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Program Evaluation of a Behaviour Therapy Group for Parents of Children with Developmental Disabilities Ages Four to Seven

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Abstract

Due to a long waitlist for behaviour management services, a pilot study was undertaken to examine the feasibility and effectiveness of a group-based intervention to teach behavioural principles. During a ten-session course, parents/caregivers of young children with developmental disabilities, referred for group intervention or from the waitlist for behaviour therapy, were taught strategies to enable them to promote desirable behaviour in their children. The program was facilitated by three behaviour therapists who drew on social learning theory to teach the mediators (parents and caregivers) positive reinforcement concepts to modify their child's behaviour. A one-time behaviour therapy clinic was offered to the participants approximately two weeks after the end of the course. In this clinic, participants had an individual appointment with a behaviour therapist with whom they could discuss their specific concerns about their child. This project followed a qualitative research design that was aimed at evaluating if the pilot behaviour therapy group for caregivers was an effective waitlist management tool at Surrey Place Centre. The participants completed questionnaires pre- and post group, post clinic, as well as a satisfaction questionnaire post clinic. The instruments used were: Knowledge of Behaviour Principles as applied to children (KBPAC): short form, The Nisonger Child Behaviour Rating Form (parent version), The Family Life Questionnaire (FLQ), and a Consumer Satisfaction Survey. Results indicate that this group was effective for teaching behavioural principles to this group of caregivers, and in some cases that translated into improvements in the child's behaviour. As well, the participants were extremely satisfied with the group and

most indicated that, at this point, they felt that they did not need further assistance from behaviour therapists. It is therefore recommended that groups be offered on a regular basis.

The group

In a climate of service cutbacks, long waiting lists and high demand for behavioural services are a challenge to the service system. Many agencies have tried to find creative solutions to increase their efficiency to provide supports for a large number of people.

The goal of the Behaviour Therapy group described here was to educate families in the principles of behaviour analysis as a wait list management tool. In the short term, families receive training that may alleviate the problem, improve some of the behaviours, change their perception of their child or improve their ability to follow detailed treatments once a therapist is available to activate the client. It was also hoped that the caregivers would continue to use this knowledge as other, new, behavioural issues arise that might reduce the need for further service altogether.

We felt ten sessions provided enough time to teach the fundamentals of behaviour analysis within the scientific paradigm, and give families a context and understanding of when to use specific types of strategies. As well, out of concern that caregivers may not be able to apply behavioural principles without additional support, we added a one-time clinic session at the completion of the group. This aspect is unique in that other community groups are just instruction based.

Method

Participants

Twelve family members of eight children participated in the group. The children ranged in age from four to seven. Two of the children were diagnosed with Down syndrome and six with Pervasive Developmental Disorder. The participants were selected from the waitlist for behaviour therapy services and/or referred directly by other clinicians. The participants agreed to complete evaluation measures, and to be available during the time the group was held.

Procedure

The 10-week behavioural principle course was delivered in an agency serving persons with developmental disabilities and their families. Each session was approximately 1.5 hours in length and taught by three facilitators. The facilitators used a Power Point presentation with examples drawn from the participants, videotaped scenarios, role-play, feedback, and visual examples of environmental modifications. The curriculum included the philosophy of behaviour therapy, operational definitions of behaviour, understanding antecedents and consequences, data collection methods, conducting an environmental and functional assessment, pretreatment considerations, the use of visual supports or other antecedent approaches to reduce behaviour, and the use of consequences to increase and decrease behaviour. The participants were all offered a 1.5 -hour clinic at the completion of the workshop to help them apply the general principles learned in the course to their child's behaviour problems. The participants completed a set of questionnaires before the group began, after it ended, and three-months post group. One of the questionnaires, the *Family Life Questionnaire*, was only completed before the group began. As well, a consumer satisfaction questionnaire was administered by phone post group.

Instruments

The *Nisonger Child Behaviour Rating form* (Edelbrock, 1985). This instrument was initially developed to assess emotional and behaviour problems in children and adolescents. In 1996, Aman, Tasse, Rojahan, and Hammer, created two versions, a parent and a teacher version, of the form for use with children with developmental disabilities. The forms were found to have good internal consistency, and strong concurrent validity (Aman et al., 1996). This form rates specific adaptive and maladaptive behaviours on a four-point scale from: 'not true' to 'always true'; and 'no problem' to ' severe problem' respectively.

The *Family Life Questionnaire* (FLQ); (Durand & Crimmins, 1994). This scale was designed to assess perceptions of family supportiveness and control, and has a high degree of reliability (a=0.84; a=0.74). The 26 questions are rated on a 4-point scale from strongly agree to strongly disagree.

The *Knowledge of Behaviour Principles As Applied To Children* (KBPAC); (McLoughlin, 1985). This is a 50-item multiple-choice questionnaire developed to assess mediator understanding of the application of basic

behaviour principles with children. The principles covered are: assumptions about behaviour change; principles and schedules of reinforcement and punishment; shaping behaviour; and, data collection. The questionnaire has been shown to be sensitive to changes in parents' knowledge and it demonstrated adequate internal consistency and correlations between pre and post-test scores. Modified versions of the questionnaire have been used successfully, and for this study, one 10-item version maintaining the distribution of items representing each domain was used.

The *Parent Group Questionnaire*. This questionnaire was developed specifically for use with this group, to determine parental satisfaction and feedback specific to the group format. Composed of 11 items measuring degree of satisfaction with the group environment, content, and facilitators and 3 items on skill acquisition, the questionnaire is rated on a ten-point scale with '1' as poor and '10' as excellent. Three additional open-ended items were included to determine highlights and suggestions for improvement. The questionnaire was administered by phone interview.

Results

The knowledge of behavioural principles

The KBPAC was administered prior to the initiation of the behaviour therapy group (Pre), immediately after the completion of the group (Post 1), and three months after the completion of the group (Post 2). Not all 12 study group participants completed the questionnaire in each phase (Pre n=8, Post 1 n=9, Post 2 n=10). The mean scores for all completed questionnaires can be seen in Figure 1. The mean values and p values for the t-tests are reported in Table 1. As is evident from Table 1 and Figure 1, the majority of participants exhibited a significant increase in their knowledge of behavioural principles. As a group, there was a significant increase in knowledge after participating in the group.

The Nisonger. Due to the fact that each age group is normed differently on this instrument, the data were treated as a series of case studies. Most of the participants perceived positive changes in their child's behaviour. Group data was not analyzed due to the small number of participants in each of the age categories.

Figure 1: Mean Scores for the KBPAC, N(pre = 8, post1 = 9, post2 = 10)

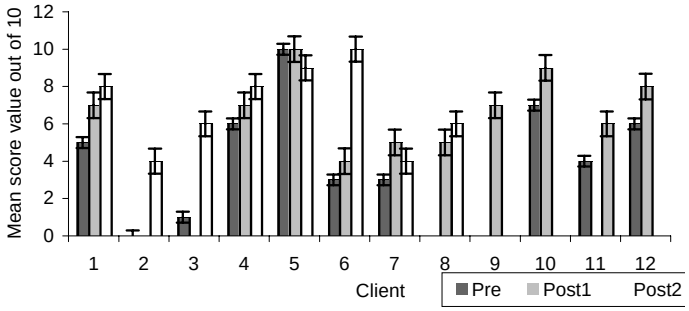

Table 1: Mean Scores for Pre, Post1, and Post2 Time Periods for the Assessment Using the KBPAC

	Mean score
Pre	4.50 (SD 2.9)
Post1	6.89 (SD 1.9)
Post2	6.77 (SD 2.1)
	p values for 1 tailed t-test
Pre/Post1	< 0.02
Pre/Post2	< 0.02
Post1/Post2	< 0.15

The Family Life Questionnaire. This was administered prior to the initiation of the behaviour therapy parent group to assess the level of support and control in the family setting. All 12 participants completed this questionnaire. The mean score for the participants in the group was 60.75, with a range from 52 to 72. None of these scores posed a concern in terms of participating in this group.

The Parent Group Questionnaire. The Parent Group Questionnaire was administered one month after the completion of the parent group and clinic. It was administered over the phone to all twelve participants of the study.

The results are presented in Table 2. Most participants (78%) felt that they received sufficient training and will not need additional behavioural services at this point.

Table 2: Mean Responses to the Parent Group Questionnaire (n=12)

Statement	*Mean ('1'= negative; '10'= positive)*
Comfort of room	8.4
Location	8.9
Length of sessions	8.8
Number of sessions	7.5
Explanations by facilitators	9.2
Pace of presentation	8.0
Handouts	8.0
Number of participants	5.5
Comfortable discussing own child	6.5
Own child's data usefulness	5.2
Strategies assisted in working with own child	9.3
Overall satisfaction	9.1
Have more groups	9.4
Practical application of skills taught	9.5
Probability of applying skills in the future	9.3

Discussion

The results of the present evaluation indicate that the Behaviour Therapy Group for Parents was successful in achieving its goals. The main goal of the group was to teach caregivers, whose children were experiencing behavioural problems, scientifically based behavioural principles. As seen in the results, participants' knowledge increased significantly after participation in the group. As well, the participants expressed high satisfaction with different aspects of the group, particularly in areas relating to the effectiveness and knowledgeability of the facilitators.

Although the tool used to rate the children's behaviour did not lend itself to group analysis due to the different age-norms for this scale, it allowed us to track individual children's perceived behaviours. In many areas, and for most children, their caregivers rated their behaviours as having improved. Although this is a subjective measure, it tells us not only that the behaviours

may have improved, but also that the perception of the caregiver has become more positive. Positive perceptions of the child would likely contribute to the caregiver's coping and ability to interact positively with the child.

In addition, the success of this group can also be measured by the report of most of the participants, that they would not need any further behaviour therapy services at this time. This indicates that this group was an effective waitlist management tool. Clearly, the participants appreciated this group, and the goals set for it were achieved. Therefore, behaviour therapy parent groups will be offered regularly.

Future studies should examine whether or not providing early intervention in the form of teaching learning theory to caregivers would prevent future behaviour problems. As well, it should be determined whether an increase in the knowledge of behavioural principles in the caregiver actually translates to an increase in prosocial behaviours and a decrease in maladaptive behaviours in the child. Mediator variables as they relate to the success of this type of intervention, should also be examined.

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