

# Info-QcABA

The Québec Association for Behaviour Analysis'  
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## More New Developments

By Marc Lanovaz, Ph.D., BCBA-D



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QcABA has experienced several new developments and changes in the last few months. First, two new members have joined the Board of Directors. I was elected without opposition as the new Secretary whereas Thiago Lopes, student in psychology at UQAM, was elected as Student Representative. We would like to take this opportunity to thank Mélanie Laberge and Sasha Zalob who left the Board. Their dedication to the advancement of behaviour analysis in Québec was very much appreciated during the last two years.

Our Third Annual Conference was held on March 8 and was a success. The results of our survey indicate that the conference was greatly appreciated, especially the presentations by our two invited speakers, William Heward and Lars Klintwall whom we would like to thank again. Since the conference, QcABA was approved as a continuing education provider by the Behavior Analyst Certification Board (BACB) to offer continuing education opportunities to our certified members. We plan to organise a reading club of ABA articles once per month and to provide continuing education units at our next annual conference. We also initiated the process of applying to potentially offer an alternative pathway to certification by providing coursework approved by the BACB. We will keep you posted by email.

In the current issue of the Info-QcABA, you will find three new columns. The first column describes the results of a recently published article in ABA. The second column proposes an overview of the literature on a specific topic and the third column offers a summary of ABA research being conducted in Québec. As usual, you will also find an interview with a renowned behaviour analyst. In this issue, our contributor had the honour of interviewing William Heward.

We hope you enjoy this issue!



Kirsty Robertson

## A review of a study entitled, “A comparison of two pairing procedures to establish praise as a reinforcer” (Dozier et al., 2012)

By Kirsty Robertson, BCaBA

When reinforcing target behaviour in applied settings, praise is often combined with an alternative form of reinforcement. Studies have shown that some individuals are unresponsive to the reinforcing effects of social stimuli (Drennen et al., 1969). Therefore, pairing is often necessary to establish social stimuli as conditioned reinforcers.

Dozier et al. (2012) compared the efficacy of two different pairing procedures to establish praise as a reinforcer. The purpose of the study was to “determine whether simple pairing of neutral stimuli (praise) with primary reinforcers (food) would be effective in establishing praise statements as reinforcers for simple targets behaviours displayed by individuals with intellectual disabilities” (p.724). To meet their objective, the researchers conducted a series of two experiments. The first experiment examined whether providing a history of pairings between novel praise statements and edibles on a fixed-time (FT) schedule would be successful in conditioning praise as a reinforcer. In the second experiment, Dozier et al. examined the effects of a response stimulus pairing procedure where participants were given a history of pairing between neutral praise statements and edible items, which were delivered contingent on a target response.

Twelve individuals, ranging from 17 to 56 years old, participated in the study. The participants included individuals who were diagnosed with various developmental disabilities. Prior to the study, a paired stimulus preference assessment was conducted in order to determine highly preferred edible items for each participant. Additionally, ten statements of praise, which the participants were unlikely to have a history with, were chosen to be used during the study (i.e. “you go girl!”).

Four individuals participated in the first experiment. A reinforcer assessment was conducted prior to the evaluation of the effects of the stimulus pairing in order to assure that the edible items that were selected functioned as reinforcers (i.e., increased a behaviour). Initially, each individual participated in a stimulus pairing procedure involving ten novel praise statements and preferred edible items that were delivered on a FT schedule. Following the pairing sessions, the researchers examined the effects of praise alone on task completion. The results indicated that praise did not clearly function as a reinforcer for any of the four participants.

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## Sustaining Members 2013

QcABA thanks you for your support!

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Eight individuals participated in the second study, which evaluated the effectiveness of a response-stimulus pairing procedure where participants were given a history between neutral praise statements and edible items that were delivered contingent on the target response. Subsequently, the edible reinforcers were no longer delivered after the target response in order to determine whether the response would still occur under the contingent praise. The baseline and praise conditions were then alternated using a multielement design both before and after the pairing condition. If the target response was still maintained after this condition, a second evaluation of the reinforcing effect of praise was conducted by attempting to strengthen additional responses for which food did not have a previous history of being paired with praise. The results indicated that prior to the experiment, praise did not function as a reinforcer for responding for any of the eight participants. After the response-stimulus pairing procedure, four participants maintained responding under the praise alone condition and were also able to acquire new targets when praise was used as a reinforcer. Thus, the results of the second experiment demonstrate that response-stimulus pairing may be useful in conditioning praise as a reinforcer and these effects may also extend to other target responses.

In sum, the experiments suggest that the response pairing procedure may be more suitable than the stimulus pairing procedure to establish praise as a reinforcer. It is important to note however that there are several limitations to this study such as whether conditioning would be more likely to occur when paired stimuli are delivered contingent on the response that is later tested under extinction or whether it would be effective to deliver paired stimuli contingent on one response and test whether a different response would be acquired under praise-only conditions. More research needs to be conducted on the conditions in which praise and other social consequences can function as a reinforcer in order to be able to draw more definitive conclusions.

Please see page 7 for complete references

## Training Family Members

By Myra-Jade Lui, BCBA

The field of applied behaviour analysis has, to date, offered a wealth of information about teaching individuals with developmental disabilities and improving their overall quality of life (Matson, Hattier, & Belva, 2012). The concept of quality of life includes factors such as independence, social participation, and well-being (Schalock, Bonham, & Verdugo, 2008). For a child with autism, these factors will likely be managed by his parents. Therefore, an essential element of improving quality of life is ensuring that family members are able to continue the work that we start. To this end, behaviour analysts need to spend considerable effort and time training family members in effective ways. This article will offer an overview of some of the findings on this topic.

Training family members should be more than simply demonstrating or explaining a procedure. For example, Koegel, Glahn, and Nieminen (1978) trained parents how to teach a specific skill to their child through the use of a brief 10- to 15-minute demonstration of the procedure and skill. Following training, the parents were generally successful in teaching their child the skill, but when asked to apply the same procedure to teach a different skill to their child, the parents were not successful. Only after they had been offered more extensive training which included



*Myra Jade Lui*

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lectures on general topics, such as the use of discrete trials, S<sup>D</sup>s, prompts, shaping, and consequences, were parents able to successfully teach their children novel skills. These results suggest that parents need training in a range of basic behavioural skills and methods rather than simply knowing how a particular procedure is implemented.

Isaacs, Embry, and Baer (1982) evaluated a comprehensive training package to train family therapists. These family therapists were, in turn, responsible for training family members to become effective teachers with their child. The training package sought to increase critical skills in these family therapists which were identified as: providing *instructions*, *praise*, and *feedback* to parents. When therapist rates of these three skills increased, parent-child interactions showed improvements as evidenced by increased levels of parent attention paid to child compliance and decreased levels of parent attention paid to child non-compliance. Subsequently, greater levels of child compliance and significant decreases in non-compliance were demonstrated. Further, as the parents became more competent at these basic behavioural skills, the trainer's frequency of offering instructions decreased while the parent-child interactions remained stable. The results from this study also noted that the most effective family therapists developed a fairly regular pattern of these three skills during interactions.

More recently, Mueller et al. (2003) compared typical didactic instruction where parents were given written or verbal instructions only, to several other training components such as modeling (two therapists role-playing), rehearsal (parent role-plays with therapist acting as child), and post-session feedback. These authors found that neither written *nor* verbal instructions presented once on their own produced acceptable levels of treatment integrity for parents implementing pediatric feeding protocols. For some parents, presenting verbal instructions a second time produced improvements, but for the others a combination of modeling, rehearsal, and in one case post-session feedback was necessary to produce results that were satisfactory. Similarly, Young, Boris, Thomson, Martin, and Yu (2012) found that didactic materials alone (written manual and video) were not effective in teaching parents how to implement discrete trial instruction with their children, but when combined with role-playing and feedback, significant improvements in parent teaching abilities were observed across all participants.

The studies summarized above are only a few of the ones available that offer us information on how to become effective at teaching parents and other family members. Becoming more effective teachers means that the client and family members are able to capitalize on the efforts spent on intervention. The common message of these studies is that simplistic forms of training such as a single demonstration, written, or verbal instructions are not sufficient. The most effective training includes multiple presentations of the training materials, knowledge about basic behaviour principles, modeling, rehearsal, and feedback on parent performance (i.e., behavioural skills training). As such, parent training must integrate multiple components and be implemented repeatedly across time to be effective.

To bring this concept back to our roots, Baer, Wolf, and Risley (1968) emphasized *generality* as the final dimension of applied behaviour analysis. Training family members effectively is not simply an option: it is crucial as part of our practice. As behaviour analysts, we should strive to teach family members the same tools that we use with the clients themselves to bring about significant behaviour change. In turn, we must gauge our success by the ensuing competencies demonstrated by family members and the accomplishments that they experience with their child.

Please see page 7 for complete references

## Specialised services for 2- to 5-year-old children with autism spectrum disorders: Evaluation of services and their effects

By Amélie Terroux, CRDITED de la Montérégie-Est, and Justine Grenier-Martin, UQAM

In 2003, the readaptation centers in intellectual disabilities and pervasive developmental disorders (CRDITED) received the mandate to offer intensive behavioural intervention (IBI) to young children diagnosed with an autism spectrum disorder (ASD). IBI programs are well-established as the most effective programs to date for this population (Eikeseth, Klintwall, Jahr & Karlsson, 2012; Eldevik, Hasting, Jahr, & Hugues, 2012; Eldevik et al., 2009; Makrygianni, & Reed, 2010; Reichow, Barton, Boyd, & Hume, 2012; Viruès-Ortega, 2010; Warren et al., 2011). However, there is very little literature that looks at the application of this intervention in naturally occurring environments such as daycares or within a public organization. Also, the increase in ASD diagnoses means strains on IBI waiting lists at the CRDITED. These factors have led the CRDITED de la Montérégie Est to introduce a broader range of services to meet the needs of the greatest number of children possible. The new structure involves 4 types of services which include parent training, services for children who are waiting for a diagnosis, pre 'early-intervention' (one hour of intervention per week for the year preceding IBI), and intensive intervention (IBI at 20 hours a week, maximum) before the child enters school. A research project on the delivery and effects of services has been initiated by a team of researchers (Mercier & Rivard, 2008).

This project consists of 2 main components and assesses the different elements of the service offer. The first component, which is at an organizational level, focuses on the delivery of IBI services. Notably, this component will cover the following aspects: 1) service quality (continuity, validity, flexibility and accessibility); 2) client satisfaction with services; 3) service trajectory, from the first suspicions of a diagnosis to the access to specialized services, and from these services until the transition into the school setting. The second component, which covers a span of over 3 years (4 measurement periods), focuses on the effects of different kinds of services offered at the CRDITED de la Montérégie Est for children and their families. The research team and the educators at CRDITED helped families complete different evaluations with the aim to measure the effects of different family (e.g., parental stress levels, the family's quality of life) and child-related variables (e.g., level of functioning, adaptive behaviours, severity of autistic symptoms, socio-emotional adjustment). The results of this second component will be analyzed across four themes, these being the effects of different modalities of intervention on the children and their families, the effect of the child's intellectual delay on intervention, the socio-emotional skills of these children within typical childcare settings, and the health and well-being of the families. Roughly 300 children and their families who received services in 2009, 2010, and 2011, have agreed to participate in this project. This research project will shed light on several issues related to the services offered to children with ASDs and their families, such as the importance of intensity of applied interventions. The preliminary results highlight the importance of improving the services offered for this population.

Several studies are currently underway that will help to identify the factors necessary to provide quality services, individualized to the specific needs of children at any end of the autism spectrum. These projects will also look at issues concerning multiculturalism, and how these relate to problem behaviours and the importance of intervention that is offered as early as possible. The project at the CRDITED de la Montérégie Est is conducted under the supervision of Céline Mercier and Mélina Rivard and financed by the Health and Social Services Agency of Montérégie. The researchers are also supported in this work by a research team that includes Amélie Terroux, Anabel Lépine and Claudel Parent-Boursier.

## Interview with William Heward

By *Hanna Raczowska, BCaBA*

If you are a professional or student of behaviour analysis, it's likely that you have come across the work of Dr. William Heward, Ed.D., BCBA. Dr. Heward is Professor Emeritus at The Ohio State University. He is the co-author of one of the most widely used introductory textbooks in the field, *Applied Behavior Analysis* (Cooper, Heron, & Heward, 2007). He has also authored several others books related to behaviour analysis and special education. Dr. Heward has written over 100 book chapters and journal articles, and presented at conferences and conducted workshops in 20 countries around the world. He recently joined us at QcABA's Third Annual Conference, as the keynote speaker. Dr. Heward spent some time with me discussing the challenges and development of behaviour analysis in small markets and in languages other than English.



*William Heward*

**The BACB website currently lists only 11 certified professionals in Montreal. How can we work on expanding this community?**

A key step would be to work on starting a local student program. Currently, individuals seeking certification complete their coursework through the U.S. or other provinces, but the BACB also offers what is called an "alternative path course sequence", which can be started locally, and does not have to immediately be associated with a university. This is something to consider when you don't have the critical mass of enough faculty and students to create an entire university program, but you have several people interested in studying in the field. The QcABA could take a leadership role in sponsoring the course sequence and once you have a few core people certified, it is much easier to continue expanding the field.

**In Quebec, the title of BCBA and BCaBA is not well known to parents or other professionals. How can we gain more recognition as a profession from the wider community?**

In order for behaviour analysts to really use this science to help improve things, and gain recognition in the community, behaviour analysts must become legitimate players or participants in specific fields. This means not only studying behaviour analysis, but also studying and becoming skilled and knowledgeable in the discipline that you are passionate about and wish to influence. This means that if you are interested in education, you get a teacher's license, or if your area is industrial and behaviour safety, it means working for a company as a safety engineer, or if you are interested in the area of the environment, you can gain knowledge by working for a non-profit, or the government, maybe even run for office. It's easier to make changes from the inside out. By working directly in a specific field, it will allow you to become familiar with the professional and cultural practices of that field and to get to know the contingencies and cultural practices that operate in that profession, get to know the language, and to better understand the problems of that field.

**What are ways that we can improve behaviour analytic services in our community?**

There is the top-down approach, where the government or whoever is paying for services realizes that there is an evidence-based approach, and there are things that are not, and they demand the evidence-based approach. But that usually takes longer than the bottom-up approach. The bottom-up approach requires educating consumers directly, and that's how things normally get started, that's what happened in the U.S. It didn't begin with the government saying that we will help these kids and families affected by autism with the most

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effective method and intervention, it was parents demanding it, and starting lawsuits, and demanding that the science of ABA be used.

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