

ASD-CARC Trainees eNewsletter

Volume 3 July, 2008

Trainee Conference Summaries

Trainee
Tess Clifford

Training Site
Queen's
University

Conference
OADD RSIG
2008

The Ontario Association on Developmental Disabilities Research Special Interest Group meeting was an excellent occasion to interact with professionals, students and

researchers from Ontario in the field of developmental disabilities. The conference featured a number of speakers on various topics related to the field including access to behavioural interventions, the experiences of families of children with ASD in Ireland, and the experiences of Latin American mothers of children with autism.

The keynote speaker, Dr. John Lord, provided a thought provoking presentation focusing on the importance of including people with developmental disabilities and their families in the development of research questions and the interpretation of findings. His approach is important to acknowledge, as it seems to indicate a shift in the way research is conducted in this field. I would expect that with the adoption of his community-based research techniques researchers can provide meaning-

ful information to families, agencies and people with disabilities.

Throughout the conference a number of the researchers pointed to areas of service delivery requiring change. For example, Dr. Maurice Feldman reported that many of the children in his study with significant behaviour problems were not receiving behavioural services. As well, I learned about the difficulties posed for Latina mothers of children with autism attempting to access services for their children in an individualistic culture. However, some of the research pointed to services that were working to support individuals with developmental disabilities. Mary Forhan spoke about an individualized funding program, in which young adults and their families are able to control the allocation of funding for supports. These families reported satisfaction with their community activities and quality of life. I was also pleased to learn that in a study of the medical needs of adolescents and young adults with developmental disabilities, researchers

found that in general individuals were receiving the medical and dental services they required. Much of the information presented at RSIG was informative in terms of the types of supports that are useful for individuals with developmental disabilities and their families, and the types of services that require further attention.

Trainee
Vicki Lopes

Training Site
Queen's
University

Conference
IMFAR 2008

In May of 2008, I attended the 7th annual International Meeting for Autism Research, which was held in London, England. The conference featured over 800 poster

and oral presentations in the areas of cognition, intervention, communication, genetics, clinical phenotypes, brain imaging, sensory systems, epidemiology, treatment, motor and imitation, comorbidity, services, developmental stages, social functioning and sibling studies.

I found the presentations on developmental stages and sibling studies to be very interesting. A major concern for families and professionals working in the field of autism is the age at

Trainee Conference Summaries cont....

which children are first diagnosed with an Autism Spectrum Disorder (ASD). Often children are not diagnosed until they are well into their preschool years, yet parents often report noticing symptom much earlier. An interesting line of research is emerging that tracks the development of younger siblings of children who have been diagnosed with ASD. Younger siblings of children with ASDs are considered to be “at risk” for ASD. These prospective studies of children who are at risk for ASD enable doctors and other professionals to screen for autism and track developmental milestones at a number of ages, such as 3-months, 6-months, 1 year, 18-months, etc. Dr. Chawearaka and her colleagues at Yale University presented a talk, entitled, “Action and Speech Monitoring Delays in 3-month-old infants at Risk for ASD.” Since autism has a strong genetic component, the researchers hypothesized that deficits in social perception might be present as early as the first few months of life in unaffected siblings of children with ASD. Two groups of infants (high and low risk for ASD) were shown videos of an actress talking to the camera in motherese and performing the actions of making a sandwich. The results of the study showed that 3-month-old infants that were at a high risk for ASD

spent more time attending to objects and less time attending to the actress. These results suggest that delays in monitoring of human action monitoring and in paying attention to speech can be demonstrated as early as three months in infants at risk for developing ASD.

Researchers in Canada are also looking for developmental signs that may facilitate earlier identification of ASDs. Dr. Brian, Dr. Bryson, Dr. Garon, Dr. Roberts, Dr. Smith, Dr. Szatmari and Dr. Zwaigenbaum presented a talk entitled, “Clinical Assessment of Autism in High-Risk 18-Month-Olds.” The researchers looked at a prospective sample of 155 infant siblings of children with ASD, and compared them to 73 control children who were at a low risk for ASD. The objective of the study was to evaluate the predictive validity of the Autism Observation Scale for Infants (AOSI) and the Autism Diagnostic Observation Schedule (ADOS) at 18-months. The results showed that items from the ADOS Social and Behavioural domains were most informative for children at 18th months. In addition, AOSI items measuring behavioural reactivity and motor control added additional information to ASD diagnoses at 36 months. These results demonstrate that it is not only important to consider social-communication deficits,

but also temperament and motor control when assessing toddlers who are referred for an ASD assessment.

Overall the conference was interesting and informative! It was a great to able to attend such a large meeting of individuals with such varied research interests all related to the field of ASD.

Trainee
Duong Nguyen

Training Site
University of
Manitoba

Conference
Manitoba
Speech and
Hearing Association
2008

I had the opportunity to present at the Annual Manitoba Speech and Hearing Association (MSHA) Conference held in June 2008. MSHA is a provincial non-profit association represent-

ing over 300 speech-language pathologists and audiologists that provides services to persons with communication disorders and their families.

My presentation was an effort to promote knowledge translation in terms of bridging the gap between research findings in Applied Behavior Analysis (ABA) and the clinical work that I undertake as an ABA Consultant at the St. Amant ABA Program. In addition, it was an opportunity to disseminate ABA principles and procedures that have been helpful in teaching chil-

Trainee Conference Summaries continued...

dren with autism to other professions who may be able to adopt these ideas in their practice with children with autism.

My presentation was entitled "Fading an Object Exchange Communication System to a Picture Communication System for a Child with Autism." The first portion of my presentation focused on providing an overview of empirically based research findings that suggest that an individual's basic discrimination skills can be used to determine the most effective modality (object, picture, or spoken form) to present choices to the individual. I also discussed different behavioral strategies to use to teach children with autism. The second portion of my presentation outlined how I incorporated these findings into the teaching procedure I was using to transition the client I was working with from using an object communication system to a picture communications system. I concluded my presentation emphasizing the importance of tailoring teaching procedures to the clients who you are working with discussed the need to replicate my teaching procedure with more children with autism.

I believe that presenting at the MSHA Conference has been a great opportunity for me and my colleagues to meet professionals from other disciplines to communicate and learn from one another.

Attending ONTABA was an ex-

Trainee
Danielle
Savona

Training Site
Queen's
University

Conference
ONTABA
2007

search.

Dr. Richard Foxx's alarming literature review left a big impression on me from the conference. He discussed the treatment of aggressive-destructive behavior and how many studies lacked essential components necessary for any research article. Some research articles that were mentioned failed to describe the participants in the study, or failed to indicate clear results. The results of Fox's review was shocking to hear because treatments for people who are severely aggressive have significant consequences, and these studies should be conducted with great care and thoroughness. Later he discussed the characteristics of programs that effectively treat aggressive/destructive behaviour.

I also heard an excellent presentation about PECS and verbal behaviour by Dr. Andy Bondy. I was especially impressed with how he broke down the components of B. F. Skinner's verbal behaviour. He

gave an engaging presentation and simplified many complex concepts of verbal behaviour. I am especially interested in the use of PECS and I was eager to hear what the co-developer of PECS would discuss. He gave a refresher of the essential parts of PECS, and discussed its relevance to verbal behavior. His talk was a great way to integrate my knowledge of PECS from a previous training workshop.

I also enjoyed listening to the presentation on the development of the York Measure of Quality of Intensive Behavioural Intervention. After working with Dr. Adrienne Perry, it was interesting to hear about the development of this useful measure.

Another symposium discussed the challenges of providing ABA based support to children with autism in general education classrooms. This is a significant concern to parents and ABA providers. The need for a systematic intervention for this population is of key importance and there are significant challenges to overcome within the school system. Many of the ABA providers who I met at the conference appeared to echo the presenters concerns.

Overall, ONTABA helped me to connect with some very dedicated people and to discuss current research with fellow colleagues. I enjoyed hearing current research in the field and look forward to the

Trainee Conference Summaries continued...

upcoming ONTABA conference this year!

Trainee
Jessica
Schroeder
Training Site
York
University
Conference
IMFAR 2008

I attended many fascinating presentations during the IMFAR, however one presentation was of particular interest to me.

Laugeson presented outcome results from the

UCLA PEERS Program, a new social skills training program. I recall attending her presentation about this program last year, when the program was still in its early phases, and it sounded like a really interesting program, so I was very excited to see that they were presenting the outcome results this year.

This project involved 17 teens with high-functioning Autism or Asperger syndrome. This manualized program focuses on developing friendships through use of concrete lessons, demonstrations, live coaching, practice activities, and parent training. Modules focus developing social skills, including: conversation skills, electronic communication, selection of appropriate peer groups, peer rejection, humour and initiating conversation. Individuals who participated in the program showed significant improvement on a number of measures of social

skills including a measure of peer conflict, and quality of get-togethers as rated by both parents and teachers.

As an aspiring clinician who works with individuals with Autism and Asperger syndrome these results are very encouraging; I look forward to learning more about the program.

Trainee
Kerri Walters
Training Site
University of
Manitoba
Conference
ABA 2008

While attending the Association for Behavior Analysis 2008 Convention in Chicago I took in a talk on Functional Communication Training presented by Dr. David Wacker of the

University of Iowa.

Functional Communication Training (FCT) is a behaviour intervention strategy used for providing communication alternatives for individuals who have difficulty communicating their wants and needs, and who may engage in harmful behaviours (e.g., self-injury or aggression towards others) as a means of communication. Dr.

Wacker's research focuses on identifying and refining techniques for teaching FCT skills to children with developmental disabilities, including autism, and maintaining those skills over time and across environments.

Before selecting a be-

haviour intervention, an assessment of the function of the behaviour is conducted to determine whether certain events occurring immediately before and/or after the behaviour may be influencing the behaviour. Some common environment-behaviour relations assessed during a functional assessment include attention from a caregiver or some pleasant events following the target behaviour and escape from demands (such as a difficult academic task) by engaging in the target behaviour. For example if after a child engages in arm biting and he receives a break from an academic task, and the behaviour tends to occur more often whenever an academic task is presented, the behaviour might be maintained by successfully escaping from the task demands. If a child engages in arm biting and he is comforted by a caregiver, and the behaviour tends to occur more often whenever that caregiver is present, the arm biting behaviour might be maintained by the caregiver's attention.

Once the function of the behaviour has been identified, an alternative or replacement behaviour can be taught as a means of accessing the reinforcer thought to be maintaining the harmful behaviour. This is the concept behind FCT. That is, to provide a functional and socially acceptable alternative to arm biting for the child to communicate their wants/needs.

Dr. Wacker and his stu-

Trainee Conference Summaries continued...

dents found from their functional assessments that escape from demands was the most common function for these behaviours. Therefore, they taught the children to touch a card to receive a break from the task as an alternative communicative response. The focus of Dr. Wacker's study was to evaluate whether the FCT intervention can be maintained over time while gradually increasing the child's tolerance for demands and fading out the communication card.

They accomplished this in two stages. During the first stage, brief demands (e.g., instructions to stack two blocks) were presented. Immediately after each instruction, they presented a small card (with a com-

munication icon) to the child and prompted the child to touch the card. Once the child touched the card, the task materials were removed and the child could leave the table or go play. This stage continued until the frequency of the undesirable behaviour reduced to near zero.

In the next stage, they increased the number of demands before presenting the card. Starting with one instruction, they increased it gradually until they were delivering eight instructions before presenting the icon to allow the children to go on a break.

Across all of the children that participated in their research at the time of the presentation, all but one child had a 70% reduction in their aberrant behav-

our by the end of the intervention. On average they reported that the reduction took approximately 5.5 weeks to occur after which the objective was to maintain the low rates of behaviour while increasing demands. The study demonstrated that the children were able to maintain their low rates of self-injurious and aggressive behaviours, and that the children were able to tolerate an increased number of demands before receiving access to the break card.

Dr. Wacker's research is important because until now, there is little research on the long-term effectiveness of FCT. By evaluating this intervention approach over a two year period his research is among the first to address this important issue.

Trainee Review of an Intervention for ASDs

Trainee
Leslie Thorne

Training Site
University of
Manitoba

Treatment
Vitamin and
Magnesium
Therapy

[Vitamin B6](#) is an essential vitamin that is necessary for biological processes. Vitamin B6 is converted into an enzyme (PLP) that is used to release energy from

starches and break down proteins. [Magnesium](#) (Mg) is an essential mineral that is necessary for the health of every cell in the body and some researchers suggest that children with autism may have too little magnesium.

B6 and manesium supplements have been used as an [alternative therapy](#) for autism.

It is believed that the enzyme used to break down vitamin B6 into PLP may not work as well in children with autism. Some researchers have reported that children with autism may have a magnesium deficiency and there is some evidence to suggest that providing magnesium supplements to children with ADHD can have a calming effect.

Controversy exists surrounding the evidence for the effectiveness of vitamin B6 and

magnesium in autism. There have been small, well-controlled studies that demonstrated no effects of supplementation. In contrast, a large study did show positive behavioral effects of combined vitamin B6 and magnesium, however this study was not well-controlled.

Vitamin B6 and magnesium produces positive behavioral effects for about half of those who try the therapy, which may explain the difference in outcomes for the studies. Another explanation is that vitamin B6 and magnesium supplementation is not effective.