



Manitoba Association for Behavior Analysis Newsletter

Issue 2
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MISSION AND PURPOSE

Our purpose and mission is to develop and disseminate knowledge about behaviour analysis as a science. MABA's interests lie in basic science focusing on principles governing human and nonhuman behaviour (i.e., the experimental analysis of behaviour) as well as applied science focusing on application of those principles for improvement of socially important problems (i.e., the applied behaviour analysis), and disseminating this information to stimulate interest in and correct misunderstandings of behaviour analysis.

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Greetings from the MABA President

Hello MABA members!

2006 was a great first year for the Manitoba Association for Behaviour Analysis. We produced a newsletter with excellent articles from esteemed behaviour analysts, we became an official affiliate chapter of the Association for Behavior Analysis International (www.abainternational.org/Chapters/Manitoba_ABA.asp), and we held our first conference (see Highlights from the 2006 Conference on page 6). Our goals for 2007 include replicating and improving upon what we accomplished in 2006, recruiting new members, and reaching out to the community to disseminate information about behaviour analysis. **I hope you enjoy our newsletter and that you will join us for the 2007 Conference.**



Kirsten Wirth

Call for Papers Second Annual MABA Conference

We are holding the 2nd Annual MABA Conference on November 17th 2007, here in Winnipeg.

Submit your proposal for an address, symposium, workshop, or poster, on conceptual, experimental, and applied behaviour analysis. Disseminate your research, practice, or program to students, researchers, professors, and practitioners, and come enjoy the blues skies of Winnipeg's fall.

Please download a form at www.maba.ca and email to :

submissions@maba.ca



RESEARCH REPORT

Picture Prompts for Teaching Activity Schedules

Caroline Simard

St Cloud State University and St Amant ABA Program

Children with autism may lack the skills necessary to engage in appropriate leisure activities, adaptive daily living skills and vocational tasks. Additionally, they may have difficulty remaining on-task and on-schedule when engaged in activities (MacDuff, Krantz & McClannahan, 1993). Such deficits may impact their ability to function independently at home, school, and community settings. The utility of various prompting strategies to teach children with autism to complete leisure activities, vocational tasks, and daily living skills have been examined by researchers for over thirty years.

Picture prompts have been used to facilitate the acquisition of performance on a variety of tasks, as well as to facilitate transition to other tasks, settings or activities. In a picture activity schedule, a series of picture prompts, in the form of photographs, drawings or symbols, are placed in a notebook, on cards, or programmed in a computer (Rehfeldt et al., 2004). To teach the learner to follow the schedule, the learner is shown a picture of each task to be performed, followed by training in completing that task. Pictures are sequenced to guide the learner's performance and prompt the learner to remain on task (Wacker & Berg, 1983). Picture schedules are relatively simple and inexpensive to make, are versatile and allow variation in the length of the task by adding or removing pictures. In addition, they

can be tailored to suit the individual's skills, for example by using text instead of pictures, and can contribute to increased independence from caregiver supervision.

My study was designed to further research on activity schedules, by replicating MacDuff, Krantz and McClannahan's (1993) design with three participants. In a multiple-baseline across participants I have assessed the effects of picture prompts on the on-task (engagement with activity materials) and on-schedule (following schedule of activities) behaviour of three children diagnosed in the Autism Spectrum between the ages of 4 and 6 years old. Data were recorded using a 10-second whole interval procedure. A pre-assessment was conducted to ensure that the participants could match the pictures of the activities to the actual three-dimensional activity materials used in their activity schedules. Colour photographs of each activity were placed in clear plastic covers, attached by metal rings.

On-task was defined as the child (a) visually attending to any appropriate play/activity material, (b) looking at the photographic schedule (c) manipulating activity materials appropriately, and (d) transitioning one scheduled activity to another. Off-task was defined as the child (a) using materials in a manner other than that for which they were designed; (b) engaging in inappropriate behaviours such as tantrums, aggression or stereotypic behaviours; and (c) not engaging with activity materials.

A combination of graduated guidance, spatial fading, and shadowing was used. The use of graduated guidance, as used by Krantz et al. (1993) and MacDuff et al. (1993), would permit instructors to gradually fade assistance faster than with the use of verbal prompts, thereby increasing the independence of the participants and reducing supervisor time. Participants were taught to follow a vocal instruction "(child's name), follow your schedule" by pointing to the first picture, gathering the necessary materials, completing the activity (simple completion toys), putting away the materials, and turning the page to the next activity and so on. Upon completion of the last activity they were taught to hand an "all-done" card to the teacher, at which point a reinforcer was delivered.

The procedure resulted in increased on-task and on-schedule behaviours for each participant, from 16.3% to 97.6% of on-task intervals, and from 11.5% to 99.4% of on-schedule intervals. Acquisition was achieved in eight sessions for two of the participants and seven sessions for one participant. Increased levels of on-task and on-schedule behaviours maintained across maintenance, re-sequencing and generalization phases.

Results extended the literature demonstrating that picture prompts used in activity schedules are effective to increase on-task and on-schedule behaviour of young children with autism.

RESEARCH REPORT

Using the ABLA Test to Predict Compliance of Children With and Without Developmental Delay

Rene Hiebert

University of Manitoba and St Amant Research Centre

Noncompliance is one of the most frequent challenging behaviors exhibited by children with developmental delay (Walker, 1993). In this research, two studies were conducted to examine if a child's discriminative ability influences his/her rate of compliance. In Study 1, archived videotaped data were examined that showed caregiver-child interactions when caregivers were asked to teach their 4-year-old children with developmental delay as they normally would. Rates of child compliance to instructions, requests, modeling, gestures, and various combinations of these stimuli were assessed. Results indicated that: a) the most effective prompts for producing compliance were instructions with modeling and gestures (IMG); b) caregivers tended to provide low levels of modeling and gestures; and c) overall levels of compliance were low (8%-51%), even though rates of *positive attention* contingent on compliance were high (56%-78%).

Study 2 involved 21 children without disabilities and 16 children with developmental delay. Of these 37 children, 13 passed Levels 3 and 4 of the Assessment of Basic Learning Abilities (ABLA) test, which assesses the child's ability to learn visual discriminations in few trials with few errors, and failed ABLA Level 6, which assesses an auditory-visual discrimination learning ability. The remaining 24 children passed ABLA Levels 3, 4, and 6. All children were presented with five age-appropriate educational tasks by their caregivers in a structured teaching session that included Instructions Alone (IA) and Instructions with Modeling and Gestures (IMG). The results indicated that: a) children at ABLA Level 6 performed better on Instructions Alone (IA) than those at ABLA Levels 3 and 4; b) children at ABLA Levels 3 and 4 performed better when given Instructions with Modeling and Gestures (IMG) than Instructions Alone (IA); and c) children at ABLA Level 6 performed equally well on both IA and IMG. These results were consistent across all children, and for the two subgroups of children without disabilities and children with developmental delay.

The results are important for providing information to caregivers on how to best instruct their children in an effort to increase compliance.

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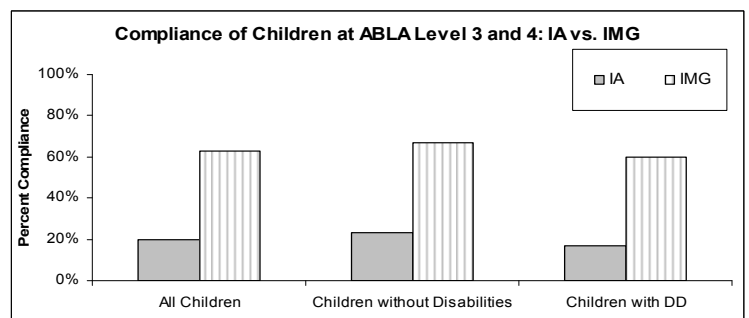


Figure 1. Percent Compliance of Participants at ABLA Levels 3/ 4 to IMG and IA

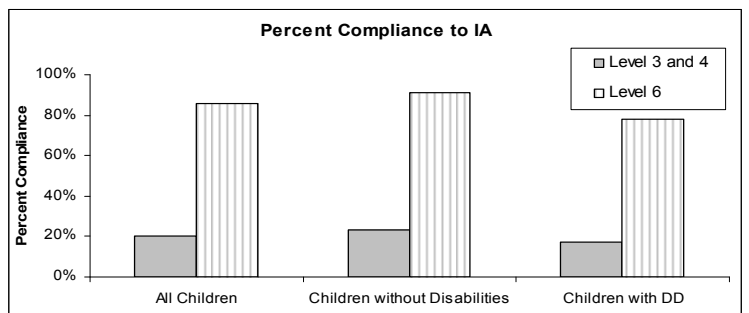


Figure 2. Percent Compliance of Participants at ABLA Level 6 to IMG and IA

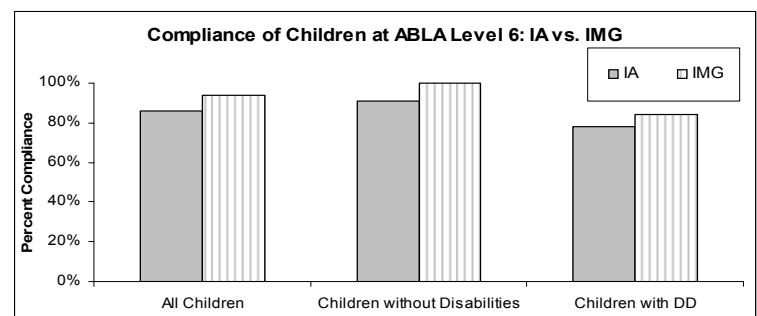


Figure 3. Percent Compliance of All Children

Applied Behaviour Analysis for Children with Autism in Manitoba—Improved Severity of Autism

Recently, Canadian news and web forums circulated information from a report of improvements in the Childhood Autism Rating Scale (CARS) following intensive behavioural intervention in Ontario. The data obtained by the **St Amant ABA Program**, the provincial service provider of applied behaviour analysis (ABA) intervention for children with autism in Manitoba, also demonstrated improvement in severity of autism! The CARS is one of the instruments used by St Amant to evaluate individual and group progress of children receiving ABA services.

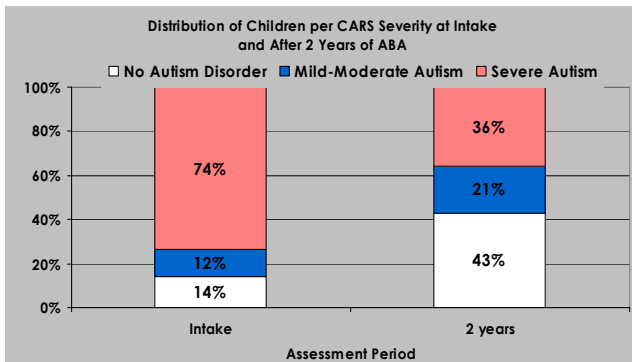


Figure 1. % of children per severity range at intake and 2 years

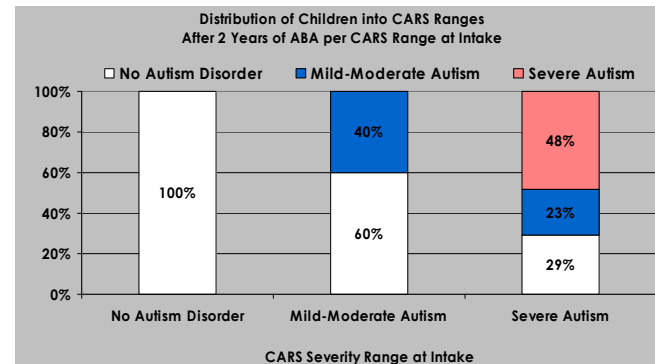


Figure 2. Changes in severity at 2 years per group at intake

Figures 1 and 2 illustrate improvements of a group of children who completed 2 years in the ABA Program Preschool Services. Figure 1 shows changes in percentages of each severity range at intake and 2 years, indicating a 38% decrease in the Severe range, and a 29% increase in the No Autism Disorder range. Figure 2 shows the 2 year distribution across severity ranges grouped by intake severity range. It indicates that all children who started in the No Autism Disorder range remained in that range, 60% of the children at the Moderate range at intake, improved to No Autism Disorder after 2 years, and 52% of the children who started in the Severe range improved: 29% from Severe to No Autism Disorder and 23% from the Severe range to the Moderate range.

Daniela Fazzio

Getting to Know the MABA Community

We have compiled some information to help us get to know the current MABA members and community, so that we can work more effectively to meet this community's expectations, gain new members, and strengthen Behaviour Analysis. Here we share this information with you, current as of the end of 2006. At the time of our 2006 conference we were 39 members:

- ▶ 18% holding a PhD
- ▶ 46% between 25 and 34 years old
- ▶ Affiliations:
 - University Of Manitoba
 - St. Amant
 - St Cloud State University
 - Florida Institute of Technology
 - Louis Riel School Division (Winnipeg)
 - Manitoba Psychological Society
 - Canadian Psychological Association



Reflections and Call for Action

A big emphasis for behaviour analysis must be placed on dissemination to the greater public and policy makers. Frequently noted in the literature, at previous ABA conferences, and also at the upcoming ABA conference in San Diego in May, 2007, is that we are so often “out there” doing research, teaching, or providing service where it’s wanted, yet we neglect to market what we do. We have powerful teaching methods and treatment strategies supported by science that are often overlooked because we do not have an equally effective marketing strategy. Pseudo-scientific “professionals” have powerful marketing strategies which result in their wide acceptance and use by society, with no questions asked! We must all do our part to let others know that behaviourism is far from dead, and that we are just getting started. I’d say we have started a long time ago.

I was inspired by Dr. Henry Schlinger’s presentation at last year’s ABA conference in Atlanta. As a field, we have the

responsibility not only to market what we do, but to correct the misinformation that is so often provided by others. Dr. Schlinger explained how he had begun to write to publishers of websites, news articles, journal articles and so on, in response to incorrect information about Behaviour Analysis, or in response to information from others that behavioural science had already addressed. I implore you to take some time to think about how you can contribute to correcting misconceptions about Behaviour Analysis and teach individuals or groups about what it really is. It is cliché, I know, but I believe with all my heart that through Behaviour Analysis we can produce social change and make the world a better place.

Think about how you can help contribute to the cause of demonstrating to others that behaviour analysis is alive!

Sincerely,

Kirsten Wirth

Post-Trauma: The Role of Psychoeducation and Treatment

The *International Conference on War-Affected Children* was hosted in Winnipeg on September 17, 2000. The conference illuminated society’s moral obligation to help war-affected children—“mind, body, and spirit”. The agenda was adopted in accordance with the principles enshrined in the *United Nations Charter*, with a focus on prevention through conflict resolution skills, health, well-being, and unhindered humanitarian access to assistance. Over the past decade, as we are all so poignantly aware, North America has been the recipient of calamities assaulting the very fibre of our society. Clinically, these environmental triggers have manifested in diagnoses including Post-Traumatic Stress Disorder and other broader Anxiety Disorders, Mood Disorders, and Psychoses.

Murray Sidman describes how terrorism has created a set of emergencies that compel an immediate action (*Behavior and Social Issues*, 12, 83-89, 2003). He examines actions of society likely to prove effective. Dr. Sidman reviews how to eliminate these atrocities by providing the same reinforce-

ment for desirable behaviour. He opines, if worldwide notice constitutes reinforcement for terrorism, we must provide the same kind of worldwide reactions for friendly acts, instead.

As behaviourists, we are at the front-line as service providers, intervening with our fundamental knowledge of Respondent and Operant conditioning. Literature reveals Cognitive-Behavioural techniques as the treatment of choice with methods including exposure, systematic desensitization, and greater insights into the power of self-talk. Children are supported through limitations on exposure and positive role-modeling.

Behaviourists need to become more visible in their key role as educators on etiological factors and treatment of post-trauma, from the perspective of social responsibility as well as individual treatment.

Dr. Lorraine DeWiele

Highlights from the 2006 MABA Conference

We had 30 individuals in attendance, including 6 individuals from the US – 76% were MABA members, and 58% of our membership attended. It was an excellent turnout for our first conference! We offered 11 poster presentations and 7 oral presentations that varied widely in terms of content. I discussed the importance of a merger between basic and applied psychology, Dr. Joseph Pear (U of M) spoke about the history of Behaviour Analysis, Dr. Adam Derenne (UND) highlighted the impact

that pauses on FR schedules have on procrastination, Dr. Garry Martin (U of M) discussed mental preparation from the point of view of a behaviour analyst, Dr. Jeffrey Weatherly (UND) talked about the implications of positive induction on human behaviour, Daniela Fazzio (U of M & St. Amant) shared data on the outcomes of the St. Amant ABA preschool program, Dr. John Rapp (St. Cloud U) persuaded us to think about the accuracy of recording methods for different events. Our guest speaker, Professor Gerry Mertens and his student Bradley Dreis

delighted us with a humorous presentation on teaching strategies for all types of students. We tried to pique the interests of all individuals by keeping our presentations behaviourally “eclectic” across fields. We would love feedback from the membership so we could take your ideas into account for subsequent conferences. Please share your thoughts with us.

We hope to see more of you at our 2007 conference!

Kirsten Wirth

MABA Executive Committee

We had elections and have said goodbye to some esteemed members and welcomed new ones. We thank May Lee for her work as Treasurer and Allyson Locke (and baby Reagan) for editing our first MABA Newsletter.

2007 Committee

President: Kirsten Wirth

Vice-President: Caroline Simard

Membership: Rene Hiebert

Member at Large: Colleen Murphy

Executive Consultant: Lorraine DeWiele

Conference Chair: Kerri Walters

Secretary: Carole Marion

Conference Co-chair: Daniela Fazzio

Treasurer: Jason Hiebert

Newsletter Editor: Daniela Fazzio

Note from the Editor

Dear Reader,

I hope you have enjoyed the second issue of our newsletter. I invite you to send your feedback about this issue and suggestions of what you would like to see in future MABA newsletters. You can also submit your article for review and publication in future issues.

Sincerely,

Daniela Fazzio

