SATURDAY, NOVEMBER 26

#8 Invited Event
11/26/2005
9:00 AM - 9:50 AM
Opening Event

#9 Paper Session
11/26/2005
10:00 AM - 10:50 AM
TPC
Cultural Versus Biological Determinism
Chair: Masaya Sato (Teikyo University)

Are Women, People of Color, Asian's, and Southern European's Inherently Inferior to the Rest of Us? (Theory). Richard W. Malott (Western Michigan University)

Abstract: Biological determinism vs. behavior analysis--the battle for the soul of psychology. Behavior analysis is more than a technology; it is also a world view that can help us understand the human condition far beyond the Skinner box. However, political expedience in some contexts causes us to violate that world view and drift down the genome strewn path to intellectual shallowness, in ways we would never consider in other contexts. Is biology really destiny? Or is the gene the last refuge of scoundrels and the intellectually lazy?

East is East, West is West: A Behavior Analysis of Cultural Difference (Theory). MASAYA SATO (Teikyo University)

Abstract: In his book "The geography of thought", R. E. Nisbett considered the question how and why Asians and Westerners think differently from a standpoint of cognitive psychology. In this paper, I try to answer the same question from a standpoint of behavior analysis.

#11 Symposium
11/26/2005
10:00 AM - 10:50 AM
AUT; Applied Behavior Analysis

The Development and Application of Applied Behavior Analysis in Taiwan
Chair: Hua Feng (National Chang-hua University of Education)

Session Abstract: This symposium will include three topics, the development of ABA in Taiwan, the effects of intensive behavioral treatment for three children with autism in an ABA institute in Taiwan, and the effects of ABA intervention for middle school students with autism on social interaction. First of all, the presenters provide a scope to overview the development of ABA in Teacher Colleges, Universities, schools, and institutes in Taiwan. Secondly, ABA Developmental and Educational Center, Taichung, Taiwan, presents the effects of ABA intervention for children with autism on verbal behaviors. The empirical study will show the results for two-years effects of ABA intervention on verbal and social behaviors of children with autism in

the institute. Thirdly, the presenters share the teaching effects on the telephone use and topical conversation training for 2 middle school students with autism. All the empirical studies above demonstrate highly positive acquisition and generalization results. Social validity from parents and teachers also illustrate positive feedback at the end of the study.

The Development of Applied Behavior Analysis in Taiwan. HUA FENG (National Chang-hua University of Education), Sharon Chien (Seek Education, Inc), and Chai-yu Chou, Chih-liang Chen, and Fang-chen Liao (Autism Society in Taiwan)

Abstract: The presenters provide a scope to overview the development of ABA in Teacher Colleges, Universities, schools, and institutes in Taiwan. This paper first describes course arrangement, the effect on the special education training in Teacher College, and its scholastic development in university. Secondly, this paper provides a collaborative example of how institute and university in American and in Taiwan working together. Thirdly, the presenters propose a model to facilitate the future development and qualification of professional in the area of ABA in Taiwan.

The Effects of Intensive Behavioral Treatment for Three Children with Autism in an ABA Institute in Taiwan. Grace Chang (Seek Education, Inc.) and SHU-HWEI KE, Li-Tsun Wang, Chiao-yun Yen, and Shu-fen Guo (ABA Developmental and Educational Center)

Abstract: The empirical study showed the results for two-years effects of ABA intervention on verbal and social behaviors of children with autism in ABA Developmental and Educational Center, Taichung, Taiwan. Three preschool children with autism attended the program in ABA developmental and Educational Center for 2 years with intensive behavioral treatment. Three of them all demonstrated a significant gains on verbal and social behaviors which included expressive and receptive language, emotional behaviors, play skills, and social behaviors. All the parents of the children also showed highly positive attitude toward the program after the treatment.

The Effects on the Telephone Use and topical Conversation Training for Two Middle School Students with Autism. HSIANG-CHIN YAO (Chung-ming Middle School), Ming-li Chang (Je-Ai Middle School), and Chai-chen Chung (National Chang-hua University of Education)

Abstract: There are two studies included in this presentation. First one is the effect of discrete trial teaching on the telephone use of a middle school student with autism. The consequences of the study showed DTT increases the possibility for students with autism to pick up phone calls spontaneously, answering phone calls correctly, increase the accuracy of message, transformation, the possibility of continuous conversation. It also enhances the generalization outcomes of students with autism in using telephone. The second study investigated the effect of DTT on topical conversation of a middle school student with autism. DTT has shown the positive effects on improving the Topical Conversation Behaviors of the junior high school student with autism. The correct rates of the student's answers and inquiries are raised, and also showed generalization to different speakers. Besides, DTT has demonstrated the positive effects on improving the concentration behaviors of the junior high school student with autism. Last, teachers and peers have positive attitude toward the effects of Discrete Trial teaching.

#12 Paper Session
11/26/2005
10:00 AM - 10:50 AM
EAB
Timing and Conditioning
Chair: Rocío Vegas (Universidad Central de Venezuela)

Predicting Behavior Using a Packet Theory of Timing and Conditioning (Experimental Analysis). MIKA MACINNIS (Brown University)

Abstract: Models of timing and conditioning generally predict results from experimental procedures in the form of a single dependent measure such as a response gradient or a stimulus discrimination ratio. A Packet Theory of Timing and Conditioning predicts the times of responses on timing and conditioning procedures. From these responses any number of dependent measures can be calculated. A Turing Test can be used to evaluate the model, and provide information about where the model fails. Packet Theory was applied to data collected from rats trained on simple appetitive head entry procedures, in which the food was made available every 120 s. Additional time markers (such as a brief pulse of white noise, or the onset and termination of an interval of filled noise) were presented in some procedures. The rats responded differentially to the time markers, dependent upon the temporal information the time marker provided. Packet Theory predicted the observed response patterns in each procedure by using a combination rule to incorporate the temporal information provided by the time markers presented.

Effects of Conditioning History on Response Recovery (Experimental Analysis). ROCÍO VEGAS, Joel Romero, and Luvina Torres (Universidad Central de Venezuela)

Abstract: This study explored recovery of responding after different conditioning histories: order of reinforcement schedules, extinction and a 60-day rest period. Twelve naive pigeons (Columba livia) were randomly assigned to 6 experimental groups. Two random reinforcement schedules were successively alternated in all groups: random ratio and random interval. During extinction, the feeder was either absent or present and trials were presented spaced or massively. The main results were: 1) Recovery was greater in groups with extinction with no systematic difference between extinction procedures. 2) Low response rates were recovered after reaching high rates when the difference between the two was not large. 3) With no extinction, response recovery was better in RI than RR. 4) Recovery of responses learned first in the history of conditioning that did not undergo extinction was better. 6) Resting had no regular effect in either extinction group. 7) RR responding was more resistant to extinction than RI regardless of the extinction procedure. 8) Resistance was greater with spaced trials. 9) Recovery of pecking was almost immediate in the first session after extinction. It is concluded that behavior is reversible and adjusts regularly to different environmental conditions and that extinction suppresses behavior transitorily and facilitates its recovery.

#13 Paper Session
11/26/2005
10:00 AM - 10:20 AM
EDC

ABA in Public School Settings: A Comparison and Contrast of Three Successful Service Delivery Models (Applied Behavior Analysis). TERRE HRADNANSKY (University of Phoenix)

Abstract: ABA has been proven to be an effective therapy delivery system to increase the skill and academic levels of preschool children with autism. Because children with autism have similarities yet have distinct learning differences, the therapy designed to meet those unique needs should also be similar yet different. The speaker will describe, compare and contrast three ABA therapy delivery systems that have proved to be successful in treating and teaching preschool children with Autism in a large, diverse public school setting in California. The ABA therapy delivery systems that will be discussed are the Home ABA delivery system, the extended school day ABA delivery system, and the integrated school day ABA delivery system. The roles of parents, teachers, therapists, and other members of the child study team will be highlighted, as will the paperwork and ABA therapy plan development and ongoing assessment process. The pros and cons associated with each delivery system and the generalities about the types of children that benefit most from the different systems will be discussed.

#14 Invited Symposium
11/26/2005
10:00 AM - 11:50 AM
OTH

An Overview of Behavior Analysis

#15 Paper Session
11/26/2005
11:00 AM - 11:50 AM
CSE

Community Health Interventions
Chair: Michael B. Ehlert (University of Guam)

Culture as a Source of Self Management (Applied Behavior Analysis). ELSA RITTER (Universidad Central de Venezuela), Beatriz Cobo and Evelyn Lobo (Universidad Simón Bolívar), and Belkis Coriano (Universidad Central de Venezuela)

Abstract: This study attempts to contribute to the search of a greater production and a better quality life of Naiguata Parroquia inhabitants (Vargas State). It is initiated with the organization of leaders and community members about the development of a self management project that permits income generations in order to obtain self supply. In the initial step, self management was the priority and the community identified the religious folk events held in the Parroquia as a source of income. However, during the development of the study the focus of the community priority need was the strengthening and cultural potentialities , the sense of belonging and identity. The selected slogan Naiguata Cultural Dream of a Nation identifying the community longings, reflects this priority. Then, the community projects were linked to the strengthening of their cultural traditions and the security and health of the community. Among the examples of the developing projects are the establishment of a Cultural House, a Documentary Center and History of the Parroquia, a Social Assistance Center, and an Itinerant Cathedra for the Sensitization and Formation in Cultural Traditions.

Using the Three-Term Contingency to Organize a Community Forum on Tobacco Control (Service Delivery). MICHAEL B. EHLERT (University of Guam)

Abstract: The US Territory of Guam has the highest adult smoking rate of all states and territories, (34%; Guam BRFS, 2003). A team of researchers organized a community forum to develop a research agenda that would provide data to help practitioners work more effectively to decrease the current smoking rates. The three-term contingency was used to structure the discussion groups. One group (Prevention) considered antecedents that could discourage tobacco use. A second group (Cessation) discussed concerns about tobacco-use behavior. A third group (Policy) considered rules and regulations that alter the consequences of tobacco use. We tasked each group with identifying two concerns that could be developed into research questions. All three groups identified one concern associated with education and another specific to its domain. Prevention focused on changing the antecedents through publicity and increasing program availability. Cessation focused on discouraging smoking by educating about effective cessation methods and increasing cessation programs. Policy focused on changing the consequences by emphasizing tobacco's effects and analyzing the effectiveness of existing policies. The three-term contingency facilitated discussion of a major health concern on Guam, and could be used in other communities to organize social change. With Asian nations among the highest tobacco users world wide (WHO, 2004), presenting this paper in China could be most effective.

#16 Paper Session
11/26/2005
11:00 AM - 11:50 AM
AUT

Motivational Procedures for the Treatment of Autism
Chair: Karen Sze (University of California, Santa Barbara)

Promoting the Development of Intervention for Children with Autism in Southeast Asian Countries (Service Delivery). XIUCHANG HUANG, John Wheeler, Jie Zhang, and Yanhui Pang (Tennessee Technological University)

Abstract: Children with autism usually face significant challenges in such areas as normal social interaction, communication, and independent daily functioning, which are considered as the basic skills essential for success in life. This paper intends to synthesize the latest research and best practices in enhancing the above skills of children with Autism in the United States, with an attempt to give some directions on how Southeast Asian countries can learn from them. Firstly, this article presents facts about Autism and general information about the development of research in Autism in the U.S.A. Then it synthesizes the established research-based interventions and the current best practices in this field, such as visual scheduling, direct instruction, social stories, peer tutoring, and video modeling, which have been proven effective in teaching social skills and in improving communication ability, as well as in decreasing inappropriate behavior. Finally this paper suggests how these methods and strategies can be introduced to Southeast Asia, combined with the actual situations locally, to promote the development of treatment for children with Autism in these countries.

Understanding Speech Acquisition in Nonverbal Children with Autism Using the Pivotal Response Treatment Approach (Applied Behavior Analysis).
KAREN SZE, Robert L. Koegel, Amanda Mossman, and Lynn Kern Koegel (University of California, Santa Barbara), Lauren Brookman-Frazee (University of California, San Diego), and Yvonne Bruinsma (University of California, Santa Barbara)

Abstract: The literature suggests that an increasing number of previously nonverbal children with autism may acquire a functional vocabulary with systematic intervention. In particular, motivation may be a pivotal area for acquisition of first words for such nonverbal children. The purpose of this paper address is to discuss issues and present data on a programmatic line of research pertaining to the use of motivational procedures in teaching speech to nonverbal children with autism. Specifically, I will address the mechanism of functional speech acquisition in nonverbal children and present data to illustrate the importance of coordinating motivational procedures in the context of a parent education program. The literature also suggests that, despite intensive efforts, some children continue to fail to develop a functional, expressive vocabulary. The remaining portion of this address will focus on additional researched motivational variables that have been developed specifically to improve the speech outcomes in a subset of challenging nonverbal children who exhibit difficulty in learning a functional vocabulary. I will discuss the incorporation of predictable routines, pre-treatment vocalizations, and behavior momentum strategies into the overall language intervention package. Data will be presented in terms of their implications for further understanding speech acquisition in nonverbal children with autism.

#17 Paper Session
11/26/2005
11:00 AM - 11:50 AM
EAB

Studying Choice
Chair: Linlin Yi (Brown University)

Depth Analysis: A Test for the Molar Approach to Choice. (Experimental Analysis). CARLOS F. APARICIO and William M. Baum (University of Guadalajara-CEIC)

Abstract: Regularity in the local effects of individual reinforcers on choice behavior emerged from studies that varied the range of within-session changes in the ratio of reinforcer available from two alternatives. The present study extended to rats the generality of this finding. Each session arranged a series of seven non-signaled reinforcer ratios to occur in two levers; each reinforcer ratio provided a maximum of 10 reinforcers and terminated with a 1- minute blackout signaling the start of a new reinforcer ratio. The log response ratios adjusted rapidly to dynamic changes in the reinforcer ratio. Sensitivity increased with reinforcers delivered. There were not carryover effects of the previous component on the current component. Depth analyses indicated that for 5 reinforcers or more, the source of the first reinforcer makes no difference on choice; In other words, the sequences that affect choice are no longer than 5 reinforcers. The implications of these results for a dynamic model of choice will be discussed.

How Rats Simultaneously Time Two Independently Reinforced Fixed Intervals (Experimental Analysis). LINLIN YI (Brown University)

Abstract: When animals time more than one interval simultaneously, they combine information from multiple sources. Rats were used in an instrumental appetitive lever press procedure that involved two independently reinforced fixed intervals indicated by a long stimulus (120 s) and a short stimulus (60 s). The two stimuli could be presented singly, or in compound (simultaneously, or partially overlapping with the short stimulus first or the long stimulus first), creating nine different cycle types. In experiment 1, food was delivered on each cycle following the first response after the appropriate fixed interval; in experiment 2, a peak procedure with a reinforcement probability of .75 was employed. Results showed that responding on the two fixed intervals was well characterized by a single ogive function. Responding on compound cycles was predicted by applying this ogive function to the intervals created by stimulus overlap. Four possible combination rules (the short stimulus dominance rule, the first food dominance rule, the weighted sum rule and the general combination rule) were evaluated.

#18 Paper Session
11/26/2005
11:00 AM - 11:50 AM
EDC/DDA

Training Children with Developmental Disabilities
Chair: Dennis Rose (University of Auckland)

Self-Management Procedures and Special Needs Students: Classroom and Supported-Employment Applications (Service Delivery). CHARLES HUGHES and Frank Rusch (Pennsylvania State University)

Abstract: Self-Management (SM) procedures have been promoted over the last 35 years as being effective in strengthening both durability and generality of behavior changes. This is especially true in the field of special education. This presentation summarizes extant applied research on the use of behavioral self-management procedures (eg. self- monitoring, self-evaluation, self-reinforcement etc) with students with disabilities. Research conducted in both classrooms and supported employment settings will be covered. In addition to summarizing data on the general effectiveness of SM procedures with individuals with special needs, this presentation will also examine questions such as: 1) Are the resultant changes socially valid?, 2) Are some procedures more effective than others and with which classes of behavior?, 3) What are procedural issues that impact efficacy? 4) Are maintenance and generalization improved, and 5) what instructional components are necessary for independent use of SM procedures?

The Effects of a Direct Instruction Program on Bilingual Children with Mental Retardation (Applied Behavior Analysis). DENNIS ROSE (University of Auckland)

Abstract: Language for Learning is the latest revision of DISTAR Language, a direct instruction program developed for use in Project Follow Through. The programme was introduced to classes of Asian children who had been classified as having mental retardation. The program was delivered in English, the language of instruction in

these classes. However, English was a second or even third language for these children whose mother-tongues were Asian languages such as Mandarin, Tamil, or Bahasa Melayu. Language for Learning was delivered to these children for a school year and the effects assessed through pre- and post-tests and comparisons with controls. The children made substantial gains in their receptive and expressive language, especially in vocabulary. The gains were often well in excess of those normally expected of children without retardation. Smaller gains were made in those areas requiring grammatical skills. Generally there was a "Matthew Effect"; those children with better entry skills made the greater gains. Several adaptations to the script and delivery protocols of the program were required for this population and these are also reported on.

#19 Paper Session
11/26/2005
11:00 AM - 11:20 AM
TPC

A Behavioral Science without Borders: Variation and Selection in an International Context (Theory). EDWARD K. MORRIS (University of Kansas)

Abstract: This paper addresses three features of behavior analysis in an international context. First, its basic principles make it a "science without borders." As with the principles of any natural science, the principles of behavior are universal (e.g., reinforcement). In contrast, where the social, behavioral, and cognitive sciences are natural history, their principles are only as universal as are cultural contingencies and contexts. Thus, behavior analysis can survive in more niches than its competitors. Second, variations in the presence of behavior analysis across cultures and countries suggest that it is differentially selected for as a cultural practice. Thus, although it may die in some cultures and countries, it may flourish in others, ensuring its survival in the world. Third, behavior analysis is not an essence to which one culture or country is privileged, but varies across them as a discipline, that is, in its basic and applied sciences, its conceptual stances, and its practices. These variations ensure its evolution as a discipline that can then be selected for as a cultural practice. These three features strongly suggest that the internationalization of behavior analysis will ensure its survival.

#20 Panel Discussion
11/26/2005
1:00 PM - 1:50 PM
CBM/VRB; Theory

Clinical Behavior Analysis: The Effect Experience has on Clinical Practice and How We Talk About It
Chair: Paul Andronis (Northern Michigan University)

T. V. JOE LAYNG (Headsprout)
MADALYN E. TYSON (Blue Ridge Behavior Systems)
WILLIAM M. TYSON (Blue Ridge Behavior Systems)

#21 Paper Session
11/26/2005
1:00 PM - 1:50 PM
AUT

Early Intervention Programs for Children with Autism
Chair: David J. Leach (Murdoch University)

Chinese Early Intervention Program for Young Children with Autism: How Can ABA Help? (Service Delivery). YANQING GUO (Institute of Mental Health, Peking University), and Meixiang Jia and Xiaoling Yang (Peking University)

Abstract: For Chinese young children with autism, we provide three ways to help them getting a more normalized life: one, family based intervention plan; second, institute based intervention plan and the third, take both forms of intervention. For family based intervention plan, we first make a workshop on ABA theories and techniques for parents who want to do such training jobs. The workshop is divided into two parts, the first part focuses on basic principles and techniques of behavior analysis; the second part focuses on training skills by imitating practice. After the workshop, an individualized training program will be established by parents and professionals, and then the parents will perform the training programs according the protocol. The process will be videotaped and reviewed by professionals. Besides this, the professionals will direct the parents to form new training plan or change the plan if any situations changed. For institute based intervention plan, the trained professionals are responsible for the training jobs. They also provide opportunities for parents to be trained under the supervision of professionals. The results and social influence will be reported and discussed.

Long-Term Effects of a Public, Centre-Based, Behavioral Early Intervention Programme (Service Delivery). DAVID J. LEACH (Murdoch University)

Abstract: A group of 4-6 year old children with Autism Spectrum Disorder who attended a fully state-funded, centre- based, behavioural early intervention programme for one year were assessed at programme entry and exit on a wide range of norm-referenced measures. The same children were re-assessed after 15 months of inclusive education in regular schools. Highly significant and widespread changes in behaviour and achievement are reported that remained at follow-up, with a majority of children functioning at developmental levels equivalent to their typical peers.

#22 Paper Session
11/26/2005
1:00 PM - 1:50 PM
AUT

Research on Treatment of Children with Autism
Chair: Robyn Young (Flinders University)

Tracking the Progress of Children with Autism in an ABA Program: An Outcome Monitoring Study (Service Delivery). KATHERINE MOXNESS and Celine Mercier (Montréal Readaptation Center), Nancy Cusson (University de Quebec à Montréal), and Myriam Chrétien (Montréal Readaptation Center)

Abstract: In 2003, the Quebec Ministry of Health recommended that children with autism spectrum disorders receive at least 20 hours a week of ABA interventions. The implementation of this policy was monitored through a client information system and the systematic tracking of hours of ABA exposure for every child participating in

the program. In March 2004, data on the children's characteristics and weekly hours of exposure was available for 321 children. This presentation will bear on the outcome monitoring study that is now taking place. One of the study's key issues is to observe the relationship between the intensity of exposure (weekly hours of interventions and total number of months), the children characteristics and the results obtained on developmental scales, language, social behaviour and behaviours related to autism. The design will be presented as well as some preliminary findings. The methodological challenges raised by this type of large scale outcome study will also be discussed.

The Treatment of Autism in Young, Pre-verbal Children Using Intensive Home-Based Intervention (Service Delivery). ROBYN YOUNG, Carrie Johns, and Taly Goren (Flinders University)

Abstract: This research evaluates the efficacy of an intensive behaviour based Early Intervention Research Program (EIRP). This program targets early behaviours considered pivotal to development and identified in Young, Brewer & Pattison, (2003) and operationalised in their newly developed screening tool – The Flinders Observation Schedule of pre-verbal Autistic Characteristics. Such behaviours include; joint attention, theory of mind, response to verbal commands, eye contact, social reciprocity, proto-declarative pointing. Children were randomly allocated into either an experimental group or wait-list control. The intervention was based on the principles of operant conditioning and more specifically Applied Behavioural Analysis. All children underwent an intensive clinic-based intervention program over a 2-week period and continued with home-based therapy for 18-weeks. Data for all participants were collected on 5 separate occasions using standardised tests and systematic behavioural observations. Overall, the children demonstrated significant improvements in overall severity of their disorder; specifically in response to name, eye contact, functional play, pretend play, imitation, response to verbal commands, ability to switch tasks, and adaptation to change. Participants maintained their gains from the clinic-based intervention over the home-based intervention program with further gains seen in most areas.

#23 Paper Session
11/26/2005
1:00 PM - 1:50 PM
EAB/BPH

Testing the Anhedonia Hypothesis
Chair: Carlos F. Aparicio (University of Guadalajara - CEIC)

Testing the Anhedonia Hypothesis with Progressive Ratio Schedules of Reinforcement (Experimental Analysis). CARLOS F. APARICIO (University of Guadalajara-CEIC)

Abstract: Progressive ratio schedules of reinforcement have been used to assess the power of positive reinforcers. The break point or higher response ratio completed, which indicates the reinforcement's efficiency, can be used to estimate the secondary effects of dopamine antagonists in the motivational system. The present study used progressive ratio schedules with rats to show that haloperidol does not take away the hedonic value of food reinforcers. Four doses of haloperidol were tested with two different reinforcers (saccharine and food pellets). The parameters of activation and response time changed as a function of the dose of haloperidol, suggesting that the

drug affected the motor system. The implications of these results for the general model of anhedonia will be discussed.

Dynamic Environments and the Matching Law: Testing the Anhedonia Hypothesis (Experimental Analysis). CARLOS F. APARICIO (University of Guadalajara-CEIC)

Abstract: The idea that dopamine mediates the reinforcing effects of positive stimuli, subsist in the field of neurosciences. The present study will show that haloperidol does not interfere with the rat's behavior of pressing on a lever to obtain food reinforcers that varied in magnitude and probability of occurrence. Within sessions the ratio of reinforcers changed seven times in two levers, modeling a dynamic environment. Magnitude of reinforcement was manipulated independently of the ratio of reinforcer provided by the levers. Four doses of haloperidol were assessed (ip) over periods of twelve days. Haloperidol did not stop the discrimination that the rats established between rich and lean levers, response distributions favored the lever associated with the highest probability of reinforcement and the largest number of pellets. The parameters of the generalized matching law (bias and sensitivity to reinforcement) indicated that haloperidol acted upon the motor system, but it did not affect the rat's motivation for food reinforcers.

#25 Panel Discussion
11/26/2005
1:00 PM - 1:50 PM
EDC/AUT; Service Delivery

Using Technology to Provide Research Based Interventions to Large Populations Outside the United States
Chair: T. V. Joe Layng (Headsprout)

KAREN L. MAHON (Praxis, Inc)
RICHARD FLEMING (Eunice Kennedy Shriver Center, University of Massachusetts Medical School)
JANET TWYMAN (Headsprout)

#26 Invited Symposium
11/26/2005
1:00 PM - 2:50 PM
OTH

Behavior Analysis Around the World

#27 Paper Session
11/26/2005
2:00 PM - 2:20 PM
EDC/DEV

Deconstructing Accountability from a Behavioral Perspective: Uses and Misuses in the Public Educational System (Theory)
MARTHA PELAEZ (Florida International University)

Abstract: In the last years, the main focus in the US public education system has been on accountability. This paper offers a behavior-analytic perspective of

accountability practices and many misapplications that have taken place. The conceptual analysis begins by showing that there exist multiple definitions and interpretation of the concept. The discussion is focused in uncovering the misuse of behavioral principles and provides some example of recent changes in the Florida educational system. The paper attempts to discern the underlying assumptions of the state in the public educational process and the approach used to address students' rates of learning and improvement of quality education. Some suggestions for best practices are offered.

#28 Paper Session
11/26/2005
2:00 PM - 2:20 PM
DEV/EAB

Infant Responding Compared Under Conjugate- and Continuous-Reinforcement Schedules (Experimental Analysis).
Jacob L. Gewirtz, MARTHA PELAEZ, and Michael Voltaire (Florida International University)

Abstract: The performance of 6 human infants (aged 16 to 20 weeks) was compared under a conjugate- versus a continuous-reinforcement schedule. The contingent visual stimulus consisted of a sequence of 5 colored lights, their intensity varied in proportion to response amplitude under the conjugate but not under the continuous schedule. A concurrent auditory contingent stimulus—a set of chimes—was also provided under both schedules. The target operant response—a foot press of a vertical panel—activated the lights, caused the chimes to tinkle, or resulted in the simultaneous presentation of both stimuli. A reversal design counterbalanced with alternating treatments was implemented for each half of the participants. Visual inspection of the graphed-operant frequencies and one-tail binomial tests showed at $p < 0.008$, using all 6 infants, that: (a) the two contingent-stimulus complexes, visual alone and visual-plus auditory, functioned as reinforcers of leg thrusts under both reinforcement schedules; the visual-plus-auditory consequence was a more effective reinforcer for leg-thrust operants than was the visual consequence alone; and, (c) compared to the continuous CRF schedule, the conjugate-reinforcement schedule generated higher peak responding.

#29 Paper Session
11/26/2005
2:00 PM - 2:50 PM
TPC

Behavioral Health and Self-Management
Chair: Dongbo Fu (School of Public Health, Fudan University)

A Behavior Analysis of Human Sexuality (Theory). RICHARD W. MALOTT (Western Michigan University)

Abstract: I will do a behavior analysis of sexuality in terms of behavior, reinforcers, and sources of reinforcers. Traditionally, people paint with a brush too broad (e.g., the following concepts are too broad: heterosexual, gay, lesbian, transsexual, bisexual). Let us use a brush molecular. Let us analyze in terms of sex-style behavior, sexually reinforced behavior, sexual values (i.e., reinforcers & aversive conditions), source of reinforcers. Then we will look at the role of learning and

inheritance of these aspects of sexuality. We will conclude that most depends on the contingencies. Little depends on whether you're male or female or uncertain. This will be a multi-media PowerPoint presentation.

Self-Efficacy, Self-Management Behaviors and Health Status (Theory).
DONGBO FU, Hua Fu, and Yongming Ding (School of Public Health, Fudan University)

Abstract: Objectives: This study was aimed to explore the relationships among six-month changes of self-efficacy, self- management behaviors and health status with 430 participants in Shanghai Community-based Chronic Disease Self-Management Program(CDSMP) guided by Self-efficacy Theory. Methods: Spearman correlation, multiple Logistic regression analysis were used. Results: A statistically significant association between two self-efficacy variables and aerobic exercise($r=0.11, r=0.18$, $P<0.001$) were found. There were no significant association between two self-efficacy variables and stretching/strengthening exercise and practice of cognitive symptom management. Multiple Logistic regression analysis showed that, self-management behaviors were more important than self-efficacy for explaining six-month changes in energy, shortness of breath, social/role activities limitations. But less important than self-efficacy for explaining six-month changes in pain, illness intrusiveness and depression. Conclusions: Self-efficacy is positively associated with aerobic exercise and self-efficacy is an important contributor to health status improvement among Chinese chronic disease patients.

#30 Paper Session
11/26/2005
2:00 PM - 2:50 PM
EAB/TPC

Conditioned Reinforcement
Chair: Robert Allan (Lafayette University)

Relative Reinforcement and Changes in Reinforcer Value (Experimental Analysis).
JEFFREY N. WEATHERLY and Jeri T. Nurnberger (University of North Dakota)

Abstract: Contrast occurs when the rate of behavior varies indirectly with the conditions of reinforcement in another situation. Induction, on the other hand, occurs when behavior varies directly with the conditions in another situation. The present experiment had rats respond in a procedure in which 1% liquid sucrose could be freely consumed for 3 min followed by a second 3-min period that allowed access to either 1% or 32% sucrose, depending on condition. In some conditions, subjects consumed sucrose in the different 3-min periods from separate spouts. In others, only one spout was used. Results showed that upcoming 32% sucrose decreased consumption of 1% sucrose in the first 3-min period when separate spouts were employed (a contrast effect), but increased consumption when a single spout was employed (an induction effect). After each condition, subjects were also exposed to 10 25-min sessions in which nose poking was reinforced with 1% sucrose delivered by a random-interval 60-s schedule. Nose poking occurred at a higher rate following 1%-32% conditions than 1%-1% conditions. These results indicate that, despite producing contrast or induction depending on the number of spouts employed, upcoming 32% sucrose had increased the reinforcing value of the 1% sucrose. This finding has theoretical implications for the study of both contrast and induction.

Conditioned Reinforcement: Discriminative and Eliciting Roles for Component Stimuli (Experimental Analysis). ROBERT ALLAN (Lafayette College)

Abstract: The discriminative and eliciting roles of conditioned reinforcers demands that further research delineate these functions more carefully. Utilizing a yoked chain/multiple schedule procedure, the present research explored the putative role of conditioned reinforcement in the maintenance of behavior. The results suggest that there may be a continuum between conditioned reinforcement and response elicition, with discriminative control of behavior between the two extremes.

#32 Paper Session
11/26/2005
02:30 PM - 02:50 PM
EDC/DEV

The Neuropsychology of Second Language Acquisition: How the Mature Brain Acquires a Second Language (Experimental Analysis).
DARLEANA MCHENRY (St. Carries Center for Human Development)

Abstract: Learning a second language later in life is possible. Language is a dynamic process that derives from the integrated function of the whole brain. The more complex the task, greater are the number of regions and structures in the brain that must be involved. Details of the neural mechanisms of language has been the most difficult of the brains functions to study. The universal ability of humans to communicate links us together into a powerful community. There are 44 distinct basic sounds (phonemes) that can be arranged into an infinite number of combinations.. The first language provides the linguistic context for second-language acquisition. Adults can learn another language efficiently and effectively. It is possible for adults to learn to speak a new language with little or no accent. Brain development is a continuous unending process. Genes and environment interact to continually change the brain from the moment of conception until death. . Free will is considered the strongest force directing the development of our brain as well as our lives. Experiences, thoughts actions and emotions actually change the structure of our brains. Acquisition of functions such as academic learning, take place over a lifetime, unconstrained by windows of development.

#33 Symposium
11/26/2005
3:00 PM - 3:50 PM
CBM; Applied Behavior Analysis

Behavioral Assessment of ADHD: Performance-Based Measures of Attention, Impulsivity, and Hyperactivity
Chair: David J. Leach (Murdoch University)

Session Abstract: In the three presentations, attention, impulsivity and hyperactivity are defined behaviorally. Attention is operationalised as "continuous responding to stimuli designated salient within a given context"; Impulsivity as "making choices that minimize gains and maximize losses of desired objects and activities within the context of available quantities and time delays"; and Hyperactivity as "behavioral activity deemed inappropriate for age and development level, task and context". We describe how these behaviors are measured by

computer-driven programs when elicited under standardized, clinical conditions. Accurate, maintaining, competing and switching attention to auditory and visual stimuli is assessed. Impulsivity is measured in relation to a hypothetical choice between the size of a gain or loss and the delay in receiving the gain or loss. Hyperactivity is assessed by measuring body movements and vocalizations. We present single-case and group data to illustrate the validity and utility of these behavioral measures in planning, evaluating and monitoring precise interventions with children and adolescents. We also discuss the potential of these measures in contributing to a comprehensive behavioral assessment and analysis of ADHD.

Behavioural Assessment of Attention. DOUGLAS F. BREWER and David J. Leach (Murdoch University)

Abstract: Attention is operationalised as "continuous responding to stimuli designated salient within a given context" We describe how these behaviors are measured by computer-driven program when elicited under standardized, clinical conditions. Accurate, maintaining, competing and switching attention to auditory and visual stimuli is assessed. We present single-case and group data to illustrate the validity and utility of these behavioral measures in planning, evaluating and monitoring precise interventions with children and adolescents. We also discuss the potential of these measures in contributing to a comprehensive behavioral assessment and analysis of ADHD.

Behavioral Assessment of Impulsivity. DAVID J. LEACH and Douglas F. Brewer (Murdoch University)

Abstract: Impulsivity is operationalised as "making choices that minimize gains and maximize losses of desired objects and activities within the context of available quantities and time delays". Impulsivity is measured in relation to a hypothetical choice between the size of a gain or loss and the delay in receiving the gain or loss. We present single-case and group data to illustrate the validity and utility of these behavioral measures in planning, evaluating and monitoring precise interventions with children and adolescents. We also discuss the potential of these measures in contributing to a comprehensive behavioral assessment and analysis of ADHD.

Behavioual Assessment of Hyperactivity. DOUGLAS F. BREWER and David J. Leach (Murdoch University)

Abstract: Hyperactivity is operationalised as "behavioral activity deemed inappropriate for age and development level, task and context". Hyperactivity is assessed by measuring body movements and vocalizations. We present single-case and group data to illustrate the validity and utility of these behavioral measures in planning, evaluating and monitoring precise interventions with children and adolescents. We also discuss the potential of these measures in contributing to a comprehensive behavioral assessment and analysis of ADHD.

#34 Paper Session
11/26/2005
3:00 PM - 3:50 PM
VRB/EDC

Decision-Making and Rule-Governed Behavior
Chair: Stefan Billinger (Örebro University)

Analysis of Decision Making Behavior Among Aviation and Non-Aviation Graduate Students (Theory). PATRICIA DAMMIER (Embry Riddle Aeronautical University/Northcentral University)

Abstract: The purpose of this study is to analyze the differences of decision making behavior between aviation and non aviation students. Aviation professionals are concerned with the identification of improving technology but a new trend is also seeking answers about the behavior that indicate how decisions are made in high risk aviation environments. This quantitative research will present a comparison of aviation and non aviation subjects that analyzes the verbal behavior identified from the choices made on a personality test. The literature supports that verbal statements are the results of an individual's thought process and the collection of environmental causes that may be used to understand behavior. The Keirsey Temperament Sorter indicates a numerical score for factors such as thinking versus feeling and judging versus perceiving that should provide the replicable operational outcomes. Parametric statistics will be used to analyze whether there exists a significant difference between the mean scores on a test of decision making. completed by aviation and non-aviation groups.

Derived Transfer of Stimulus Functions and Rule-Governed Behavior in School Settings (Applied Behavior Analysis).STEFAN BILLINGER (Department of Caring Sciences, Örebro University, Sweden) and Björn Lyxell (Behavioural Sciences, Linköping University, Sweden)

Abstract: Relational frame theory proposes that rule-governed behavior emerges parallel to relational abilities. The purpose of the present study was to examine if it was possible to find support for this claim in developmental differences among children within ordinary school classes. Specifically the study aimed to investigate the extent to which children who show most difficulties to perform derived relational responding also are among those children who show poor rule-governed behavior, or difficulties with adherence to rules and instructions in their natural school environment. The present study extends previous research showing derived transfer of functions through equivalence relations, by applying previously used methods of arbitrary matching-to-sample in the children's natural school setting. The results indicate that those children who show most difficulties to perform derived relational responding, are among the population of children the class teachers perceive to have disabilities in rule generation, rule understanding and rule following. The results will be discussed in relation to educational applications.

#35 Symposium
11/26/2005
3:00 PM - 3:50 PM
AUT; Applied Behavior Analysis
Early Intensive Behavioral Intervention for Young Children with Autism
Chair: Rebecca P. F. MacDonald (The New England Center for Children)

Session Abstract: Increasing evidence suggests that early intensive behavioral treatment can result in dramatic gains for children with autism spectrum disorder. At the New England Center for Children, we provide both home based and center based early intensive behavioral intervention (EIBI) for young children with autism. The purpose of this symposium is to describe the components of an EIBI program

including: a model for providing services, strategies for evaluating and teaching joint attention and a model for working with families. In addition we will show outcome data from children who have participated in this program. The discussion will focus on factors that may influence responsiveness to early intensive behavioral intervention.

Early Intensive Behavioral Intervention: Outcome Data for Children with Autism. Katherine E. Foster, Rebecca P. F. MacDonald, RENEE MANSFIELD, and Vincent Strully (The New England Center for Children)

Abstract: Children with a diagnosis of PDD/autism can benefit from early intensive behavioral treatment. At the New England Center for Children, we have developed a comprehensive assessment protocol, which is used on a yearly basis to directly measure performance on early cognitive skills, levels of stereotypy, and levels of joint attention. A description of the protocol along with outcome data will be presented for 33 children with autism upon entry into the Early Intensive Behavioral Interventions program and at the completion of each year of treatment. Data will also be presented for 30 age-matched typically developing children. Interobserver agreement on all measures ranges between 85 -100%. Results indicate that children who enter treatment at 2 years of age make greater gains across all three areas of analysis (cognitive, stereotypy, and joint attention). Performance profiles will be presented for children within the sample. Discussion will focus on outcomes as they relate to age of entry into treatment and overall cognitive levels.

A Behavioral Analysis and Treatment of Joint Attention Responding for Children with Autism. Rebecca P. F. Macdonald, RENEE MANSFIELD, O'Sullivan Gretchen, and Jenny Klein (The New England Center for Children)

Abstract: This paper describes a highly structured assessment protocol for evaluating children's responsiveness to the joint attention bids of an adult and a treatment protocol for teaching children to follow the gaze of an adult. The assessment was administered to 9 children diagnosed with autism spectrum disorders and 3 typically developing children, aged 2 to 4 years. Sessions were conducted in both a learning environment and a naturalistic play setting. Responding to joint attention was assessed using an adult gaze shift or a point cue and stimuli were presented in 5 different locations. Interobserver agreement was above 90% for all behavioral measures. Results showed that 4 children with autism responded to joint attention using a point but were unable to follow an adult gaze, where as 5 children with autism and the typically developing children showed high levels of responsiveness to both cues, regardless of setting or position of stimuli. Treatment was initiated for the children who did not follow an adult gaze. Data will be presented on acquisition of this skill using delayed-cue teaching procedures. These results extend previous research on the behavioral assessment and treatment of joint attention. Keyword: autism, joint attention, early intensive behavioral intervention

A Parent Training Model: Developing Parent Skills In Teaching Discrete Trials And Behavior Chains. SUSAN N. LANGER, William L. Holcomb, June M. Sanchez, and Ellyn Ellis (New England Center for Children)

Abstract: The use of videotaped samples for observation and feedback was evaluated for their effectiveness in teaching discrete trials and behavioral chains for a group of 15 parents. Prior to the class, a pretest was conducted in which the parents were videotaped implementing the two acquisition programs. The parents

then participated in a 5-week group consisting of didactic presentation, role-play, and ongoing review and feedback using videotape samples of exercises assigned as homework. A videotaped posttest was then conducted. Dependent measures included the presence/absence of targeted teaching behaviors (i.e., environmental arrangement, correct prompting strategy, and contingent delivery of reinforcement). Data indicate that parents' teaching performance on the 2 tasks improved after the combination of didactic, role-play, and videotape feedback portions of the training. Interobserver agreement data were collected on 40% of the videotape samples and ranged from 90% to 100%. An analysis was also conducted to determine the effect of the parent intervention on the children's skill acquisition. The effects of the different components of the treatment package, as well as the impact of additional aspects of the EIBI parent training model will be discussed.

#36 Paper Session
11/26/2005
3:00 PM - 3:50 PM
TPC/TBA

Ethical, Regulatory, and Terminology Issues in International Collaboration
Chair: Mary E. Boyle (SUNY, New Paltz)

The Gap Between Original Meanings and Chinese/Japanese Translations of Basic Terms of Behavior Analysis (Theory). XINXING RAN, Mira Simic, Chen Ke, and Yoshinori Hasegawa (Okayama University)

Abstract: Our purpose is to investigate the discrepancy between the exact meaning of basic terms of behavioral analysis and their translations into Chinese and Japanese everyday words. The Chinese/Japanese translations of basic conceptual terms in English are usually borrowed from their everyday words. However, discrepancy in meaning between exact definition and these translated terms frequently occur, what may hinder spreading or cause misunderstanding of behavior analysis. At first, we conducted document investigation about literal meaning of Chinese/Japanese translations for 10 basic terms. Furthermore, we examined what associative words were creating those words for behavioral analysis beginners. Target basic terms are Chinese/Japanese translations for 10 terms: behavior, reinforcement, punishment, contingency, operant, respondent, conditioning, extinction, rule- governed, and performance-management. Chinese and Japanese dictionary were used for the document investigation. Participants in this research were Chinese and Japanese students with little knowledge about behavior analysis. For comparison, research was conducted for only Japanese students after they acquired initial knowledge of behavior analysis. It is necessary to give further explanations about discrepancy in order to resolve misunderstandings and to alleviate spreading of behavioral analysis.

Addressing Ethical and Regulatory Challenges Affecting International Collaborative Research Involving U.S. Investigators and International Colleagues (Theory). MARY E. BOYLE (SUNY, New Paltz)

Abstract: Collaborative international research presents multiple challenges to investigators. Among these are ethical issues related to diverse cultural beliefs affecting the research topic and varied national or regional regulatory requirements concerning promotion of informed decision making, voluntary participation and comprehension relative to human subject research. The focus of this paper is the

integration of strategies to promote ethical and sound scientific research and strategies for compliance with U.S. regulations concerning international research studies. Two key definitions in the discussion of U.S. regulations related to international research are "engagement in research" [45CFR46.102(d) and (f)] and "local research context"[45CFR46.103(d), _.107(a), _.111 and _.116]. If the research is collaborative, then consequences related to "engagement in research" may apply. These include the necessity of review by a local (international) institutional review board (IRB), in addition to the IRB in the U.S. The intent of these regulations is to assure that research conducted in a foreign country meets the requirements of U.S. law and those of the other country and/or region, in a manner which acknowledges cultural context. This session will review varied strategies for fostering ethical research including alternative informed consent and recruitment procedures, requests for waivers, and procedures to promote community preparedness.

#37 Paper Session
11/26/2005
3:00 PM - 3:50 PM
EAB/VRB

Stimulus Equivalence Studies
Chair: Jacqueline Schenk (Erasmus University Rotterdam, The Netherlands)

Equivalence Outcome as a Function of Training Structure (Experimental Analysis).ERIK ARNTZEN (Akershus University College)

Abstract: Previous studies both when comparing groups of subjects and studying individual subjects have indicated differential probabilities of stimulus equivalence outcome as a function of training structure. Both one-to-many and many-to-one training structures seem to produce stimulus equivalence more often than a linear series training structure. The present study investigated the probability of equivalence as a function of a higher numbers of members in different training structures. The difference in number of comparisons connected to each sample as a consequence of the dissimilarity in the training structures are discussed as a possible explanation for the difference in equivalence in equivalence outcome.

Children's Emergent Relations of Equivalence via Exclusion Responding: Minimal Training Conditions (Experimental Analysis). JACQUELINE SCHENK (Erasmus University Rotterdam, The Netherlands), Simon Dymond (APU, Cambridge, United Kingdom), and Paul Smeets (Leiden University, The Netherlands)

Abstract: The present study examined different conditions under which exclusion responding in conditional discrimination tasks would generate emergent discrimination performances in young children. Exclusion responding describes the tendency of subjects to select undefined (frequently novel) over defined comparisons (i.e. by the reinforcement contingencies) when the sample stimuli are also undefined. Stimuli involved visual stimuli (Sets A, B, C, and D) and verbal stimuli (Set N). In total, four experiments were conducted, each involving eight preschool children. The results suggest that in order for young children to be able to derive novel arbitrary conditional relations of equivalence nature based on exclusion they need to have had training involving at least two conditional relations involving different samples. The results are discussed with reference to other studies on children's emergent conditional discrimination performances.

#38 Paper Session
11/26/2005
4:00 PM - 4:20 PM
TPC/AUT

A Model of Cooperative Coordination for Shared Outcomes: Implications for Therapy (Experimental Analysis).
RICHARD SCHUSTER (University of Haifa)

Abstract: Most experimental and therapeutic models are based on individual behavior. Using rats, we study cooperation based on pairs reinforced for coordinating back-and-forth shuttling within a shared chamber. By incorporating dimensions of "natural cooperation" whereby familiar individuals learn to work together, the model addresses issues such as: what is learned; what are the underlying processes; and how are participants affected by working together. We show evidence consistent with reinforcement from both immediate material gains such as food or money, and affective states associated with the actual behaviors used when cooperating, i.e., for the influence of irreducible social dimensions of cooperating . The latter can explain a "bias to cooperate" that includes: a strong preference to cooperate that is not related to unrelated immediate material gains; anticipatory emotional responses prior to cooperation; and asymmetric allocation of single reinforcements that had no influence on performance. The bias appears "irrational" but can be adaptive if: a) intrinsic reinforcements facilitate learning to cooperate, even when material outcomes are few, and b) relationships are strengthened among cooperators that will be important in the future. The methodology and underlying processes have implications for behavior therapy, including treatment of autism and social dysfunctions.

#39 Invited Event
11/26/2005
4:00 PM - 4:50 PM

B. F. Skinner's Scientific Discoveries and Their Technological Derivations
JULIE S. VARGAS (B. F. Skinner Foundation)

Abstract: A short history of Skinner's discovery of the impact of contingencies on rate of actions will be given along with the main principles of the science he began. The impact of his reinforcement-based technology of teaching will be discussed in terms of its impact on teaching everything from zoo animals to college students. Specific applications will include Clicker training, TAG teaching, Precision Teaching, and the teaching of children with autism using procedures derived from Skinner's book Verbal Behavior.

#40 Paper Session
11/26/2005
4:00 PM - 4:50 PM
CBM

Behavioral Medicine
Chair: Carla Schlesinger (Alcohol and Drug Service, The Prince Charles Hospital Health Service)

Australian Developments in the Cognitive Behavioural Therapies: Past Achievements and Future Directions (Applied Behavior Analysis). CARLA SCHLESINGER (Alcohol and Drug Service, The Prince Charles Hospital Health Service)

Abstract: Research focused on the Cognitive and Behavioural therapies has advanced significantly in Australia in recent years. The presentation will address Australia's clinical and research contributions to CBT, covering a number of topic areas including mood, anxiety and substance use disorders. The Australian Association for Cognitive and Behaviour Therapy (AACBT) will be overviewed. The AACBT was developed for a range of health professionals with an interest in the application of the principles of cognitive and behavioral psychology to help alleviate the difficulties experienced by individuals and groups in the community. The association promotes the scientific approach to understanding and modifying behavior in applied settings, with branches in most states of Australia. Future directions for the association, as well as research and clinical practice will be also addressed within this presentation.

#41 Paper Session
11/26/2005
4:00 PM - 4:50 PM
EAB

The Application of Operant Conditioning to Giant Panda Research and Husbandry (Applied Behavior Analysis). PEI SUN (School of Psychology, Georgia Tech), Jay Pratt, Wendy Gardner, and Kate Duello (Zoo Atlanta), and Angela Kelling, M. Jackson Marr, and Terry L. Maple (School of Psychology, Georgia Tech)

Abstract: Widely used in modern zoological parks, in this paper we will review how operant conditioning has been used to study and manage giant pandas in Atlanta and in China. By training pandas to present body parts, we performed physical examinations without dangerous anesthesia. For example, "eye present" training helped our physicians to examine a scratched cornea in an adult female. Signs of estrus were discernable by visual inspection after presentations of the ano-genital region. Preparation for artificial insemination and nipple expression was also trained with female subjects. Males were trained to enable measurement of their testicular development, and animals routinely submitted to trainers who gave injections or examined them by ultrasound. Cognitive and visual abilities were tested by discrimination training for color and contrast. Male and female pandas learned to discriminate black and white, and green from gray. We also describe our exchange of personnel to teach Chinese colleagues various behavioral training techniques. Our work is designed as a scientific and management partnership supported by a collaborative research relationship between the American Zoo and Aquarium Association, the U.S. Fish & Wildlife Service, and the Chengdu Center for Giant Panda Breeding in China. Photographs and video clips will help to demonstrate the scope of our research and husbandry. Students from the School of Psychology at Georgia Tech and keepers from Zoo Atlanta provide the human resources to carry out this scientific program in Atlanta and in China.

#42 Paper Session
11/26/2005
4:00 PM - 4:20 PM
EDC/OBM

Studying Fluency: Applications in Mathematics and Environmental Education (Applied Behavior Analysis). PHILIP CHASE (West Virginia University)

Abstract: A recent review revealed little experimental evidence that rate-building procedures affect the fluency outcomes of retention, persistence, and generalization of trained skills when other variables that also are known to affect performance are controlled (Doughty, Chase, & O'Shields, 2004). This finding has led to basic research that indicates some dimensions of stimulus presentation methods and curriculum design that affect both rate of responding and fluency outcomes. Based on the results of this research, the current paper will address the application of research methods to investigate fluency within mathematics and environmental education. Of particular interest is an evaluation of methods for controlling the effects of practice and rate building and for developing curricula that produce retention, persistence, and generalization. Doughty, S. S., Chase, P. N., & O'Shields, E. M. (2004). Effects of rate building on fluent performance: A review and commentary. The Behavior Analyst, 27, 7-23.

#43 Paper Session
11/26/2005
4:00 PM - 4:50 PM
VRB/DEV
Verbal Skills Acquisition
Chair: Dolleen-Day Keohane (Columbia University Teachers College and CABAS® Schools)

Identification and Induction of Verbal Capabilities (Theory). R DOUGLAS GREER and Dolleen-Day Keohane (Columbia University Teachers College)
Abstract: We describe key verbal capabilities in children identified in programs of research on Skinner's verbal behavior theory and the extension of that theory to a functionally defined hierarchy of developmental stages. The extension involves the identification of controlling variables for the source of speaker and listener operants, generative behavior as higher order operants, the critical speaker as own listener stage, the transformation of stimulus and establishing operation functions for initially independent repertoires, and the induction of missing capabilities in individual's with verbal delays.

Visual Tracking and Sensory Matching as Verbal Developmental Protocols to Increasing Children's
Verbal Capabilities (Applied Behavior Analysis). DOLLEEN-DAY KEOHANE, R. Douglas Greer, and Shira Ackerman (Columbia University Teachers College)

Abstract: Visual Tracking and Sensory Matching protocols were implemented to provide four children with the pre- requisites needed to move toward more complex levels of verbal capability. The children were between the ages of three and six and diagnosed with autism or related communication disabilities. In general, the children were pre-listeners and attended to stimuli inconsistently. The children's data showed low levels of responding to learn units across academic, communication, and expanded community of reinforcer areas of the curriculum. Specifically, the children did not imitate teacher modeling, match stimuli, follow basic directions, or discriminate among stimuli through a point to response when requested. After baseline measures of the children's individualized curriculum were obtained, and an strategic analysis of the problem in the learn unit context identified that the children

were missing pre-requisite levels of verbal capability, their programs were placed on hold and the Visual Tracking and Sensory Matching protocols were implemented. The post experimental data for each protocol showed that the children reached criterion levels of responding for most short-term and long- term objectives across their matching programs, and that the learn units to criterion decreased significantly for all children across the areas of the curriculum measured.

#44 Paper Session
11/26/2005
4:30 PM - 4:50 PM
AUT/VRB

Verbal Behavior in Classrooms (Applied Behavior Analysis).
SMITA AWASTHI (Independent, school, UAE, India)

Abstract: Education for children with autism in group setting is becoming a necessity with the increasing number of diagnoses among children. To acquire this we look at using verbal behavior (ABA) techniques of acquiring instructional control, reinforcement, prompting, prompt fading, errorless teaching, group size, shadow teachers with respect to diagnostic variability in children with autism. Many children have problem behaviors associated with autism and are unable to be main streamed. VB in a group (Group of children with ASD) offers best practices with out compromising on training quality as delivered in a 1:1 setting with individual and group goals on acquisition.

#45 Poster Session
11/26/2005
5:00 PM - 6:30 PM
AUT

1. Acquisition and Generalization of Social Skills Using Table Game for a Student with High Functioning Autism (DDA; Applied Behavior Analysis).
MASAHIKO INOUE and Yasuhiko Yoshida (Hyogo University of Teacher Education)

Abstract: In this study, a table game to teach social skills was designed. A boy with high functioning autism and two normal peers were participated. During eight training sessions, their appropriate interactions were increased. The result, his social skills were improved and cooperative plays and activity were increased in generalization settings.

2. Comparison of Two Types of Consequences for Errors in Programs for Children with Autism (EAB; Applied Behavior Analysis). LUIS ANTONIO PREZ-GONZLEZ (University of Oviedo, Spain), Gladys Williams (Applied Behavioral Consultant Services, New York), and Carlota Belloso-Daz, Monica Rodriguez-Mori, Benigno Alonso-Alvarez, and Lorena Garca-Asenjo (University of Oviedo, Spain)

Abstract: One crucial characteristic in the programs for teaching children with autism and other learning disabilities is the type of consequences for errors. Some programs use a correction procedure, which consists of presenting the child the correct behavior or providing physical guidance for the child to perform the behavior, with no reinforcement. Other programs present a prompt in the subsequent trial prompt in the next trial. We taught two skills to a child with autism in which we alternated the two procedures according to an ABAC design counterbalanced across

the two skills. The correction procedure served to teach faster and with fewer errors than the prompt in the next trial procedure. It is possible that a reason for this fact is that the in the correction procedure reinforcement is more correlated to correct responding than in the prompt in the next trial procedure. These results have important applications in the form of teaching a great number of skills in children with learning disabilities.

3. Effect of Coaching to Promote the Appropriate of Self-Evaluation and Social Skills in a Child with Autism (DDA; Applied Behavior Analysis). SHINZO ISAWA (Hyogo University of Teacher Education) and Hironobu Shimoda (Bunkyo University)

Abstract: The purpose of this study was to examine the effect of coaching to promote appropriate of the self-evaluation, when was introduced self-evaluation procedure in order to acquire social skills in a child with autism (CA:13-6, IQ:57). Subject was requested to perform joint work activity (handicraft) with peer and it was demanded self- evaluation of the targeted social behaviors that became necessary for that activity. The procedure of self- evaluation was that subject should put a circle around "yes" or "no" on the check sheet that it were written down the targeted social behaviors how was subject able to accomplish a demanded the behaviors at on the joint work activity. In Second Phase for self-evaluation, we introduced coaching for self-evaluation. It was result that only self-evaluation's sheet (First Phase for self-evaluation) did not promote of targeted social behaviors. By conducting of the coaching to self-evaluation, subject was able to discriminate an appropriate or not-appropriate of targeted social behaviors, and accurate self-evaluation rate and performance of targeted social behaviors were promoted. Consideration was done on the effectiveness and the procedure of self-evaluation to coaching.

4. Effects of Early Behavioral Intervention on the Mother-Child Interactions of Children with Autism (Applied Behavior Analysis). NOZOMI NAOI and Jun-ichi Yamamoto (Keio University)

Abstract: Recent studies suggested that maternal responsiveness predict child social and language abilities both in typical developing children and children with autism. However, child responsiveness should also contribute to maternal responsiveness. Early behavioral interventions have been successful in teaching children with autism a variety of communication skills, however, few studies have examined its effects on the mother-child interactions. In the present study, we examined the relations between the child social development and mother-child interactions. Mother-child interactions in free play sessions were assessed at intake and 1 year after the treatment began. Four children with autism and their mothers participated in the present study. They aged from 45 months to 78 months. Two children had no functional words and the other two had one-word utterances at the beginning of the study. Prior to the treatment, mothers' responses to their children's vocal/verbal production were more directive rather than responsive compared to the mothers of developmental age matched typically developing children. One year after the treatment began, mothers were more likely to reproduce the children's vocal/verbal production than before. Our findings suggest that the intervention for children with autism might have positive effect on not only child social responsiveness but also maternal responsiveness to their children.

6. Teaching Cell Phone Skills to Student with Autism: Consideration of Relationships Between Simulation Settings and Community settings (CSE; Applied Behavior Analysis). AKIRA FUKUNAGA, Kenichi Ohkubo (University of Tsukuba Graduate School Comprehensive Human Sciences), Masahiko Inoue (Center for Research on Human Development and Clinical Psychology), and Yoko Inukai (Hyogo Support Center for Autism and Developmental Disorder)

Abstract: This study examined the acquisition cell phone use by a student with autism. The target skills are receiving a cell-phone call, answering question about his location and moving to the meeting place. At first, student was introduced simulation training in clinic. And then, we assessed probe test in community setting. However, generalizations were poor. Next, we arranged reinforcement of target skills (e.g., if he accomplished moving, his favorite food items were given) and repeat-question procedure was began when he could not answer. The result indicated that he successfully acquired the generalized cell phone skills in community setting. We discussed about similarity of discriminative stimuli and reinforcement between simulation setting and community setting.

#46 Poster Session
11/26/2005
5:00 PM - 6:30 PM
BPH

7. Agonistic and Antagonistic Effects of Dopamine in Dynamic Reinforcing Environments (EAB;
Experimental Analysis). JORGE BALDERRAMA (Universidad Veracruzana & Institute of Neuroscience and CEIC Universidad de Guadalajara) and Carlos Aparicio (CEIC Universidad de Guadalajara)

Abstract: Research in neuroscience suggested that dopamine mediates the reinforcing effects of positive stimuli (e.g., food). This idea received support from studies showing that dopamine antagonists (i.e., Haloperidol) suppress instrumental behavior maintained with positive reinforcement. By contrast, dopamine agonists (e.g., d- amphetamine) produce increments in the rate of operant responses. The purpose of the present study was to compare within the same situation the effects of haloperidol and d-amphetamine on choice behavior. The ratio of reinforcers provided by two levers changed every day modeling a dynamic reinforcing environment. When behavior reached stability, haloperidol and d-amphetamine were assessed (ip) over 12-day periods. Results showed that the distribution of responses in the levers decreased with increasing doses of both haloperidol and d- amphetamine; indicating that the drugs affected the motor system. However, sensitivity to reinforcement, as estimated by the generalized matching law, did not decrease with increasing doses of these drugs; Suggesting that motivation for food reinforcers was not affected by haloperidol and d-amphetamine. The implications of these findings for a general model of anhedonia will be discussed.

#47 Poster Session
11/26/2005
5:00 PM - 6:30 PM
CSE

9. Self-Concept of Formal Caregivers, and Life Quality of internally users in Elderly Institutions (Applied Behavior Analysis) MIGUEL DE ARRIAGA, Raul Cordeiro, and João Claudino (Escola Superior de Enfermagem de Portalegre)

Abstract: It is a transversal and descriptive study, and the main meaning was to measure the Self-Concept of Formal Caregivers in Elderly Institutions, and also Life Quality of internally users in dose same institutions. To the development of the study were selected two of the elderly institutions of Portalegre, Portugal. The population was composed by Internally Users (n=113) and Formal Caregivers (n=81) of both elderly institutions, being used respectively the WOHQOL-bref Questionnaire and the Vaz Serra (1986) Self-concept Inventory. Based on the distribution of the Self-Concept of Formal Caregivers by mean point, we verify that 97,67% (n=42) have a high Self-Concept, and 2,33% (n=1) have a low Self-Concept. About Life Quality values, we verify that most of Internally Users had values above the average point that identify Life Quality. Which allow us to say that the Internally Users have a good Life Quality. A significant positive correlation was found between scores of the Life Quality dimensions Questionnaire and Institution satisfaction, in Internally Users, and also a significant positive correlation between Self Concept and Institution Satisfaction, in Formal Caregivers. This way we suppose that there's maybe a connection between Internally Users Life Quality and Formal Caregivers Self Concept.

#48 Poster Session
11/26/2005
5:00 PM - 6:30 PM
DDA

10. Effects of Multisensory Environments on Problem Behaviour Maintained by Social and Automatic Reinforcement (AUT; Applied Behavior Analysis).
Karen Trusler, Lindsay Hill, and FREDERICK FURNISS (The Hesley Group)

Abstract: Multisensory environments have been shown to produce short-term reductions in maladaptive and challenging behaviours exhibited by young people with developmental disabilities, but the behavioural processes involved remain unclear. Using an alternating treatments design, we repeatedly observed the maladaptive and prosocial behaviours of four young people with severe developmental disabilities who exhibited problem behaviours evaluated by functional assessments as being maintained by either social or automatic reinforcement while the participants were either in a day activity room or in a multisensory environment. The levels of interaction participants received from careers in each environment were also measured. The effects of the multisensory environment on behaviours maintained by each class of reinforcer are reported and implications for future research into multisensory environments discussed.

11. Learning Japanese Kanji-Writing by the Constructional Matching-to-Sample in the Students with Learning Disabilities (EDC; Applied Behavior Analysis).
Hiroshi Sugasawara (Keio University & RESTEX), Yuki Kiuchi (Keio University), and Jun'ichi Yamamoto (Keio University & RESTEX)

Abstract: Japanese students, especially students with learning disabilities, have difficulties in the acquisition of Kanji- writing. There would be two factors: One was the disability of visual segmentation and construction. The other was the disability of motor response, such as the clumsiness. Learning of Kanji was often aversive by repeated requirement of writing. In the present study, the students with learning disabilities participated, who could not write Kanji preciously. We developed the computer-based teaching program including the constructional matching-to-sample for selecting the parts of Kanji and constructing the whole Kanji. When the student pushed the key, whole Kanji and the parts of the Kanji were presented in the display

as the sample and the comparison stimuli, respectively. The student was required to select the parts of Kanji by mouse and construct the whole Kanji. When a correct response occurred, the student was praised by sounds and animations. The multiple-baseline across tasks was applied as the experimental design. As results, the students not only could construct Kanji correctly, but also they could write both trained and novel. The constructional matching-to-sample task was effective for learning and transfer of the acquisition of Kanji in the students with learning disabilities.

12. Teaching School Readiness Behaviors to a Japanese Preschool Child with Mild Autism (EDC;
Applied Behavior Analysis). Yuki Dojo, Setsuko Hara, Chiaki Yamamoto, Yoshihiro Tanaka, and Junko Tanaka-Matsumi (Kwansei Gakuin University)

Abstract: Inclusion education is a customary practice in Japan. In this study, we trained school readiness behaviors in a 5- year-old preschool girl in discrete trials. Individualized training sessions were followed by small group training sessions. The preschooler was a girl diagnosed with "Mild Autism" (Full Scale IQ = 74). She had been referred for lack of attention to kindergarten teacher's instructions as well as other developmental delays. The trainer was a doctoral-level graduate student assisted by 3 other students. The school readiness behaviors were selected for training for the child to adapt to the elementary school in six months time. To derive appropriate target behaviors, we first observed teacher and student behaviors in a regular first-grade classroom of an elementary school. We then selected those classroom behaviors children routinely performed following teacher instructions such as copying letters off the blackboard, taking textbooks out from the desk drawer, among others. The behavioral training package included instruction, prompts, modeling, behavioral rehearsal, and reinforcement. As a result of training, all target behaviors increased from baseline to post-test. In a few months, we will test for the effect of the training in the naturalistic first grade classroom environment, when the child has enrolled in school.

#49 Poster Session
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5:00 PM - 6:30 PM
EAB

14. Control of Variability of Pecking Location in Budgerigars (Melopsittacus undulatus) (Experimental Analysis). KAZUCHIKA MANABE and Takashi Kawashima (Nihon University)

Abstract: When budgerigars were trained to produce a specific call in one-template training, call variability decreased. On the other hand, call variability increased in an N-back procedure in which birds were required to make a call that was different from N previously reinforced calls. A very similar result was found when budgerigars were reinforced for pecking locations different from, in terms of distance, previously pecked or reinforced locations on an LCD monitor. As with response topographies in other species, budgerigars' pecking location was sensitive to selective reinforcement and frequency-dependent reinforcement by food. Two different N-back procedures were used, namely response-based and reinforcement-based procedures. In response-based N-back procedure, a peck was reinforced when it was made to locations that were more than pre-defined distance from the previous pecked N locations. In reinforcement-based N-back, a peck was reinforced when it was made

to locations that were greater than a predefined distance from the previous, reinforced N locations. In reinforcement-based N-back, subjects produced at least N + 1 pecking locations. On the other hand, Subjects developed a relatively fixed response pattern -- a pattern of alternating pecks to a location randomly intermixed with pecks to other locations in response-based N-back procedure.

15. Effects of Flavor and Water Deprivation on the Feeding Pattern and Corporal Weight in Rats
(Experimental Analysis). Nayely Ordaz (Universidad de Guadalajara), Antonio Lopez-Espinoza (Universidad de Guadalajara), HECTOR MARTINEZ (Universidad de Guadalajara - Mexico)

Abstract: The palatability of diets is one of the factors that influence the regulation of food ingestion and corporal weight. It has been demonstrated that the flavor of a food can determine its acceptation or rejection; however, acceptation of a particular flavor may also be influenced by deprivation. In this experiment, we measured consumption of water and food and body weight while modifying the flavor of water after a period of water deprivation. Twenty-eight Wistar rats were distributed among five groups. All rats were exposed to three days of water deprivation, followed of a period of free access of five days in which the flavor of water was modified; the experiment ended with ten days of unflavored water. Four experimental groups were exposed to one of the following flavors: cream, butter, chili, or quinine. A control group received unflavored water. The results suggest that both flavor and water deprivation affect the consumption of water and food, and thus corporal weight. Key words: flavor, deprivation, palatability, water intake, rats.

16. Effects of Response Variability on the Sensitivity to Schedule Change in Humans (TPC;
Experimental Analysis). NAOKI YAMAGISHI (Komazawa University)

Abstract: This experiment examined the history effects of lag schedule for interresponse-time (IRT) and post reinforcement pause (PRP) on schedule sensitivity with college students. The lag schedule increased variability of IRT/PRP by reinforcing IRT/PRP that differs from preceding one. The first and third phase was designed to investigate sensitivity to reinforcement schedule change from fixed-ratio to fixed-interval. In the second phase, participants experienced the lag schedule. Participants showed insensitivity in first phase and sensitivity in third phase. The results indicate that experience of lag schedule and growth of response variability increased schedule sensitivity in humans.

17. Observing Responses in Humans: A Systematic Replication of Mulvaney, Hugues, Jwaideh and
Dinsmoor (1981) (Experimental Analysis). CANDIDO PESSOA (Pontificia Universidade Catolica)

Abstract: The purpose of this research was to compare duration and frequency of observing responses emitted by humans when the consequences were the production of stimuli related to a VI or EXT schedule. Six participants between 22 and 42 years old were distributed in 2 groups. Participants in Group 1 were first exposed to a multiple schedule VI 20s-EXT with components of 90 seconds in average. During the VI component, presses on a button produced points exchanged for money at the end of each session. After achieving 0.9 or more in a discrimination index (responses during VI divided by responses during VI plus responses during

EXT) for 3 or more consecutive sessions, the participants were exposed to a mixed schedule VI 20s-EXT, with the possibility of emitting responses on a second button that changed the schedule from mixed to its multiple equivalent for the time the button remained pressed. Group 2 participants' were exposed directly to this second condition. Participants of Group 2 achieved higher discrimination indexes and faster than Group 1 participants'. Also, all participants produced the stimulus related to EXT for longer time than the stimulus related to VI. Keywords: observing responses, discrimination learning, response duration

19. Some Simple Properties of Interresponse-Time Sequences in Variable-Interval Schedules
(Experimental Analysis). FRANCOIS TONNEAU and Areli Morando (Universidad de Guadalajara)

Abstract: Although much work has investigated the differential reinforcement of interresponse times (IRTs), the properties of sequences of IRTs under standard reinforcement schedules remain poorly known. Here we analyze some simple stochastic properties of IRT sequences on two schedules of reinforcement (variable-interval 30-s and variable-interval 90-s). Four water-deprived Wistar rats were exposed to these two schedules in counterbalanced order. In all cases, IRT distributions could be partitioned into "short" (between 0 and 0.5 s) and "long" (larger than 0.5 s) values. The number of consecutive short IRTs before emitting a long IRT, as well as the number of consecutive long IRTs before returning to a short IRT, followed geometric distributions. Studying the effects of reinforcement on such distributions may provide a better understanding of operant behavior.

20. The Effects of the Conditioned Learning with a Visual Cue to Decrease Unilateral Neglect (DEV; Applied Behavior Analysis). Chiang-soon Song (Samsung Noble County) and BO-IN CHUNG, Min-Ye Jung, and Eun-Young Yoo (Yonsei University)

Abstract: The purpose of this study was to investigate the effects of the conditioned learning with a visual cue to decrease unilateral neglects. Three persons with hemiparesis caused by stroke had been trained by conditioned learning with a visual cue for three weeks. The visual cue to use conditioned learning is a towel which is frequently used in activity of daily living (ADL). A single-subject experimental design with A-B-A reversal was employed in this study. The Albert Test, Baking Tray Task were used to measure the change in unilateral neglect before and after the training with conditioned learning. ADL tasks were used to probe the effect generalization of conditioned learning with visual cue. As a consequence of this study, the degree of unilateral neglect and ADL performance of all three participants were respectively improved during the treatment period as compared to the baseline. These improvements were sustained 1 week after cessation of the training and greater when conditioned learning was trained along with a visual cue than without a visual cue. The result of this study presents that conditioned learning with a visual cue has positive effects to decrease unilateral neglect by persons with stroke. The conditioned learning with a visual cue showed a modest level of generalization to ADL tasks.

21. The Transformation of the Discriminative Function and the Structure of Comparison Stimulus Within the Stimulus Equivalence Classes
(Experimental Analysis). KANAME MOCHIZUKI (Teikyo University), Yukie Tanohata (Keio University), and Masaya Sato (Teikyo University)

Abstract: The transformation of functions refers to the untrained acquisition of stimulus functions among members of stimulus equivalence classes. In this study, we examined the transformation of the stimulus control and the structure of comparison stimulus using arbitrary matching-to-sample procedure. Five university students acquired equivalence relation within 3 6-member classes made up of unfamiliar foreign letters and icons in phase 1. Then they were trained 2 conditional discriminations using one of three classes as a discriminative stimulus. Four of 5 participants show the transformation of the stimulus control and the structure of the comparison stimulus to the equivalence classes.

22. Verbal Behavior under Contingencies of Reinforcement, Punishment and Extinction (Experimental Analysis). GERSON Y. TOMANARI (University of São Paulo) and Katia P. Ramos, Livia C. Sanches, Milena Geremias, Nathali M. Sabino, Vera R. Amaral, and Ana Beatriz Almeida (Sobrapar)

Abstract: Verbal behavior was experimentally investigated under contingencies of reinforcement and punishment followed by extinction. Three normal adults were exposed to the task of making sentences. The software VERBAL 2.0 was used for data collection and recording. In three drop-down menus horizontally aligned on the monitor screen, the subjects first selected a pronoun to initiate the sentence, then selected the verb (in a particular verbal tense), and finally a complement for the sentence. In each menu, six different choices were available. This one-session experiment started with baseline, when neither reinforcement nor punishment was applied. Following, subjects could either earn points by choosing a specific pronoun previously selected by the experimenter or loose points by choosing any other pronoun. Choices in the other two menus had no programmed consequences. A final condition under extinction ended the session. Results showed that any particular pronoun was markedly chosen in baseline. As the experimental condition initiated, the use of the pronoun under reinforcement increased as the use of pronouns under punishment decreased. On extinction, the use of the formerly reinforced pronoun slightly decreased, although its frequency remained higher than baseline. This resistance to extinguish may be reflecting specific effects of the subjects' experimental history on contingencies of reinforcement and punishment.

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5:00 PM - 6:30 PM
EDC

23. Effect of Teacher's Implementation of ABA-Based Intervention in Class to Manage Disruptive Behaviors of Children with ADHD (CSE; Service Delivery). KEE YEON MIN, Yun Hee Lee, Eun Hee Son, and Jin Hwa Lee (Lotus Flowers Children Center, Korea)

Abstract: Several researches have been supporting the educational effect of school-based applied behavior analysis(ABA) in supporting positive behaviors for children with attention deficit hyperactivity disorders. The present study examined the effect of teacher's implementation of ABA-based intervention in class to manage disruptive behaviors of children with ADHD. Two children with ADHD, twenty of typically developing children, and a general education teacher participated in the study. The teacher was trained how to utilize the behavior intervention in class and implement a classroom-based ABA program to manage disruptive behaviors of a child with ADHD

in the class. The results showed that the intervention produced decrease in disruptive behaviors and increase in on-task behaviors of the subject. Also, the intervention promoted peer acceptance for the subjects by their typically developing classmates.

24. Peer-Mediated Social Story Intervention to Decrease Inappropriate Class Behaviors for Children with ADHD (CSE; Applied Behavior Analysis). KYONG BOK KIM, Kee Yeon Min, Soo Ok Song, Hae Jin Lee, Jee Hae Kim, Hae Ree Han, and Sin Hee Kim (Lotus Flowers Children Center, Korea) and Chee Yeon Yoon (Choon Hae College)

Abstract: Autism spectrum disorder is characterized by major deficits in social skills, which relates closely to maladaptive social behaviors in a peer group. The present study examined the effect of peer-mediated social story intervention to decrease in inappropriate class behaviors and increase in on-task behavior of preschoolers with behavioral disorders. Using a multiple baseline design across subjects, the study targeted decrease in crying, out- of-seat, and screaming behaviors as inappropriate class behaviors and increase in on-task behavior in a peer- group activity time through peer-mediated social story intervention. The results showed that the intervention produced increase in on-task behavior and decrease in inappropriate behaviors in a peer-group activity with all the subjects.

25. Teaching Choice Behavior to Students with Mental Retardation in a Classroom Setting (TBA; Applied Behavior Analysis). PEI HONG (University of Tsukuba) and Watanabe Masataka (Yokohama
National University)

Abstract: The development of choice making in individuals with disabilities is recognized as a critical goal for special education. In this study, choice behavior was taught to three students with moderate mental retardation at school of handicapped in China. First, choice opportunities of activity were provided by personal computer for play activity, by song book for Karaoke, and by photo card for shopping. Second, students received systematic prompting and feedback to perform self-selection, decision, and initiation of activity. Results indicated that after implementation of choice program, all students made more choices of the activities than the baseline and the amount of choices increased during routine day activity. The quality-of-life (QOL) indicator's score was also improved. Results are discussed in regard of developing instructional approach and curriculum to exert control over meaningful events in the lives for students with mental retardation .

26. The Effect of Student Assistants on Instructional Effectiveness in a Physical Activity Setting
(Applied Behavior Analysis). ANDREW HAWKINS (West Virginia University) and Mary Ann DeLuca (Davis and Elkins College)

Abstract: This study evaluated the effect of a student assistant in supplementing the instruction of a teacher in developing a novel skill. Six students were chosen from a 5th grade class based on scores from a pretest of juggling. One other fifth grade student from the same class was chosen as a student assistant based on maturity. Six single case alternating treatment designs were employed for approximately 16 days. Juggling catches and cascades during practice and probe episodes were the dependent variables. Supplementary dependent variables such as feedback, verbal cues, and modeling of the teacher and student assistant were also

examined. The three levels of the independent variable of organizational arrangement were 1) class taught as a whole by the teacher alone; 2) class divided in half, subject taught by the teacher; and 3) class divided in half, subject taught by the student assistant. Students practicing under the direction of a student assistant were as effective as under the direction of the teacher. In addition, teaching behaviors supporting instruction nearly doubled when the class was divided and the student assistant was used in teaching. Teachers may multiply their own instructionally relevant teaching behaviors by the use of trained student assistants.

27. Using Meditation Music with Cognitive Restructuring for Children with Behavior Problems to Manage their Maladaptive School Behaviors (CSE; Service Delivery). JEONGIL KIM, Hyo Shin Lee, and Sung Ae Kim (Daegu University, Korea)

Abstract: The present study examined effect of meditation music therapy with cognitive restructuring for children with behavior problems to manage their maladaptive school behaviors. Fifteen children as experimental group and fifteen children as control group participated in the study. The results showed the experimental group provided with the intervention displayed significant lower rate in their school maladaptive behaviors.

#51 Poster Session
11/26/2005
5:00 PM - 6:30 PM
TBA

28. A Consultative Model for Providing Positive Behavior Supports to Rural/Underserved Schools (TBA; Service Delivery). John Wheeler, Amy Johnson, Bob Baggett, Richard Bumbalough, Morgan Chitiyo, Xiuchang Huang, JIE ZHANG, and Yanhui Pang (Tennessee Technological University)

Abstract: Classroom teachers and school personnel continue to be confronted with the question of how to successfully address the students' challenging behavior in school settings. In the U.S.A., research and demonstration projects prompted by the IDEA Amendments of 1997 have prompted in-roads in the development of school-wide behavior support models aimed at preventing and proactively addressing the issue of challenging behavior. This poster will highlight a technical assistance project known as the Tennessee Technological University (TTU) Make a Difference Project. This funded initiative is aimed at the delivery of technical assistance and consultation in the area of positive behavior supports (PBS) to rural/underserved schools. The TTU Make a Difference Project provides behavioral consultation and support to the 23 county, 2 city and 1 federal education system within the Upper Cumberland region of the state; perhaps the area in greatest need given the rural isolation that exists. The poster session will emphasize the project's design, methods for delivering technical assistance to regional schools, collaboration with school-based behavior support teams and families, and lastly, school-based, classroom-based and individual program outcomes and evaluation.

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OTH

30. Masters Programme in Applied Behaviour Analysis at the University of Wales, Bangor, UK. PAULINE HORNE (University of Wales, Bangor), Carl Hughes, Steve Noone, Sandy Toogood, Richard Hastings (Wales Centre for Behaviour Analysis), Marguerite Hoerger (Wales Centre for Behaviour Analysis)

Abstract: In 2003 we developed the first Masters course in Applied Behaviour Analysis in Europe. The course is designed and taught by Board Certified Behavior Analysts (BCBA) and has been approved by the Behavior Analysis Certification Board (BACB) as providing content eligibility (3rd Task List) for students to sit the full BCBA exam. In line with the British University system, the course is offered at three levels: Post-graduate Certificate, Post-graduate Diploma, and Masters. In the design and running of the course we have attempted to use behavioural principles in the instructional materials, learning environments, and in the assessment of students learning. We utilise computer based instructional packages, direct instruction, and in particular, Precision Teaching approaches, such as SAFMEDS and Standard Celeration Charting. The course is a full one-year or can be taken on a part-time basis (either 2 or 3 years in duration). Each year we enroll approximately 25-30 students from a wide range of backgrounds: Early Autism Intervention Projects, challenging behaviour units, Social Services, Special Education, and new graduates. Our main aim is to make a significant contribution to training competent behaviour analysts.

31. The Wales Centre for Behaviour Analysis. . PAULINE HORNE (University of Wales, Bangor), J. Carl Hughes (Wales Centre for Behaviour Analysis), Steve Noone (Wales Centre for Behaviour Analysis), Sandy Toogood (Wales Centre for Behaviour Analysis), Richard Hastings (Wales Centre for Behaviour Analysis), Marguerite Hoerger (Wales Centre for Behaviour Analysis)

Abstract: The Wales Centre for Behaviour Analysis (WCBA) was granted formal approved as a University of Wales Centre in September 2004. The aim of the WCBA is to contribute, through the application of behaviour analysis theory and methods, to the understanding of basic human learning processes and to establish positive behaviour change in children and adults using individual and larger-scale interventions. The rationale for creating a formal centre based at the University was to unite a number of existing applied and basic research streams with two significant developments in training and applied provisions in ABA at Bangor. The first of these is the newly established Masters level training in Applied Behaviour Analysis: the course was started in 2003 and is the first European BCBA approved Masters in ABA. The second development is the establishment of the Bangor Centre for Developmental Disabilities; this is a new school and residential provision that exists to provide a service to children with developmental disabilities and severe behaviour disorders through ABA. The WCBA holds regular open research and planning meetings designed to encourage collaboration between researchers and applied providers and dissemination of research and best practice. The WCBA aims to contribute significantly to the training of the next generation of basic and applied researchers through the Masters training course and other research, consultation, and training initiatives.

#53 Special Event
11/26/2005
7:30 PM - 10:00 PM
Social Event/Reception