

ASD-CARC Trainees eNewsletter

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Trainee Conference Summaries

Trainee
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Conference
Association for
Behavior Analysis
International
(ABAI, 2009)

In May, 2009 I attended the Association for Behavior Analysis International Conference in Phoenix, Arizona. Being in a clinical program, I am always looking for interesting workshops or presentations on the treatment of children, adolescents, and families. Having at-

tended a short workshop on motivational interviewing (MI) at York a few years ago, I was somewhat familiar with this therapeutic technique. However, I was interested in learning more about it and how I could use it in my clinical practice in the future.

Dr. Miller described how MI first emerged through his effectiveness work on treatment for adults with drug and alcohol problems. He noticed that some people stopped drinking after merely coming in for an introductory session on a treatment approach, before the actual treatment began. This led Dr. Miller investigate what were the active treatment ingredients in leading someone to change their behaviour. After many years and randomized studies, MI is an established technique that is used across disciplines to help motivate clients to begin a particular type of treatment. It involves a number of processes and techniques, such as using open-ended questions, affirmations, reflective listening, rolling with resistance, re-framing, and summaries.

Motivational interviewing as typically been conceptually associated with Carl Rogers' humanistic psychotherapy. However, Miller discussed how the mechanisms of change could be described in behavioural terms as well. Miller discussed how the client's language is a precursor of behaviour change.

Although this was not a presentation about autism per se, I took away a lot of useful information about how to motivate clients to engage in the treatment process. I believe that, with a deeper understanding and more training in MI, I could use it when discussing a child's treatment options with parents. Moreover, in IBL, for instance, it is very helpful if the parents are involved in the treatment by learning the behavioural techniques and using them in the day to day life of their child. Naturally, MI can also be used with the client herself and thus, with higher functioning individuals with autism, it could prove useful when attempting to engage someone in various types of therapy, such as CBT mood issues, for example, that frequently co-occur with autism. I encourage everyone to explore this evidence-based technique if you are planning on working clinically by conducting therapy in the future.

In May, 2009 I attended the Association for Behavior Analysis International Conference in Phoenix, Arizona. One of the presentations that I went to discussed the use of the Wechsler Preschool and Primary Scale of Intelligence, 3rd Ed. (WPPSI-III) within a popula-

tion of children with autism. The presenter first described the WPPSI-III and its clinical utility in assessing the cognitive ability of children aged 2 ½ to 7. However, she pointed out that the norm sample of the WPPSI-III is made up mostly of typically developing children. Thus, when used with children with autism, even if the children make gains in cognitive ability, since their gains are often at a slower rate than the rest of the population, it appears that their IQ decreases (standard

scores go down). Therefore, the author felt that it would be important to develop WPPSI-III norms that were based on a population of children with autism so that a specific child could be compared to other children with autism.

Previous research had developed norms for a group of nearly 500 pre-school children with autism before receiving any treatment. The current presentation described a study of WPPSI-III test scores of 216 children with autism who had received one year of ABA treatment. The author presented the two sets of scores and talked about how helpful they were in describing how a child compares to other children with autism who have also received treatment.

My own dissertation research employs cognitive tests to explore how the IQs of children with autism change from pre-treatment to post-treatment to follow-up (at least one year after treatment has ended). Although I understand Ms. Neely's rationale for computing these norms, ultimately I do not feel that they are very useful. Although the IQs of these children do typically go down over time, I feel that this is a true phenomenon given the definition of a standardized IQ scores. If their cognitive abilities are not developing at the same rate as typical children, this is useful information and should not be washed over by comments about how such changes are average for a child with autism. Instead, in addition to comparing their progress to that of typical children, other progress indicators can be used to describe how their IQ has changed. For instance, clinical and/or statistical significant changes made from one time point to another can be examined. Moreover, change in developmental rate from birth to treatment start and then during treatment could be compared. Although it might be nice for a parent to hear that their

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child is making "typical" progress as compared to other children with autism who have also received IBI, I feel that the benefits of this research do not justify conducting a study of such enormity.

This past May, 2009 I attended the Association for Behavior Analysis International (ABAI) Conference in Phoenix, Arizona. The conference was attended by thousands of individuals working, researching, and studying in the field of behavior analysis. The conference included several

poster sessions and numerous lectures and seminars that highlighted current research, a wide variety of ongoing therapeutic and educational programs, up and coming technology and various other aspects involving behavior analysis and developmental disabilities such as Autism Spectrum Disorders. In addition, the conference included an expo where various chapters of the International Association for Behavior Analysis from across the continent could highlight their efforts and organization within their affiliation. The Manitoba Association for Behavior Analysis (MABA) was proud to participate in the expo by displaying a poster describing our chapter. The expo was a fantastic opportunity to learn about and build connections with members from other chapters.

This year I presented my Masters thesis data in a poster format. This was the first international conference that I have been able to attend and I was very excited to be able to share my research with so many others in the field. It was also wonderful to see other members of ASD-CARC, both trainees and mentors, at the poster sessions and have the opportunity to share research with them as well. The title of my Masters thesis was "A Comparison of Consequences for Errors During Discrete-Trials Teaching with Children with Autism Spectrum Disorders". The focal point of this research was to compare three different error consequence procedures during teaching with children with autism. Using an alternating-treatments design, I compared two multiple-practice procedures and a no-practice procedure following errors, during discrete-trials

teaching of 3-choice matching-to-sample discriminations with 3 boys with autism spectrum disorders. In the Static Antecedent procedure, a child practiced the correct response 5 times following an error using the same task stimuli that occasioned the error. In the Varied Antecedent procedure, the practice was the same as the Static procedure except that two irrelevant features of the antecedent were varied across the practice trials. In the no-practice procedure, an error was ignored for 5 s. There were little differences between the procedures in the number of sessions required to reach the predetermined mastery criterion, but the no-practice procedure was substantially less time consuming when practice trials were taken into account.

Although the conference as a whole was a great experience, I think I speak for the Manitoba students when I say that the highlight of the conference for us was when our advisor and mentor, Dr. C.T. Yu, was honored with an outstanding mentorship award by ABAI. The award was presented during the presidential address and a group of Dr. Yu's students proudly accepted this award on his behalf. Unfortunately Dr. Yu could not be there himself to accept the award but his students were thrilled to accept on his behalf. I speak for all his students when I say that we feel the award was well deserved and we are honored to be his students and celebrate this accomplishment with him.

I look forward to next year's ABAI conference in San Antonio, Texas! Hope to see some of you there.

As a doctoral student in clinical psychology at Queen's University I have many interests in research related to autism spectrum disorders (ASD), both for how it relates to my own research and my clinical work. I was very excited to attend the International Meeting for Autism Research in Chicago this year and I was pleased to have the opportunity to hear about some of the newest findings in many disciplines.

At IMFAR this year, I took the opportunity to learn about some areas of research of which I am not that familiar. In particular, I attended a series of lectures on Epidemiology, during which I learned about several studies investigating risk of ASD based on the age of parents, maternal use of beta 2 agonists and folic acid early in pregnancy. I also learned that the age of diagnosis is decreasing in the United States, although there is great variability across states.

I also attended a series of talks about the relationship between the immune system, brain and behaviour and I was particularly excited by some promising preliminary findings presented by Dr. Amaral. This research group has isolated a specific antibody that has been found in a subset of mothers of children with ASD. The antibody was given to a small group of pregnant rhesus monkeys and their offspring were monitored for differences in behaviour, as compared to monkeys who had not received the antibody. The researchers found some very specific repetitive behaviours in the monkeys who had received the antibody in utero. They are planning to replicate this study with a larger group of monkeys; however, the findings to this point are very promising and indicative of the importance of understanding immune functioning in families of children with ASD.

I was also able to attend some presentations that focused on issues that will be more relevant to my clinical work in assessing and treating children with ASD. I attended a series focusing on disorders and difficulties that tend to co-occur with ASD. I learned that some work has found that as many as 70% of children with ASD will also have another psychiatric diagnosis, most commonly ADHD. In a separate talk, discussing the treatment of ADHD symptoms in children with ASD I learned that the medications that are often prescribed for ADHD in typically developing children do not work as well in children with ASD.

My own research focuses on the experiences of parents of children with ASD and particularly on the differences between parents who use parent support groups and those who do not. I was

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Conference
ABAI (2009)

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Conference
International
Meeting for Autism
Research (IMFAR,
2009)

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able to present some preliminary findings in a poster at IMFAR and was excited to speak to both researchers and family members who were interested in my work. I am still looking for participants and will be offering an online parent support group as part of my study, and I invite you to get more information at <https://sites.google.com/site/ASDParentSupportGroupStudy>

In May 2009, I attended the Association for Behavior Analysis International Conference in Phoenix, Arizona. At this conference, I presented a poster on my primary ASPIRE project examining potential predictors of outcome for preschool-age children receiving intensive behavioral intervention. While at the conference, I had the opportunity to

attend several interesting talks in the field of applied behavior analysis. Of all the talks I attended, there were two that stand out. The first is a talk by Krista Smaby regarding school inclusion data. During the talk, a model for measuring student progress was discussed. Specifically, examples were given on how to develop meaningful IEP goals, determine specific criteria, measure progress, and how to train school staff to collect behavioral data.

A second talk that stood out was the Presidential Address given by Dr. Miltenberger titled "Why Are We Not Acting to Save Lives?" This talk focused on research that teaches safety skills to children. Dr. Miltenberger discussed some examples of unsafe behavior that people typically engage in. He also discussed how behavior analysis can be used to address these problem behaviors. He also discussed how saving people's lives can change peoples' views about applied behavior analysis.

In May of this year, I had the opportunity to both attend, as well as present at, the 8th Annual International Meeting for Autism Research (IMFAR) in Chicago, Illinois. Given that this is an interdisciplinary meeting, there were many interesting presentations on a variety of topics related to Autism research. I attended a series of talks on epidemiology

and autism. Of particular interest was a talk that examined factors that influence the age of identification of children with autism and PDD-NOS (Adelman & Peters). Specifically, the authors examined whether the age of diagnosis is declining, as well as whether any differences exist in age at diagnosis in four different areas of the United States. Participants (n = 654) were recruited from a database at the Kennedy Krieger Institute and John Hopkins Medicine. Overall, the researchers found that the current age of diagnosis in the United States was 37.78 months (SD = 16.27). The researchers also found that there were differences in age of diagnosis among the four regions of the US.

The Adelman and Peters talk discussed regional differences in age of diagnosis, which is very similar to my secondary project. Attending the epidemiology talks provided additional information which I found to be very helpful and provide me with different ways to think about my project.

Attending the 2009 International Meeting for Autism Research (IMFAR) was a great opportunity to gain a better understanding of the vast range of international research related to developmental disabilities and Autism Spectrum Disorders (ASD) being con-

ducted. Of particular interest to me was a series of oral presentations discussing the emotional and social skills training and intervention in individuals with ASD. In particular, Dr. David Williams' presentation on "What Is Wrong with Emotion Processing in Autism?" examined the ability of individuals with and without autism to recognize the emotions of others as well as to report their own previous experiences of these emotions. Participant's awareness of three different types of emotions was examined: 1) simple (e.g., happiness, sadness, fear); 2) complex (e.g., disappointment, surprise, disgust); and 3) social/self-conscious (e.g., pride, embarrassment, guilt).

Twenty-one individuals with an ASD and 21 age and ability-matched developmentally delayed participants took part in the

present study. Participants watched nine different five-second video clips, with an actor expressing a different emotion in each. After each movie clip, participants were asked what emotion they thought the actor was expressing. For the second part of the study, participants were asked to first define each of the nine emotions and then to describe a time in which they had experienced these emotions. These descriptions were then rated on a scale of 0 to 2 according to the appropriateness of the emotion in each experience.

Results indicated that both groups had more difficulty accurately identifying social/self-conscious emotions, compared to simple or complex emotions. Additionally, in the ASD group the ability to report experiences of these social emotions was significantly related to their ability to accurately recognize social emotions in others. Lastly, groups did not differ in either their ability to recognize or describe all three types of emotions.

Williams and Happé (2009) concluded that the nature and severity of individuals with autism's emotion processing deficits may not be as pronounced as previous research has indicated. Specifically, children with autism may have developed coping strategies which allow them to accurately process and identify other's emotion in experimental settings.

Overall, this oral presentation reveals that although individuals' with an ASD may have difficulty processing social emotions, they are able to accurately identify and describe simple and complex emotions. Furthermore, individuals' with autism are able to learn strategies that will aid in enhancing their social-emotional skills. These presentations, as well as all the others at IMFAR, provided me with invaluable knowledge and I look forward to next year.

In May, 2008 I attended the International Meeting for Autism Research. As my dissertation concerns following up children with autism who have received Intensive Behavioural Intervention (IBI), I was most interested in attending the presentations and view-

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Conference
ABAI, 2009

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IMFAR, 2008

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ing the posters on treatment outcomes. On Thursday, May 15th from 10:15am to 12:15 pm I attended the set of talks that were scheduled to be about autism intervention. There were eight presentations altogether, forcing time keepers to carefully monitor the 12 min presentations so that there would be time for questions. The first presentation was the most interesting for me as it directly applied to my dissertation research. Dr. Pat Mirenda discussed her research with Ms. K. D. Bopp in British Columbia on early intervention outcomes before and after terminating IBI and entry to school.

The objectives of this study were to examine the rates of change (RoC) during and following treatment of 53 children with ASD. Their measures of receptive and expressive language and adaptive functioning were administered prior to the initiation of treatment and at 6, 12, 24, 32, and 53 months later. They examined the developmental trajectories of the children for each of the outcome measures and compared them to estimated trajectories of typical children using information from relevant test manuals. Results revealed that during 2 years of treatment, RoCs on some of the measures approached or exceeded those of typically developing children. Following treatment, however, RoCs for all measures except a receptive language test decreased to 25%-50% of the rates during treatment. Therefore, this sample of children showed greatly accelerated language and adaptive skill development over 2 years of treatment, but these gains were not maintained at the same rate after treatment ended.

A poster presentation related to the outcomes of children having received intensive intervention 7 years later was presented by a group of researchers from the Institute of Psychiatry at King's College and the ICH in London, United Kingdom. Their sample included one treatment group of 36 children with ASD. They noted significant improvement in ADI-R scores and an increase in mental age over time (but a decrease in IQ scores). However, they pointed out that individual children showed variable trajectories of change and based on an overall composite

change score, only 22% showed steady improvement and as many as 28% showed little or no improvement. In addition, one child showed more improvement after intervention was terminated. The authors conclude that there is a need to attend more to the trajectories of individual children after treatment termination and to examine the variables that may be associated with different outcomes.

The above review was based on my own notes taken while at the conference and the abstracts of the presentations.

Trainee
Helen Penn

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Conference
ABAI, 2009

A number of teaching strategies have been developed to support children with Autism Spectrum Disorders (ASDs). However, parents and front-line staff often fail to receive sufficient training about how to use these

techniques. At this symposium, presenters discussed the use of video-based instruction to help parents and front-line staff to learn about evidence-based interventions that can help children with autism.

In the first presentation, Nicole Nefdt described an approach for training parents to use Pivotal Response Training (PRT) to support their children. An interactive training DVD with a manual was developed that provided examples about how to use PRT techniques. Interested parents received the DVD by mail and watched in at home. These parents and their children were then compared to parents and children who did not receive training. Results showed that training led parents to acquire greater skills implementing PRT, and provide more opportunities for their children to communicate. In addition, parents' confidence improved and children's use of meaningful speech increased.

In the second presentation, Suzanne Robinson discussed the use of video-based feedback to improve the skills of support staff who work with children

who have ASDs at school. First, professionals demonstrated teaching techniques that support staff could use with specific children. Then, support staff created videos demonstrating their skills, and received feedback on their performance. Support staff reported high levels of satisfaction with this training. In addition, their skills improved and children met new social and communication targets.

These presentations demonstrate that video-based techniques can be a useful strategy to support knowledge transfer, improving the skills of parents and staff who work closely with children on the spectrum.

This symposium contained a number of presentations related to improving the communication skills of children with Autism Spectrum Disorders (ASDs).

In one of the presentations, entitled

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Conference
ABAI, 2009

"Improving appropriate conversation with children with Asperger Disorder through the use of a social conversational framework," Koegel, Ence, & Koegel described an effective approach to improving conversational skills

in children with ASD. Children with ASD often have difficulty restricting their speech during conversations, providing too much detail about topics that are of interest to them. In addition, they often have difficulty organizing the way in which they present information during conversations. In this study, therapists taught children how to use a social conversational framework to improve their conversation skills. First, children were asked to select a topic. Then, they were asked to say three sentences about the topic: the first to introduce the topic, the second to provide an additional detail related to the topic, and the third to introduce a feeling related to the topic (e.g., "Harry Potter books are great. The 5th book is my favorite- I love it!"). This intervention helped children to limit

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extra details in conversation and organize the presentation of their ideas. These skills could be important in improving interactions between children with ASD and their peers.

A second presentation entitled "Improving pragmatics in children with autism: the use of video self-management," by Koegel, Levinger, Fredeen, & Koegel, addressed strategies to improve social conversational skills in children with ASD using video self-management. During conversations, children with ASD often have difficulties with social skills, such as staying on topic and showing interest in what others are saying. This study helped children to improve their conversation skills through the use of video-modeling. Children were videotaped having conversations with therapists related to specific topics. Then, they watched the tapes and were taught how to evaluate their own performance related to a number of social and communication goals. For example, a child could evaluate whether they felt that they were keeping a "calm body" and showing interest when the therapist was speaking. If they had difficulty in these areas, they could use strategies to improve their performance during the next conversation. This intervention was effective at helping children to improve their pragmatic conversation skills over time.

These presentations introduced interesting techniques that other therapists could use to improve the social and communication skills of children with ASD.

Trainee
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Conference
ABAI, 2009

(C.A.R.D. Inc). Perspective taking is the ability to see the world from another person's view point and to understand that another person may see things differently depending on what they have seen from their vantage point. A commonly used task to assess this skill involves playing a short game with two dolls (Sally and Anne; Baron-Cohen, Leslie, & Frith, 1985). The two dolls place a ball into a basket, after which one of them (Sally) leaves the room to go to the washroom. While out of the room Anne moves the ball from the basket to the box. When Sally returns, the child is asked to predict where Sally will look for the ball. Of course, because she was out of the room at the time the ball was moved she would still think it was in the basket. Approximately 80% of children with autism are unable to perform this task (Baron-Cohen et al., 1985) and respond by saying that Sally would think the ball was in the box, where Anne just moved it.

The author's presented a literature review of past attempts to teach this skill to children with autism and discussed the dearth of quality intervention studies demonstrating the successful learning and

generalization of those skills to tasks that are commonly used to assess this skill. The literature review provided evidence of a need for further research on teaching perspective taking to children with ASDs and discussed key considerations for such research. Some of the key concerns that were expressed by the authors included a failure to adequately demonstrate generalization beyond the scope of the training tasks. That is, prior research has been able to successfully teach the skill of perspective taking and demonstrate improved performance on the Sally Anne task, or variations of it. Stronger evidence of skill acquisition, however, would include producing generalization of the skill to untrained variations of the Sally Anne task, or to real life scenarios. The presenter also critiqued prior research for not including a maintenance check to ensure that the children were able to maintain the newly learned skill over time without the need for ongoing training. Overall, this was an excellent opportunity to learn about what other researchers are working on in the area of perspective taking and to validate the need for the research I am conducting for my dissertation.

I am looking forward to the 2010 ABAI convention being held in San Antonio Texas, where I hope to present the findings of my dissertation research.

References

Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a "theory of mind?" *Cognition*, 21, 37-46.

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