. Approximately half of children receiving such intervention function adaptively in the neurotypical range by seven years of age, but the remainder do not. Therapists, teachers, and parents are puzzled about the reason some children profit greatly for EIBI and others make lesser gains. Increasing evidence from neuroimaging,

basic neuroscience, and genetic research may supply the answer. Growing evidence suggests the mechanism that may underlie these differences in permanent changes, involves increasing formation of synapses (brain connections) in structures that are often dysfunctional among children with autism spectrum disorders. The underlying difference among children making great gains from EIBI and those that do not appears to be a genetic error in formation of brain connections. Among EIBI “responders,” specific genetic lesions are present that depend on activity within those brain structures to reverse. Intensive behavioral intervention appears to overcome lack of brain connectivity by turning on activity-dependent genes in dysfunctional brain structures. Children who are less responsive appear to have brain dysfunction brought about by other mechanisms.

Publications authored by Travis Thompson will be offered at the bookstore:

*Making Sense of Autism*

*Dr. Thompson's Straight Talk on Autism*

*Freedom From Meltdowns: Dr. Thompson's Solutions for Children With Autism*

*Self-Injurious Behavior: Gene-Brain-Behavior Relationships*

*International Handbook of Applied Research in Intellectual Disabilities*

More information regarding Dr. Travis Thompson's publications is available starting on page 129.

## #6 Discussion and Audience Q&A

11:30 a.m.—11:45 a.m.

Chair: Craig H. Kennedy, Ph.D., BCBA, Vanderbilt University

This discussion will cover topics and presentations from the morning sessions. Questions will be taken from the audience.

## #7 Invited Presentation

1:15 p.m.—2:15 p.m.

(BACB/PSY CE credit offered for this event.)

### **Augmentative Communication Strategies With Children With Autism and Severe Disability**

Joe Reichle, Ph.D., University of Minnesota



This presentation will focus on a description of evidence based advances in the application of augmentative communication systems with individuals who experience autism spectrum disorders (ASD). Emphasis will be placed on the following topical threads: 1) implementing functional communication training and self regulation strategies to replace escape, tangible, and attention maintained challenging behavior; 2) establishing the conditional use of communicative functions; and 3) describing the collateral effect of augmentative communication on speech production and spoken language comprehension. Additionally, there will be a description of strategies that have a broadening base of experimental support. A technical assistance model to establish these strategies in an educational service delivery system and an evaluation of the model will be offered.

Dr. Joe E. Reichle is a Professor in the Department of Speech-Language-Hearing Sciences and the Department of Educational Psychology at the University of Minnesota. He directs the Autism Certificate Program at the University of Minnesota and is Co-Principal Investigator of the Minnesota LEND Interdisciplinary Leadership Training Grant in Neurodevelopmental Disorders. Dr. Reichle is affiliated with the Center for Early Education Development and is a Fellow of the American Speech-Language-Hearing Association. For the past 28 years he has worked in regular and special education programs serving populations with ASD. He has successfully established technical assistance programs in the area of positive behavioral support with a number of school districts in Minnesota. Currently he is Co-Principal Investigator on a federally funded subcontract conducting a clinical trial examining comprehensive curricula for preschoolers with ASD. Dr. Reichle has published over 55 peer reviewed articles on augmentative and alternative communication and challenging behavior. He has been Associate Editor for the *Journal of Speech, Language, and Hearing Research* and *Augmentative and Alternative Communication*.

A publication by Joe Reichle will be offered at the bookstore:

*Communicative Competence for Individuals Who Use AAC*

More information regarding Dr. Joe Reichle's publications is available starting on page 128.



## #8 Invited Presentation

2:15 p.m–3:15 p.m.

(BACB/PSY CE credit offered for this event.)

### **A Standardized Approach for Individualizing School-Based Interventions for the Challenging Behaviors of Students with Autism**

Glen Dunlap, Ph.D., University of South Florida



Behavior analysis has made great progress in assessment and intervention for challenging behaviors; however most schools still lack the knowledge and resources needed to resolve serious behavior problems in classrooms and other school settings. As a result, many students with disabilities, including autism, continue to exhibit disruptive behaviors that present great risks to physical and emotional well-being and interfere with optimal educational opportunities. A need

exists for strategies that are standardized (and manualized) so that large numbers of school professionals can use the existing technology of behavior support effectively. The “Prevent-Teach-Reinforce” (P-T-R) model of individualized, school-based intervention was developed to address this need. The purpose of this presentation is to describe the conceptual background and implementation procedures of the P-T-R model. In addition, data will be shared from a large-scale, randomized control evaluation study conducted over four years in school districts in Florida and Colorado. The results of the study showed that school-based professionals (e.g., teachers) were able to use the model’s strategies with acceptable fidelity and that implementation of the model resulted in reduced levels of challenging behaviors and increased levels of appropriate task engagement. These findings offer encouragement for the effective “scaling up” of behavioral models so that the thousands of students with autism spectrum disorders and related disabilities can benefit from interventions delivered by their teachers and associated school personnel.

Glen Dunlap is a research professor in the Florida Mental Health Institute at the University of South Florida, where he works on research, training, and demonstration projects in the areas of behavior support, early intervention, family support, foster care, and autism and other developmental disabilities. Glen has been involved with individuals with autism for more than 35 years and has served as a teacher, administrator, researcher, and university faculty member. He has been Principal Investigator for multiple grants and research institutes including the National Center for Evidence-Based Practice: Young Children With Challenging Behavior. Glen was instrumental in establishing statewide and state-funded programs for autism in West Virginia and Florida, and oversaw the development of these programs for many years in the 1980s and 1990s. Dr. Dunlap has authored more than 190 articles and book chapters, co-authored or co-edited seven books, and served on 15 editorial boards. Glen was a founding Editor of the *Journal of Positive Behavior Interventions* and currently serves as Editor of *Topics*

in *Early Childhood Special Education*. He moved to Reno, Nevada in 2005, where he continues to work on research and training projects as a member of the faculty at the University of South Florida.

Publications authored by Glen Dunlap will be offered at the bookstore:

*Prevent-Teach-Reinforce: The School-Based Model of Individualized Positive Behavior Support*

*Handbook of Positive Behavior Support*

*Positive Behavioral Support: Including People With Difficult Behavior in the Community*

*Generalization and Maintenance: Lifestyle Changes in Applied Settings*

More information regarding Dr. Glen Dunlap's publications is available starting on page 127.

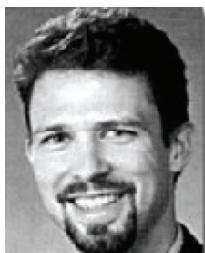
### **#9 Invited Presentation**

3:30 p.m.—4:30 p.m.

(BACB/PSY CE credit offered for this event.)

#### **Identifying Effective and Preferred Behavior-Change Programs: A Case for the Objective Measurement of Social Validity**

Gregory P. Hanley, Ph.D., BCBA, Western New England College



The adoption of effective behavioral interventions and teaching strategies for young children is largely influenced by the extent to which stakeholders find the procedures appropriate and the effects important. Stakeholder values have been described as measures of *social validity* in applied behavior analysis, and these measures have been a part of behavior-analytic research and practice since their important characteristics were

described the late 1970s (Kazdin, 1977; Wolf, 1978). A brief review of the current state of affairs regarding social validity assessments conducted for the benefit of young children will be provided. Published examples in which the empirically-derived values of children were identified and used to inform clinical and educational decisions for the same children will then be described in detail. The importance of several tactics for determining the social acceptability of critical features of intensive behavioral intervention with the children receiving the services will also be described.

### **#10 Discussion and Audience Q&A**

4:30 p.m.—4:45 p.m.

Chair: Dorothea C. Lerman, Ph.D., BCBA, University of Houston-Clear Lake

This discussion will cover topics and presentations from the afternoon sessions. Questions will be taken from the audience.

## **#11 Special Interest Group Overview**

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4:45 p.m.—5:15 p.m.

### **Autism Special Interest Groups for Parents and Professionals**

## **#12 Poster Session**

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5:30 p.m.—7:00 p.m.

Columbus Hall

- 1. Increasing Spontaneous Eye Contact in an Early Childhood Developmentally Delayed Preschool Classroom** (AUT Autism; Applied Behavior Analysis) AMANDA JEAN KOWALSKI and Richard W. Malott (Western Michigan University)

The focus of this case study was to increase eye contact in the absence of prompts. An AB design was used to assess the frequency of spontaneous eye contact with a 3-year-old child diagnosed with autism. The child was selected from an early childhood developmentally delayed (ECDD) classroom in southwest Michigan. In order to increase spontaneous eye contact, a highly preferred item was first selected (DVD player). After unprompted eye contact was made, the DVD player was presented for 30-60 seconds. The requirement for duration of eye contact was increased over time. Once unprompted eye contact was established, high probability tasks were introduced and eye contact was required preceding and following task presentation in order to gain access to the DVD player. Previous attempts to increase eye contact using auditory and visual tracking techniques (i.e., “Look at me,” or calling the child’s name) in a discrete trial format were unsuccessful. The study focused on eye contact, a necessary prerequisite skill to target deficits in the child’s repertoire.

- 2. Use of a Token Economy to Increase Appropriate Sitting** (AUT Autism; Applied Behavior Analysis) TIALHA NOVER and Richard W. Malott (Western Michigan University)

The current case study looks at the effects of a fixed-interval token economy on increasing appropriate sitting behavior for a preschooler diagnosed with autism. Prior to implementation of the token economy, behavior such as flopping to the floor, lying across the table, and facing away from the tutor occurred regularly. Baseline data were taken on compliant sitting behavior. Sitting behavior included sitting in the chair or bean bag facing the tutor, or sitting or standing by the table facing the tutor. A changing criterion design was then implemented for the fixed-interval economy and training began with a one-minute goal line. Criterion was raised in one-minute increments with a final goal of 10 intervals. All data were taken with multiple whole-interval observation probes. Further research on specific token economies will allow us to more effectively control behavior while keeping reinforcement rates high.

**3. Matching to Receptive Skill Transfer** (AUT Autism; Applied Behavior Analysis) KELLY STONE (Western Michigan University)

Receptive identification of 3D objects is a difficult skill for many children with autism spectrum disorder (ASD). Matching to sample is a skill that is generally taught early on in the intervention and is mastered quickly. The purpose of this study was to see if a transfer from matching to sample to the receptive identification of 3D objects can be achieved. The study was done with a 3-year-old child diagnosed with ASD who displayed excellent matching skills, but was deficit in receptive identification of objects. Baseline data were collected and then three phases of matching trials were taught using the item name and the sample stimulus as the discriminative stimuli. The sample stimulus was faded out to transfer the matching skills to receptive skills. Data were collected for each trial. This study will be beneficial in demonstrating an effective transfer of skills across operants, and can be used for other children who have achieved matching skills but have not yet displayed receptive skills.

**4. Functional Assessment of a Developmentally Delayed Child** (AUT Autism; Applied Behavior Analysis) TIFFANY MARIE SMIECINSKI, Richard W. Malott, Kelli Perry, and Joseph T. Shane (Western Michigan University)

The purpose of the functional assessment (FA) was to determine the function of several problem behaviors of a young child. The child is a 3-year old girl diagnosed with autism spectrum disorder (ASD). The setting consisted of an early childhood developmentally delayed (ECDD) preschool classroom within a special education school in Kalamazoo, Michigan. The assessment included target behaviors such as throwing, aggression towards therapists, biting, and dropping to the floor. Previous attempts to decrease problem behavior doing things such as simply ignoring problem behavior or following through with tasks didn't seem to work. If they did work, however, that would be evidence of only an attention or only an escape component as the function of the behavior. The FA served to find the true function of behavior so we could be accurate in designing the proper intervention. Video-taping was done to ensure accuracy with getting both baseline data and the functional assessment data.

**5. Practical Considerations for Function-Based Treatment at an Early Childhood Developmentally Delayed Preschool Classroom** (AUT Autism; Applied Behavior Analysis) MATT BRODHEAD, Kristen L. Gaisford, Woan Tian Chow, Breanne K. Hartley, and Richard W. Malott (Western Michigan University)

This case study describes methods used to develop a function-based treatment plan for a child with autism in an early childhood developmentally delayed (ECDD) preschool classroom. Functional communication training and non-contingent reinforcement procedures were developed by the

authors, classroom staff, and other service providers from the school made modifications to the child's curriculum and occupational therapy procedures. Various changes were made to the treatment plan after it was implemented, primarily to enhance its effectiveness and secondarily to meet the needs of the ECDD classroom procedures. Supervision protocols and techniques were also modified throughout the program in order to obtain procedural continuity between tutors who implemented the protocol. Final modifications to the project involve finding a balance between function-based treatment procedures and meeting the child's educational goals. Practical considerations for providing behavioral services in a multi-disciplinary setting are addressed, along with considerations for a practitioner approach to function-based treatment in this setting.

**6. Reducing Problem Behavior in an ECDD Classroom (AUT Autism; Applied Behavior Analysis) JOSEPH NORCROSS, Amanda Jean Kowalski, Tialha Nover, and Richard W. Malott (Western Michigan University)**

The purpose of this presentation is to demonstrate the power of behavior analysis in reducing problem behavior in an early childhood developmental delayed (ECDD) classroom. One child was identified to have high levels of problem behavior that interfered with learning. We conducted a functional assessment to identify the function of the problem behavior. Tutors were videotaped running sessions of discrete trial training with the child, and descriptive data were collected and analyzed to identify possible functions of the problem behavior. After implementing the intervention, tutors collected probe data to test the effectiveness of the intervention strategies, which included reinforcing prompted responses, tutor training, and removal of lessons for which the child did not have the appropriate prerequisite skills. We then videotaped the tutors again to collect post-intervention data. Using a withdrawal design, we determined which of the intervention strategies were responsible for the reduction in problem behavior.

**7. Echoic to Mand Transfer (AUT Autism; Applied Behavior Analysis) DANA PELLEGRINO and Richard W. Malott (Western Michigan University)**

Manding is a crucial part of any early intervention program, as children with autism often have defective mand repertoires. Echoic behavior can be used to train manding through the use of a transfer across operants procedure. This study used echoic-to-mand training to develop the manding repertoire of a 3-year-old child with autism. Baseline data were collected in October 2008 when the child began therapy at the Kalamazoo Autism Center. She had essentially no vocal behavior, as determined by a verbal language assessment. After several months in the program, she acquired a generalized imitative repertoire and eventually echoic behavior consisting of simple phonemes. The echoic-to-mand procedure was

implemented in August 2008 and recycled two months later. The recycle phase gave the child more echoic phase practice, as she exhibited high rates of vocal scrolling during the mand phase; a more structured preference assessment determined the most highly preferred reinforcers. This study offers support for echoic-to-mand transfer procedures and helped establish several vocal mands in the child's repertoire.

**8. Increasing Vocalizations in a Child With Autism Using a Stimulus-Stimulus Pairing Procedure** (AUT Autism; Applied Behavior Analysis) JOSEPH T. SHANE and Richard W. Malott (Western Michigan University)

The child who participated in this intervention was a 2-year-old male diagnosed with autism. He was receiving services in a classroom serving children with early childhood care developmental delays (ECCD). The subject had no functional verbal behavior at the beginning of the intervention, and his vocal behavior consisted of repeating a limited number of sounds (primarily only one sound) assumed to be maintained by automatic reinforcement. The goal of this intervention was to increase the number of different vocalizations that the subject would reliably emit. A secondary benefit of this intervention was to decrease certain repetitive vocalizations. Contingent upon a successful first phase, the intervention then shifted to a basic mand training phase. The intervention's first phase was a stimulus-stimulus pairing procedure designed to increase the frequency of target sounds and establish an automatically reinforcing property for those sounds. Following this phase, the new sounds were established as mands, using a basic mand training procedure. The intervention took place in the child's normal school environment.

**9. Using Response Prompting and Computer-Assisted Instruction to Teach Generative Writing to Students With Autism** (AUT Autism; Applied Behavior Analysis) ROBERT PENNINGTON (University of Louisville); Donald M. Stenhoff (BISTA); and Jason L. Gibson (University of Kentucky)

Written expression is a critical skill because it is used to access reinforcement in a variety of contexts. Unfortunately, there has been little research on writing skills instruction for students with autism spectrum disorders. The purpose of the current study was to evaluate the effects of simultaneous prompting and computer-assisted instruction on the story-writing responses of a 7-year-old male with autism. The researcher used simultaneous prompting to teach the participant to construct stories by selecting words from an array presented via computer software. The researcher evaluated intervention efficacy using a multiple probe design. In addition, the researcher compared the use of Web-based video conferencing software to traditional face-to-face observation methods for collecting reliability data. Data indicated that intervention was effective across all targeted responses. Additionally, the student maintained effects

at two and four weeks following intervention and generalized responding across different topographies (i.e., handwriting, vocal). Data also indicated 100% agreement across Web-based and face-to-face data collectors.

#### **10. Using Errorless Learning to Evaluate the Rate of Skill Acquisition in Teaching Children With Autism**

(AUT Autism; Applied Behavior Analysis) HANNA WOLDE and Amanda N. Adams (California State University, Fresno)

The purpose of this study was to investigate the effectiveness of errorless teaching procedures in skills acquisition of children with autism in early intensive behavioral treatment based on principles of applied behavior analysis (ABA). The study compared a standard error correction procedure and an errorless teaching procedure during teaching sessions to four children with autism. Two lessons and two skills for each lesson were selected for each participant. One skill was taught using errorless teaching procedure and the other was simultaneously taught using error correction method. Results indicated that all four participants, on average, acquired skills 44% faster using the errorless teaching procedure than with the standard error correction method. Moreover, on average, it took participants 4.25 probe sessions to master a lesson or skill taught using errorless procedure compared to 7.6 sessions with error correction. These results support previous findings that errorless teaching procedures are superior to standard error correction in skills acquisition for children with autism spectrum disorders.

#### **11. The Effects of Self-Management Teaching on Social Communication Skills of a Junior High School Student With Autism** (AUT Autism; Applied Behavior Analysis) CHIA-YANG LU and Hua Feng (National Changhua University of Education)

The study was to investigate the effect on social communication skills of a student with autism by giving self-management training. A seventh-grade junior high school student with autism participated in the study. A single-subject experimental design of multiple probes design across settings was used in this study. The independent variable of this study was self-management training. The dependent variables of this study were the percentage of correct social communication maintained, and generalized outcomes of the dependent variables. The results showed great improvement of the social communication skills across different settings. The results also displayed favorable results in stimulus and response generalization, respectively. The study also provided suitable social validity from the perspectives of homeroom teacher, former elementary school teacher, and parents. The parents and teachers strongly agreed on the importance of self-management training and treatment outcomes.

**12. Training Yes-No Responses to Children With Autism: A Systematic Replication** (AUT Autism; Service Delivery) MELISSA M. OTTO and Tanya Y. Baynham (Kansas City Autism Training Center)

Teaching children with autism to answer yes-no questions can increase access to positive events and decrease access to aversive stimuli. Despite the importance of the skill for children with limited language repertoires, very little research on teaching methodology is available to practitioners. In the current study, we systematically replicated procedures described by Neef, Walters, and Egel (1984) to increase yes-no responding when teachers asked, “do you want this?” with three children with autism. Data were collected on the number of correct yes responses (i.e., nods or a vocal “yes” in the presence of a preferred item) and no responses (i.e., head shakes or a vocal “no” in the presence of a non-preferred item). Results showed that the procedure was successful in teaching 3 of 3 students the target skill. Recently, Shillingsburg and colleagues (2009) were unable to train the “no” response under mand conditions. Possible reasons for their failure and implications for practice are discussed.

**13. Using Video Modeling to Teach Children With Autism to Respond to Facial Expressions** (AUT Autism; Applied Behavior Analysis) Judah B. Axe and CHRISTINE EVANS (Simmons College)

Young children with autism often exhibit delays in responding to facial expressions and few studies have examined teaching subtle facial expressions to this population. Three participants with autism (age 5) in a suburban early childhood school were taught to respond to facial expressions using video modeling. Eight facial expressions were targeted: approval, bored, calming, disapproval, disgusted, impatient, pain, and pleased. Probes consisted of showing an adult performing these facial expressions in a video and generalization probes across live adults and settings were conducted. Training was showing a video of an adult modeling a response to each facial expression. The effects of the training were evaluated in a multiple probe across behaviors design. Interobserver agreement and data were collected on 33% of sessions across participants, conditions, and tiers and was a mean of 98% (range 88-100%). Two participants correctly responded to all facial expressions across people and settings after viewing the video models one or two times. Experimental control was achieved with the other participant, though he required more training sessions and was less consistent with responding. Future researchers should evaluate ways to teach and test responding to facial expressions under naturalistic conditions.



**14. A Comparison of Discrete Trial Teaching With and Without Gestures/Signs in Teaching Receptive Language Skills** (AUT Autism; Applied Behavior Analysis) ONUR KURT (Anadolu University)

The purpose of the proposed poster is to share the effectiveness and efficiency of a specific version of using discrete trial teaching with children with autism. There are research studies investigating the effectiveness of various methods on teaching language skills to children with autism. However, very little attention has been paid to teaching receptive language skills to children with autism to date. This study was designed to compare the effectiveness and efficiency of two discrete trial teaching procedures for teaching receptive language skills to children with autism. While verbal instructions were delivered alone during the first procedure, all verbal instructions were combined with simple gestures and/or signs during the second procedure when teaching receptive language skills by using discrete trial teaching. A parallel treatments design was used to compare the effectiveness and efficiency of the two procedures on the acquisition of the receptive language skills of the students. Two students with autism participated in the study. The results of the study showed that the discrete trial teaching procedure in which verbal instructions were combined with simple gestures and/or signs was slightly more effective and efficient on promoting the acquisition of receptive language skills for both students.

**15. Reinforcement Techniques to Reduce Problem Behavior During Haircutting in Children With Autism** (AUT Autism; Applied Behavior Analysis) HUGO CURIEL and Marianne L. Jackson (California State University, Fresno)

Some children with autism display significant problem behavior during routine haircuts, often times resulting in the use of restraints, which can make the procedure more aversive. Other parents attempt to cut their child's hair while they are asleep. However, this approach could lead to injuries, depending on the tools being used. Negative social impact could also be a problem in this population, due to their overgrown hair. The intervention included three children with autism and consisted of a pre-exposure phase, followed with a reinforcement procedure, involving a hair-cutting machine. Baseline measures of tolerance to the machine being turned on were followed with pre-exposure trials, in which the child could hold and manipulate the machine. Intervention consisted of reinforcing longer intervals of time with the machine on the child's head. Data suggest this procedure may be a useful method of reducing problem behavior and the resulting need for restraint during routine haircuts.

**16. The Effects of Using TAG Teaching to Reverse Toe Walking in a Four-Year-Old Child With Autism** (AUT Autism; Applied Behavior Analysis) ANGELA M. PERSICKE and Marianne L. Jackson (California State University, Fresno)

Many children with autism exhibit toe walking from an early age. Consistent toe walking can be damaging to the leg and ankle muscles as the child gets older making it more difficult for a child to walk flatfooted. At the Central California Autism Center in Fresno, California, we conducted a study to reverse toe walking exhibited by a 4-year-old boy through the use of teaching with acoustical guidance (TAG). TAG is a method of teaching behaviors through positive reinforcement by using a “click” sound that identifies correct behaviors. In this study, the click sound was paired with an edible reinforcer prior to implementation. During implementation, the click sound was emitted after every flat-footed step the child took. This has implications for reversing toe walking in many children with autism and can easily be used by teachers and parents.

**17. Increasing Functional Play Skills in Children Diagnosed With Autism Using Stereotypy as Reinforcement** (AUT Autism; Applied Behavior Analysis) JACQUELINE N. POTTER, Gregory P. Hanley, and Meredith C. Phelps (The New England Center for Children)

The purpose of this study was to teach age-appropriate play skills to a child who engaged in high levels of stereotypic behavior that was noninjurious. A critical feature of our teaching strategy was that we used the child’s own stereotypy as a reward for engaging in successively more complex play behavior. A functional analysis was completed and showed that stereotypy persisted in the absence of social consequences. We then sequentially analyzed the effects of enriching the environment with activities, prompting engagement, blocking stereotypy, and allowing the child brief periods of time to engage in the stereotypy for engaging in progressively larger amounts of functional play. Interobserver agreement data were collected during 33% of sessions, and all measures averaged over 80% agreement. Results showed increases in functional engagement and decreases in stereotypic behaviors only when all treatment components were present. More and qualitatively better play was then observed across three distinct activities when, and only when, requirements to access stereotypy were systematically altered over months of assessment.

- 18. Evaluating the Effects of a Weighted Vest for Three Individuals With Autism** (AUT Autism; Service Delivery) SHAWN QUIGLEY (Western Michigan University); Lloyd D. Peterson (Sam Houston State University); Jessica E. Frieder (Armstrong Atlantic State University); and Stephanie M. Peterson (Western Michigan University)

The effects of a 5% and 10% total body weight vest on problem behaviors in children with any pervasive developmental disorder were investigated. Problem behaviors were determined using a questionnaire interview and then observed within the methodologies of a functional analysis (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982, 1994). The effects of a weighted vest were tested replicating the functional analyses methodologies while the participants wore the vest. Results indicated that there was no functional relationship between a 5% or 10% weighted vest and the participants' problem behaviors. A secondary operant-based intervention further showed that there was a functional relationship between the participants' problem behaviors and environmental events.

- 19. Pre-Service Teacher Implemented Social Stories for Students With Autism in Inclusive Classroom Settings** (AUT Autism; Applied Behavior Analysis) JEFFREY MICHAEL CHAN (Northern Illinois University); and Mark F. O'Reilly, Pamela White, Nigel Pierce, and Sonia Denise Baker (University of Texas at Austin)

Social stories are one of the most commonly-used interventions for children with autism (Green et al., 2006; Hess, Morrier, Heflin, & Ivey, 2008). Six students diagnosed with autism spectrum disorders participated and behaviors that occurred in their general education classrooms were selected as targets. Pre-service teachers, in-service teachers, and a paraprofessional were trained to implement the intervention. Participants were observed in their general education classrooms during 30-minute data collection sessions. For three participants, a time delay of at least 3 1/2 hrs was presented between intervention and observation sessions. Overall, results indicate improvements in target behaviors for 5 of 6 participants. Results of the delay condition show inconclusive effects of the time gap following social stories sessions. Peer comparison data demonstrate that participants who showed improvement in their behavior performed the target skills at levels comparable to classmates without disabilities. Treatment fidelity data indicate that pre-service teachers were able to accurately implement the intervention throughout the study. In-service and pre-service teachers rated the intervention as socially acceptable and feasible within the classroom setting.

**20. Functional Analysis of Self-Injury in Autism: Need for Medical Assessment Compliance** (AUT Autism; Applied Behavior Analysis)  
SARAH M. DUNKEL-JACKSON and Mark R. Dixon (Southern Illinois University); and Susan Szekely (Illinois Center for Autism)

The high incidence of severe aberrant behaviors and comorbid medical conditions among individuals diagnosed with autism not only adds to the complexity of an already puzzling spectrum disorder, but also of appropriate diagnoses and treatments for challenging behaviors. Before experimental assessments and function-based treatments can be conducted, medical professionals must first rule out any underlying medical trauma or disease as a contributing factor. However, difficulties exist when severe challenging behaviors accompany and amplify complete medical refusal. Using a treatment package based on desensitization and video-modeling research (Altabet 2002; CASD, 2006; Cuvo et al., 2009; Huckfeldt et al., 2007; Luscre & Center, 1996), the current study aimed to increase the medical assessment compliance of an adolescent diagnosed with autism spectrum disorder exhibiting medical refusal complicated by severe, self-injurious behavior.

**21. Using Schedule Thinning and Visual Cues to Reduce High-Rate Requesting Behavior in Children With Autism** (AUT Autism; Applied Behavior Analysis) JESSICA ZANTON, James W. Halle, and David M. Richman (University of Illinois)

Communication delays are a characteristic feature of autism. Failure to communicate efficiently and effectively often leads to behaviors that are challenging to communication partners. Functional Communication Training (FCT) is a method of teaching an alternate communication form to pre-linguistic communicators. Because the requested outcome is provided every time that it is requested during intervention, high-frequency requesting tends to continue post-intervention. Caregivers' inability to respond immediately and continuously to all requests often results in resurgence of challenging behaviors. Multiple schedules with visual cues have been used to teach discrimination of times requests will or will not be honored (Tiger, Hanley, & Neal, 2006). Delay tolerance is enhanced by providing preferred activities during delays, and gradually increasing delays (schedule thinning). This poster session addresses schedule thinning of manding by presenting a study conducted by the authors in which a multiple-baseline across activities design was successfully utilized to teach discriminated responding to two children with autism. Recommendations will be provided to support practitioners who work with children with communication delays.

**22. Eliminating Disruptive Screaming Episodes in the Classroom: A Case Study** (AUT Autism; Applied Behavior Analysis) AMANDA M. MAHONEY (Western Michigan University); and John W. Esch and Barbara E. Esch (Esch Behavior Consultants, Inc.)

The purpose of this study was to decrease screaming episodes of one child diagnosed with autism. A functional analysis suggested that screaming was maintained primarily by escape, although multiple functions were identified. Phase 1 combined escape extinction with functional communication training (FCT) and was conducted in a 1:1 setting. Phase 1 results showed moderate decreases in frequency of screaming episodes, from 35%-55% of intervals to about 15% of intervals. During Phase 2, escape extinction and FCT were combined with token reinforcement and differential reinforcement of other behavior resulting in a decrease to near-zero in the percentage of intervals in which screaming occurred. These results suggest that escape extinction coupled with mand training may not be sufficient to decrease maintained screaming behavior to acceptably low levels. Programmed reinforcement for on-task behavior, such as a token system, might be a necessary component to decrease screaming to low levels.

**23. Boosting the Effectiveness of Functional Communication Training Using an Abolishing Operation to Diminish the Reinforcing Value of Maladaptive Behavior: A Pilot Study** (AUT Autism; Applied Behavior Analysis) DIANE LYNCH FRASER (Association Française de l'ABA); Christian Pradier (Université Nice Sophia Antipolis); Anne Guennoun and Audrey Huver (IME Les Coteaux d'Azur ABA Apprendre Autrement); and Raphaëlle Trucchi (SESSAD Les Coteaux d'Azur ABA Apprendre Autrement)

An alternating treatment design was used to compare two conditions: one in which the child was encouraged to participate in maladaptive behavior (the abolishing operation component) prior to the functional communication training (FCT) and another condition in which the abolishing operation component was absent. Levels of maladaptive behavior were lower and levels of functional communication were higher in the condition with the abolishing operation component. These data provide support for using an abolishing operation component to improve functional communication with children with autism.

**24. Undifferentiated Responding During Choice Analysis** (AUT Autism; Applied Behavior Analysis) CARRIE BROWER-BREITWIESER (Idaho State University); Stephanie M. Peterson (Western Michigan University); Elizabeth Dayton (Idaho State University); Jessica E. Frieder (Armstrong Atlantic State University); Stuart M. Mullins (Idaho State University); and Shawn Patrick Quigley and Manish Goyal (Western Michigan University)

The purpose of this research (funded by an Institute for Education Sciences grant) was to evaluate the effects of a concurrent schedule of reinforcement for individuals with escape-maintained problem behavior. The three response options available were: completing a typical academic task (amount of work varied depending on phase), manding for a break from an academic task, and engaging in problem behavior. During the choice analysis phase, quality of reinforcement was altered across the dimensions of preferred toys, length of break, and adult-provided attention to assess if participants would allocate their choices to the choice (i.e., work, break, or problem behavior) that resulted in the highest quality reinforcement. Most participants consistently allocated choices with the highest quality reinforcement contingencies confirming predictions based upon matching theory (McDowell, 1988). However, one participant with autism did not respond in a manner consistent with what would be predicted by matching theory. Data will be presented for this participant in an attempt to better understand undifferentiated responding. For this participant, only when task effort was manipulated did differential responding in favor of high quality reinforcement occur.

**25. Increasing Social Interaction and Group Participation With Children With Autism Using a Daily Circle Time Activity** (AUT Autism; Applied Behavior Analysis) ANGELA M. PERSICKE, Ashley Yaughner, and Amanda N. Adams (California State University, Fresno)

Children with autism do not develop social skills in the same way typically developing children do. Circle time is used in typical pre-school and kindergarten classrooms to develop children's social skills. The objective of this study was to determine if circle time increases peer-to-peer and peer-to-adult interactions for children with autism. Five children from the Central California Autism Center participated in a daily circle time activity and data on free time interactions were recorded to determine if circle time had an effect on social interactions. Results indicated that non-verbal children did not generalize skills learned during circle time and verbal children showed a slight increase in social interactions to adults, but not to peers. Circle time may not increase social interactions with some students. However, it is possible that there are other benefits that may include aspects of joint attention, tolerance to situation, following group instruction, and participation. It is plausible that possible benefits are varied across children.

**26. Evaluation of Two Types of Delay of Reinforcement Cues for Behavior Maintained by Escape From a Demand** (AUT Autism; Applied Behavior Analysis) STACY E. DANOV, Jennifer J. McComas, and Frank J. Symons (University of Minnesota)

This study aimed to evaluate two types of delay of reinforcement cues (i.e., time-delay cue and task-delay cue) to increase appropriate waiting behavior in a 7-year-old child diagnosed with developmental disabilities/autism and self-injury maintained by escape from a task demand. Specifically, the child was taught to tolerate a delay of reinforcement (i.e., break) by making the break contingent on being able to wait until a specific amount of work was completed (task-delay) or wait a short and specific period of amount of time without any self-injury (time-delay). The study used a multi-element design to examine the effects of the different escape contingencies on self-injury followed by a reversal to further confirm the findings. Results indicated that the task delay procedure was effective for increasing tolerance for delay of reinforcement with this child. More research is necessary to determine the best way to teach delay of reinforcement.

**27. Assessment and Treatment of Property Destruction Maintained by Sensory Stimulation** (AUT Autism; Applied Behavior Analysis) Rebecca Renee Wiskirchen, BRYAN J. DAVEY, and Megan Schatzberg (ACCEL); and Christina Barosky and Donald M. Stenhoff (BISTA)

The current study is a replication of Fisher, Lindauer, Alterson, and Thompson (1998) in which the function of destructive behavior was assessed and treated through a multipart experiment, which targeted responses within a chain of behavior. In the current study, researchers examined property destruction (ripping/attempting to rip clothing or other materials) followed by stereotypy (playing with the destroyed material). Indirect assessment showed destructive behavior to be maintained automatically. Experiment 1 involved two conditions: the client wearing un-ripped clothing and free access to already destroyed items of clothing. Experiment 2 compared the presence of un-ripped clothing on the client's body to a matched condition in which the room was baited with stimuli similar to that of ripped clothing. In experiment 3, researchers compared the presence of un-ripped clothing on the client's body to a condition in which the destructive response was blocked and client was redirected to play with matched stimuli. Results indicate a chained response in which the consequence of destruction became an antecedent for stereotypy, which was automatically reinforced. Treatment analysis examined the process of teaching nondestructive responses to generate similar sensory consequences. Discussion points include satiation and deprivation issues when running multiple sessions daily on automatically maintained behaviors.

- 28. Effects of Identity-Matching and Echoic Prompts on the Acquisition of Auditory-Visual Conditional Discriminations** (AUT Autism; Applied Behavior Analysis) SEAN PATRICK PETERSON, Charlotte Lynn Carp, and Anna I. Petursdottir (Texas Christian University); and Einar T. Ingvarsson (University of North Texas)

Embedding an identity matching (IM) prompt in a least-to-most prompting hierarchy has shown to be more effective than least-to-most prompting alone for teaching auditory-visual conditional discriminations (Fisher, Kodak, & Moore, 2007). IM may function as a differential observing response (DOR) that increases attention to relevant aspects of comparison stimuli. In the present study, experiment 1 was designed to replicate previous research in two children diagnosed with autism. Three conditions were evaluated in a multi-element design: (a) IM prompt embedded in a least-to-most prompting hierarchy, (b) a traditional least-to-most prompting hierarchy, and (c) a trial-and-error control condition. The IM condition was shown to be more effective than other conditions for one participant; however, no acquisition was seen for the other participant in any condition, and an alternative evaluation of IM prompts is in progress. Experiment 2 evaluated the effects of a DOR to the auditory sample, by replacing the IM prompt with an echoic prompt. An effect of the echoic condition was seen for 1 participant with autism; and additional data collection is in progress. Results suggest that embedding a DOR in a least-to-most prompting hierarchy is more effective than using least-to-most prompting alone.

- 29. Functional Analysis and Treatment of Aggressive Behavior During Weekly Speech Therapy** (AUT Autism; Applied Behavior Analysis) AMANDA KARSTEN, Kristen Opitz and Allyssa Burby (Western New England College)

The purpose of the study was to assess the utility and acceptability of brief functional analysis and function-based treatment procedures implemented in the context of speech therapy sessions. Participants were two boys diagnosed with autism who were nominated by their speech therapists based on significant levels of aggressive behavior (e.g., slapping, pinching) during weekly, one-hour therapy sessions. All procedures for brief functional analysis and treatment were implemented by a speech therapist with assistance from a behavior analyst during regularly scheduled speech appointments. Results demonstrated that a) the behavioral function of aggressive behavior was identified in 33-48 minutes of assessment for each participant, b) resulting function-based treatments appeared to decrease problem behavior and increase functional communication; and c) social validity assessment results suggested that procedures and outcomes associated with this study were acceptable to speech therapists.



### **30. The Effects of Reinforcement Rate on the Spontaneous Request in a Child With Autistic Spectrum Disorder:**

**Analysis by Behavior Momentum** (AUT Autism; Applied Behavior Analysis) KOSUKE TAKAHASHI (University of Tsukuba); Jun'ichi Yamamoto (Keio University); and Fumiyuki Noro (University of Tsukuba)

The present study examined the effects of reinforcement rate on the spontaneous request of a child with autism spectrum disorders (ASD) in reference to Zanolli and Daggett (1998). A boy with ASD who could rarely make spontaneous requests for his caregiver or teacher participated in this study. In probe condition (5 minutes), he was seated near a well-stoppered transparent bottle containing his favorite food item and his teacher stood a distance from him. The frequency and response interval of the participant's spontaneous requests were measured as dependent variables. Three experimental conditions were compared with the alternating treatment design. In the baseline condition, the procedure the same as the probe condition was conducted. During the pretraining session of a low-rate condition, verbal requests were prompted every 15 seconds and the participant's (prompted and spontaneous) requests were reinforced with VI30s schedule. During the pretraining session of a high-rate condition, verbal requests were prompted every 15 seconds as low-rate conditions and his verbal requests were reinforced with VI15s schedule. As a result, higher frequency and shorter response intervals were shown both in a low-rate and high-rate condition as compared with the baseline condition. There was not much difference between low-rate and high-rate condition in the study. These results were discussed in terms of the effect of behavior momentum.

### **31. Using ABA Strategies to Improve Motor Coordination of a Child With Autism in Competitive Swimming** (AUT Autism; Applied Behavior Analysis) LAN LIU-GITZ, Stacy L. Carter, Joseph Bales, and Stephanie Sokolosky (Texas Tech University)

Motor and social-communication impairments in individuals with autism severely limit their opportunities to successfully participate in organized sports. Reduction in physical activity becomes more significant at the secondary school when nondisabled peers may rely mostly on organized sports to get their physical exercise. Few studies are found implementing applied behavior analysis (ABA) strategies to improve participation in organized sports for children with autism. This study used a multiple-baseline design to investigate the effectiveness of a treatment package designed to support a child with autism participating in competitive swimming. The participant was a 10-year-old boy with normal IQ who displayed frequent tantrums and noncompliance to swimming instruction. He presented with a history of limited skill acquisition which had

prevented him from developing any formal swimming strokes in spite of numerous swim lessons. Researchers implemented a fixed schedule of reinforcement, a chaining procedure, and a task analysis into typical coaching techniques in a local swim club. Results revealed that within six months the child had mastered three of four basic swim strokes and competed with age equivalent peers in swim meets regulated by the U.S. Swimming Association. The importance of using structured ABA techniques within typical coaching strategies will be presented.

**32. Establishing Some Prerequisites for Communication With PECS Among a Person with Profound Disabilities and Autism** (AUT Autism; Applied Behavior Analysis) MÉLISSA BECQUET (Université Lille 3); Philippe Schpilka (Jacinthes); and Vinca Riviere (Universitè Charles De Gaulle)

Usually, one considers that there are no real prerequisites for the implementation of picture exchange communication service (PECS). At most the learner should take and give an object to start exchanging and the discrimination will not be needed before the third phase. In this study, there were two problems with the treated person. Stereotypically, he violently threw all the objects presented and could not discriminate the preferred stimulus that we could use as a reinforcer for exchanges. Indeed, faced with two stimuli, he recomposed a single complex stimulus and another stereotypic behavior forced him to choose always on the right side (even preferred versus neutral stimulus). Learning of these prerequisites was conducted within specific sessions. To take-present-drop, we used small objects to be deposited in a box. Physical prompts (most-to-least intrusive) helped him make the correct movement. For the discrimination, after analysis of its problems, we trained discrimination between preferred-neutral stimulus using visual prompts: different size stimuli and large spacing between stimuli to avoid the recombination of a complex stimulus. Gradually, the prompts were faded and our subject was able to choose his favourite item.

**33. Measuring the Imitation Skills of Typically Developing Children to Assist in the Development of Imitative Skills in Children With Autism** (AUT Autism; Applied Behavior Analysis) MARIAN DOUD (Oakland Unified School District); James W. Partington (Behavior Analysts, Inc.); and Scott W. Partington (University of California, Los Angeles)

A review of the literature indicates that children with autism spectrum disorder (ASD) often have deficiencies in their imitative skills and that these deficits are correlated with deficits in communication skills and overall skill development. Recent research has found that a child with ASD is more likely to attain higher levels of development if he has some imitative skills prior to the implementation of intervention services (Sallows & Graupner, 2005; Weiss, 1999). Although imitation skills are

typically included in intervention programs for children with ASD, written intervention programs rarely provide a broad range of imitative skill to be included as targets. Following the measurement of the imitative skills of typically developing children on the Partington Imitation Skills Assessment (Partington, 2007), a multiple baseline across subjects design along with pre- and postscores was used to measure the effects of discrete trial instruction on three preschool age children with ASD in a special education classroom. The results of the study demonstrated that each of the ASD subjects had a significant increase in their imitative skills following the intervention. The development of these skills correlated with increases in the children's attention to their instructor and compliance with instruction and led to the development of their communication skills.

**34. The Effects of Extinction Paired With Other Interventions on Inappropriate Touching Behavior** (AUT Autism; Applied Behavior Analysis) MEGAN N. MORIEN and Melissa Twarek (The Hope Institute)

When teaching or interacting with individuals diagnosed with developmental disabilities, there are often individuals who engage in problem behavior (e.g., aggression, talking out, inappropriate touching). The present study investigated the effects of extinction combined with other interventions on inappropriate touching behaviors emitted by a 15-year-old male diagnosed with autism, moderate cognitive impairment and speech/language impairment. Through an ABCD experimental design, the rate of inappropriate touches emitted by the participant was recorded across different interventions. With the purpose of reducing instances of social disapproval and possible injury, the present study investigated the effects of pairing extinction with differential reinforcement of alternative behaviors (DRA), non-exclusionary time out and functional communications training (FCT) to decrease the occurrences of inappropriate touching behavior. Results from this study were consistent with past research, indicating that the combination of extinction with DRA and FCT was effective, showing consistently low rates of responding, including zero rates of responding during four sessions (Fyffe, Kahng, Fittro & Russell, 2004; Shukla & Albin, 1996).

**35. Promoting Social Reciprocity of Middle-School Students With Autism Through Video Modeling** (AUT Autism; Experimental Analysis) ALICIA F. SAUNDERS and Ya-Yu Lo (University of North Carolina at Charlotte)

Video modeling, in which targeted behaviors are demonstrated on videotape, is effective in increasing appropriate social behaviors in individuals with autism spectrum disorders (ASD). The purpose of this study was to examine the effects of video modeling, using same-age peers as models, on social interactions of three middle-school students with ASD in general education settings. Results were evaluated using a multiple

baseline across subjects design and indicated that all three students increased the number of social initiations and responses displayed in the general education settings. Generalization results showed that the students transferred appropriate social initiations and responses in non-training settings. These findings suggest video modeling may be useful when integrating individuals with ASD into a general education setting.

**36. A Brief Functional Analysis of Self-Stimulatory Behavior** (AUT Autism; Applied Behavior Analysis) MELISSA ENGASSER and Lisa Fletcher Smith (Behavioral Consulting of Manhattan, Inc.)

This case study focuses on the importance of conducting a functional analysis and treating behavior based on function and not topography. A 3-year-old boy with a diagnosis of autism engaged in high-rates of “finger play.” Finger play is defined as any instance of hands being held directly in front of chest while simultaneously moving the index and middle finger in a downward and upward motion. A brief functional analysis conducted within 90 minutes showed the primary function of finger play was to gain access to attention and a secondary function was to escape demands.

**37. Using Mobile Phone Technology to Teach Children With Autism to Seek Assistance When Lost** (AUT Autism; Applied Behavior Analysis) NICOLA C. HARDY (Saplings School, Mullingar) and Claire E. McDowell (University of Ulster, Coleraine)

This study investigated if teaching a child with autism spectrum disorder (ASD) to answer a mobile phone, hand the phone to an adult, and wait with them until his caregiver returned in a school setting would generalise to a community setting with unfamiliar adults. Two children diagnosed with ASD were selected to participate, and a multiple baseline across participants design was employed to assess the effects of the school-based teaching intervention on the generalisation of community safety skills. Results indicate that the participant who received intervention developed and generalised the skills, while the participant who remained in the baseline did not.

**38. Functional Analysis and Treatment of Elopement in Children With Autism in a School Setting** (AUT Autism; Applied Behavior Analysis) ALEXANDRA PETZ and Melissa Twarek (The Hope Institute)

Elopement in a school setting is not only dangerous, it also decreases the amount of learning for the students and can frustrate teachers. Students who elope from classrooms or other school events are likely to be seen as children with problem behaviors, and generally will be sent to the office. This approach is ineffective in identifying the true function of the behavior and developing an appropriate corresponding intervention plan. More

importantly, children with autism may engage in higher rates of elopement due to a lack of functional communication or lack of instructional control. Research suggests that treatment based on the function of the behavior shows better results than those arbitrarily chosen for the problem behavior. This study will examine the function of elopement through the use of functional behavior assessment in children ages 5 to 9 diagnosed with autism in a school setting. The expected results include identification of the function, which is maintaining elopement, and implementation of appropriate treatment based on the function of the behavior.

**39. Video Modeling, With Examples and Non-Examples, to Increase Conversational Skills of Adolescents With Asperger Syndrome**

(AUT Autism; Applied Behavior Analysis) Wendy M. Bromley, Dana J. Stevens, and BETTY FRY WILLIAMS (Whitworth University)

The purpose of this intervention was to determine if video-self modeling could be used with students with Asperger syndrome to increase appropriate conversational skills. Participants included three adolescent boys in a high school in the northwest United States. The study took place in both the general and special education settings. Students were observed and data collected on the use of six predetermined conversational skills: eye contact, body orientation, responding when spoken to, conversational turn-taking, appropriate comments and tone, and age-appropriate joking. Videos were made and shown to the participants of themselves using both examples and non-examples of the targeted conversational skills. Questionnaires were completed after each video to identify social errors and suggest corrections. A multiple baseline was implemented across the three students. The mean use of the targeted communication skills for all three increased from 59% during baseline to generalized use of 76%, thus affirming that video self-modeling is an effective intervention for adolescent students with Asperger syndrome.

**40. Teaching Echoic Behavior in Children With Autism** (AUT Autism; Applied Behavior Analysis) RUBY J. LEWIS and Melissa Kay Chevalier (May Institute)

In the simplest case in which verbal behavior is under the control of verbal stimuli, the response generates a sound pattern similar to that of the stimulus. This is how Skinner defined echoics in his book, *Verbal Behavior* (1957). Many children with autism and similar developmental disorders are deficit in the area of functional communication. An important prerequisite skill for learning functional language is echoic behavior. Clinicians increased verbal imitation skills in three children with autism by using a non-contingent echoic behavior protocol.

**41. Reducing Food Stealing Behavior Using Response Interruption and Redirection** (AUT Autism; Applied Behavior Analysis) LAURA L. KULIKOWSKI (University of South Florida) and Jamie L. Granatino (Behavioral Consulting of Tampa Bay, Wesley Chapel)

The proposed case study will assess the use of response interruption and redirection (RIRD) as a treatment intervention to reduce food-stealing behavior during in-clinic sessions, for a 3-year old male child diagnosed with autism. The data will be analyzed during the phases of the intervention: treated baseline sessions, RIRD intervention, return to treated baseline with probes during specific states of satiation and probes comparing attention versus no attention sessions, and during the return to intervention in an ABAB single case design. It is anticipated that the client will engage in food stealing behavior or garbage can hovering behavior whether or not he has recently consumed a regular portion of food. As this problem is of primary concern for the parents and safety for the client, it is proposed that using RIRD procedures will effectively reduce the food stealing behavior for this particular client in the clinical setting.

**42. Improving the Implementation of Discrete Trial Teaching Maximizes Learning Opportunities in Children With Autism** (AUT Autism; Applied Behavior Analysis) AUDREY ALBERSTADT (The Aurora School); Jennifer Elizabeth Turner (Preschool Autism Services); and Meg Napolitano-Evans and Carlos F. Aparicio (The Aurora School)

Discrete-trial teaching (DTT) individualizes and simplifies teaching for children with autism. During the DTT, trials consist of presenting a discriminative stimulus and the student is prompted to emit the target response producing the reinforcer. When the target response is consistent across trials, the prompt is systematically faded until the student independently emits the target response in the presence of the discriminative stimulus. Recent studies have examined methods of training staff to improve the implementation of DTT. For example, a staff behavior checklist combined with feedback is an ideal method to accomplish this goal. The aim of this study is to examine the effectiveness of this method in maximizing learning trials in children with autism. A multiple baseline across subjects was used. The dependent variable was the percentage of correct usage of ten components during 10 consecutive discrete trials. During baseline, staff members conducted the students' programs as usual. During training, a copy of the staff behavior checklist was provided and each component was reviewed. Then, a four-step procedure was used to increase the accuracy of teacher's implementation of DTT. Results were consistent with findings showing that similar techniques are effective to increase the accuracy of teacher's implementation of DTT.

**43. The Illinois Autism Coaching Network: Professional Development to Classroom Implementation** (AUT Autism; Service Delivery) KATHY L. GOULD (Illinois Autism Training and Technical Assistance Project)

The Illinois Autism Coaching Network (IACN) of the Illinois Autism Training and Technical Assistance Project focuses on building the field, scope, and capacity of schools and districts to effectively educate individuals with autism spectrum disorders (ASD) in more inclusive settings. IACN provides follow-up coaching to school teams after professional development, with goals of increased implementation, use of data-based decision making and increased inclusion of students with ASD in general education environments. The process of IACN includes a systems approach to data-based decision making and development of school-based coaches to sustain the process at the school level. School teams evaluate their schools using a self assessment survey (EIS). The EIS shows level of implementation and priority for improvement across district, school, non-classroom, classroom, and individual features. Results are graphed and used to assist teams in action planning and improving implementation of strategies learned in professional development activities. The poster illustrates how the evaluation/data collection component is used to help schools assess and improve their implementation of training and effectiveness of their school's supports and services. Preliminary results highlight that schools with higher scores on the EIS educate students with ASD in more inclusive education environments than schools with lower scores.

**44. A Longitudinal Study of a Participant's Communicative Skills and Treatment of Factors Affecting Skill Development** (AUT Autism; Applied Behavior Analysis) DEBRA A. FLOYD (Macon County Mental Health Board)

This poster will present a longitudinal study of a 4-year old male participant's communicative skills and factors affecting skill development (e.g., problematic behavior). The effectiveness of behavioral teaching strategies and empirically-based procedures used with an initially nonverbal child is discussed. Baseline and treatment data supporting the procedures are presented up to the present in which the participant has acquired verbal communication skills. The strategies and procedures include functional analysis, parent training in observation and measurement of the behavior, differential reinforcement of an incompatible behavior (DRI), sign language and picture exchange communication system (PECS) training for both child and parents, and tact/mand training for the boy following acquisition of PECS. Functional analysis was conducted initially with this child, including observation, parent interview, parent questionnaire, preference assessment, the motivation assessment scale, the infant developmental assessment, and Rossetti language scale. DRI was used for this child to decrease and

eliminate nonstop motor activity which prohibited him from being in touch with his family or environment. Sign language and PECS were introduced following the elimination of the undesirable behavior. Tact/mand training followed. Data support the procedures in effectively increasing verbal communication skills and eliminating undesirable behaviors.

**45. Does Video Modeling With Errorless Teaching Cause an Increase in the Efficacy of Instruction?** (DDA Developmental Disabilities; Applied Behavior Analysis) DERYA GENC and Onur Kurt (Anadolu University)

Researchers and teachers have been trying to find effective and efficient ways of teaching students with autism. The purpose of this proposal is to share effective and efficient ways of teaching early childhood students with autism by using response prompting procedures. In this study simultaneous prompting combined with video modeling was compared using an adapted alternating treatments design to simultaneous prompting alone in teaching food preparation skills. Four students with autism, ages 5 to 6 years old, participated in the study. The results of the study showed that both procedures were equally effective on promoting acquisition of the food preparation skills for the three students. While the impact of the procedures was evident for the three children, the results were not replicated with one student. While the procedure in which simultaneous prompting combined with video modeling was effective in teaching for this student, simultaneous prompting alone did not result in criterion level. Although mixed results on the efficiency measures were obtained in the study, it might be said that efficiency results showed little difference in favor of the simultaneous prompting plus video modeling procedure.

**46. Long-Term Effects of Functional Communication Training** (DDA Developmental Disabilities; Applied Behavior Analysis) KELLY M. SCHIELTZ, David P. Wacker, Jay W. Harding, Wendy K. Berg, and John F. Lee (University of Iowa)

The purpose of this study was to evaluate the long-term effects of functional communication training (FCT) when challenged. Two children with developmental disabilities participated in this study, and all procedures were conducted in their homes by their parent with investigator coaching. Interobserver agreement was assessed across 30% of all sessions and averaged 97%. Prior to maintenance, an FCT phase was conducted within a reversal design. Both children showed a decrease in destructive behavior and an increase in adaptive behavior. Baseline probes (extinction condition) were repeated throughout the FCT phase, and both children's results showed that destructive behavior continued to occur at higher levels than during FCT. During the maintenance phase, the persistence of destructive and adaptive behavior was challenged by changes in reinforcement schedules, establishing operations, and discriminative stimuli. The maintenance phase was conducted within a



multi-element design. For one child, resurgence of destructive behavior during the return to brief extinction conditions throughout treatment was predictive of subsequent resurgence during maintenance. For the other child, destructive behavior resurgence during the brief extinction condition was predictive of the resurgence of destructive behavior in the extended extinction condition, but not for the other maintenance challenges.

**47. A Comparison of Written and iPod-Delivered Schedules for Increasing Independent Task Initiation and Completion** (DDA Developmental Disabilities; Applied Behavior Analysis) TONI R. VAN LAARHOVEN, Justin Olson, Anna Brady, and Heather Johnson (Northern Illinois University)

An alternating treatments design was used to compare the effectiveness of written versus picture/auditory schedules for increasing independent task initiation and completion of scheduled activities for three young adults who attended a community-based transition program. Participating students had developmental disabilities and/or autism and were identified as needing a great deal of prompting from adults to initiate and complete scheduled activities. Unprompted independent correct responses were measured for students who were using a written checklist that they had been using for the majority of the school year and this was compared to a picture/auditory schedule presented on an iPod Touch. Two of the three participants performed better when the iPod was used, while the third student initially performed better with the checklist and then better with the iPod as her comfort with using it increased. All three participants selected the iPod as the preferred prompting system. However, one student also indicated that she would prefer no prompting system. A discussion of the practical use of an iPod will be presented.

**48. The Effectiveness of Using an iPod Touch to Teach Cleaning Skills: Fading From Video to Picture/Audio Prompts.** (DDA Developmental Disabilities; Applied Behavior Analysis) JUSTIN OLSON, Toni R. Van Laarhoven, Anna Brady, and Heather Johnson (Northern Illinois University)

A multiple probe across participants design was used to evaluate the effectiveness of using an iPod Touch to teach bathroom cleaning skills to three students with autism and/or developmental disabilities. Initial instructional trials involved the presentation of video prompts on an iPod and these were faded to picture/auditory prompts once students engaged in high levels of independent correct responding with the video prompts. All three participants continued with high levels of independent responding once the video prompts were faded to picture/auditory prompts and all three continued to improve their performance. All of the students indicated preference for the picture/auditory prompts and all stated that they liked using the iPod Touch as an instructional tool. The practical utility of using an iPod as a prompting system will be discussed.

**49. Comparing Two Video Fading Procedures for Teaching Students With Developmental Disabilities Daily Living Skills**

(DDA Developmental Disabilities; Applied Behavior Analysis) ANNA BRADY, Toni R. Van Laarhoven, Justin Olson, and Heather Johnson (Northern Illinois University)

This study compared the effectiveness and efficiency of two methods for fading video prompts. Using an adapted alternating treatments design, four young adults with developmental disabilities were instructed in two different cleaning tasks using video prompts. These tasks were systematically faded from video prompts to video models or pictures prompts. Results indicated that both methods of fading were effective for increasing the participants' level of correct, independent performance. However, all four participants scored higher on their posttests for the skill taught through the video modeling condition. Efficiency data in terms of time to create instructional materials, time in minutes to mastery, and the number of sessions to criteria for the four participants were split. However, the fade to video models condition was more efficient with regards to the amount of time to mastery criteria for three of the students. Students' preferences in relation to their performance and teachers' perspectives of video instruction are also discussed.

**50. Procedural Variations of Traditional Functional Analysis Procedures: Accommodating for Extraneous Environmental Factors During Analysis**  
(EAB Experimental Analysis of Behavior; Applied Behavior Analysis) AMY HANSFORD (Rutgers University); and Robert LaRue and Catriona B. Francis (Douglass Developmental Disabilities Center, Rutgers University)

Traditional models of functional analysis typically involve conducting sessions in settings, such as a treatment room or a classroom. These analyses are often run in a separate assessment room to increase experimenter control over extraneous environmental factors. In some cases, target behavior may not be observed while running conditions in typical formats. This may be because the target behavior occurs at low rates or because the target behavior is affected by ecological variables not present in traditional analysis. In this case study, an adolescent male was referred for the assessment and treatment of inappropriate touching of people and objects and disruption (dropping items). When a standard functional analysis was conducted, no target behavior was observed. Classroom staff noted that these target behaviors occurred during transitions. Resulting conditions were modified to mimic typical classroom transitions, and effectively captured high rates of behavior not observed in the traditional functional analysis. Following these variations, informed treatment plans were created to effectively address and lower rates of the behavior.

**51. The Joy of Cooking: Using Teacher-Implemented Video Prompting to Teach Cooking Skills to High School Students With Developmental Disabilities** (EDC Education; Applied Behavior Analysis) Amy Freeman (Genoa-Kingston School District); Jesse (Woody) Johnson (Northern Illinois University); and KAREN SIMMONS (Genoa-Kingston School District)

Three high school students with developmental disabilities were taught to perform three complex cooking skills using video prompts delivered on an iPod Touch. Instructional sessions were implemented by the classroom teacher and the skills were taught in the context of a multiple baseline across behaviors design. Each student learned the targeted skills and later used the iPod Touch to independently select cooking preferences.

**52. Video Prompting With an iPod Touch: Fading From Video Prompts to Picture Prompts** (EDC Education; Experimental Analysis) JESSE (WOODY) JOHNSON (Northern Illinois University) and Lora G. Johnson (The Aurora School)

Video prompting has been shown to be an effective way to teach critical skills to students with autism and developmental disabilities (Buggey, 2005; Lonckecker, Brady, McPherson, & Hawkins, 1994; Kern-Dunlap et al., 1992). Recent research has also shown that students with disabilities can learn to perform complex skills while video prompts are delivered on video iPods (Van Laarhoven, Johnson, Van Laarhoven-Myers, Grider & Grider, 2009). The purpose of this study was to evaluate the effectiveness of a procedure in which video prompts, delivered on an iPod Touch, were faded to picture prompts once students reached a criterion level of performance on functional skills. This purpose was met by teaching two students with moderate developmental disabilities to perform two different tasks using video prompts set up on an iPod Touch. Two tasks of equal difficulty (composting and cleaning) were taught in the context of an alternating treatments design. The students performed both tasks each day and the order in which the tasks were presented was counterbalanced across days. Once each student reached a criterion level of performing 100% of the steps of a task correctly after viewing video prompts for two consecutive sessions, the video prompts associated with one task were replaced with picture prompts, while video prompts continued with the other task. Both students learned to perform the targeted tasks while video prompts were being used and one of the two students maintained high levels of performance after video prompts were faded to picture prompts. However, the second student showed substantial and immediate decreases in performance when picture prompts were substituted for video prompts. The implications for future research and recommendations for implementing video prompting on iPods will be discussed.

**53. A Social Validation of a Dedicated Choice System During Preschool Free-Play** (EDC Education; Applied Behavior Analysis) NICOLE HEAL (Southern Illinois University) and Gregory P. Hanley (Western New England College)

High levels of child engagement are desirable in early childhood classrooms because children learn through their interactions with their environments. We examined the effects of a magnetic choice board during free-play times on child engagement and location using a momentary-time sampling procedure. In addition, the social validity of the intervention was directly assessed with the children via a group-oriented concurrent chains arrangement and indirectly assessed with the teachers via a questionnaire. Interobserver agreement was assessed for a minimum of 26% of sessions with mean agreement above 87% for all measures. Implementation of the magnetic choice board during free-play times resulted in a slight increase in engagement and less activity switching. Results of the social validity assessments indicated child and teacher preference for the magnetic choice board arrangement. Effective and preferred environmental arrangements for free-play times are discussed.

**54. An Assessment of Knowledge and Attitudes Towards ABA of Parents Receiving Home-Based Services** (EDC Education; Applied Behavior Analysis) ROBERTA N. RYAN (Trudeau Center); Kara Lynn Paoella (Pathways Strategic Teaching Center); Jennifer L. Marshall (Trudeau Center); and Erin Boylan and Andrea Chait (Pathways Strategic Teaching Center)

There are many myths and misunderstandings surrounding the field of applied behavior analysis (ABA). Lack of knowledge and negative attitudes toward the field have a significant impact on the many individuals who may benefit from treatment using the evidence-based methods derived from the field of ABA. Several publications have attempted to address some common myths (e.g., Bailey & Burch, 2006 and Sharpe & Koperwas, 2004); however, these publications are often marketed to professionals or students within the field. The purpose of this study was to pilot a questionnaire to determine knowledge and attitudes towards the field of ABA of families currently receiving home-based services. Home-based services range from respite to intensive, clinical-driven, evidence-based services. The goal of the survey was to gather data to determine where intervention was needed and to develop a series of parent trainings to enhance knowledge and attitudes. A search of the scientific literature was conducted and no previous studies were found that attempted to measure knowledge and attitudes toward the field. A questionnaire was developed to gather demographic information in addition to data on knowledge and attitudes towards ABA. Questionnaire results are presented and discussed with implications and recommendations for intervention.

## 55. Investigating Peer-To-Peer Manding With Preschool Children

**Diagnosed With Autism** (VRB Verbal Behavior; Applied Behavior Analysis)

SUZANNE TAYLOR and Nancy J. Champlin (Autism Concepts, Inc.)

Mand training is a set of teaching procedures that focus on altering the MO to evoke verbal behavior (Sundberg & Partington, 1998). In order to use the EO in language training, a behavior analyst must capture or contrive the reinforcing effectiveness of an event (Sundberg, 2004). This study was designed to demonstrate that preschool children with autism spectrum disorders (ASD) can spontaneously mand to multiple peers for a variety of preferred items in different settings. Participants were three 3-year-old children diagnosed with autism. The two boys and one girl are enrolled in a verbal behavior analysis center-based program. The participants were taught one-word requests for preferred items with adults prior to the initiation of peer-to-peer manding. Training was conducted in multiple locations during their one-on-one ABA sessions. Multiple peers on the autism spectrum were trained to respond and provide the edible and tangible reinforcers requested with a word or vocal approximation during timed sessions. Results demonstrate that children with ASD can independently mand to multiple peers for reinforcers in various settings.



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**sunday**

## invited presentations

## concluding remarks

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### #13 Invited Presentation

8:15 a.m.—9:15 a.m.

(BACB/PSY CE credit offered for this event.)

#### **The Science and Practice of Discrete-Trial Training: Why Some Teaching Procedures Are More Effective Than Others**

Kathryn Saunders, Ph.D., University of Kansas



Discrete trial training is used in teaching early language and related skills to children with autism and other developmental disabilities. This talk focuses on one procedure—matching to sample—that is often used in teaching receptive language. As an example, a child might be taught to select the picture that corresponds to a word spoken by the teacher from a choice pool of several pictures. Although this behavioral objective is relatively

straightforward, selecting effective teaching procedures is more complicated. A variety of teaching methods have been used, not all of which conform to the ideals of behavioral instructional programming as set forth by Keller, Holland, Skinner, and others. Ideally, instructional programming is based on an analysis of the skill. That is, a complex skill is broken into smaller components, and instruction is designed to ensure the acquisition of each component. Some often-used procedures for teaching matching to sample do not ensure that all components are taught. In this talk, I will present a component analysis of matching-to-sample performances, trace the roots of the analysis to basic laboratory research, and show how the analysis helps predict which teaching procedures will be effective. Commonly used teaching procedures, such as delayed prompting, will be analyzed to show which component skills the procedures do and do not ensure. Procedures that establish matching performances by ensuring acquisition of its components will be described.

Dr. Saunders received her Ph.D. from the University of Florida in 1986. Her area of emphasis was behavioral systems of instruction and she was involved in activities ranging from personalized systems of instruction for college students, to developing an instructional program for teaching women breast self-examination, to being the head teacher at a small private school providing individualized instruction to academically at-risk children. Her postdoctoral work at the University of Kansas took her in a complementary direction: basic research on the acquisition of stimulus control. A particular focus has been on the acquisition of “matching to sample,” a teaching procedure that is often used in discrete trial training. Her work in this area is published in *The Journal of the Experimental Analysis of Behavior* (JEAB), *The Journal of Applied Behavior Analysis* (JABA), and the *American Journal on Intellectual and Developmental Disabilities* (AJIDD). More recently, Dr. Saunders has melded her interest in instructional programming with her more basic work on the acquisition of stimulus control. One outcome of this integration is a program of research, funded by the National Institute on Child Health and Human Development (NICHD), on the development of early reading



skills in individuals with IDD. This project is the only NICHD-funded work on reading acquisition in this population in over a decade. Dr. Saunders is currently an Associate Editor of *The Behavior Analyst*, on the Editorial Board of JABA, and has been an Associate Editor of JEAB.

#### **#14 Invited Presentation**

9:15 a.m.—10:15 a.m.

(BACB/PSY CE credit offered for this event.)

#### **Assessment and Treatment of Feeding Problems in Autism**

Cathleen C. Piazza, Ph.D., Munroe-Meyer Institute



Feeding disorders are common in children diagnosed with autism and may be exhibited as a variety of topographies (e.g., food selectivity, food refusal). These problems may result in inadequate nutritional status and may be related to long-term developmental and behavioral sequelae. The purpose of this workshop will be to discuss methods of evaluating how specific behaviors can be defined and measured to allow quantification of variables related to the topographies of feeding disorders displayed by children with autism. A second purpose will be to review how this data-based approach can be used to prescribe and evaluate the effectiveness of treatment.

Dr. Piazza received her doctorate degree from Tulane University. She completed her pre-doctoral internship and a postdoctoral fellowship at the Kennedy Institute and the Johns Hopkins University School of Medicine in Baltimore, Maryland. After her training, Dr. Piazza continued as a faculty member at the Kennedy Krieger Institute and Johns Hopkins University School of Medicine where she served as the Director of the Severe Behavior Unit, the Chief Psychologist of the Neurobehavioral Unit, and the Director of the Pediatric Behavioral Sleep Clinic. In 1996, Dr. Piazza was appointed the Director of Training for the Department of Behavioral Psychology. In 1997, she was appointed the Director of the Pediatric Feeding Disorders Program. In 1999, the Kennedy Krieger and Marcus Institutes became affiliates, and Dr. Piazza moved to Atlanta to initiate the Pediatric Feeding Disorders Program at the Marcus Institute. She also served as the Director of Training for the Marcus Institute.

Dr. Piazza is a former book editor, a former Associate Editor, a former Board Member, and is currently the Editor of the *Journal of Applied Behavior Analysis*. In 2002, Dr. Piazza was named a Woman of Distinction by the Chron's and Colitis Association. She also was identified as the most productive female researcher and one of the top five researchers in the world in the areas of behavior analysis and behavior therapy in the 1990s. Dr. Piazza has served as a mentor to over 40 pre-doctoral interns and postdoctoral fellows who have trained at the Kennedy Krieger and Marcus Institutes. Dr. Piazza recently joined the faculty at the University of Nebraska Medical Center as a Professor of Pediatrics.

## #15 Invited Presentation

10:30 a.m.—11:30 a.m.

(BACB/PSY CE credit offered for this event.)

### Health Conditions in Antecedent Assessment and Intervention

Craig H. Kennedy, Ph.D., BCBA, Vanderbilt University



A range of variables influence the occurrence of behavior. Some of these, such as reinforcing stimuli and contingencies of reinforcement, play a direct role in the selection and maintenance of behavior. Others, such as discriminative stimuli, predict the availability of reinforcement, setting the occasion for behavior to occur. Still others, such as motivating operations, alter the value of reinforcing stimuli and correspondingly change the likelihood that responses will be evoked. Each of these types of behavioral processes alters the probability that responses will be emitted by a person. The classification, estimation, and manipulation of these behavioral processes help determine whether a person engages in socially acceptable behavior or behaviors that society deems inappropriate. There are, however, other variables influencing the probability of responding that have not been as extensively characterized. One such set of events—which I will call *health conditions*—can increase or decrease the occurrence of behaviors in ways that researchers are only beginning to understand. In this talk, I will outline various health conditions (e.g., sleep problems, dysmenorrhea, gastrointestinal disorders), the evidence for their influencing behaviors such as aggression, and possible mechanisms of action.

Craig H. Kennedy, Ph.D., BCBA, is Chair of the Special Education Department, Professor of Special Education and Pediatrics, and Director of the Vanderbilt Kennedy Center Behavior Analysis Clinic. His research focuses on environmental, genetic, and neurobiological causes of problem behavior in people with developmental disabilities. He is a board certified behavior analyst and a member of the Board of Directors of the Society for the Experimental Analysis of Behavior. He is a member of the American Association on Mental Retardation, Association for Behavior Analysis, American College of Neuropsychopharmacology, Society for Neuroscience, and TASH. He is a former associate editor for the *Journal of Applied Behavior Analysis*, *Journal of Behavioral Education*, and *Journal of the Association for Persons with Severe Handicaps*.

Publications authored by Craig Kennedy will be offered at the bookstore:

*Peer Supports: Improving Students' Social Lives and Learning*

*Inclusive Middle Schools*

*Including Students with Severe Disabilities*

More information regarding Dr. Craig Kennedy's publications is available starting on page 128.

## #16 Discussion, Audience Q&A, and Concluding Remarks

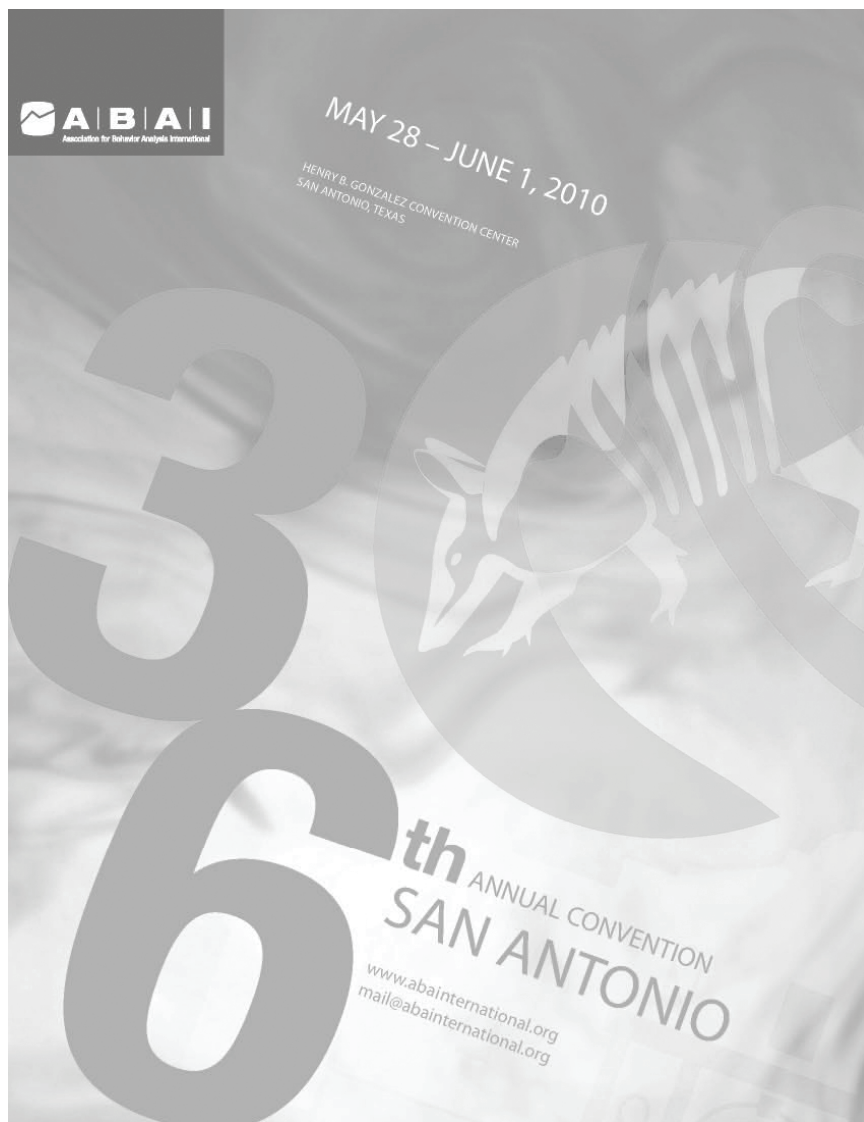
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11:30 a.m.–11:45 a.m.

Gregory P. Hanley, Ph.D., BCBA, Western New England College

Travis Thompson, Ph.D., University of Minnesota

This discussion will cover topics and presentations from the morning sessions. Questions will be taken from the audience.



## Invited Presenter Summary Articles

The viewpoints contained in the following articles represent the perspectives of each individual speaker and should not be considered the official position of the Association of Behavior Analysis International. Reproduction of any portion of this material without the express written permission of ABA International is prohibited.

### Early Intensive Behavioral Intervention and Family Psychological Adjustment

By Bob Remington

When early intensive behavioral intervention (EIBI) is delivered at home—to the heart of the family—it can be a dramatically successful intervention for young children with autism. Historically, the home became the locus for EIBI because it was quickly learned that the benefits of behavioral interventions delivered in institutional settings were not maintained following discharge, and because there was ample evidence that parents could become skilled behavioral therapists, capable of delivering sustainable change. This line of argument runs unbroken to the present day and parents are, of course, routinely involved in home-based EIBI programs.

Before considering the relationship between EIBI and *family adjustment*, it is useful to clarify both italicized nouns. The *family* of a child with autism extends beyond his or her parents, to encompass a rich and extended network of relationships, including siblings and grandparents. *Family adjustment* refers to a range of indicators of well-being—both positive and negative—for each individual family member, for the parents as a couple, and for the family as a systemic whole. On first reflection, we might expect adjustment to be affected by factors that arise from the program itself (e.g., primarily the child's progress, but also wider family reactions to EIBI, social support, program management issues). Couched in these terms, it is natural to think that adjustment may change as a result of EIBI, in other words to think of it as a dependent variable (DV). From this perspective, adjustment measures might be regarded a proxy indicator of the social validity of the intervention, essentially its acceptability to the consumers of the services that applied behavior analysts can provide.

Additionally, however, it is important to consider how family factors that pre-date intervention (e.g., parenting style, coping style, mental health, relationship stability) may determine whether EIBI is selected and implemented, and may influence its effectiveness once implemented. In this sense, adjustment may be considered an independent variable (IV) capable of moderating intervention outcome, for better or for worse. Although both interpretations are meaningful, in practice transactional effects probably dominate. For example, any initial EIBI-produced changes in adjustment may subsequently accelerate or slow a program's future progress, producing further effects on the family's adaptation to the program.

## **Family Adjustment and Applied Behavior Analysis**

Although issues relating to family adjustment may be critical both to characterizing EIBI and to ensuring its success, they have attracted very little research interest from applied behavior analysts. The reasons for this may be both historical and methodological. Historically, applied behavior analysis (ABA) has concentrated its attentions chiefly on developmental disabilities and education; work with adult populations has been primarily organizational, with little research interest in the verbal processes associated with adjustment. Methodologically, a focus on continuous monitoring of observable behavior using single case designs does not at first glance lend itself to psychological adjustment analysis. In fact, research on adjustment has typically been tackled using qualitative or psychometric data, and correlational or group-comparison research designs.

## **Experimental Research**

Group-based research methods relying on psychometric data may at first seem anathema to behavior analysts, but of course they are not. Since Lovaas's (1987) ground-breaking study, the growing corpus of evidence on which we rely to persuade others of the value of EIBI has made extensive use of clinical trial methodology. A brief review of some of the more significant of these studies reveals that all describe the role of the family in delivering the intervention (albeit briefly), but very few consider the impact of EIBI on family adjustment. One recent exception (Remington et al., 2007) compared EIBI for children with autism with treatment as usual, assessing changes in children's cognitive and adaptive function prior to intervention and after 12 and 24 months treatment. Psychometric measures of stress, depression, and anxiety were monitored at the same three time points for both parents. Although EIBI produced significant improvements in children's functioning, there were no corresponding differences in measures of parental adjustment. Intervention neither undermined nor bolstered parental adjustment.

## **Qualitative Research**

The simplest, and perhaps most reasonable, explanation for the absence of strong evidence for improved adjustment is that EIBI produces both benefits and costs. To investigate this further, Grindle, Kovshoff, Hastings, and Remington (2009) carried out qualitative interviews with 53 parents whose children had received two years of EIBI intervention. All reported a balance of positive and negative outcomes for themselves, their child with autism, and his or her siblings—a finding replicated by similar studies. Qualitative methods have also been used to identify adjustment factors that parents believe influence program delivery. For example, parents in Johnson and Hastings's (2002) study reported that support from the intervention team, family, and friends increased their capacity to implement EIBI, whereas family and personal resource constraints, team organization issues, and funding all limited it. Qualitative studies are best used to identify themes in parents' experience of EIBI. If such themes can subsequently be quantified, it becomes possible to determine their relationship with adjustment more precisely, for example by using multivariate analysis.

## **Multivariate Research**

The majority of research on adjustment has, for practical reasons, looked cross-sectionally at variables related to adjustment in cohorts of families that are currently engaged in EIBI. For example, Hastings and Johnson (2001) survey of parents who had opted for EIBI showed that high parental stress was associated with their children's autism symptomatology, whereas lower stress was associated with better social support, good coping skills, and a greater belief in the efficacy of behavioral intervention. Although several similar studies have explored the relationships between intervention and parental adjustment indicators (e.g., depression and stress), its impact on other family members has attracted very little research. The problem with multivariate research is that, while revealing associations between adjustment and EIBI, it cannot describe the direction of any causal linkages. Before causality can be attributed, experimental studies are needed or, at the least, prospective studies with data obtained at two or more time-points so that lagged effects can be identified.

## **Adjustment Factors in the Uptake of EIBI**

The work considered so far has concerned ongoing adjustment to involvement in EIBI, but it has not addressed issues surrounding the initial uptake of intervention. This matter is somewhat critical to the development of ABA services, but again there is little research. To pinpoint and characterize sources of variability, Tzanakaki, Grindle et al. (2009) interviewed parents to discover how and why they had chosen ABA. Normative beliefs about the intervention and expectations that it would be effective were frequently mentioned. In a similar questionnaire study (Solish and Perry, 2008), both EIBI staff and parents identified parental self-efficacy as a key predictor of program involvement.

Interestingly, the results of these studies—and the predominance of multivariate methods in this area—leads naturally to consideration of another approach to behavior change, very different from ABA's. Grounded in social psychology, Ajzen's (1985) Theory of Planned Behavior (TpB) has been widely used to predict uptake of health and other services at a population level. In the EIBI literature, however, the fact that parents must be recruited, trained, and participate as therapists is taken almost as a given, rather than seen as a target for behavioral analysis and intervention. TpB suggests that the decision to participate is a lawful function of subjective beliefs (attitude towards behavior; subjective norms; perceived behavioral control) that, if reconceptualized in terms of environmental antecedents, can potentially be manipulated experimentally. It is a little ironic that *social* psychological analyses lead rather directly to consideration of EIBI uptake *as a behavioral* problem.

In behavioral terms, Ajzen's model can be viewed as a generalized account of antecedents in the verbal community that determine a decision to engage in a pattern of rule-governed behavior (i.e., following the program). If a functional analysis of initial parental engagement with EIBI were carried out, some of the salient variables would undoubtedly bear a close relationship to those Ajzen has

identified. Perhaps the most important in terms of family adjustment is perceived behavioral control or self-efficacy.

### **Family Training for EIBI**

Families may believe EIBI is socially acceptable (subjective norm) and understand that such intervention is demonstrably effective (attitude toward behavior), but they may not believe that they are able to accomplish what is required to participate in a program (perceived behavioral control). They may also fear the costs, both material and psychological, of their participation. These important adjustment variables can be the target for intervention for parents considering EIBI. For example, Blackledge and Hayes (2006) have already shown that a brief intervention for parents of children with autism that was based on acceptance and commitment therapy (ACT) produced marked, if short-lived, reductions in psychological distress. As yet, however, no research has systematically evaluated this intervention as an adjunct to EIBI. Such an innovation could markedly affect uptake and outcome of EIBI.

### **Conclusions**

Behavior analysts have learned much about how to develop and evaluate high quality interventions for children with autism. We know that the family must play a critical role in this process, but its ability to do so effectively has been largely assumed. To date, there has been little research on understanding the impact of EIBI on family adjustment, and less still on how family adjustment affects our ability to provide services for families that could benefit from them. Although the available research evidence speaks to the importance of these issues, it is virtually all based on methodologies that are unfamiliar to most applied behavior analysts. There is no reason that this should continue. Single case methods can, with imagination, be used to monitor family adjustment and to identify the variables of which it is a function. It is possible to devise (and evaluate the impact of) training to increase therapists' sensitivity to family issues; similarly, families can be shown how to engage meaningfully with the EIBI process.

If, as a result of its demonstrable effectiveness, EIBI becomes more readily available through public provision, family issues will loom larger. In the future, it will be increasingly important to understand what leads parents to select—and then to stick with—EIBI. Thus, we will need to ensure not only that they fully embrace a behavioral stance to the education, but also that they have the psychological tools required to find and maintain a commitment to the values that underlie their efforts on behalf of their children.

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## **A Comparison of Methods for Collecting Data on Students' Performance During Discrete Trial Teaching**

By Dorothea C. Lerman, Laura Harper, Taira Lanagan, Susie Balasanyan, and Lynn Williams

On-going data collection and progress monitoring are essential components of discrete trial training, a common approach for teaching skills to individuals with developmental disabilities. Practitioners use a number of methods to collect data on performance during discrete trial teaching. These methods vary in terms of frequency and specificity. For example, the practitioner may record the outcome of every learning trial during teaching sessions (i.e., continuous recording). Alternatively, the practitioner may record the outcome of just a sample of instructional trials, such as the first instructional trial of each teaching session (i.e., discontinuous recording). Relative to discontinuous recording, continuous recording may provide a more sensitive measure of changes in performance, minimize the impact of correct guesses, and lead to more stringent mastery criteria (Cummings & Carr, 2009). On the other hand, discontinuous recording is more efficient and easier to use than continuous recording. Discontinuous recording also reveals the level of performance in the absence of immediately preceding learning trials or prompts when data are collected on just the first instructional trial.

The specificity of the data collected also may vary during continuous and discontinuous recording. For example, the practitioner may record whether a correct response occurred on an instructional trial (nonspecific recording), and, if so, the prompt level that occasioned the correct response (specific recording). Although specific recording may increase the sensitivity of the measurement system, nonspecific recording may be easier to use.

Because effortful measurement systems could compromise data reliability and treatment integrity, research is needed on the accuracy and utility of discontinuous, nonspecific recording methods. Thus far, only two studies have addressed this question within the context of discrete trial teaching (Cummings & Carr, 2009; Najdowski et al., in press). The outcomes of these studies were somewhat inconsistent. The purpose of the current study was to extend this previous work by examining a broader range of recording methods using a within-skill analysis. Specifically, we re-analyzed data collected via continuous, specific recording to address the following questions: (a) What is the correspondence between data collected via continuous versus discontinuous recording methods? (b) What are the advantages (if any) of specific versus nonspecific recording methods? and (c) How sensitive is each method in revealing the child's progress?

### **Method**

Participants were 9 children, ages 5 years to 15 years, who were receiving one-on-one teaching sessions with trained therapists at private clinics and day programs. The children were diagnosed with moderate to severe developmental

disabilities or autism. A total of 22 targeted skills were included in the analysis (i.e., two to three targets for each participant). Each teaching session consisted of eight or nine acquisition trials, interspersed with trials that assessed previously mastered skills. For some participants, the therapists taught more than one acquisition target in each session. The therapist used most-to-least prompt fading, and the participant had an opportunity to exhibit a correct, unprompted response on each learning trial. The therapist faded the prompt to a less intrusive prompt after one correct response at a given prompt level. The training termination criterion was a minimum of three consecutive sessions with correct unprompted responses at or above 88% of the trials (continuous data). A correct unprompted response also had to occur on the first trial of those three sessions.

Using a specially designed data sheet, the therapist recorded the occurrence or nonoccurrence of a correct unprompted response or the prompt level needed to obtain a correct prompted response on each trial (continuous, specific recording) for each targeted skill. The prompt levels were quantified for data summary purposes (e.g., physical prompt = 4, model prompt = 3). A second observer collected data independently during at least 25% of the sessions.

To conduct the data analyses, we generated discontinuous data records by inspecting the continuous recording forms. The discontinuous data for each targeted skill included the outcome of the first trial and the mean outcome of the first three trials for each teaching session. We also generated nonspecific data records by determining the percentage of trials with correct (unprompted) versus incorrect (prompted) responses.

Continuous and discontinuous data were compared in several different ways. First, to replicate the comparisons conducted by Cummings and Carr (2009) and Najdowski et al., *in press*), we determined the number of sessions required to meet the mastery criterion (i.e., responding at or above 88% of the trials for continuous data and responding at 100% for the discontinuous data). This was determined in two ways: One criterion was based on performance across two consecutive sessions (Cummings & Carr, 2009), and the other criterion was based on performance across three consecutive sessions (Najdowski et al., *in press*). We also calculated the probability that correct responding was above 50% (continuous) given (a) a correct response on the first trial (impact of lucky guesses), and (b) an incorrect response on the first trial (impact of prior instructions/prompts). To examine differences in the sensitivity of continuous versus discontinuous measurement, we determined the number of sessions that were required to reveal any improvement in responding (i.e., the first non-zero point). This latter analysis was conducted with the continuous data to compare the sensitivity of specific and nonspecific recording. A subset of the discontinuous data (those showing poor sensitivity relative to continuous data) also was included in the analysis to determine if the use of specific recording would improve the sensitivity of these data.

## Results and Discussion

*Continuous versus discontinuous recording.* The majority of targets met the mastery criterion in fewer sessions when data were collected on performance during the first trial only ( $M = 12.5$  sessions) compared to performance on the first three trials ( $M = 17.8$  sessions) or on all trials ( $M = 18.2$  sessions). However, this percentage dropped to about 35% of targets when the mastery criterion was based on performance across three sessions rather than across two sessions ( $M = 16.8$  for first trial,  $M = 20.3$  for the first three trials, and  $M = 20.1$  for all trials). No differences were obtained when comparing the three-trial and continuous data recording methods. The probability that correct responding would exceed 50% of trials was 0.87 when a correct response occurred on the first trial and 0.28 when an incorrect response occurred on the first trial. The mean number of sessions that occurred before the data revealed any change in performance during initial acquisition was 8.1 (range, 3 to 21 sessions) for first-trial recording, 5.8 (range, 2 to 17 sessions) for three-trial recording, and 3.8 (range, 1 to 11 sessions) for continuous recording. This specific pattern was observed for 64% of targets. A greater number of sessions were required to reveal a change in performance for first-trial recording relative to continuous recording for nearly all targets (95%).

*Specific versus nonspecific recording.* The mean number of sessions that occurred before the continuous data revealed any change in performance during initial acquisition was 2.5 (range, 2 to 8 sessions) for specific recording and 3.8 (range, 1 to 11 sessions) for nonspecific recording. No difference in sensitivity was obtained for the majority of targets. However, for the discontinuous data that showed reduced sensitivity relative to the continuous data, the mean number of sessions required to reveal a change in performance was 2.6 (range, 2 to 6) for specific recording and 7.1 (range, 2 to 21) for nonspecific recording. This outcome was observed for 100% of the targets.

These results suggest that first-trial recording would have led to premature determinations about skill mastery, particularly if the criterion was based on performance across two sessions. This finding is consistent with that obtained by Cummings and Carr (2009). However, targets would have been considered mastered in approximately the same amount of time if data were collected on a subset of trials (e.g., the first three trials) or if the criterion was based on performance across three consecutive sessions. Nonetheless, a criterion based on first-trial only performance would have been inappropriate for determining mastery of some targets even across four to six sessions. On the other hand, performance on the first trial was a fairly good predictor of whether performance on all trials would exceed or fall below 50% of correct trials. This finding suggested that first-trial data were not inflated due to lucky guesses. Moreover, performance on the remainder of the trials was not inflated due to the prior instruction/prompts that occurred early in the teaching session. Finally, results showed that both continuous and specific recording were much more sensitive to changes in responding than either discontinuous or nonspecific recording.

Although monitoring prompt levels did not increase the sensitivity of continuous recording, it was beneficial when using discontinuous measurement, particularly first-trial recording.

Together, these findings suggest that data collected on a subset of trials (i.e., 3 out of 8 or 9 trials) would have adequate correspondence with continuous data and reveal similar changes in performance over time. Recording data on just the first trial would give a rough estimate of overall performance in the session, but this approach may lead to premature determinations of skill mastery. First-trial data also would be relatively insensitive to initial changes in performance.

In terms of implications for best practice, we recommend the use of continuous, highly specific recording if ease and efficiency are not a top concern. Continuous recording provides greater sensitivity and may lead to more stringent mastery criteria. Furthermore, information about prompt level is useful for other reasons (e.g., to track fading steps). If ease and efficiency are a top concern, we recommend recording performance on a small subset of trials (rather than the first trial only), including the prompt level needed on these trials, and basing the mastery criterion on performance across more extended sessions (e.g., 4+ consecutive sessions)

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## Autism: Early Intervention and Brain Development

By Travis Thompson, Ph.D.

In 1987 two important studies were published which no relation to one another at that time, but which had laid the foundation for our understanding of effects of early behavioral intervention in autism spectrum disorders. The first was Ivar Lovaas's landmark study demonstrating that intensive early behavioral intervention enabled 47% of children receiving that service to be able to function similarly to their same age peers by 7 years of age. No one had any idea why the intervention was so remarkably effective for half of the children, but why it was much less effective for the other half. Also in 1987, Peter Huttenlocher and his colleague Courten published a paper concerning the density of brain connections (synapses) in human brain tissue from birth to 20 years of age. They reported that from around 6 months of age to 2 years of age there was a remarkable increase in new synapses, dropping somewhat but remaining high until around 5-6 years of age. The combination of these two studies holds the answer as to why intensive early behavior therapy is highly effective for approximately half of the children.

Three subsequent studies provide insights into why half of the children learn extremely rapidly and permanently but the other half do not. In 2005 two independent studies provide important leads. Sallows and Graupner (2005) conducted a replication of Lovaas's original 1987 study. Like Lovaas they found that around half of the children learned very rapidly and functioned similar to same age peers by 7 years of age. But they also reported a very important finding. The rapid and slow learners did not overlap in their increases in language and IQ. They were two dichotomous groups. Though the same interventions were used at the same intensity, only half of the children were rapid learners. The second 2005 study was published by Judith Miles et al., concerning genetic subtypes of autism. She studied a large population of children and youth with autism in central Missouri. She found they fell into two non-overlapping groups, one called *complex autism* and the other *essential autism*. Those with complex autism had smaller head size and more subtle anatomical features that were different from their typical peers. Their IQs and language scores were lower, and they had more MRI and EEG abnormalities. Complex autism was much less likely to run in families than essential autism. Children with essential autism had fewer brain differences, tended to better in most interventions, and essential autism tends to run in families, i.e., it is inherited. This suggests that essential autism overlaps to a large extent with Sallows and Graupner's (2005) Rapid Learners. This raises the question of how the two groups differ at a brain level that accounts for these differential outcomes.

July 11, 2008, Murrow and co-workers under the guidance of Christopher Walsh at Harvard Medical Center, studied a large group of children with autism in the Middle East. They specifically studied individuals with autism whose parents were cousins, which greatly increases the risk of neurodevelopmental disabilities. They found three important things: Several genes were identified uniquely associated

with these autism cases, those genes produced proteins that were highly expressed in brain tissue, and though the genes were on different chromosomes, all of the genes played a role in formation of synapses. Finally, those genes do not become active without experience, which turns on those genes so they produce their proteins necessary for forming synapses. Morrow et al., speculated that autism is caused by lack of activation of genes necessary for synapse formation, and hence, learning. This was the missing link explaining why intensive early behavioral intervention was effective for half of the children with autism spectrum disorders. That also suggests whatever causes autism among the other half must involve a different brain mechanism which is not as amenable to correction through carefully programmed experience. Though improvements are obtained they are more limited in the latter group.

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## Communication Approaches With Students Who Have Autism Spectrum Disorders

By Joe Reichle

*This article is a shortened version of one that appeared in Cadigan, K., Craig-Unkefer, L., Reichle, J., Sievers, P., & Gaylord, V.(Eds.). (Fall/Winter 2006/07). Impact: Feature Issue on Supporting Success in School and Beyond for Students with Autism Spectrum Disorders, 19(3). [Minneapolis: University of Minnesota, Institute on Community Integration]. You can download the entire document at the web at <http://ici.umn.edu/products/impact/193/default.html>.*

Typically, individuals with autism exhibit a wide range of communication needs. Somewhere between 33% and 50% of individuals with autism do not develop functional speech (Lord & Paul, 1997) while other individuals with autism will have sizable communicative repertoires. However, their language may include extensive repertoires of echolalia (delayed and or immediate), verbal perseveration, neologisms, and/or incessant questioning among other characteristics. Additionally, persons with autism tend to have difficulty understanding some aspects of language. Fortunately, a growing instructional technology in the area of social/communication skill intervention has resulted in significant strides in our ability to teach beginning communicative skills to young children with autism. The presentation will focus on considerations when beginning to teach communication skills.

Typically developing children begin to demonstrate that they understand spoken words between approximately 8 and 12 months of age (Windsor, Reichle, & Mahowald, 2008). They have a propensity to produce their first spoken word between 10 and 14 months of age. Gesturally, typical children will begin pointing to direct a listener's attention slightly prior to their first spoken word (Reichle & Brady, in prep). Additionally, they are able to follow a pointing gesture used by their parent between 9-14 months but will not become proficient in following a point to a more distant object until slightly before their second birthday. In examining the evidence-based practice literature describing successful intervention strategies accumulated during the past 20 years, a number of straightforward caregiver actions can be summarized that appear to enhance beginning communication skills.

*Attend to children's focus of attention.* Increasingly, evidence supports the importance of caregivers who are diligent in attending to the focus of their child's attention and are immediately responsive to their children's communicative overtures. By providing active models and facilitating actions on objects that are the focus of the child's attention, caregivers can insure that the child's motivation to learn is as great as possible. Children whose caregivers named objects that were already the focus of their child's attention have been shown to have substantially larger repertoires than children for whom this happened less often (Tomasello & Todd, 1983).

*Be responsive to children's communicative overtures.* It is becoming increasingly clear that responding to children's behavior is critically important in facilitating their communicative production. In a longitudinal study, Hart & Risley (1995) found that children whose caregivers were most responsive to their communicative attempts developed larger vocabularies at earlier ages. Although talking to children is important, being responsive to a child's communicative attempts (which may be nonverbal) appears to be very important in creating highly motivating communicative contexts.

*Identify and Implement a number of joint activity routines.* Joint activity routines are social games that parents play often with children. For example, with very young children these include games such as "peek-a-boo," "I'm gonna get you," "Eensy-weensy spider," etc. With older children, these may include tossing a Frisbee. Joint activity routines offer a number of components that facilitate social exchanges. They have a very simple purpose and are composed of simple actions. The parts of the routine can be easily used by either participant. The games allow slight variations to facilitate generalized use. For example, peek-a-boo can be played with a wash cloth at bath time or behind a paper plate at a picnic. Finally, joint routines allow a large number of repeated opportunities in social situations without looking artificial or contrived. Taken together, these characteristics permit familiar practice across a range of situations. Familiar routines provide an opportunity for the child to focus on turn taking without having to think as much about what to do during their turn.

*Utilize gesture and graphic symbols very early with children who appear to be at risk for timely development of language comprehension and production.* Within the autism community, there has been some controversy regarding the implementation of augmentative communication systems. Some have expressed the point of view that augmentative systems should not be implemented concurrently with attempts to establish spoken communicative output. However, in a global review examining the effects of augmentative communication intervention on speech, Millar, Light & Schlosser (2006) found no evidence that augmentative communication implementation had an impeding influence on the development of speech. Additionally, some emerging literature suggests that augmentative communication applications may have a facilitating effect for some children's communicative production. Several studies have concluded that systematic implementation of the Picture Exchange Communication Program can result in an increase in vocal and/or verbal output (Bondy & Frost, 1994; Schwartz, Garfinkle & Bauer, 1998). Mirenda (2005) and Layton & Yoder (1988) have suggested that when implemented carefully with children who are good at vocal imitation, sign implementation can facilitate speech production.

An important misinterpretation is that children with autism who require augmentative communication support will benefit more from gestural symbols (signs) than from graphic symbols (pictures, line drawings, printed words). The extent of the relative benefit of each of these appears to be somewhat learner specific (Bopp & Mirenda, 2005).



*Address a variety of communicative functions.* Among typically developing children, acts are used to behaviorally regulate others (e.g. request and protest), to establish joint attention in directing a partners attention to events (e.g. commenting on events) and to further social interaction (calling, greeting, communication associated with social games). Children with autism, often have a skewed distribution of communicative acts with behavioral regulation being the prominent communicative function produced.

Communicatively, joint attention involves coordinating one's attention between an event in the environment and a prospective listener. Recent intervention programs (Prizant, Wetherby, Rubin, & Laurent, 2005) emphasize the introduction of different communicative functions matched to particular regularly occurring situations that can be used to establish predictability for the learner.

Another important area receiving increasingly more attention from interventionists involves strategies to facilitate building rapport (Carr et al., 1994). Because some children with autism are more reluctant to approach individuals who are not very familiar, interventionists have considered decreasing demands from potential social partners and given them strategies to share desired items and activities without any expectations for child performance. These low demand high benefit situations appear to show promise in increasing social approaches from children with autism and may further enhance our ability to teach joint attention and social interaction communicative functions.

*Implement strategies to teach children to refrain from overusing communicative acts.* Once a new communicative skill has been taught there is a possibility of overuse (overgeneralization). For example, once a child learns that he can request assistance, he may discover that it requires less effort to request assistance than to independently complete work that does not require help. In the past several years, strategies have emerged (Reichle & McComas, 2004) that are successful in teaching the conditional use of newly established communicative acts. For example, the case of a skill like requesting assistance, the learner must be taught that reinforcement is greatest for working independently. The next greatest reinforcement is available by requesting assistance and no reinforcement is available if the task is abandoned.

*Make sure that newly established communication competes successfully with old and less socially acceptable communication strategies.* Evidence suggests that after initial and intense intervention to establish a new behavior, it may be possible to extend the use of that behavior to other environments by implementing a softer, less intense intervention in those environments. The degree to which the newly taught communicative behavior is efficient for the learner can have a significant effect on the degree to which this is possible. Drasgow, Halle, and Ostrosky (1998) reported findings for three preschool aged children with autism/PDD and severe language delays. Baseline data showed that children requested using marginally acceptable to unacceptable means (reaching, grabbing, leading). Each child was taught a replacement request (signing

“please”) in school but rarely used it at home (generalization setting). The “lower-dose” intervention implemented at home was to stop reinforcing the “old” communicative means. Two of the three learners very quickly began using the newly taught communicative alternative. These investigators concluded that when teaching a request, one shouldn’t assume that failure to use the behavior in an untrained setting is the result of a failure to realize that using the new behavior is an option. An alternative explanation is that the child may have considered the new option and concluded that as long as the old “easy to produce option” results in the same outcome, there is no reason to switch.

*Both social pragmatic and discrete trial approaches to intervention can play a successful role in developing a social communicative repertoire.* Among the continuum of available intervention approaches are behavioral and social-pragmatic. The characteristics associated with each outlined below. A number of characteristics associated with discrete trial approaches include, a) one to one instruction, b) a highly prescriptive curriculum, c) initial emphasis on responding to interventionist delivered cues/prompts, and d) tend to minimize context not directly related to the skill or discrimination being taught, e) a sequential introduction of intervention objectives. On the other hand, components of a social pragmatic approaches tend to emphasize, a) an initial focus on turn taking and interactive exchanges, b) a limited amount of interventionist directiveness, c) concurrent consideration of gestural graphic and vocal mode communication, d) teaching new behavior in the situation that it is expected to be used, and e) a concurrent implementation of multiple intervention targets

Behavioral approaches for addressing the delays and deficits common in autism have been recognized by many as among the most effective treatment methods to date (numerous sources). Others suggested that more discrete trials in the absence of concurrent more natural teaching opportunities may interfere with opportunities for spontaneous and initiated communication because intervention focuses primarily on adult directed activities and provides fewer opportunities for interventionists to follow the child’s lead. This, in turn, results in children being less active learners.

In spite of the dichotomous camps that sometimes arise with respect to the most productive intervention approach, each appears to have been productive. It is possible that the most effective programs may combine aspects of discrete trial intervention along with the implementation of more concurrent natural teaching opportunities. This option may allow interventionists to consistently implement in accordance with their teaching style. Regardless of the intervention strategy chosen, being consistent and precise in its implementation repeatedly has been demonstrated to be important.

## **Summary**

Regardless of a child’s primary communicative mode, or the intervention approach emphasized, this presentation summarized a number of general considerations that have been validated in evidence-based practice. There are

promising strategies available to those responsible of meeting the communicative needs of young children with Autism regardless of their communicative limitations. Augmentative communication systems are potentially facilitating of speech production (among children who imitate) and of speech comprehension.

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# **A Standardized Approach for Individualizing School-Based Interventions for the Challenging Behaviors of Students With Autism**

By Glen Dunlap

Challenging behaviors are likely the greatest impediment to the social and intellectual development of children with autism. Serious challenging behaviors, such as aggression and persistent tantrums, often serve to exclude children from social interactions, integrated educational settings, and many learning opportunities. Because of these serious ramifications, behavior analytic researchers have been engaged in developing effective interventions for challenging behaviors for more than four decades. Using single subject experimental designs, hundreds of researchers have demonstrated the influence of a rich array of practices based on the principles of contingency management and stimulus control (Carr et al., 1999; Dunlap & Carr, 2007; Horner, Carr, Strain, Todd, & Reed, 2002).

In the late 1970s and early 1980s, behavioral scientists advanced our understanding of challenging behaviors by introducing the notion of behavioral “function,” and this conceptual foundation led to the attendant technologies of functional analysis, functional assessment, and function-based interventions (Carr, 1977; Iwata et al., 1982, 1994; O'Neill et al., 1997). This pivotal development shifted the emphasis from topography, meaning that the form of the behavior tended to determine the intervention procedures, to function, meaning that the purpose of the behavior was the determining factor in the identification of the interventions. The emergence of function-based interventions required that serious challenging behaviors be preceded by an assessment to identify the behavior's controlling variables, and this meant that effective interventions had to be highly individualized.

The development and implementation of individualized interventions that are based on functional assessment data has proven to be difficult for many schools serving children with autism and other developmental and behavioral disabilities (Blood & Neel, 2007; Payne, Scott, & Conroy, 2007). Even though the federal statute mandating special education services specifies the need for functional behavioral assessments, schools often lack the resources and expertise needed to conduct assessment and develop and implement effective, function-based interventions. As a result, effective, individualized and function-based behavior support plans are rarely evident in school environments. Therefore, it has been suggested that a standardized and manualized approach might help school-based professionals to develop effective individualized support plans for students with serious problem behaviors. The prevent-teach-reinforce (PTR) model was developed to address this need (Dunlap, Kincaid, & Strain, 2005; Dunlap, Iovannone, Wilson, Kincaid, & Strain, in press).

## **Prevent-Teach-Reinforce**

PTR is a systematic, structured process for developing and implementing behavior support plans for students with significant behavior problems. It is designed to be used by school-based teams, including the student's teachers and all others who are directly involved in the student's instruction and curriculum. PTR is derived from the principles of applied behavior analysis and the framework of positive behavior support. The model was designed for and tested with students in the K-8 grade range, however it may be applied effectively with pre-K and secondary students as well.

As much as possible, the PTR model has been manualized, with each step being detailed in terms of objectives, actions for the team to take, and a self-evaluation to be completed before the team moves to the following step. The PTR assessment is scripted so that team members contribute observational information pertinent to behavioral functions and antecedent influences. The PTR intervention step is linked to the assessment results and is menu-driven, with numerous options available for each intervention component. An important aspect of the intervention development is that each intervention plan must include at least one strategy from each of the three key components: (1) prevent, which involves antecedent manipulations; (2) teach, which involves instruction on replacement behaviors and other important competencies; and (3) reinforce, which involves adjustments to the reinforcement schedules.

There are five steps in the PTR process: teaming, goal setting, PTR functional assessment, PTR intervention, and evaluation. The process for completing the steps is the same for all students. In this way, the PTR model is a standardized approach. However, the content that is developed within each step is based on the idiosyncratic characteristics of the student, the setting, and the school professionals who will be responsible for implementing the intervention. In this way, the model is both standardized to meet the needs of all students, yet individualized to address the special characteristics and circumstances of the student in need of assistance.

*Step 1: team building.* The first step in the PTR process is the establishment of a well-functioning team consisting of those individuals who are responsible for the intervention and who are invested in the well being of the student. Teams usually include three to seven individuals and must include the student's teacher, any other school employee who spends substantial time with the student, and at least one individual who is knowledgeable about behavioral approaches and experienced with functional behavioral assessment, assessment-based interventions, and positive behavior support. In addition, it is desirable for teams to include parents or other primary caregivers, administrators or other school officials with direct access to school resources and policies, and anybody else who cares about the student and is in a position to facilitate optimal interventions.

*Step 2: goal setting and data collection.* The second step is to develop a clear, unified consensus regarding the short and long-term goals for the student. Often these goals have already been developed in the form of an individualized

education plan, but it is nevertheless important for the team to review such goals in the context of a behavior support plan, and to determine if they are the most significant for this phase of the student's development. When goals are agreed upon, practical data collection strategies are developed in order to evaluate the status of the student's behavior, to evaluate progress, and to determine whether revisions to the intervention plan are needed. It is essential that the data collection procedures be simple enough for typical classroom personnel to implement.

*Step 3: PTR assessment.* The next step in the process is a version of a functional behavioral assessment. The PTR assessment is structured in such ways that all team members contribute information that relates to the three key components of the intervention: prevent, teach, and reinforce. The assessment process involves answering a series of questions that are then summarized to represent a functional understanding of the student's behavior problems and how they are influenced by events in the social, instructional, and physical environment.

*Step 4: PTR Intervention.* The fourth step involves using the results of the PTR assessment to create an individualized intervention plan. Menus are provided to help teams select intervention strategies that are apt to be effective and fit well within the school settings where they will be used. As indicated previously, a vital aspect of the PTR intervention is that at least one strategy is selected from menus in each of the three components of prevent, teach, and reinforce.

*Evaluation.* The final step in the process is ongoing data collection and evaluation. The PTR model includes realistic procedures for evaluating the effects of the PTR intervention, and indicates what teachers and team members can do on the basis of evaluation results.

All of the PTR procedures are described in detail in a manual authored by Dunlap, Iovannone, Wilson, Kincaid, Christiansen, Strain, & English (in press).

### **Research on PTR**

The efficacy of the PTR model has been evaluated in a number of time series designs with direct observations of disruptive behavior, academic engagement, and social behavior. A description of the model with illustrative case study data was reported by Dunlap, Iovannone, Wilson, Kincaid, & Strain (in press). A multiple baseline analysis of PTR's beneficial effects with three students with autism has also been completed (Strain, Wilson, & Dunlap, in preparation).

A large experimental examination of the efficacy of the PTR process was conducted with 245 students in several school districts in Florida and Colorado (Iovannone et al., 2009). This investigation involved random assignment of children with the most severe behavior problems into either the PTR group or a comparison group that was provided the districts' "services as usual." Analysis of data from these 245 students revealed significant beneficial effects of PTR on reducing the occurrence of behavior problems, increasing evidence of social skills, and increasing the occurrence of academic engaged time (Iovannone et al., 2009). Analyses of additional data from children who were initially in a wait control condition and then transitioned to the PTR process are underway.

## Summary

The PTR model was developed in order to provide schools with a standardized process with which to develop and implement an individualized behavior support plan. Initial data are encouraging in that students receiving PTR showed significantly improved behavior relative to students who received services as usual. Future research will be needed to examine the sustainability of observed benefits and to identify characteristics of those students who performed well as opposed to those students who continued to display challenges. With ongoing study and refinement, it is hoped that the PTR model can help schools address the behavioral needs of students with autism—and, indeed, all students—more effectively.

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## Identifying Effective and Preferred Behavior-Change Programs: A Case for the Objective Measurement of Social Validity

By Gregory P. Hanley

The adoption of effective behavioral interventions and teaching strategies for young children is largely influenced by the extent to which stakeholders find the procedures appropriate and the effects important. Stakeholder values have been extracted from measures of *social validity* in applied behavior analysis, and these measures have been a part of behavior-analytic research and practice since their important characteristics were described the late 1970s (Kazdin, 1977; Wolf, 1978). Based on his experience developing effective programs for rehabilitating delinquent youth, Wolf asserted that "...if the participants don't like the treatment then they may avoid it, or run away, or complain loudly. And thus, society will be less likely to use our technology, no matter how potentially effective and efficient it might be" (p. 206). Because he then focused on developing socially validated programs, his teaching family model continues to be implemented across the country and around the world today (Fixsen, Blasé, Timbers, & Wolf, 2001).

Like Wolf and the teaching family model, I think today's behavior analysts are at a similar crossroads with the technologies being discovered to address a range of socially important behavior problems, such as early intensive behavioral intervention (EIBI) for young children diagnosed with autism spectrum disorders (ASD). We are confident that EIBI based on the principles and procedures of behavior analysis works. We still have a lot of refining to do, and we still are not clear on the moderators of the effects (Herbert, Sharp, & Gaudiano, 2002; Rogers & Vismara, 2008; Smith et al., 2006), but the intervention improves the developmental trajectories of those who receive it (Campbell et al., 2003; Cohen, Amerine-Dickens, & Smith, 2006; Eldevik, Eikeseth, Jahr, & Smith, 2006; Helt et al., 2008; Howard, Sparkman, Cohen, Green, & Stanislaw, 2005; Lovaas, 1987; Morris, 2009, National Institute of Mental Health, 2007; Odum et al., 2003; Smith, Groen, & Wynn, 2000). We know much less, however, about the acceptability of critical features of EIBI to the children experiencing it, and it is these data and our responses to these data that I believe will have the greatest impact on children to be diagnosed with ASD in the upcoming decades. It will essentially determine whether effective practices are experienced by these children or not.

But, you may be wondering, why should the recipients of behavior-change procedures be involved in the social validation process; is it not sufficient to program behavior-change procedures that work, that can be implemented with fidelity, and that caregivers find acceptable? There are many good arguments for including the recipients in the social validation process, but perhaps the most important reason they should be involved is because staff's and caregiver's values are not necessarily the values of the recipient of the behavior-change procedure. The golden rule of "do unto others as you would have them do unto you" is not so golden if their preferences are different than your own. Allowing recipient participation also allows for members of dependent populations to exert counter

control in an acceptable manner (Skinner, 1972), and allowing children with ASD or intellectual disabilities to select the contexts they will routinely experience may result in less problem behavior, serving to escape or avoid habilitative, educational, and therapeutic contexts (Dunlap et al., 1994; Heal & Hanley, 2007).

A review of the social validity literature with regard to behavior-change procedures applied to young children revealed that recipients of the behavior-change procedures were not well represented (less than 3% of applications; Heal & Hanley, unpublished manuscript). Why are recipients of behavior-change procedures not involved in the social validation process? It is not because professionals do not agree that recipients of the behavior-change procedures should have influence over their selection. This has been advocated by many different people in many different ways for quite some time (Bannerman, Sheldon, Sherman, & Harchik, 1990; Carr et al., 2002; Holburn, 1997; Lundy & McEvoy, 2009; Van Houten et al., 1988). My guess as to why is related to another main finding of our social validity review—most social validity assessments involve indirect measures (e.g., verbal responses to questions about the appropriateness of procedures), and perhaps it is this historic *reliance on indirect measures* that the recipients of behavior-change procedures are not involved in the social validation process. In other words, if someone's language skills are not strong, it is unlikely they will be asked their opinion as to the appropriateness of a given behavior-change procedure.

Including recipients of behavior-change procedures in the social validation process simply involves giving them the opportunity to experience and then choose among several viable behavior-change procedures. The opportunity to choose, in general, is usually reinforcing because it results in greater access to items and contexts that are momentarily or typically valuable to the person choosing. Furthermore, studies on the value of choosing show the opportunity to choose, in and of itself, is highly reinforcing, in that children will work much more for conditions involving the opportunity to choose even when the same outcome is available for much less effort (Schmidt, Hanley, & Layer, 2009; Thompson, Fisher, & Contrucci, 1998; Tiger, Hanley, Hernandez, 2006).

The technology for allowing persons with intellectual disabilities to choose from among two or more items, often referred to as preference assessments, has steadily advanced over the past 20 years (DeLeon & Iwata, 1996; Fisher et al., 1992; Pace, Ivancic, Edwards, Iwata, & Page, 1985). However, preference assessments usually allow people to choose only from among items that can be placed in one's hand or on a table top. Determining the acceptability of behavior-change procedures with young children or those with ASD is complicated by the fact that these same individuals often show limited verbal competence, have a limited history with the procedures in question, or both. But, it is possible to do. I will describe applications of concurrent chains schedules, methods borrowed from basic behavioral research (e.g., Catania & Sagvolden, 1980), to provide objective assessments of children's preferences for behavior-change procedures.

In applied studies involving concurrent chains schedules, different colored poster boards are correlated with different behavior-change procedures (e.g., teaching strategies, behavioral interventions), and children repeatedly experience the procedures in the presence of the colored poster boards. Smaller colored cards or micro-switches, one associated with each procedure, are then made available to the children outside of the room in which the procedures are experienced, and the child is asked to select the one he likes best. When the child hands a card to the adult (or presses a micro-switch), the adult and child enter the room and briefly experience the procedures associated with the selected color. This process of handing cards (or pressing switches) and experiencing correlated procedures is repeated until the child selects one option on a regular basis (or some other pattern emerged). Thus, preferences for behavior-change procedures, which are difficult to describe to young children, are directly assessed by recording each child's selections of cues correlated with the behavior-change procedures. It is important to note that concurrent-chains arrangements are designed to provide an *objective* measure of children's preferences for behavior-change procedures—a child's preference for a given procedure is detected by measuring the extent to which the children select and experience particular procedures, and not by, for example, measuring indices of happiness while the child experiences each context. In addition, although the extent to which the context reduces undesirable behavior and increases desirable behavior is measured to determine the effectiveness of the behavior-change procedures, these measures are not used as indices of preference. In other words, there are two important *and independent* questions to be asked when developing a procedure to address a socially-important behavior problem: Does it work and is it preferred by those experiencing it?

These questions were addressed by Hanley, Piazza, Fisher, Contrucci, and Maglieri (1997) when attempting to develop treatments for the problem behavior of two young children with intellectual disabilities. After learning via functional analysis (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982, 1994) that the two children's aggression and disruption were maintained by adult attention, two function-based treatments were designed. One provided the reinforcer for a socially desirable alternative behavior (functional communication training [FCT]), the other provided the same type and amount of attention independent of behavior (i.e., according to time; noncontingent reinforcement [NCR]). Both treatments were similarly effective in reducing aggression and disruption. When the children were then allowed to choose between FCT, NCR, and extinction in a concurrent chains arrangement, both children chose FCT. We think that children chose FCT because it allowed them to access social reinforcers at times they were most valued. This study provides an example of the use of an objective social validity assessment with the recipients of the behavior-change procedures when those procedures are similarly effective. This preference for contingent over noncontingent reinforcement also has some generality. Luczynski and Hanley

(2009) recently showed that 7 of 8 children of typical development preferred contingent to noncontingent social reinforcement (one child was indifferent).

For some children, FCT results in an acceptable reduction in problem behavior only when a punishment procedure is added to the treatment (Fisher et al., 1993; Wacker et al., 1990). This was also the case in a study by Hanley, Piazza, Fisher, and Maglieri (2005), who showed that for two children with intellectual disabilities and autism, FCT was ineffective, whereas FCT plus punishment (e.g., 30-s hands down procedure) was effective in reducing severe self-injury, aggression, and disruption. When the two children were provided with repeated opportunities to choose between FCT, FCT plus punishment, or punishment only, both children consistently chose FCT plus punishment. These results underscore the fact that if treatment options were restricted to those considered nonaversive or positive, the children in this study would have been prescribed treatments that were both ineffective and nonpreferred. Taken together, the studies by Hanley et al. (1997, 2005) suggest that the values guiding the selection of treatment strategies can be data-based. Treatment decisions need not be based on the name or structure of the intervention; they can be based on measures of efficacy and child preference.

Children's values with respect to teaching procedures have also been assessed in a similar manner (Heal, & Hanley, 2007; Heal, Hanley, & Layer, 2009). In Heal et al. (2009), the efficacy of and preferences of four children of typical development for teaching strategies that varied in the amount of teacher directedness were evaluated. The results showed that children preferred the strategy that involved direct teaching in addition to embedded and discovery-oriented teaching over strategies that were devoid of direct teaching (the preferred strategy was also the most effective in teaching target relations). As an aside, it seems important for this sort of study to be systematically replicated with young children with autism. Multiple teaching tactics based on learning principles are currently used to teach young children with autism social and language skills, among other socially important behaviors, but the extent to which each is more or less effective than the other and the extent to which each is valued by those experiencing them (i.e., young children with autism) remains unknown.

Because children often experience behavior-change procedures simultaneously (e.g., class-wide or group contingencies, classroom schedules), Layer, Hanley, Heal, and Tiger (2008) examined the accuracy of a group-oriented concurrent-chains assessment. This assessment essentially involved all children making independent selections of a behavior-change procedure and then simultaneously experiencing the same one that was randomly selected from those that were chosen. This *group* assessment was shown to be accurate and efficient for determining preferences for behavior-change procedures. Layer and Hanley (unpublished manuscript), then used this group assessment to determine preschoolers preferences for three behavior management strategies commonly used during free-play periods. An efficacy evaluation showed that rule reminders following the aggressive or disruptive behavior of four preschoolers resulted in

the highest levels of these problem behaviors. Talking about the behavior and practicing an alternative behavior in addition to the rule reminders resulted in a decrease in problem behavior, but to unsatisfactory levels. Inserting a brief time-out (formally consistent with a “sit and watch;” Porterfield, Herbert-Jackson, & Risley, 1976) between the rule reminder and talk and practice resulted in near elimination of problem behavior for all four preschoolers during free play. When given an opportunity to choose from among these three alternatives, two preschoolers were indifferent, and two preferred the strategy involving time-out in addition to rule reminders and talk and practice. These data show social validity assessments can be conducted with groups of children simultaneously (and that children’s preference for contexts involving punishment has some generality).

Concurrent chains arrangements are but one way to objectively determine children’s values for our behavioral programming. Another means of doing so is to simply observe where children allocate their time when multiple activities or contexts are concurrently available. For instance, we used a momentary time sampling procedure to record the location and engagement level of 20 preschoolers in order to detect their preferences for nine simultaneously available activities (Hanley, Cammilleri, Tiger, & Ingvarsson, 2007). When we discovered that the majority of the children did not prefer our direct instructional, science, and library activities, we added more effective prompting and higher quality reinforcers to those activities while keeping the other activities as they were (Hanley, Tiger, Ingvarsson, & Cammilleri, 2009). By doing so, we were able to shift children’s preference toward these educationally important activities while still respecting their original choices. This study shows that the value of our behavior-change procedures can be determined in different ways with the recipients of the procedures (e.g., you can allow them to “vote with their feet”). In addition, when children make less-than-desirable choices we encourage them, but don’t require them, to make good choices by improving the quality of important activities that are not preferred initially while leaving other options intact.

In summary, it is possible to objectively determine the acceptability of multiple types of behavior-change procedures with any child and any size group experiencing the procedures.

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## Health Conditions in Antecedent Assessment and Intervention

By Craig H. Kennedy

A range of variables influence the occurrence of behavior. Some of these, such as reinforcing stimuli and contingencies of reinforcement, play a direct role in the selection and maintenance of behavior. Others, such as discriminative stimuli, predict the availability of reinforcement, setting the occasion for behavior to occur. Still others, such as motivating operations, alter the value of reinforcing stimuli and correspondingly change the likelihood that responses will be evoked. Each of these types of behavioral processes alters the probability that responses will be emitted by a person. The classification, estimation, and manipulation of these behavioral processes help determine whether a person engages in socially acceptable behavior or behaviors that society deems inappropriate.

There are, however, other variables influencing the probability of responding that have not been as extensively characterized. One such set of events—which we will call *health conditions*—can increase or decrease the occurrence of behaviors in ways that researchers are only beginning to understand. By health conditions, what we are referring to is any illness, injury, impairment, or physical condition that negatively impacts a person's well-being. Health conditions of interest in relation to problem behavior can include chronic and acute conditions. That is, such conditions can be longstanding health challenges that persist over extended periods of time (e.g., gastroesophageal reflux disease) or be brief and transient (e.g., otitis media). In addition, health conditions are often cyclical in their occurrence or change in their intensity over time. Such cyclicity can occur at ultradian (e.g., esophageal pain following meals), circadian (e.g., sleep cycles) or longer time scales (e.g., dysmenorrhea).

Health conditions are particularly important in understanding the occurrence of problem behaviors in people with developmental disabilities because these individuals have a greater rate of occurrence of special health care needs than the general population. For example, between 44% and 83% of children with autism have sleep problems, whereas 11% of children without disabilities are reported to have sleep anomalies. Similarly, 25% of adults with developmental disabilities are reported to have some form of epilepsy, a prevalence rate 25 times greater than the general population. Adding to this pattern, the greater the degree of intellectual disability the more likely a person is to have multiple health care needs. Because of the greater prevalence of health care needs among people with developmental disabilities, there is a higher probability that health issues may be present and contribute to problem behavior.

In general, health conditions may exacerbate some aspect of behavior-environment relations shaping and maintaining problem behaviors, contributing to a greater probability these behaviors will occur. In some instances, the influence of health conditions may be evocative or discriminative; in other instances health conditions may create new response-reinforcer relations. An

example of the former type of process would be the discomfort associated with dysmenorrhea, making stimuli that are typically ineffectual as negative reinforcers noxious enough to evoke escape-related behaviors. An example of the latter process would be the onset of otitis media (an inner-ear infection) whose painful somatosensory effects can be temporarily alleviated by head hitting or head banging. In both examples, biological variables serve a role in changing how behaviors are negatively reinforced.

In the examples just provided, the onset of a health condition contributes to the occurrence of problem behavior. To incorporate such antecedents into both assessment and intervention for problem behavior, functional behavioral assessments (FBAs) and behavioral intervention plans (BIPs) need to adopt an interdisciplinary approach. Individuals with indepth knowledge of health conditions need to work alongside individuals with educational and behavior-analytic skills to identify both biological and environmental variables contributing to problem behaviors. In addition, these individuals need to work in tandem in the development, implementation, and monitoring of interventions. Often, interventions will need to focus on both environmental and biological aspects contributing to problem behaviors when health care issues are present.

In this talk, I will review common health conditions that have been identified as having an association with problem behavior. I will define the health conditions, review assessment techniques, and discuss possible interventions within the context of reducing both the health care concerns and problem behavior that may be exacerbated by them. My goal is to provide the audience with an opportunity to consider how health care needs contribute to problem behavior and the importance of treating a broader range of variables, including health conditions, within the context of FBAs and BIPs.

## The Science and Practice of Discrete Trial Training: Why Some Teaching Procedures Are More Effective Than Others

Kathryn Saunders

Discrete trial training procedures are widely used to teach early language skills to students with autism and other developmental disabilities. This talk focuses on one discrete trial procedure—matching to sample—that is often used in teaching receptive language. In a matching-to-sample procedure, for example, a student might be taught to select the picture that corresponds to a spoken word (the spoken word is referred to as a sample stimulus) from a choice pool of two or more pictures. Although this behavioral objective is relatively straightforward, choosing effective teaching procedures is more complicated.

Ideally, instructional programming should be based on an analysis of the skill. That is, a complex skill is broken into smaller components, and instruction is designed to ensure the acquisition of each and every component. What are the components that a student must master to perform a matching-to-sample task? First, the stimuli in the choice pool must be discriminated from one another. This discrimination can be assessed by presenting only the choice stimuli on each teaching trial, and reinforcing the selection of the same choice stimulus on every trial. Second, the learner must discriminate the sample stimuli from one another. In the present example, the samples are spoken words. Requiring the student to repeat the spoken word is a simple way of ensuring that the student is making this discrimination (providing the learner can imitate spoken words). Importantly, repeating the spoken word involves *making a different response to each sample stimulus*, thus providing clear evidence of the sample discrimination. The third component is control of the choice-stimulus selection by the sample stimulus (the spoken word). This third component may seem too obvious to mention, but it is possible for a learner who discriminates the sample stimuli and the choice stimuli to, have great difficulty learning relations between samples and choices.

Some often-used procedures for teaching matching to sample do not ensure that all components are taught. Consider delayed-prompting procedures. These procedures typically involve prompting the selection of the correct choice stimulus. For example, after allowing time for the student to make a response, the teacher might point to the correct stimulus and require the student to imitate that point. If all goes well, the student begins to respond before the prompt is presented (during the delay). This procedure is effective for some students, but used as described here, it does not ensure the discrimination between the sample stimuli; the student can make the correct prompted response without attending to the sample at all. This may be why the procedure is not universally effective.

Another commonly used teaching procedure, sometimes called the “three-step” procedure, involves presenting the same sample on every trial. This is done for one of the samples until accuracy is very high for a number of consecutive trials. Next, the second sample is presented until accuracy is very high with that sample.

In the third step, the samples are presented randomly across trials. It is not unusual for accuracy to fall to chance levels in the third step, when the samples are mixed, but this outcome should not be a surprise. The contingencies involved in the first two steps of the procedure do not require that the learner attend to the sample stimuli, much less discriminate them.

It is important to note that the aforementioned procedures are sometimes effective, which accounts for their frequent use. The effectiveness of any teaching procedure depends on the student's pre-existing skills. Students who have a history of learning a number of matching-to-sample problems, for example, are more likely to learn with simple teaching procedures. It seems efficient to determine whether a simple delayed-prompt procedure is effective with a particular student prior to using more elaborate procedures. Building on the analysis presented thus far, I will describe a teaching procedure designed to ensure the initial acquisition of matching to sample by ensuring that all three component skills have been established.

Building on the analysis presented thus far, I will describe several relatively simple teaching procedures that have been shown to facilitate acquisition of matching to sample, along with a rationale for their effectiveness. Some examples include putting the more difficult discrimination in the choice position, prompting the correct choice-stimulus selection by presenting a stimulus identical to the correct choice (instead of a physical prompt), presenting the choice pool first and delaying the sample, or requiring a differential response to the sample stimuli.

## ABAI 2010 Autism Conference Bookstore

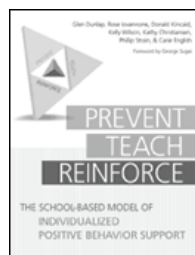
ABAI conference bookstore features the books of invited presenters and authors pertinent to the subject of autism. The bookstore has been expanded for this event and includes more than 300 titles. Located in the Columbus Hall on the Gold Level of the East Tower, the bookstore is open during exhibit hours. Stop by the bookstore for the newest and most varied publications on autism.

Some of the conference's invited presenters will be signing their publications at the bookstore. The author signing will take place from 8:00 p.m. to 9:00 p.m. on Friday evening. The books listed below are authored by conference presenters and are available at the bookstore.

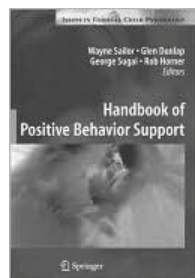
**Glen Dunlap**

*Prevent-Teach-Reinforce: The School-Based Mode of  
Individualized Positive Behavior Support*

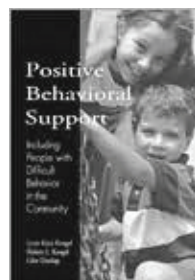
Glen Dunlap, Rose Iovannone, Donald Kincaid, Kelly Wilson,  
Kathy Christiansen, Phillip Strain, and Carrie English  
Autism Asperger Publishing Company, 2009



*Handbook of Positive Behavior Support*  
Wayne Sailor, Glen Dunlap, George Sugai,  
and Robert H. Horner (Eds.)  
Springer, 2009



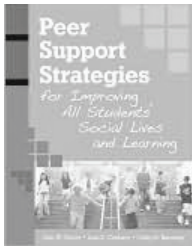
*Positive Behavioral Support: Including People With  
Difficult Behavior in the Community*  
Lynn Kern Koegel, Robert L. Koegel, and Glen Dunlap (Eds.)  
Paul H. Brookes Publishing Co., 1996



*Generalization and Maintenance: Lifestyle Changes  
in Applied Settings*

Robert H. Horner, Glen Dunlap, and  
Robert L. Koegel (Eds.)  
Paul H. Brookes Publishing Co., 1988

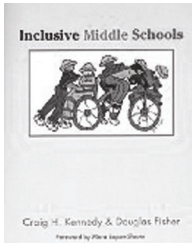
Visit the bookstore to  
purchase this title!



## **Craig H. Kennedy**

*Peer Support Strategies for Improving All Students' Social Lives and Learning*

Erik W. Carter, Lisa S. Cushing, and Craig H. Kennedy  
Autism Asperger Publishing Company, 2009



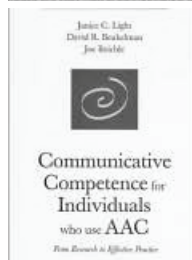
## *Inclusive Middle Schools*

Craig H. Kennedy and Douglas Fisher  
Paul H. Brookes Publishing Co., 2001



## *Including Students With Severe Disabilities*

Craig H. Kennedy and Eva M. Horn  
Allyn and Bacon, 2004



## **Joe Reichle**

*Communicative Competence for Individuals Who Use AAC*

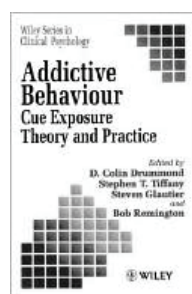
Janice C. Light, David R. Beukelman, and Joe Reichle  
Paul H. Brookes Publishing Co., 2003



## **Robert Remington**

*The Challenge of Severe Mental Handicap: A Behaviour Analytic Approach*

Robert Remington (Ed.)  
J. Wiley & Sons, 1991

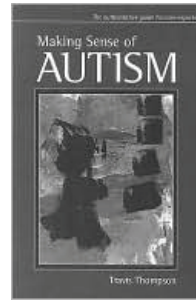


## *Addictive Behaviour: Cue Exposure Theory and Practice*

D. Celia Drummond, Stephen T. Tiffany, Steven Glautier, and Robert Remington (Eds.)  
J. Wiley & Sons, 1995



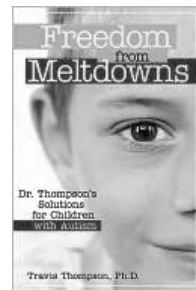
**Travis Thompson**  
*Making Sense of Autism*  
 Travis Thompson  
 Paul H. Brookes Publishing Co., 2007



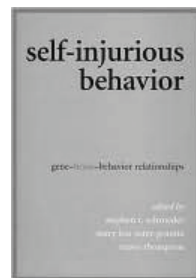
*Dr. Thompson's Straight Talk On Autism*  
 Travis Thompson  
 Paul H. Brookes Publishing Co., 2008



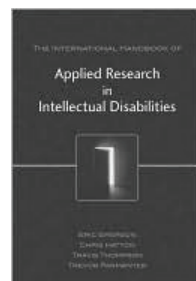
*Freedom From Meltdowns: Dr. Thompson's Solutions for Children With Autism*  
 Travis Thompson  
 Paul H. Brookes Publishing Co., 2008



*Self-Injurious Behavior: Gene-Brain-Behavior Relationships*  
 Travis Thompson, Stephen R. Schroeder, and Mary Lou Oster-Granite (Eds.)  
 American Psychological Association Publisher, 2002



*International Handbook of Applied Research in Intellectual Disabilities*  
 Eric Emerson, Chris Hatton, Travis Thompson, and Trevor Parmenter (Eds.)  
 John Wiley & Sons, 2004



## Events of Interest at ABAI's 36<sup>th</sup> Annual Convention in San Antonio

May 28-June 1, 2010

Henry B. Gonzalez Convention Center and Grand Hyatt San Antonio

If you are interested in learning more about applied behavior analysis as it relates to the treatment of autism and other developmental disabilities, consider attending ABAI's annual convention this May. This event provides a forum for more than 1,500 events within a 5-day period and is attended by professors, researchers, practitioners, students, teachers, parents, and consultants in the field of behavior analysis. The 2010 convention will feature 488 events related to autism and developmental disabilities, as well as 45 workshops and more than 306 poster presentations on these topics. Highlights of these events are the B. F. Skinner Lecture Series, invited tutorials, and invited events.

### **ABAI Tutorial**

*Incorporating Elements of the Derived Stimulus Relations Research Program Into Educational Curricula for Learners With Autism and Other Disabilities*

Ruth Anne Rehfeldt  
(Southern Illinois University)

### **Invited Presentations**

*Utilizing Behavior Change Strategies to Achieve Political Change*

John Scibak  
(Vice-Chair of the Joint Committee on Economic Development and Emerging Technologies and Co-Chair of the Oral Health Legislative Caucus)

*Designing and Evaluating Technology-Based Behavioral Interventions for Individuals With Autism Spectrum Disorders*

Linda A. LeBlanc  
(Auburn University)

### **Autism Special Interest Group**

#### **Business Meeting**

Chair: Ruth Donlin  
(Private Practice)

Sunday, May 30; 7:30 p.m.

A business meeting will be held to address various administrative matters

relevant to the Autism SIG. The business meeting will be followed by a panel presentation titled "Responding to Media Inaccuracies Surrounding Autism Treatment." This panel will include discussion about the misrepresentation of effective treatments for autism as well as efforts being made to increase the visibility of science-based treatments for autism in the media. All interested parties are welcome to attend.

### **Parent-Professional Partnership Special Interest Group Business Meeting**

Chair: David A. Celiberti  
(Association for Science in Autism Treatment)

Sunday, May 30; 8:00 a.m.

Behavior analysts involved in clinical practice recognize that we owe much to parents who have been staunch advocates for higher quality services for their children. The synergy that can arise from parents and professionals working together creates exciting opportunities and possibilities. The purpose of this meeting is to review the Parent Professional Partnership

SIG's goals and objectives, and to discuss ways to improve upon the SIG Web site. All interested parents and professionals are encouraged to attend this meeting and visit our Web page at [www.PPPSIG.org](http://www.PPPSIG.org).

### **ABAI Practice Board: Autism Insurance Summit**

The purpose of this event is to begin a dialogue between applied behavior analysis (ABA) providers, advocates, and insurance industry representatives around the issue of the implementation of the Autism Insurance Mandate Bills and the funding of ABA services. As of September 2009—thanks to the hard work of many, including the staff of Autism Speaks—there are now 15 states with such bills in-place and 6 more shortly to be considered in their respective state legislatures. Many providers claim that the delay in being paid for their services is driving them away from accepting referrals when insurance funding is the only source of payment. The goals for the summit will be to identify strategies for working with the insurance industry for better education concerning ABA services, to agree upon a model of service delivery appropriate for ABA and children diagnosed with autism, to identify appropriate standards for ABA practitioners, and to create a model for the education of ABA practitioners in understanding and dealing with the insurance industry.

### **Parents and Professionals Sharing the Conference Experience**

Chair: Pamela H. Gorski  
(Reaching Potentials, Inc.)

Sunday, May 30; 7:30 p.m.

This meeting provides an opportunity for parents of children receiving

behavior analytic services and professionals to gather in an informal setting to discuss the conference and common issues. Autism treatment is expected to be a major topic. Pamela Gorski—Executive Director of Reaching Potentials, Inc.—an ABA parent support services agency, will host this meeting. Refreshments will be provided.

## **ABAI 2010 Organizational Members**

Association for Behavior Analysis International acknowledges and thanks the following organizations for their participation and support.

- Autism Spectrum Therapies
- The Aurora School
- BEACON Services
- Center for Autism and Related Disorders
- The Columbus Organization
- Criterion Child Enrichment
- Evergreen Center
- Institute of Professional Practice, Inc.
- Judge Rotenberg Center
- May Institute
- National Autism Center
- The New England Center for Children
- The Spectrum Center

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Invited presenters are in **bold**.

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## Q

Quigley, Shawn Patrick: #12 (18),  
#12 (24)

## R

**Reichle, Joe:** #7

Reitzel, Jo-Ann M.: #1 (24)

**Remington, Bob:** #3

Richards, Jeffrey A.: #1 (9)

Richman, David M.: #12 (21)

Ridenour, Lindsey: #1 (53)

Rivard, Mélina: #1 (12)

Riviere, Vinca: #1 (32), #12 (32)

Rojahn, Johannes: #1 (45)

Ryan, Roberta N.: #12 (54)

## S

Saunders, Alicia F.: #12 (35)

**Saunders, Kathryn:** #13

Schatzberg, Megan: #12 (27)

Schieltz, Kelly M.: #12 (46)

Schpilka, Philippe: #12 (32)

Schussler, Nancy G.: #1 (8)

Severtson, Jamie M.: #1 (49)

Shane, Joseph T.: #12 (4), #12 (8)

Sharp, William G.: #1 (10)

Shusterman, Gila R.: #1 (16)

Shymansky, Amy: #1 (5), #1 (20)

Simmons, Karen: #1 (53), #12 (51)

Smiecinski, Tiffany Marie: #1 (4)

Sokolosky, Stephanie: #12 (31)

Stenhoff, Donald M.: #12 (9),  
#12 (27)

Stevens, Dana J.: #12 (39)

Stone, Kelly: #1 (2), #12 (3)

Summers, Jane: #1 (24)

Swiezy, Naomi: #1 (15), #1 (19)

Symons, Frank J.: #12 (26)

Szatmari, Peter: #1 (24)

Szekely, Susan: #12 (20)

## T

Takahashi, Kosuke: #12 (30)

Taylor, Suzanne: #12 (55)

**Thompson, Travis:** #2, #5, #16

Trucchi, Raphaelle: #12 (23)

Turko, Kristine: #1 (52)

Turner, Jennifer Elizabeth: #12 (42)

Twarek, Melissa: #1 (23), #1 (39),  
#1 (54), #12 (34), #12 (38)

## U

Ulke Kurkcuoglu, Burcu: #1 (27)

## V

Van Laarhoven, Toni R.: #12 (47),  
#12 (48), #12 (49)

## W

Wacker, David P.: #12 (46)

Wang, Shih-yu: #1 (51)

Weiss, Mary Jane: #1 (21),  
#1 (47)

Wendt, Oliver: #1 (37)

Wertheim, Sarah: #1 (11)

White, Pamela: #12 (19)

Williams, Betty Fry: #12 (39)

Williams, W. Larry: #1 (57)

Wiskirchen, Rebecca Renee:  
#12 (27)

Wolde, Hanna: #12 (10)

Wu, Hang: #1 (18)

## X

Xu, Dongxin: #1 (9)

## Y

Yamamoto, Jun'ichi: #12 (30)

Yang, Chunyan: #1 (40)

Yaughner, Ashley: #12 (25)

## Z

Zammito, Rachel: #1 (52)

Zane, Thomas L.: #1 (21)

Zanton, Jessica: #12 (21)

Zwaigenbaum, Lonnie: #1 (24)



# AST Autism Spectrum Therapies



## Creating Futures For Individuals With Autism

Positions available in Los Angeles, San Fernando Valley, San Gabriel Valley, Inland Empire, Orange County & San Diego!

### DIRECT INTERVENTIONIST, BA/BS

- Minimum of one year experience working with children with autism
- Appropriate educational or training background

### PROGRAM SUPERVISOR, MA/MS

- BCBA required
- Minimum of two years experience in working with children with autism and designing behavior intervention programs
- Experience in providing supervision of ABA methods

### DIVISION COORDINATOR, MA/MS or PH.D.

- BCBA required
- Minimum of four years experience working with children with autism
- Experience in independent program development, report writing and case supervision

### WE OFFER COMPETITIVE SALARIES AND A BENEFITS PACKAGE INCLUDING:

- |                                |                               |
|--------------------------------|-------------------------------|
| • 401 (k) with Corporate Match | • Vision Insurance            |
| • Medical Insurance            | • Life & Disability Insurance |
| • Dental Insurance             | • Paid Vacation & Sick Leave  |

### **CAREER OPPORTUNITIES**

Launch your career with  
AST now! To learn more,  
please visit our website:

[www.autismtherapies.com](http://www.autismtherapies.com)

AST Autism Spectrum Therapies

[www.autismtherapies.com](http://www.autismtherapies.com)



## Personal Information

TITLE (CIRCLE): Dr Prof Ms Mrs Mr

FIRST NAME

PREFERRED FIRST NAME (NICKNAME)

MIDDLE NAME

LAST NAME

SECOND LAST NAME

WORK TELEPHONE

HOME TELEPHONE

CELL

## SABA Donations

Contributions to SABA qualify for tax deductions to the full extent provided by the law.

### Research Endowment Fund

Contribute to funding of two Master's thesis grants of \$500 each and two dissertation grants of \$1,000.

☐ \$ \_\_\_\_\_ Research Endowment Donation

### Senior Student Presenter Fund

 Donate to support registration for a student who is a senior presenter at ABAI's 36<sup>th</sup> Annual 2010 Convention. A single student registration is \$79.

☐ \$79 Donation for 1 student

☐ \$158 Donation for 2 students

☐ \$237 Donation for 3 students

### Unrestricted Donation

☐ \$ \_\_\_\_\_ Unrestricted Donation

ADDRESS (CIRCLE): Home Work

STREET

CITY

STATE/PROVINCE

POSTAL/ZIP CODE

COUNTRY

E-MAIL

AFFILIATION

## Registration Fees

All presenters, including invited presenters and authors, must register for the event(s) in which they are presenting. Payment of membership and registration fees is subject to current federal, state, and local tax regulations. To determine the tax-exempt status of your payment, contact your local office of tax information.

 All event registrants, including students, must be a member for the 2010 calendar year in order to receive member rates. If you do not wish to renew your membership for 2010, you must register as a non-member. *Not sure you have renewed for the 2010 calendar year? Check here and we will renew your 2009 membership for 2010 and charge your credit card:* ☐

## Cancellation Policy

Requests for registration refunds for the 2010 annual convention in San Antonio, TX, minus a \$50 cancellation fee, will be met provided they are made prior to midnight (EST) April 30, 2010.

Refund requests received after deadlines, except for those made as a result of a death in the immediate family, will not be granted. Cancellations due to a family death should be submitted to ABAI in writing; ABAI reserves the right to request legal verification of the death.

## Transfer Policy

Requests for registration transfers (attendee replacements) for the 2010 annual convention in San Antonio TX, received by midnight (EST) May 7, 2010 will be processed in the ABAI office prior to the convention. Requests made after this date will be processed on-site at the Registration Counter. There will be a \$50 processing fee for transfers.

## Special Accommodations

 The Association for Behavior Analysis International makes accommodations for convention attendees with disabilities. We ask that any individual requiring special arrangements at the convention submit their needs in writing to: [convention@abainternational.org](mailto:convention@abainternational.org) and follow up with the ABAI office accordingly.

For the 2010 annual convention in San Antonio, TX, arrangements are not guaranteed for requests made after midnight (EST) April 1, 2010.

## Name Badges

Name badges are required for entry into all ABAI events, presentation rooms, and for access to ABAI on-site services, including bookstores, exhibits, and job placement services. Registrants receive a name badge on-site. Replacement name badges will be provided for a cost of \$20. Your name badge will be printed with your preferred first name (nickname) in addition to your full first and last name and affiliation, as specified in your Personal Information, above.

## Family Badges

Family attending only your convention presentation must purchase a family badge or they will not be permitted into your event. Include each of your family member's names, below, and \$10 per badge with your convention registration. Name badges will be placed in your advance registration packet, or may be purchased at the On-site Registration Counter.

### First Family Member

FAMILY 1 PREFERRED FIRST NAME

FAMILY 1 FULL FIRST AND LAST NAME

FAMILY 1 AFFILIATION, IF APPLICABLE

### Second Family Member

FAMILY 2 PREFERRED FIRST NAME

FAMILY 2 FULL FIRST AND LAST NAME

FAMILY 2 AFFILIATION, IF APPLICABLE

REGISTER FOR THE ENTIRE ANNUAL CONVENTION			
Please circle membership type and amount	Register on or before 2/24/10	Register 2/25/10 -4/30/10	Onsite 5/27/10 -6/1/10
Sustaining, Supporting, Full, or Affiliate Member	\$157	\$177	\$207
Emeritus and Student Member	\$79	\$89	\$104
Chapter-Adjunct Member	\$203	\$223	\$253
Non-member	\$374	\$394	\$424

SINGLE-DAY CONVENTION REGISTRATION			
Check day(s) attending: <input type="checkbox"/> Saturday 5/29 <input type="checkbox"/> Sunday 5/30 <input type="checkbox"/> Monday 5/31 <input type="checkbox"/> Tuesday 6/1			
Circle your membership category from the list below and fill in the appropriate amount (fee X # of days): \$ _____			
Category	Register on or before 2/24/10	Register 2/25/10 -4/30/10	Onsite 5/27/10 -6/1/10
Sustaining, Supporting, Full or Affiliate Member	\$79	\$89	\$104
Emeritus and Student Member	\$79	\$89	\$104
Chapter-Adjunct Member	\$106	\$116	\$131
Non-member	\$139	\$149	\$164

### Payment

Overpayments and discounts not taken will be considered donations to ABAI unless a request for a refund is made in writing to the ABAI office. Full payment must be received in the ABAI office before services will be granted. Payment may be made by check, credit card, or money order and must be made in U.S. dollars. Returned checks will be subject to a \$35 fee. Make checks payable to ABA International or charge your:

(CIRCLE ONE): Am. Exp. MasterCard Visa  
Discover

NAME ON CARD

CARD NUMBER

EXPIRATION DATE

SIGNATURE

BILLING ADDRESS IF DIFFERENT THAN PAGE 1

BILLING CITY, STATE, ZIP, COUNTRY

### Program Book Mailed

Given the exceptional growth in the number of convention events and, by extension, in the size of the Program Book, all registrants will receive their printed program book on-site in San Antonio at the Pre-Registration counters.

If you would like to receive your copy of the printed program book prior to the convention, you must register before February 24, 2010 and cover the cost of postage (\$6). Would you like your Annual Convention Program Book mailed to you prior to convention, for a \$6 fee?

☐ Yes (\$6 fee)

☐ No

### Journal Subscriptions

	ABAI Student Members	Other ABAI Members	Non-Members	Internat'l Shipping
<i>The Analysis of Verbal Behavior</i>	<input type="checkbox"/> \$25	<input type="checkbox"/> \$35	<input type="checkbox"/> \$45	<input type="checkbox"/> \$10
<i>Behavior Analysis in Practice</i>	<input type="checkbox"/> \$26	<input type="checkbox"/> \$37	<input type="checkbox"/> \$46	<input type="checkbox"/> \$20
<i>The Behavior Analyst*</i>		<input type="checkbox"/> \$51	<input type="checkbox"/> \$64	<input type="checkbox"/> \$20

\*Dues for all membership categories except Chapter/Adjunct INCLUDE subscriptions to *The Behavior Analyst*.

TOTAL PAYMENTS ENCLOSED	
Annual Convention Registration	\$ _____
Journal Fees	\$ _____
SABA Donations	\$ _____
Family Badge(s)	\$ _____
Program Book Mailing (\$6)	\$ _____
<b>TOTAL PAYMENTS</b>	<b>\$ _____</b>

Mail form and payment to 550 West Centre Ave., Suite 1, Portage, MI 49024-5364 for Fax: 269.492.9316

Members of ABA International enjoy reduced convention registration fees, subscriptions to the ABAI newsletter, *Inside Behavior Analysis*, free resume posting on ABAI's Job Board (New in 2010!), access to apply for competitive Professional Liability Insurance (New in 2010!), and access to on-line membership services through the ABAI portal. Additional benefits are included in each member type description, below.

## Affiliate Members

Affiliate Membership is for individuals who have an interest in behavior analysis or have completed undergraduate credit, but do not meet the full member education requirements. Dues help support the involvement of undergraduate and graduate students in the science and practice of behavior analysis

**Additional Benefit:** subscription to the journal, *The Behavior Analyst*.

## Emeritus Affiliate Members

Emeritus Affiliate Membership is for individuals who are 65 years of age or older but do not have voting rights.

**Requirement:** Send verification of age when applying for this status for the first time.

## Sustaining and Supporting Affiliate Members

Sustaining and Supporting Affiliate memberships provide additional support to encourage the involvement of undergraduate and graduate students in the science and practice of behavior analysis through increased membership dues.

**Additional Benefits:** Citation in *Inside Behavior Analysis* and the *Convention Program Book*.

## Full Members

Full membership dues help support the involvement of undergraduate and graduate students in behavior analysis.

**Additional Benefits:** voting rights on ABAI business matters, to participate in the nominations and election of officers, and a subscription to the journal, *The Behavior Analyst*.

**Requirements:** A Master's degree in psychology, behavior analysis, or a related discipline and demonstration in your application of competence in either the experimental analysis of behavior or applied analysis of behavior. Full membership applications are reviewed for eligibility by the ABAI Applications Review Committee (ARC). When first applying for Full membership, applicants will be classified as Affiliate members until a decision has been made by the ARC. Payment of dues for the membership year is understood as acceptance of Affiliate membership status for that membership year. Full membership is at the discretion of the ARC and is based upon materials submitted in the Full Member application as understood and interpreted by the ARC. When applying for this status, submit the following along with your completed 2010 Membership Form included in this packet:

- the required documentation indicated on the accompanying *ABAI Full Membership Application* on the next page for the **one** category under which you are applying;
- the accompanying *ABAI Full Membership Application*.

Please note that incomplete applications will not be reviewed.

## Emeritus Full Members

Emeritus Full membership is for individuals who have been approved for full membership status and are 65 years of age or older.

**Requirement:** Send verification of age when applying for this status for the first time.

## Supporting and Sustaining Full Members

Supporting and Sustaining Full memberships provide additional support to encourage the involvement of undergraduate and graduate students in the science and practice of behavior analysis through increased membership dues.

**Additional Benefits:** Citation in *Inside Behavior Analysis* and the *Convention Program Book*.

## Chapter/Adjunct Members

Chapter/Adjunct membership is for individuals who are members of an ABAI Affiliated Chapter.

**Requirement:** Send proof (e.g., member fee receipt, copy of membership card, verification letter) from the chapter confirming current chapter membership or complete the "Verification of ABAI Affiliated Chapter Membership" section below. If purchasing a three-year membership, proof must be sent annually at the time of ABAI membership renewal.

**VERIFICATION** of ABAI Affiliated Chapter Membership

I, \_\_\_\_\_ have proper knowledge and authority to assure that the applicant is a member of the

\_\_\_\_\_  
AFFILIATED CHAPTER

\_\_\_\_\_  
DATE

\_\_\_\_\_  
CHAPTER OFFICER SIGNATURE

## Student Members

Student membership is for full-time undergraduate or graduate students, residents, or interns.

**Additional Benefit:** subscription to *The Behavior Analyst*.

**Requirement:** Send proof of full-time student, intern, or resident status or complete the "Verification of Full-Time Student Status" section below. Students who do not send proof with their application will be charged the fee for and classified as Affiliate members until verification is received.

**VERIFICATION** of Full-Time Student Status

I, \_\_\_\_\_ certify the applicant is a full-time student, intern, or resident at:

\_\_\_\_\_  
INSTITUTION NAME

\_\_\_\_\_  
DATE

\_\_\_\_\_  
FACULTY SIGNATURE

## Full Membership Application: Categories 1 - 4

Competence in Experimental Analysis of Behavior or Applied Behavior Analysis

Full membership in ABAI requires the minimum of a Master's degree in psychology, behavior analysis, or a related discipline and a demonstration of competence in either the experimental analysis of behavior or applied analysis of behavior. When requesting this status for the first time, select the one category from the checklist below for which you are qualified, or complete the following page (Category 5: Significant Contributions in Behavior Analysis), and submit the required documentation. Applications are subject to review by the Application Review Committee; applicants will be classified as Affiliate Members until a decision is made by the Committee.

### ☐ CATEGORY 1:

#### **Experimental Analysis of Behavior (EAB)**

I have the minimum of a Master's degree in psychology, behavior analysis, or a related discipline and my attached vita and documentation demonstrates competence in the experimental analysis of behavior via evidence that my training included a minimum of one year's supervised laboratory research and that my graduate project, thesis, or dissertation was an empirical based and investigation based in the experimental analysis of behavior.

### ☐ CATEGORY 2:

#### **Applied Behavior Analysis (ABA)**

I have the minimum of a Master's degree in psychology, behavior analysis, or a related discipline and my attached vita and documentation demonstrates competence in the applied analysis of behavior via evidence that my training included a minimum of one year's supervised practicum and that my graduate project, thesis, or dissertation was an empirical based and investigation based in the applied analysis of behavior.

### ☐ CATEGORY 3:

#### **Experimental Analysis of Behavior (EAB) in other competence**

I do not have the minimum of a Master's degree in psychology, behavior analysis, or a related discipline but my attached vita and documentation demonstrates competence in experimental behavior analysis via evidence of two or more years supervised experience in the experimental analysis of behavior.

### ☐ CATEGORY 4:

#### **Applied Behavior Analysis (ABA) in other competence**

I do not have the minimum of a Master's degree in psychology, behavior analysis, or a related discipline but my attached vita and documentation demonstrates competence in applied behavior analysis via evidence of two or more years supervised experience in the applied analysis of behavior.

**Note:** Unsupervised job experience does not meet the requirement for supervised research experience.

**Note:** Please see the next page to select and complete Category 5: Significant Contributions in Behavior Analysis.

PRINT YOUR NAME: \_\_\_\_\_

Complete the fields below and submit required documentation for your selected Category along with a completed 2010 Membership Form to the ABAI office for review by the Application Review Committee.

#### ☐ Select only one category to the left, or complete the next page for **Category 5: Significant Contributions to Behavior Analysis**

- ☐ Documentation that provides the following evidence of competence in EAB (Categories 1 & 3) or ABA (Categories 2 & 4)

- ☐ MA degree    ☐ PhD degree (Categories 1, 2, 3 & 4)

DEGREE NAME \_\_\_\_\_

DATE DEGREE CONFERRED \_\_\_\_\_

DEGREE CONFERRING INSTITUTION \_\_\_\_\_

TITLE OF GRADUATE PROJECT \_\_\_\_\_

NAME OF GRADUATE ADVISOR (OR REFERENCE) \_\_\_\_\_

- ☐ Minimum 100-word abstract of project (attach documentation) (Categories 1, 2, 3 & 4)

- ☐ One year of supervised research or practicum in EAB (Category 1) or ABA (Category 2)

- ☐ Two years of supervised research or practicum in EAB (Category 3) or ABA (Category 4)

DATES SUPERVISED RESEARCH TOOK PLACE \_\_\_\_\_

SUPERVISED RESEARCH TOPIC \_\_\_\_\_

NAME OF INSTITUTION AT WHICH IT WAS SUPERVISED \_\_\_\_\_

SUPERVISOR'S NAME \_\_\_\_\_

SUPERVISOR'S PHONE \_\_\_\_\_

SUPERVISOR'S E-MAIL \_\_\_\_\_

SUPERVISOR'S MAILING ADDRESS \_\_\_\_\_

Minimum 50-word description of the supervised research activities (attach documentation)

- ☐ Attach your vita

- ☐ A letter of recommendation from an ABAI Full Member, if you are applying for membership for the first time. This is not necessary if you have previously been an ABAI member.

## Full Membership Application: Category 5

Significant Contributions to Behavior Analysis

Full membership in ABAI requires the minimum of a Master's degree in psychology, behavior analysis, or a related discipline and a demonstration of competence in either the experimental analysis of behavior or applied analysis of behavior. First time applicants who do not meet the criteria of Categories 1 – 4 of the prior page but who have made significant contributions to the field may select Category 5 and document their contributions for consideration. Applications are subject to review by the Application Review Committee; applicants will be classified as Affiliate Members until a decision is made by the Committee.

**☐ CATEGORY 5:**

**Significant Contributions to Behavior Analysis**  
**I do not meet the requirements for Categories 1 – 4; however, I have made significant contributions to knowledge in behavior analysis as evidenced by research publications or any such other meanings as may be determined by the ABAI Membership Board.**

PRINT YOUR NAME: \_\_\_\_\_

Complete the fields below and submit required documentation for Category 5 along with a completed 2010 Membership Form to the ABAI office for review by the Application Review Committee.

- ☐ Select the category to the left, **Significant Contributions to Behavior Analysis**
- ☐ Documentation that provides evidence of the applicant's significant contributions to behavior analysis.
- ☐ MA degree    ☐ PhD degree
- DEGREE NAME \_\_\_\_\_
- DATE DEGREE CONFERRED \_\_\_\_\_
- DEGREE CONFERRING INSTITUTION \_\_\_\_\_
- TITLE OF GRADUATE PROJECT \_\_\_\_\_
- NAME OF GRADUATE ADVISOR (OR REFERENCE) \_\_\_\_\_
- ☐ Minimum 100-word abstract of project (attach documentation)
- ☐ Multiple reports of empirical research, literature reviews, or conceptual analyses in well-cited peer-reviewed journals, chapters, or books (attach documentation)
- ☐ Names and contact information for two professional references who can comment on these contributions to behavior analysis:

PROFESSIONAL REFERENCE 1:

NAME \_\_\_\_\_

PHONE \_\_\_\_\_

E-MAIL \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_

PROFESSIONAL REFERENCE 2:

NAME \_\_\_\_\_

PHONE \_\_\_\_\_

E-MAIL \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_

# 2010 ABAI Membership Application

## Personal Information

 TITLE (CIRCLE): Dr Prof Ms Mrs  
 Mr

FIRST NAME

PREFERRED FIRST NAME (NICKNAME)

MIDDLE NAME

LAST NAME

SECOND LAST NAME

DATE OF BIRTH

WORK TELEPHONE

HOME TELEPHONE

CELL

FAX (HOME/WORK)

## Membership Fees for Non-U.S. Members

ABA International offers discounted fees for members with permanent residency in countries with per capita income of less than 75% of the United States'. ABAI determines members' permanent residency based on members' mailing addresses. Fees have been divided into four categories. Income per capita information was obtained from the World Bank Group, 2008. Source data is available at <http://www.worldbank.org/data/quickreference/quickref.html>. If your country is not listed above, but you feel you qualify for reduced dues based on the income per capita of your resident country, contact the ABAI office.

**Note:** Membership terms are from January 1 through December 31 of the membership year.

SEX (CIRCLE): Male Female

ADDRESS (CIRCLE): Home Work

STREET

CITY

STATE/PROVINCE

POSTAL/ZIP CODE

COUNTRY

CITIZENSHIP

E-MAIL

AFFILIATION

Personal information such as age and annual income will be kept confidential. This information is collected for the purpose of membership data analysis only.

**Region A:** For countries with income per capita of 75%-100% of the US, including Australia, Austria, Bahrain, Belgium, Bermuda, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Japan, Kuwait, Luxembourg, Netherlands, Norway, Qatar, Sweden, Switzerland, United Arab Emirates, United Kingdom.

**Region B:** For countries with income per capita of 50%-75% of the US, including Greece, Hong Kong, Israel, Italy, New Zealand, Singapore, and Spain. (Members in Category B receive a 25% discount on membership dues).

## Journal Subscriptions

	Stdnt	Ind.	Intl. Shipping
<i>The Analysis of Verbal Behavior</i>	<input type="checkbox"/> \$25	<input type="checkbox"/> \$35	<input type="checkbox"/> \$10
<i>Behavior Analysis in Practice</i>	<input type="checkbox"/> \$26	<input type="checkbox"/> \$37	<input type="checkbox"/> \$20
<i>The Behavior Analyst*</i>	<input type="checkbox"/> \$51	<input type="checkbox"/> \$20	

\*Dues for all membership categories except Chapter/Adjunct INCLUDE subscriptions to *The Behavior Analyst*.

## SABA Donations

Contributions to SABA qualify for tax deductions to the full extent provided by the law.

### Research Endowment Fund

Contribute to funding of two Master's thesis grants of \$500 each and two dissertation grants of \$1,000. ☐ \$ \_\_\_\_\_ Research Endowment Donation

### Senior Student Presenter Fund

Donate to support registration for a student who is a senior presenter at ABAI's 36<sup>th</sup> Annual 2010 Convention. A single student registration is \$79.

☐ \$79 Donation for 1 student  
☐ \$158 Donation for 2 students  
☐ \$237 Donation for 3 students

### Unrestricted Donation

☐ \$ \_\_\_\_\_ Unrestricted Donation

**Region C:** For countries with income per capita of 25%-50% of the US, including Cyprus, Czech Republic, Hungary, Korea, Oman, Portugal, Saudi Arabia, and Slovak Republic. (Members in Category C receive a 40% discount).

**Region D:** For countries with income per capita of <25% of the US, including Albania, Argentina, Bangladesh, Benin, Brazil, Chile, China, Colombia, Costa Rica, Ecuador, Egypt, Georgia, India, Jordan, Malaysia, Mexico, Nigeria, Pakistan, Paraguay, Peru, Philippines, Poland, Russian Federation, South Africa, Thailand, Turkey, and Venezuela. (Members in Category D receive a 60% discount).

## MEMBERSHIP DUES FOR RENEWING AND NEW MEMBERS

	Region A		Region B		Region C		Region D	
<b>Please circle membership type and amount</b>	1-Yr	3-Yr	1-Yr	3-Yr	1-Yr	3-Yr	1-Yr	3-Yr
Sustaining Affiliate or Sustaining Full**	\$323	\$938	\$243	\$703	\$194	\$563	\$129	\$375
Supporting Affiliate or Supporting Full**	\$176	\$510	\$132	\$382	\$105	\$306	\$70	\$204
Affiliate or Full**	\$132	\$384	\$99	\$288	\$79	\$230	\$53	\$154
Chapter-Adjunct	\$52	\$151	\$47	\$137	\$47	\$137	\$47	\$137
Emeritus	\$52	\$151	\$47	\$137	\$47	\$137	\$47	\$137
Student	\$52	NA	\$47	NA	\$47	NA	\$47	NA

\*\*First-time Full Member applicants have additional requirements. Please submit all documentation listed on the preceding Full Membership Application and Checklist.

## Student Member Information

- ☐ High School   ☐ Undergraduate   ☐ Master's  
☐ Doctoral   ☐ Post Doctoral

NAME OF SCHOOL YOU ATTEND \_\_\_\_\_

PROGRAM NAME \_\_\_\_\_

EXPECTED GRADUATION DATE \_\_\_\_\_

## Reason for Membership or Renewal

- ☐ I Am Pleased with ABAI Services  
☐ Encouraged by University Program/School  
☐ Family Members Exposed to Behavioral Treatment  
☐ Maintain Certification Status  
☐ Obtain *The Behavior Analyst* journal  
☐ General Interest in Behavior Analysis  
☐ Required by Employer  
☐ Other: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Degree Held

MOST RECENT DEGREE RECEIVED \_\_\_\_\_

CONFERRING INSTITUTION \_\_\_\_\_

YEAR RECEIVED \_\_\_\_\_

## Certification

Are you a certified behavior analyst?

- ☐ Yes   ☐ No

If yes, by whom: \_\_\_\_\_

CERTIFYING INSTITUTION \_\_\_\_\_

CERTIFICATION NUMBER \_\_\_\_\_

## Languages Spoken

First Language \_\_\_\_\_

Second Language \_\_\_\_\_

Third Language \_\_\_\_\_

## Position Title

Please check one box that most closely describes your job title:

- ☐ Administrator  
☐ Student  
☐ Consultant/Staff Trainer  
☐ Professor/Academic  
☐ Psychologist/Therapist  
☐ Researcher  
☐ Social Worker  
☐ Speech/Language Pathologist  
☐ School Teacher  
☐ Parent  
☐ Other: \_\_\_\_\_  
 \_\_\_\_\_

## Primary Discipline

Check the one box that most closely describes your field of study:

- ☐ Behavior Analysis  
     ☐ Applied Behavior Analysis  
     ☐ Behavior Theory and Philosophy  
     ☐ Experimental Analysis of Behavior  
     ☐ Organizational Behavior Management  
☐ Psychology  
     ☐ Behavioral Psychology  
     ☐ Clinical Psychology  
     ☐ Counseling Psychology  
     ☐ Developmental Psychology  
     ☐ Educational Psychology  
     ☐ Experimental Psychology  
     ☐ Industrial/Organizational Psychology  
     ☐ School Psychology  
     ☐ Social Psychology  
☐ Counseling  
☐ Education  
☐ Medicine  
☐ Neuroscience  
☐ Psychiatry  
☐ Public Policy and Administration  
☐ Rehabilitation/Rehabilitation Science  
☐ Special Education  
☐ Speech Pathology/ Speech-Language-Hearing Sciences  
☐ Social Work  
☐ Sociology  
☐ Other: \_\_\_\_\_  
 \_\_\_\_\_

## Annual Income Range

- ☐ <\$15,000  
☐ \$15,000-\$35,000  
☐ \$35,001-\$55,000  
☐ \$55,001-\$75,000  
☐ \$75,001-\$100,000  
☐ \$100,001-\$150,000  
☐ >\$150,000  
☐ Do not wish to share data

## Research Information

During the past 12 months have you served as a member of a grant review committee?

- ☐ Yes   ☐ No

During the past 12 months did you receive funding for behavioral research?

- ☐ Yes   ☐ No

**Note:** This information may be shared with persons or agencies/organizations engaged in efforts to support and promote behavioral research.

What source provided the funding? \_\_\_\_\_  
 \_\_\_\_\_

What was the amount of funding?

\$ \_\_\_\_\_ over \_\_\_\_\_ year(s)

What is the subject of your funded research? \_\_\_\_\_  
 \_\_\_\_\_

## Journal Marketing

May we have your permission to contact your institution or university library on your behalf to advertise our journals?

- ☐ Yes   ☐ No

If yes, please provide name of institution and contact information: \_\_\_\_\_  
 \_\_\_\_\_

## Volunteer

Participation is needed on ABAI Boards and Committees. Please indicate where you would like to volunteer:

- ☐ Affiliated Chapters Board  
☐ Education Board  
☐ Education Board / Graduate Accreditation  
☐ Membership Board  
☐ Membership Board / Recruitment & Retention  
☐ Membership Board / Student Committee  
☐ Practice Board  
☐ Practice Board / Governmental Affairs  
☐ Practice Board / Licensure Committee  
☐ Practice Board / Research in Practice  
☐ Publication Board  
☐ Science Board  
☐ Science Board/Research Support  
☐ Science Board/Dissemination of Scientific Knowledge  
☐ Science Board/Scientific Education

Special Interest Groups (SIGs) are a critical component of ABA International and provide additional services and support to members with specialized interests. SIGs are initiated by members to provide a forum for information exchange and a vehicle to promote a particular area of interest.

Please indicate which SIGs of which you are a member of and which you are interested in. Circle "M" if you are a member, and "I" for those in which you have interest.

- ☐ M ☐ I Applied Animal Behavior
- ☐ M ☐ I Autism
- ☐ M ☐ I Behavior Analysis and Selectionist Robotics
- ☐ M ☐ I Behavior Analyst Online
- ☐ M ☐ I Behavioral Coaching and Counseling
- ☐ M ☐ I Behavioral Gerontology
- ☐ M ☐ I Behavioral Medicine
- ☐ M ☐ I Behavioral Technology
- ☐ M ☐ I Behaviorists for Social Responsibility
- ☐ M ☐ I Behaviorists Interested in Gambling

- ☐ M ☐ I Child Welfare
- ☐ M ☐ I Clinical
- ☐ M ☐ I Crime, Delinquency, and Forensic Behavior Analysis
- ☐ M ☐ I Developmental Behavior Analysis
- ☐ M ☐ I Direct Instruction
- ☐ M ☐ I Dissemination of Behavior Analysis
- ☐ M ☐ I Evidence-Based Practice
- ☐ M ☐ I Experimental Analysis of Human Behavior
- ☐ M ☐ I Health, Sport, and Fitness
- ☐ M ☐ I Interbehaviorists
- ☐ M ☐ I Neuroscience
- ☐ M ☐ I Organizational Behavior Management Network

- ☐ M ☐ I Parent-Professional Partnership
- ☐ M ☐ I Positive Behavior Support
- ☐ M ☐ I Practitioner Issues in Behavior Analysis
- ☐ M ☐ I Rehabilitation and Independent Living
- ☐ M ☐ I Sex Therapy and Educational Programming (STEP)
- ☐ M ☐ I SIG Español
- ☐ M ☐ I Speech Pathology Special Interest Group
- ☐ M ☐ I Standard Celeration Society
- ☐ M ☐ I Teaching Behavior Analysis
- ☐ M ☐ I Verbal Behavior

Affiliated chapters are membership organizations associated with ABAI through their interest in the dissemination and growth of behavior analysis. They are defined by a geographical boundary, most usually a state, region, or country. ABAI maintains a mutually beneficial relationship with affiliated chapters in Asia, Australia, Europe, and North and South America. Many chapters hold conferences, sponsor lectures, and offer continuing education opportunities.

Please indicate which ABAI affiliated chapter(s) you are a member of or are interested in. Circle "M" if you are a member, and "I" for those in which you have interest.

- ☐ M ☐ I ABA Colombia
- ☐ M ☐ I ABA España
- ☐ M ☐ I ABA India
- ☐ M ☐ I ABA of Argentina
- ☐ M ☐ I ABA of Brazil
- ☐ M ☐ I ABA of Italy (IESCUM)
- ☐ M ☐ I Alabama ABA
- ☐ M ☐ I Asociación Latinoamericana de Analisis y Modificación del Comportamiento
- ☐ M ☐ I Asociación para el Avance de la Ciencia de la Conducta: ABA Español
- ☐ M ☐ I Association for the Advancement of Radical Behavior Analysis - Italy
- ☐ M ☐ I Association Française de l'ABA
- ☐ M ☐ I Australian Association for Cognitive Behaviour Therapy
- ☐ M ☐ I Behavior Analysis Association of Michigan
- ☐ M ☐ I Behaviour Analysis in Ireland
- ☐ M ☐ I Berkshire Association for Behavior Analysis and Therapy
- ☐ M ☐ I British Columbia ABA
- ☐ M ☐ I California ABA
- ☐ M ☐ I Charter ABA
- ☐ M ☐ I Chinese ABA
- ☐ M ☐ I Connecticut ABA
- ☐ M ☐ I Delaware Valley ABA
- ☐ M ☐ I Experimental Analysis of Behaviour Group UK
- ☐ M ☐ I Florida ABA
- ☐ M ☐ I Four Corners ABA

- ☐ M ☐ I French ABA
- ☐ M ☐ I Georgia ABA
- ☐ M ☐ I Hawai'ian ABA
- ☐ M ☐ I Heartland ABA
- ☐ M ☐ I Hoosier ABA
- ☐ M ☐ I Iceland ABA
- ☐ M ☐ I Iowa ABA
- ☐ M ☐ I Israel ABA
- ☐ M ☐ I Japanese ABA
- ☐ M ☐ I Jordanian ABA
- ☐ M ☐ I Kansas ABA
- ☐ M ☐ I Korean ABA
- ☐ M ☐ I Korean Association of Child and Adolescent Behavior Therapy
- ☐ M ☐ I Lone Star ABA
- ☐ M ☐ I Louisiana ABA
- ☐ M ☐ I Manitoba ABA
- ☐ M ☐ I Maryland ABA
- ☐ M ☐ I Massachusetts ABA
- ☐ M ☐ I Mid-American ABA
- ☐ M ☐ I Middle East ABA
- ☐ M ☐ I Minnesota Northland ABA
- ☐ M ☐ I Missouri ABA
- ☐ M ☐ I Nevada ABA
- ☐ M ☐ I New Jersey ABA
- ☐ M ☐ I New York State ABA
- ☐ M ☐ I New Zealand ABA
- ☐ M ☐ I Norsk Atferdsanalytisk Forening (Norwegian ABA)
- ☐ M ☐ I North Carolina ABA
- ☐ M ☐ I Northwestern ABA
- ☐ M ☐ I Ohio ABA
- ☐ M ☐ I Ontario ABA
- ☐ M ☐ I Oregon ABA

- ☐ M ☐ I Pennsylvania ABA
- ☐ M ☐ I Philippines ABA
- ☐ M ☐ I Polish ABA
- ☐ M ☐ I Polish Association of Behavioral Therapy
- ☐ M ☐ I Sociedad Mexicana de Analisis de la Conducta
- ☐ M ☐ I South Carolina ABA
- ☐ M ☐ I Southeastern ABA
- ☐ M ☐ I Swedish ABA
- ☐ M ☐ I Taiwan ABA
- ☐ M ☐ I Tennessee ABA
- ☐ M ☐ I Texas ABA
- ☐ M ☐ I Vermont ABA
- ☐ M ☐ I Virginia ABA
- ☐ M ☐ I Wisconsin ABA



# 2010 ABAI Membership Application

## Event Registration

Your 2010 membership in ABAI entitles you to reduced registration fees for events in 2010, including the 36<sup>th</sup> annual convention in San Antonio, TX from May 28 – June 1, 2010. We encourage you to register when you renew your membership, in one easy step.

### 36<sup>th</sup> Annual Convention

ABAI is pleased to host the 36th Annual Convention at the Henry B. Gonzalez Convention Center. The program, personalized convention scheduling system, and on-line workshop registration will be available January 2010.

REGISTER FOR THE ENTIRE ANNUAL CONVENTION			
Please circle membership type and amount	Register on or before 2/24/10	Register 2/25/10 -4/30/10	Onsite 5/27/10 -6/1/10
Sustaining, Supporting, Full, or Affiliate Member	\$157	\$177	\$207
Emeritus and Student Member	\$79	\$89	\$104
Chapter-Adjunct Member	\$203	\$223	\$253
Non-member	\$374	\$394	\$424

SINGLE-DAY CONVENTION REGISTRATION			
Check day(s) attending: <input type="checkbox"/> Saturday 5/29 <input type="checkbox"/> Sunday 5/30 <input type="checkbox"/> Monday 5/31 <input type="checkbox"/> Tuesday 6/1			
Circle your membership category from the list below and fill in the appropriate amount (fee X # of days): \$ _____			
Category	Register on or before 2/24/10	Register 2/25/10 -4/30/10	Onsite 5/27/10 -6/1/10
Sustaining, Supporting, Full or Affiliate Member	\$79	\$89	\$104
Emeritus and Student Member	\$79	\$89	\$104
Chapter-Adjunct Member	\$106	\$116	\$131
Non-member	\$139	\$149	\$164

### Program Book Mailed

Given the exceptional growth in the number of convention events and, by extension, in the size of the Program Book, all registrants will receive their printed program book on-site in San Antonio at the Pre-Registration counters. If you would like to receive your copy of the printed program book prior to the convention, you must register before February 24, 2010 and cover the cost of postage (\$6). Would you like your Annual Convention Program Book mailed to you prior to convention, for a \$6 fee?

☐ Yes (\$6 fee)

☐ No

TOTAL PAYMENTS ENCLOSED	
Membership Fees	\$ _____
Journal Fees	\$ _____
SABA Donations	\$ _____
Autism Conference Registration	\$ _____
Annual Convention Registration	\$ _____
Program Book Mailing (\$6)	\$ _____
<b>TOTAL PAYMENTS</b>	<b>\$ _____</b>

**Registration Fees**

All event registrants, including students, must be a member for the 2010 calendar year in order to receive member rates. All presenters, including invited presenters and authors, must register for the event(s) in which they are presenting.

Payment of membership and registration fees is subject to current federal, state, and local tax regulations. To determine the tax-exempt status of your payment, contact your local office of tax information.

**Transfer Policy**

Requests for registration transfers (attendee replacements) for the 2010 Autism Conference in Chicago, IL, received by midnight (EST) January 4, 2010 will be processed in the ABAI office prior to the convention. Requests made after this date will be processed on-site at the Registration Counter. There will be a \$60 processing fee for transfers.

Requests for registration transfers (attendee replacements) for the 2010 annual convention in San Antonio TX, received by midnight (EST) May 7, 2010 will be processed in the ABAI office prior to the convention. Requests made after this date will be processed on-site at the Registration Counter. There will be a \$50 processing fee for transfers.

**Cancellation Policy**

Requests for registration refund for the 2010 Autism Conference in Chicago, IL, minus a \$60 cancellation fee, will be met provided they are made prior to midnight (EST) January 4, 2010.

Requests for registration refund for the 2010 annual convention in San Antonio, TX, minus a \$50 cancellation fee, will be met provided they are made prior to midnight (EST) April 30, 2010.

Refund requests received after deadlines, except for those made as a result of a death in the immediate family, will not be granted.

Cancellations due to a family death should be submitted to ABAI in writing; ABAI reserves the right to request legal verification of the death.

**Method of Payment**

Full payment must be received in the ABAI office before services will be granted. Payment may be made by check, credit card, or money order and must be made in U.S. dollars. Make checks payable to ABA International. Returned checks will be subject to a \$35 fee.

Overpayments and discounts not taken will be considered donations to ABAI unless a request for a refund is made in writing to the ABAI office.

**Special Accommodations**

The Association for Behavior Analysis International makes accommodations for convention attendees with disabilities. We ask that any individual requiring special arrangements at the convention submit their needs in writing to:  
convention@abainternational.org and follow up with the ABAI office accordingly.

For the 2010 Autism Conference in Chicago, IL, arrangements are not guaranteed for requests made after midnight (EST) January 1, 2010.

For the 2010 annual convention in San Antonio, TX, arrangements are not guaranteed for requests made after midnight (EST) April 1, 2010.

**Name Badges**

Name badges are required for entry into all ABAI events, presentation rooms, and for access to ABAI on-site services, including bookstores and job placement services. Registrants receive a name badge on-site. Replacement name badges will be provided for a cost of \$25.

Your name badge will be printed with your preferred first name (nickname) in addition to your full first and last name and affiliation, as specified in your 2010 membership application. If you would like your badge to read otherwise, please indicate below what it should say:

---

PREFERRED FIRST NAME (NICKNAME)

---

FULL FIRST AND LAST NAME

---

AFFILIATION AS YOU WOULD LIKE IT TO  
DISPLAY ON YOUR BADGE



# Society for the Advancement of Behavior Analysis

The Society for the Advancement of Behavior Analysis (SABA) was chartered in 1980 as a non-profit corporation devoted to the welfare and future of behavior analysis. SABA exists to secure and administer private funds in support of behavior analysis. These activities include, but are not limited to, the advancement of basic knowledge about behavior analysis and the applications of that knowledge to problems of developmental disabilities and other areas.

SABA supports behavior analysis through both independent projects that it initiates and through underwriting activities of the Association for Behavior Analysis International (ABAI). The nine Directors of SABA are also members of the Executive Council of ABAI.

## Grants Awarded by SABA

The **Janet and Sidney Bijou Fellowship** provides two \$5,000 grants annually to students in a doctoral program in psychology or education, in which it is possible to conduct research in behavioral child development.

The **SABA Experimental Fellowship** provides two \$2,000 grants annually to students in a doctoral program in psychology or behavior analysis, in which it is possible to conduct research in the experimental analysis of behavior.

The **International Development Grant** supports a project aimed at developing behavior analysis internationally, such as a training program or conference.

The **Student Presenters Grant** provides complimentary registration to student members presenting at the annual convention and other events.

## Funds to Support Behavior Analysis

The **Doctoral Dissertation and Master's Thesis Research Endowment Fund** will provide financial assistance for individuals for long-term development of dissertation and Master's thesis research. Contributions to this endowment are now being accepted.

The **International Endowment Fund** is allocated to support the dissemination of behavior analysis outside of the United States.

The **Student Presenters Fund** supports registration fees for senior student presenters of a papers or poster at the ABAI annual convention.

**Unrestricted funds** are used to support the SABA award ceremony at the ABAI convention and other regular SABA activities.

## Tax Status

As a non-profit organization, SABA is exempt from federal income tax under Section 501 (c)(3) of the 1986 Internal Revenue Code as amended.

Contributions to SABA qualify for tax deductions to the full extent provided by law.

## Ethical Standards

The Society safeguards privacy rights and confidential information. The Society neither accepts nor grants favors for the personal gain of any individual, nor does it accept favors where a higher public interest would be violated. The Society avoids actual or apparent conflicts of interest and, if in doubt, seeks guidance from appropriate authorities.

## Advantages of Giving

The Society provides advantages to donors and to behavior analysis because:

- It is private and non-profit, existing solely for the benefit of behavior analysis.
- It is directly accountable to the behavior analysis community through its permanent connection with ABAI's Executive Council.
- It allocates unrestricted gifts to help advance behavior analysis in areas which otherwise might not be funded.
- It is flexible in working with donors to see that any specific requests they have will be honored within the guidelines of the Society.
- Its gifts are tax deductible.
- Its small size and low overhead ensure that gifts are directed to programs and not to administrative costs.

## To make a contribution to SABA please include the following information:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Area to which you wish to contribute:

- ☐ Research Endowment Fund \$ \_\_\_\_\_
- ☐ Student Presenters Fund \$ \_\_\_\_\_
- ☐ Unrestricted Fund \$ \_\_\_\_\_

Make checks payable, in U.S. dollars, through a U.S. bank, to SABA or charge to your:

☐ American Express ☐ MasterCard ☐ Visa ☐ Discover

Name as it appears on your card: \_\_\_\_\_

Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## Gifts can be made to:

Society for the Advancement of Behavior Analysis  
550 West Centre Avenue; Suite 1  
Portage, MI 49024

SABA welcomes inquiries about gifts of any type by writing to the above address or by calling (269) 492-9310. Additionally, gifts may be made at the secure SABA Web site: [www.abainternational.org/saba](http://www.abainternational.org/saba).

## ABAI 2009 Autism Conference

### *Research to Practice: Making Real Changes in the Lives of People With Autism*

#### **Now available on DVD!**

The DVD exposes providers of home and school-based behavior analysis services, parents and family members, caregivers, researchers, teacher trainers, and students to the most current, scientifically validated information about behavior analysis in autism treatment. The single-track conference featured 11 invited presentations and question and answer sessions by prominent researchers and authorities on the treatment of autism.

You can now buy the DVD alone or the DVD and CE offerings as a package. If you already own the DVD, you can now purchase the opportunity to earn up to seven (7) BACB continuing education (CE) credits in the comfort of your own home or office. Go to <http://www.abainternational.org/store/index.asp> to visit the ABAI on-line store and order your copy of the 2009 Autism DVD! The speakers and presentation titles of the conference are as follows:

#### *Fostering Independent Performance Skills in Young Children with Autism*

Diane M. Sainato, Ph.D., The Ohio State University

#### *Improving Joint Attention and Reciprocal Language Skills in Children with Autism*

Bridget A. Taylor, Psy.D., BCBA, Alpine Learning Group

#### *Applied Behavior Analysis and Adults with Autism: Applications to Promote Competence and Quality of Life*

Peter F. Gerhardt, Ed.D., Organization for Autism Research

#### *Early Intensive Behavioral Intervention for Children with Autism: What Does Research Tell Us?*

Adrienne M. Perry, Ph.D., C. Psych., BCBA, York University

#### *Defining, Designing, & Delivering ABA School Programs for Students with Autism Spectrum Disorders*

Suzanne Letso, M.A., BCBA, Connecticut Center for Child Development

#### *Autism SIG and Parent-Professional Partnership SIG Overview*

#### *Now That We Know What to Do, How Do We Do It? Implementation Science and Applied Behavior Analysis*

Samuel L. Odom, Ph.D., University of North Carolina

#### *Experimental Approaches to Behavioral Assessment*

Brian A. Iwata, Ph.D., BCBA, University of Florida

#### *Three Expert Panels: Using Science to Guide Autism Treatment, Current Status, Challenges, and Opportunities in Legislation of Behavior, Analytic Autism Services: Observations and Recommendations from Professionals and Parent Advocates*

Order online at [www.abainternational.org](http://www.abainternational.org) or complete this form and fax or mail to ABAI  
550 West Centre Avenue, Suite 1, Portage, MI 49024 Phone: (269) 492-9310 Fax: (269) 492-9139

Name: \_\_\_\_\_

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City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

DVD Type:

☐ Nonmember (\$280) ☐ Member (\$260) ☐ Nonmember w/ CE (\$350) ☐ Member w/ CE (\$330)

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P.O. # / Credit Card #: \_\_\_\_\_ Expiration: \_\_\_\_\_

Signature: \_\_\_\_\_

# Behavior Analysis *in* Practice

*Behavior Analysis in Practice* (BAP) is ABA International's new peer-reviewed journal for practitioners and the people who train and supervise them. Published twice annually, BAP promotes empirically-validated best practices in an accessible, colorful format and describes not only what works, but also the challenges of implementation in applied settings. Articles and topics published in BAP include empirical evaluations of behavior-analytic procedures and programs; discussion papers on professional and practice issues; technical articles on methods, data analysis, and instrumentation; tutorials on terms, procedures, and theories relevant to best practices; and critical reviews of books and products that are aimed at practitioners or consumers of behavior analysis.

Quantity	Description	Unit price				Total
		Individual		Student	Institution	
		Member	Nonmember			
	Volume 3 (2010)	\$37.00	\$46.00	\$27.00	\$92.00	\$
	Volume 2 (2009)	\$37.00	\$46.00	\$27.00	\$92.00	\$
	Volume 1 (2008)	\$37.00	\$46.00	\$27.00	\$92.00	\$
	International shipping fee, per annual subscription*	\$20.00	\$20.00	\$20.00	\$20.00	\$
6% Sales Tax (Michigan Residents Only) SUBTOTAL x .06 =					\$	
*(Prices include domestic shipping and handling)				Total Cost Included =	\$	

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Mail or fax form and payment to: ABAI; 550 West Centre Avenue; Suite 1; Portage, MI 49024  
Fax: (269) 492-9316; Telephone (269) 492-9310; E-mail: mail@abainternational.org

## The Behavior Analyst Order Form

Make checks payable to: **ABAI, 550 W. Centre Avenue, Suite 1; Portage, MI 49024-5364**

Order online at: <https://apps.abainternational.org/store/>

		<u>Unit Cost</u>		<u>Quantity</u>	<u>Total Cost</u>
		<u>Individual</u>	<u>Institution</u>		
<b>2010 Subscription</b>					
Vol. 33, 2010	No. 1 and No. 2 – Member	\$ 51.00	\$ 133.00	X _____	= \$ _____
	No. 1 and No. 2 – Nonmember	64.00		X _____	= \$ _____
	No. 1 and No. 2 – Student	23.00		X _____	= \$ _____

### Separate Volumes

<u>Volume #, Year</u>	<u>Circle Issue # 1 and/or 2</u>				
32, 2009	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 24.00	\$ 61.00	X _____	= \$ _____
31, 2008	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
30, 2007	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
29, 2006	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
28, 2005	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
27, 2004	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
26, 2003	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
25, 2002	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
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22, 1999	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
21, 1998	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
20, 1997	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
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14, 1991	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
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11, 1988	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
10, 1987	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
9, 1986	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
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7, 1984	No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
6, 1983	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
5, 1982	No. 1 (spring) <i>or</i> No. 2 (fall)	\$ 22.00	\$ 56.00	X _____	= \$ _____
4, 1981	No. 1 (spring)	\$ 22.00	\$ 56.00	X _____	= \$ _____
1, 1978	Original Print #1	\$ 6.00	\$ 6.00	X _____	= \$ _____

### The Behavior Analyst Set

Volumes 1 – 29 - Member	\$ 764.00	\$ 1216.00	X _____	= \$ _____
(Issues 2.1, 2.2, 3.1, 3.2, 4.2, 7.1, 15.1, 15.2, 16.1, 19.2, 23.1 and 24.1 are unavailable)				

<b>SUBTOTAL</b> .....	\$ _____
<b>International Shipping: \$10 per issue \$20 per subscription \$95 per complete set</b> .....	\$ _____
<b>6% Sales Tax</b> (Michigan Residents Only) .....	\$ _____
<b>TOTAL (Make Checks Payable to ABA in U.S. funds)</b> .....	\$ _____

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## The Analysis of Verbal Behavior Order Form

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If you are interested in a behavioral analysis of language, *The Analysis of Verbal Behavior* is the ideal journal for you. No other journal offers this unique contribution to the empirical and conceptual analysis of verbal behavior.

*The Analysis of Verbal Behavior* (ISSN 0880-9401) publishes original papers relevant to the elementary verbal operants, autoclitics, multiple control, private events, rule-governed behavior, epistemology, scientific verbal behavior, language acquisition, language assessment and training, second languages, pedagogy, the verbal behavior of nonhumans, and verbal behavior research methodology.

Prices include domestic shipping and handling

	Unit Cost			Quantity	Total Cost
	Individual	Student	Institution		
Separate Volumes					
Volume 26 .....	\$ 35.00	\$ 25.00	\$ 79.00	x _____ = \$ _____	
Volume 25 .....	\$ 32.00	\$ 23.00	\$ 75.00	x _____ = \$ _____	
Volume 24 .....	\$ 30.00	\$ 22.00	\$ 71.00	x _____ = \$ _____	
Volume 23 .....	\$ 28.00	\$ 21.00	\$ 67.00	x _____ = \$ _____	
Volume 22 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 21 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 20 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 19 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 18 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 17 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 16 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 15 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 14 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 13 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 12 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 11 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 10 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 9 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 8 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 7 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 6 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 4 .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
Volume 1, 2, & 3 bound together .....	\$ 27.00	\$ 20.00	\$ 64.00	x _____ = \$ _____	
* International Shipping Fee, per volume .....	\$ 10.00	\$ 10.00	\$ 10.00	x _____ = \$ _____	

### Set

Volumes 1-25 (does not include vol. 5) .....	\$ 415.00	\$ 415.00	\$ 1066.00	x _____ = \$ _____	
* International Shipping Fee, complete set .....	\$ 95.00	\$ 95.00	\$ 95.00	x _____ = \$ _____	

<b>SUBTOTAL</b> .....	\$ _____				
<b>6% Sales Tax</b> (Michigan Residents Only) .....			<b>SUBTOTAL x .06 =</b>	\$ _____	
<b>TOTAL</b> .....				\$ _____	

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Street Address: \_\_\_\_\_

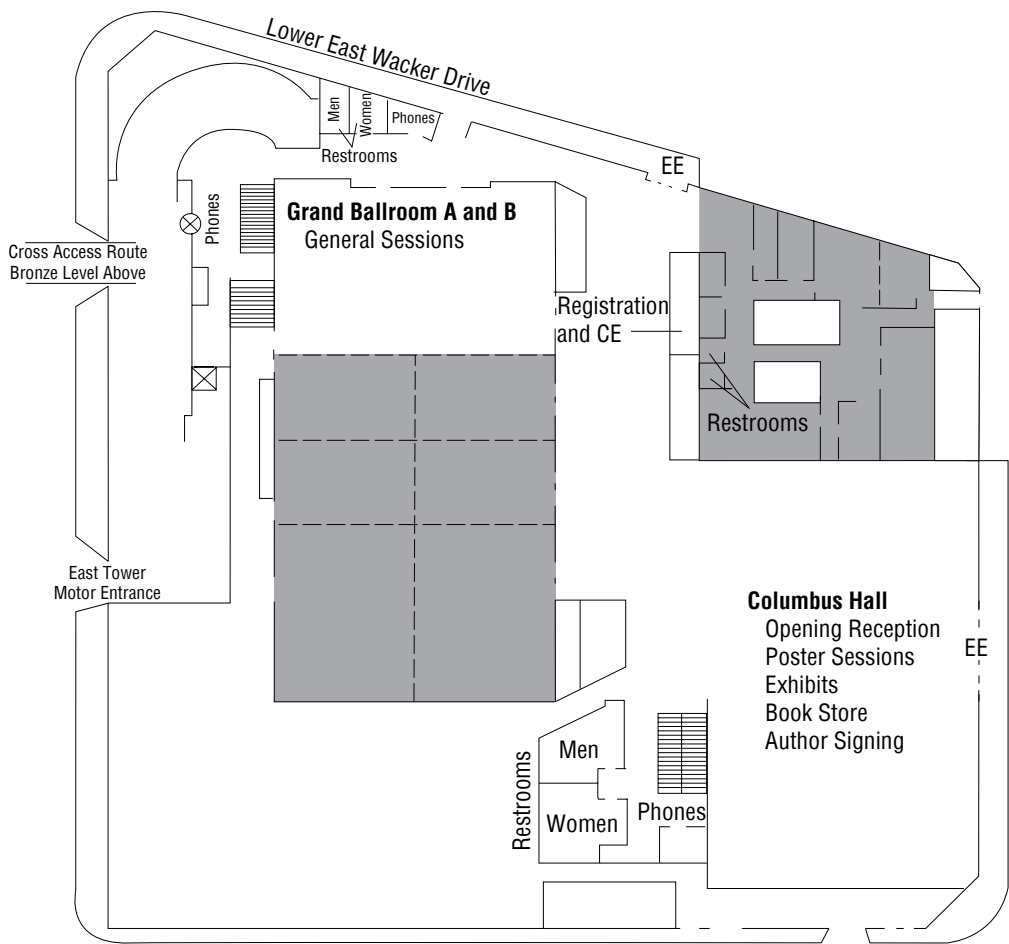
City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

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