Evaluation of a Support Group for Fathers of Children with Autism Spectrum Disorder L'évaluation d'un groupe de soutien pour des pères d'enfants ayant des troubles du spectre autistique

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ABSTRACT

This study evaluated the impact of a support group designed for fathers of children with autism. Two groups of 6 fathers each attended 8 weekly sessions that focused on various topics related to parenting a child with autism. Pre- and post-intervention, participants completed measures of depression, marital adjustment, parenting stress, optimism, coping strategies, and social validity. Participants in one group also completed these measures 4 months later. Results indicated no significant changes on all but one measure; however, participants strongly endorsed the utility of the support group experience. Results are discussed with reference to previous research, limitations, and clinical recommendations.

RÉSUMÉ

Cette étude mesure l'impact d'un groupe de soutien pour les pères d'enfants ayant l'autisme. Deux groupes de 6 pères ont participé à 8 séances hebdomadaires ciblant divers sujets en lien avec le parentage d'un enfant ayant l'autisme. Les participants ont complété des mesures de dépression, d'ajustement conjugal, de stress lié au parentage, d'optimisme, de mécanismes d'adaptation, et de validation sociale, avant et après l'intervention. Les participants d'un groupe ont aussi complété ces mesures 4 mois plus tard. Les résultats n'ont démontré de changement significatif que pour une mesure; les participants ont cependant fortement endossé l'utilité de l'expérience du groupe de soutien. Une discussion sur les résultats est présentée en faisant référence aux études antérieures, aux limites, et aux recommandations cliniques.

Over the past decade, there has been a dramatic increase in the number of individuals diagnosed with autism spectrum disorder (ASD). The current global estimate is 1 in 160 individuals, with a higher proportion of males than females consistently observed (Elsabbagh et al., 2012). ASD is characterized by severe and pervasive impairments in social communication and the presence of restricted and repetitive behaviour, interests, and activities (American Psychiatric Association, 2013). Thus, it is not surprising that parenting a child with ASD can present significant challenges.

In an early paper on fathers of children with autism (Eisenberg, 1957), it was observed that the role of fathers has been neglected. More than a half century after Eisenberg's observations, the vast majority of research conducted with parents of children with ASD still includes mothers—either exclusively or primarily—as participants. For example, a recent systematic review of fathers' participation in parent-implemented interventions for children with ASD found that, of 26 studies published in the past 20 years, only 3 included fathers as participants, and 2 of those included only one father each (Flippin & Crais, 2011).

There are a number of reasons why the experiences and needs of fathers should be examined in ASD research. First, we know that mothers and fathers have different psychological experiences as both parents and partners; this includes differences in coping, stress, anxiety, and depression (Hastings, Kovshoff, Ward et al., 2005; Lee, 2009; Ornstein Davis & Carter, 2008). Second, a bidirectional influence exists between mothers and fathers, whereby one parent's psychological experiences (e.g., stress, anxiety, depression) affects the other's (Hastings, 2003; Hastings, Kovshoff, Ward et al., 2005; Kavfitz, Gragg, & Orr, 2010; Rivard, Terroux, Parent-Boursier, & Mercier, 2014). Finally, fathers influence and contribute to their children's development (Pleck & Masciadrelli, 2004; Videon, 2005). For example, Allen and Daly (2007) found that higher levels of father involvement were associated with higher cognitive development, higher social-emotional development and well-being, and better physical health. Furthermore, fathers themselves benefit from being more involved with their children: higher paternal involvement in childcare has been associated with greater paternal self-confidence, higher parenting efficacy, and less substance abuse (Allen & Daly, 2007).

Parenting a child with pervasive social, communication, and behavioural impairments can be a stressful and challenging experience. Furthermore, many of these issues are chronic and lifelong, requiring ongoing professional treatment as well as constant attention and effort. Thus, it follows that a wide range of supports and interventions have been developed to assist parents in the significant task of raising a child with ASD. One example of these aids is a specialist-led support group that focuses on parents' emotional and psychological concerns and issues. Such support groups share a number of characteristics: (a) members come together primarily to share their experiences about similar issues and to provide one another with information as well as emotional and social support, (b) the group is led by a professional who facilitates discussion rather than providing didactic instruction or active counselling, and (c) the facilitator controls group membership (Kurtz, 1997, 2004). Kurtz identified a number of therapeutic factors that operate in effective support groups, including group cohesiveness, a sense of belonging, universality, giving and receiving support, instilling hope, altruism, obtaining information and experiential knowledge, and learning methods of coping.

Scant research has examined support group participation and effectiveness, either for parents in general or for parents of children with ASD. However, it appears that between one third and three quarters of ASD parents participate in a support group at some point in time (either face-to-face or online), depending largely on factors related to accessibility (e.g., time, location, transportation, childcare availability) (Clifford & Minnes, 2013b; Mandell & Salzer, 2007; Papageorgiou & Kalyva, 2010). As is the case for parent training programs, support

group members are typically mothers: across the three published studies in which ASD support group enrolment was open to parents of both sexes, only 3 of 51 participants (6%) were fathers (Banach, Iudice, Conway, & Couse, 2010; Bitsika & Sharpley, 1999; Clifford & Minnes, 2013a). Although a review of literature did not identify any published research studies on the impact of support groups specifically designed for fathers of children with ASD, the results of several unpublished qualitative studies suggest that fathers would attend such groups if the groups were available. For example, Hunt-Jackson (2007) interviewed 14 fathers of children with ASD about their parenting experiences and needs. Participants wanted to learn from other fathers about such issues as their reactions to the diagnosis and how having a child with ASD affected their personal relationships. Similarly, Long (2005) conducted interviews on the experiences of four fathers of children with ASD, all of whom lamented their lack of contact with other fathers and the emotional difficulty of talking about their experiences in mixed-sex support groups. Likewise, Collins (2008) conducted interviews with 15 fathers who all thought that they would benefit from being in a fathers-only group. As one father poignantly stated,

Women are supported more when it comes to kids with autism. Even if we go to the [Autism] Society meetings, there are only one or two dads there and we feel out of place. They have many activities and support groups for the moms. Nothing is really aimed at dads and how any of this affects us. (Collins, 2008, p. 70)

Another father noted, "If we could just get together.... and share our experiences, we could let down our hair ... and let our real feelings be heard" (pp. 70–71).

In addition to the paucity of male participants, a number of other limitations are evident in the scant research to date on ASD support groups. Most studies provided either no follow-up data or had only short interval follow-up (e.g., one month). However, in some cases there may be a "sleeper effect," in which the impact of an intervention increases over time (Capon & Hulbert, 1973). For example, in two studies examining the impact of interventions aimed at parents of children with ASD, greater treatment effects were found 6 to 12 months after study completion than immediately postintervention (Tonge et al., 2006; Vadasy, Fewell, Meyer, & Greenberg, 1985).

Another limitation of previous studies is that support group impact was evaluated using only a few relevant variables (e.g., parent stress, satisfaction with the group experience). However, Ekas, Lickenbrock, and Whitman (2010) contended that research on parents of children with ASD should evaluate both positive and negative psychological variables, in order to achieve a more comprehensive and holistic understanding of parents' experiences. The negative variables that have been commonly studied include parenting stress (Baker-Ericzén, Brookman-Frazee, & Stahmer, 2005; Rivard et al., 2014) and depression (Lee, 2009), with parents of children with ASD scoring consistently higher on measures of both, compared to parents of typically developing children and those with disabilities

other than ASD (Hartley, Seltzer, Head, & Abbeduto, 2012; Hayes & Watson, 2013). In addition, although studied less often in this population, several positive psychological variables also warrant attention. Constructive coping strategies such as maintaining a positive outlook and expressing emotions in appropriate ways have been shown to moderate negative psychological experiences such as stress (Dunn, Burbine, Bowers, & Tantleff-Dunn, 2001; Hastings, Kovshoff, Brown et al., 2005). Higher levels of parental optimism have been correlated with better mental and physical health (Ekas et al., 2010; Greenberg, Seltzer, Krauss, Chou, & Hong, 2004), and fewer child behaviour problems (Durand, 2001). Finally, the marital relationship can be a source of support and strength; for example, Lickenbrock, Ekas, and Whitman (2011) found that mothers who reported better marital adjustment also reported higher positive perceptions of their children with ASD. However, many parents report that having a child with ASD places a strain on spousal relationships (Hoogsteen & Woodgate, 2013; Myers, Mackintosh, & Goin-Kochel, 2009), and the research on marital satisfaction suggests that parents of children with ASD score lower overall in this regard, compared to parents of typically developing children (Lee, 2009).

Fortunately, father-involvement initiatives have increased in recent years, both in Canada and elsewhere (Hoffman, 2011). For example, the Canadian Association of Family Resource Programs (FRP Canada) published a handbook titled *Supporting Fathers* (Beauregard & Brown, 2000) that aimed to help family resource programs better engage fathers in the parenting role. The handbook was based on information gathered from interviews and focus groups with national experts, fathers, and staff, in addition to surveys of resource and program materials. Similarly, *The Father Toolkit* (http://www.mydad.ca/tool-kit.php) was developed from the "*My Daddy Matters Because*..." project, funded by Health Canada. The *Toolkit* evolved from the work of an advisory committee and 14 pilot sites across Canada. The objectives of the current study were (a) to utilize these and other relevant resources (e.g., Nichols & Jenkinson, 2006) to develop a support group created specifically for fathers of children with ASD, and then (b) to evaluate the impact of this group on the participants.

Based on the previous review of the literature regarding the impact of ASD on parents, five psychological variables were selected to measure the outcome of the support group. Parenting stress and depression were included because parents of children with ASD have been shown to experience significantly higher levels of symptomatology related to both of these variables, compared to other parents (Hartley et al., 2012; Hayes & Watson, 2013). Coping was included because constructive coping strategies may help to mitigate the effects of parenting stress (Dunn et al., 2001; Hastings, Kovshoff, Brown et al., 2005), and because this variable was also measured in one of the few previous studies that examined the impact of support groups for parents of children with ASD (Clifford & Minnes, 2013a). Optimism was measured because of its positive relationship with both parental health (Greenberg et al., 2004) and the parent-child relationship (Durand, 2001). Finally, marital satisfaction was included because

previous research (Lee, 2009) suggests that parents of children with ASD are especially vulnerable in this domain, and the spousal relationship was specifically addressed as a support group topic. The primary research question addressed in the study was "Are there significant differences between preintervention and postintervention scores, and/or between postintervention and 4-month follow-up scores, on measures of depression, parenting stress, marital adjustment, optimism, and/or coping strategies for participants in a specialist-led support group designed for fathers of children with ASD?" In addition, the secondary research question was "To what extent was the support group socially valid, as indicated by participants' attendance and their responses to open-ended questions about their experiences in the group?"

METHOD

Recruitment

Participants were recruited through six autism agencies providing services to families of children with ASD in British Columbia. In order to be eligible, fathers had to (a) be fluent in written and spoken English, (b) have parental responsibility for a child with ASD between the ages of 4 and 16, (c) be married or in a commonlaw relationship, (d) be able to attend all eight weekly group sessions, and (e) not be receiving psychotherapy or taking medication for mental health issues. Potential participants were told that they would receive \$10 for every session they attended (to cover the cost of transportation and parking), plus an honorarium of \$20 for participating in the study, up to a maximum of \$100. The research was approved by the university research ethics board of the participating authors' institution.

Participants

The first 12 fathers who expressed an interest in the study were all eligible and subsequently participated. Participants' mean age was 44.9 years (SD = 7.35, range = 34–56). Two participants were Asian, one was Persian, and the remaining nine were Caucasian. Two participants were in common-law relationships and the remaining 10 were married. With the exception of one participant who was divorced and living in a common-law relationship with a new partner, all of the men were in relationships with the biological mothers of their child(ren) with ASD. The total number of children per family ranged from one to four (M = 2.17, SD =.94), with a mean child age of 7.06 years (range = 3-15; SD = 3.44). The number of children with ASD per family ranged from one to three (M = 1.42, SD = .67); eight participants had one child with ASD, three had two children with ASD, and one had three children with ASD. Of the 12 participants, 6 fathers had no nonautistic children. For 3 of this subset of fathers, the child with autism was an only child; the other three men each had two or three children with autism. One of the participants had not completed high school, nine had completed college or trade school, and two had completed a bachelor's degree. Two participants reported gross annual household incomes in the low range (\$35,000-\$69,000),

four reported incomes in the medium range (\$70,000–99,000), and six reported incomes in the high range (>\$100,000).

Setting and Materials

Participants were divided into two support groups. Group 1 met in the boardroom of a provincial autism agency, and Group 2 met in a meeting space of a child development society. Snacks and refreshments were provided at each session. After each group had ended, participants were e-mailed a document summarizing Canadian research on father involvement and the title of a book of essays written by fathers about parenting a child with special needs.

Research Design

The study employed a pretest-posttest design with a 4-month follow-up, with the data combined across the two groups for analysis (Creswell, 2003). Participants were assigned to one of the two groups based on their availability and geographic location; thus, assignment was not random. Group 1 and Group 2 ran consecutively and each consisted of eight weekly 2-hour sessions. During the eight weeks that Group 1 was underway, Group 2 engaged in no formal activities related to the study. The day after Group 1 completed its eighth and final session, Group 2 commenced and ran for eight weeks. During the eight weeks that Group 2 was underway, Group 1 engaged in no formal activities related to the study. Followup data were collected only from Group 1, four months after the conclusion of their group.

Dependent Variables

All participants completed five standardized instruments that measured depression, parenting stress, marital satisfaction, optimism, and coping strategies. In addition, all participants completed a demographic form designed for the study at the time of initial data collection and a social validity questionnaire regarding their experience of participating in the support group after the final session. The instruments were presented in random order to control for order effects.

Beck Depression Inventory-II (BDI-II). The BDI-II (Beck, Steer, & Brown, 1996) is a 21-item self-report inventory designed to measure the presence and severity of depression. Each item assesses a different symptom or attitude by asking the examinee to consider a group of graded statements that are weighted from 0 (*not present*) to 3 (*severe*) (e.g., "I feel sad much of the time"). The BDI-II total raw score, which was used in this study, is derived by summing the weights corresponding to the statements endorsed over 21 items. Low raw scores are indicative of less depression, with scores between 0 and 13 indicating minimal depression, scores between 14 and 19 indicating mild depression, scores between 20 and 28 indicating moderate depression, and scores between 29 and 63 indicating severe depression. The BDI-II can be completed in 5 to 10 minutes. Beck et al. (1996) assessed the internal consistency of the BDI-II using coefficient alpha and reported $\alpha = .92$. They also found high test-retest reliability (r = .93) over a one-week

interval among a sample of 26 outpatients. The BDI-II is moderately correlated with the Beck Hopelessness Scale (r = .68) and the Revised Hamilton Psychiatric Rating Scale for Depression (r = .71) (Beck et al., 1996).

Dyadic Adjustment Scale (DAS). The DAS (Spanier, 2001) is a 32-item selfreport instrument designed to measure the quality of adjustment between marital couples or other partners in a dyadic relationship. On some items, respondents indicate the extent to which they agree or disagree with their partner; on other items, they rate how often they engage in various activities with their partner. The items are scored on Likert scales, with response ranges from 5 to 7 points; in addition, two items are answered either "yes" or "no." The DAS yields a total adjustment score that can range from 0 to 151, with higher scores reflecting a more positive perception of the relationship. Spanier (2001) noted that a total raw score of less than 100 as a criterion of poor marital adjustment is "frequently used in the research literature" (p. 14). The normative sample used to develop the DAS yielded mean total raw scores for married and divorced individuals of 114.8 (SD = 17.8) and 70.7 (SD = 23.8), respectively (Spanier, 1976). The DAS can be completed in 5 to 10 minutes. Spanier (1976) reported coefficient α = .96 for the total score, and α scores of .90 and above have also been reported by others (e.g., Kim, 2012). Convergent validity with other marital adjustment scales is generally high (e.g., r = .86 with the Locke Wallace Marital Adjustment Scale; Locke & Wallace, 1959).

Life Orientation Test – Revised (LOT-R). The LOT-R (Scheier, Carver, & Bridges, 1994) is a 10-item self-report instrument designed to assess generalized expectancies for positive versus negative outcomes; four are filler items that are not scored. Respondents are asked to indicate their agreement with each of the items, using a Likert-type scale ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). The three negatively worded items are reverse coded before scoring. Responses yield a total score that can range from 0 to 24, with higher scores representing greater optimism. The scale can be completed in less than 10 minutes. Based on a sample of 2,000 participants, Glaesmer et al. (2012) found that the population-based total mean raw score for both men and women is approximately 15.0. Scheier et al. (1994) reported that Cronbach's $\alpha = .78$ for the total score. Test-retest reliability was calculated as r = .68 at 4 months, .60 at 12 months, and .79 at 28 months.

Parenting Stress Index – 4th Edition Short Form (PSI-4-SF). The PSI-4-SF (Abidin, 2012) consists of 36 items drawn directly from the full (120-item) version of the measure, and is designed to evaluate the magnitude of stress in the parent-child system. Items are scored on a 5-point Likert scale, with a response of 5 indicating *strongly agree* and 1 meaning *strongly disagree*. Total raw scores, which can range from 36 to 180, were used in this study; higher scores reflect greater levels of parenting stress. Completion time is approximately 10 minutes. Abidin (2012) reported that internal consistency for the four subscales ranged from $\alpha = .88$ to .95. Test-retest reliability over a 6-month period was r = .84 for the total score, with subscale values ranging between r = .68 and r = .85.

Ways of Coping Questionnaire (WCQ). The WCQ (Folkman & Lazarus, 1988) is a 66-item instrument designed to "identify the thoughts and actions an individual has used to cope with a specific stressful encounter" (Folkman & Lazarus, 1988, p. 6). To complete the WCQ, respondents are asked to think about the most stressful situation they have experienced in the past week, and rate the frequency with which they used various strategies on a 4-point Likert scale ranging from 0 (does not apply) to 3 (used a great deal). High raw scores indicate that the person often used the behaviours described by a subscale in order to cope with a stressful event. The coping strategies examined in the WCQ can be divided into two broad categories: constructive coping (i.e., addressing a stressor in a productive/ effective way) and nonconstructive coping (i.e., avoiding a stressor in some way). In applying this framework to the WCQ, the constructive subscales include Planful Problem Solving, Accepting Responsibility, Positive Reappraisal, and Seeking Social Support. Conversely, the nonconstructive subscales include Confrontive Coping, Distancing, Self Controlling, and Escape Avoidance. Administration time for the WCO is 5 to 10 minutes. Folkman and Lazarus (1988) reported internal consistency scores that ranged from $\alpha = .61$ to $\alpha = .79$ across the eight subscales. With respect to reliability, the authors asserted that test-retest measures are not appropriate because the WCQ measures coping processes, "which, by definition, are variable" (p. 17).

Social Validity. Davison, Pennebaker, and Dickerson (2000) noted that the social validity of a group is perhaps the most important criterion for success because "participation is its own index of success: Groups without value cease to be groups. Members vote with their feet" (p. 206). Thus, participant attendance was recorded as one indicator of the perceived value of the support group. In addition, a form with seven open-ended questions was used to solicit information about participants' experiences in the group, including information about the most and least enjoyable aspects of participating in the group and suggested changes to the group structure and session content (see Appendix A).

Independent Variables

The activities of Group 1 and Group 2 were structured identically. They consisted of eight weekly 2-hour sessions led by the first author, who is a Board Certified Behavior Analyst (BCBA) with both master's and doctoral degrees in special education (with emphasis on ASD) and a master's degree in counselling psychology. She has worked for 18 years in various capacities in the field of autism. As the group leader, she adopted a suggestive, guiding interaction style with the aim of connecting relevant information; identifying themes that emerged in the discussion; and helping group members identify, explore, and share their thoughts, feelings, and experiences. When appropriate, she also provided ASD resources or information on how and where to access the resources, during a session or via e-mail afterward.

Both groups had fixed membership and followed the same general format each week. Members were free to help themselves to snacks or take breaks as

needed, but no formal break was scheduled. Participants were given the first 5 minutes to enter, greet other members, seat themselves, get settled, and prepare themselves to participate in the group discussion. The group leader then greeted the members, briefly summarized some of the main themes and discussions that had occurred during the previous meeting, and asked group members to comment on what had been most important or meaningful to them in the previous week's discussion. Following this, the leader introduced the current session topic, and began facilitating the discussion. Although specific topics were addressed each week, session content varied slightly based on the group members' experiences, interests, and interpersonal interactions. Appendix B provides a summary of the topics that guided the agenda for both groups. Approximately 10 to 15 minutes before the session concluded, the leader reminded the group that the session would be ending soon and helped group members to wrap up the discussion, ensuring that there were no unresolved or outstanding issues. Before ending the group, the leader reminded group members about the next meeting date, time, and proposed topic.

Procedures

Pretest. One to two weeks prior to the commencement of each group, the first author met with each participant individually to complete the study measures. Locations included participants' homes (4), a participant's workplace (1), various coffee shops (5), and an agency office (2). In all cases, locations and meeting times were selected by the participants themselves on the basis of convenience. Although participants were not asked to share personal information verbally during these meetings, every effort was made to ensure privacy and protect confidentiality (e.g., when they met in a coffee shop, the researcher and participant sat as far as possible from other customers). The researcher provided an instruction sheet related to the measures and asked the participant to read the instructions and ask questions, as necessary. The participant then completed all of the study forms (except for the social validity questionnaire), a process that required approximately 45-60 minutes. The first author remained in attendance until all of the forms were completed and checked each form to ensure they were completed accurately.

Support group. Following pretest data collection for each group, each support group gathered for 8 weeks, as described in the previous section (see Independent Variables).

Posttest. Upon conclusion of each support group, participants completed the same measures as during the pretest phase, as well as the social validity question-naire. All participants completed measures at the end of the final session in the same room where their group had met.

Follow-up. Approximately 4 months after Group 1 concluded, participants in this group completed all measures except the social validity questionnaire. Five of the six participants met as a group to complete the measures, in the same room where the support group originally took place. By request, the first author met with the sixth and final participant in a café the following night.

Data Analysis

Data analysis was conducted using SPSS, Version 21. Paired samples *t*-tests were used to compare pre-and posttest scores for each measure across the two groups combined (n = 12), and to compare posttest and 4-month follow-up scores for Group 1 only (n = 6). Because the study was exploratory in nature and employed a small sample, the alpha value was set at p < .05 (two-tailed) without a Bonferroni adjustment.

RESULTS

The results for the pretest-posttest comparisons will be summarized first, followed by the follow-up comparisons and the results of the social validity questionnaire.

Pretest-Posttest Comparisons

No significant differences were found between pretest and posttest scores for the four measures of depression, stress, marital satisfaction, and optimism, or for the coping strategies subscale scores. The results are summarized in Table 1.

Depression (BDI-II). The mean raw scores fell within the minimal depression range both pre- and postintervention (scores of 8.6 and 8.4, respectively). However, upon completion of the support group, the scores for one father decreased by 14 points from a moderate depression score of 20 to a minimal depression score of 6. Conversely, the scores for another father increased by 8 points, from 10 to 18.

Parenting Stress (PSI-4-SF). On average, participants scored within the normal range both pre- and postintervention, with mean scores of 100.4 and 96.3, respectively. However, one third of the 12 fathers scored in the high or clinically significant range of stress preintervention, with total scores ranging from 112 to 125. Two of these fathers continued to report elevated parenting stress postintervention (scores of 116 and 130), while scores for the other two fathers both decreased by 22 points postintervention, into the normal range (scores of 91 and 103).

Marital Satisfaction (DAS). On average, participants scored at the borderline range of poor marital adjustment, both pre- and postintervention (scores of 98.6 and 100.3, respectively). However, there was wide variability within the group, as reflected in the large standard deviations. Half of the participants had both pre-and postintervention scores that ranged from 105 to 128, indicating normal levels of marital satisfaction. The remaining fathers had scores between 62 and 100 preintervention, and all six of these scores remained below the threshold of 100 postintervention, suggesting continued marital dissatisfaction.

Optimism (LOT-R). The mean pre- and post-intervention optimism scores (16.4) were identical, although the range was very large (1-24).

Ways of Coping Questionnaire (WCQ). The WCQ examines coping strategies that are classified into eight individual subscales. As noted previously, constructive coping strategies are reflected in the four subscales that measure Accepting

Responsibility, Planful Problem-Solving, Positive Reappraisal, and Seeking Social Support; for these subscales, high scores are more desirable than low scores. Slight increases in mean scores were evident for three of these four subscales (Accepting Responsibility, Planful Problem-Solving, and Seeking Social Support), although none reached significance. Conversely, nonconstructive coping strategies are reflected in the Confrontive Coping, Distancing, Self-Controlling, and Escape Avoidance subscales; for these subscales, low scores are more desirable. Slight but nonsignificant decreases in mean scores were evident for all of the nonconstructive coping subscales except for Confrontive Coping.

Table 1

	Pretest		Posttest			
Variable (Measure)	Mean (range)	SD	Mean (range)	SD	t	Р
Depression (BDI-II)	8.6 (1-20)	7.3	8.4 (0-18)	6.0	.091	.929
Parenting stress (PSI- SF-4)	100.4 (63-133)	19.7	96.3 (56-130)	21.7	1.162	.270
Marital satisfaction (DAS)	98.6 (62-128)	23.7	100.3 (62-125)	20.2	639	.536
Optimism (LOT-R)	16.4 (1-24)	6.3	16.4 (5-21)	4.9	N/A	N/A
Confrontive coping (WCQ)	7.0 (2-15)	4.3	7.3 (2-16)	4.4	317	.757
Distancing (WCQ)	6.3 (1-15)	4.1	5.3 (0-14)	4.2	.952	.362
Self-controlling (WCQ)	10.3 (5-15)	3.3	8.5 (0-15)	5.1	1.538	.152
Seeking social support (WCQ)	7.3 (2-11)	2.5	5.0 (0-12)	3.9	1.912	.082
Accepting responsibility (WCQ)	3.5 (0-10)	3.3	4.2 (1-8)	2.6	686	.507
Escape avoidance (WCQ)	6.7 (0-14)	4.8	6.3 (0-13)	4.4	.646	.532
Planful problem solving (WCQ)	8.5 (2-15)	4.0	10.2 (4-17)	3.7	-1.307	.218
Positive reappraisal (WCQ)	5.6 (0-12)	3.8	5.1 (0-10)	3.5	.331	.747

Pretest-Posttest Results for Measure	res of Depression	, Stress, Marit	al Satisfaction,
Optimism, and Coping $(N = 12)$	')		-

Pretest-Follow-up Comparisons

Results of the comparisons between preintervention and 4-month follow-up scores for Group 1 are presented in Table 2.

Table 2

	Pretest		Followup	Followup		
Variable (Measure)	Mean (range)	SD	Mean (range)	SD	t	p
Depression (BDI-II)	8.5 (2-17)	6.8	8.8 (0-21)	6.9	.791	.465
Parenting stress (PSI- SF-4)	96.17 (63-133)	23.9	100.7 (59-139)	28.2	-1.79	.133
Marital satisfaction (DAS)	99.5 (62-128)	31.7	102.3 (57-129)	29.7	-2.33	.067
Optimism (LOT-R)	14.67 (1-24)	7.5	15.8 (7-21)	4.7	-1.27	.259
Confrontive coping (WCQ)	4 (2-7)	1.9	5.7 (2-8)	2.3	632	.175
Distancing (WCQ)	4.7 (1-8)	2.6	5.3 (3-11)	3.1	222	.625
Self-controlling (WCQ)	10.8 (5-15)	3.5	7.5 (4-11)	3.0	.782	.028 ª
Seeking social support (WCQ)	7.5 (6-10)	1.4	4.3 (0-7)	2.7	1.42	.105
Accepting responsibility (WCQ)	1.8 (0-4)	1.7	2.3 (1-6)	1.9	3.80	.518
Escape avoidance (WCQ)	3.8 (0-10)	3.4	5.2 (0-11)	4.5	-1.342	.414
Planful problem solving (WCQ)	9.3 (5-15)	3.9	7.7 (2-10)	3.0	1.122	.526
Positive reappraisal (WCQ)	3.8 (0-6)	2.6	3.3 (0-7)	2.7	1.00	.636

Pretest–Follow-up Results for Measures of Depression, Stress, Marital Satisfaction, Optimism, and Coping for Group 1 (n = 6)

^a.028 indicates significant difference between pretest and followup.

Results of paired samples *t*-tests revealed a significant difference between preintervention and follow-up for the WCQ Self-Controlling subscale score, moving in the desired direction (i.e., decreasing). No significant differences were evident for any of the other measures or WCQ subscales.

Social Validity

Participant attendance was excellent, with group members attending 94% of the eight support group sessions (M = 7.50). On the social validity questionnaire that participants completed after the last support group session, all 12 participants answered in the affirmative to two questions: "Did you find the group helpful?" and "Would you recommend [the group] to other fathers of children with autism?" An analysis of responses to a question about what was most helpful about the group indicated that participants valued hearing from and sharing their own

experiences with other men in similar paternal and familial circumstances; being able to talk about issues in a caring, open, and accepting atmosphere; and getting new perspectives, insights, and information on how to parent a child with ASD and how to manage other interpersonal relationships (e.g., spousal relationships). The following is a representative quote from a Group 1 participant:

It was a good experience to hear from other fathers having similar or varying degrees of difficulty. It helped me be more at peace with my situation (Thank God I am where I am!). Things seem so much better when you can compare with others.

Another Group 1 participant stated that "All the experiences and stories that were shared were useful in my day-to-day life, and I've tried to practice and change lots of things that I was somehow not aware of or not paying too much attention to." One Group 2 participant was especially enthusiastic about his experiences in the group, saying, "I think this type of service would be a tremendous contribution to the autistic community and their families. I honestly feel this type of interaction is as important as an AA group is for an alcoholic." A Group 2 participant offered that the group "was a worthwhile adventure. I hope we can build on it and keep the group going in some form." In fact, both groups spontaneously expressed a desire to continue meeting socially after the support group concluded; one group met at least one time and the other group has continued to meet regularly, typically on a monthly basis, including occasional family social gatherings (e.g., a barbecue) that children and spouses also attended.

Additionally, the social validity questionnaire asked participants to provide information about the group experience in general. Participants in both groups endorsed the frequency, duration, and timing of the sessions. Several participants felt that there was "a good balance of topics and time spent on each." One father noted that "some topics [meant] less to me personally but more for other dads, so to meet the topics of interest to every dad it had to be wide and varied." Suggestions for additional topics included information on how to access additional community resources for children with disabilities, health and nutrition, and a problem-solving exercise wherein participants could brainstorm specific strategies to address an issue. Finally, two participants expressed some concerns about the nature of the group discussions. One noted that "Sometimes [there was] too much wallowing for too much of the session," while another commented that he disliked it when "participants' responses were 'prescriptive' towards others."

DISCUSSION

This study was exploratory in nature, as it was the first to examine the impact of a support group for fathers of children with ASD using standardized measures to assess participants' psychological experiences pre- and postintervention. The results for each of the dependent variables, limitations and implications for future research, and clinical implications will be discussed in the sections that follow.

Depression

One of the criteria for study inclusion was that participants not be receiving psychotherapy or taking medication for mental health issues at the time of the study. Nonetheless, we expected to find evidence of low-grade depression in our sample (i.e., BDI-II scores between 14 and 29, indicating mild to moderate depression), as numerous studies have found this to be the case in parents of children with ASD (see Karst & Van Hecke, 2012, for a review). However, both pre- and postintervention, the total raw score means were well within the range of "minimal" depression on the BDI-II (i.e., scores of 0–13), with only three participants scoring above this range. Hence, there was little room for change in depression scores from pre- to postintervention, similar to the results of previous support group studies by Bitsika and Sharpley (1999) and Clifford and Minnes (2013a). This might not have been the case had we screened for higher but non-clinical levels of depression as one of the inclusion criteria. Future studies should consider this possibility.

Parenting Stress

Although there were no significant changes from pre- to postintervention, 4 of 12 fathers (33%) scored in the high or clinically significant range of stress preintervention, which is comparable to rates previously reported in the ASD literature (e.g., Baker-Ericzén et al., 2005), although lower than the 60% rate of clinical stress reported in one recent study of 118 fathers (Rivard et al., 2014) whose children had recently been diagnosed and who were waiting to receive early intervention services. Previous research has indicated that stress in parents of children with ASD tends to be quite stable over time in the absence of specific, parent-focused intervention (Karst & Van Hecke, 2012; Zaidman-Zait et al., 2014). For example, Baker-Ericzén et al. (2005) measured stress levels (using the PSI) in mothers and fathers, both before and after their children with ASD were involved in an inclusive toddler program that included general family education. Similar to the current study, no significant changes were evident in fathers' stress levels over an 8-month period.

Marital Satisfaction

On the DAS, total raw scores of less than 100 are indicative of "poor dyadic adjustment." In the study sample, the mean scores both pre- and postintervention (98.6 and 100.3, respectively), were close to the borderline score. It is interesting to note that these overall means were similar to those reported by Lee (2009) for both mothers (91.4) and fathers (90.8) of children with Asperger's disorder or high functioning autism. However, in the present sample, these scores were distributed bimodally. Scores for all six fathers whose preintervention scores were above the threshold of 100 (M = 117.8) remained high postintervention (M = 117.7). Conversely, scores for the other six fathers remained low (preintervention M = 79.3 and postintervention M = 83.0). Nonetheless, it is important to note

that most marriages survive despite having a child with ASD and the interpersonal stressors that are involved. For example, a recent study by Hartley et al. (2010) found that, although parents of children with ASD had a higher divorce rate than the comparison group of parents with typically developing children, approximately 75% of these marriages were intact.

Optimism

Mean scores on the LOT-R were identical from pre- to postintervention (16.4) and compared favourably with the mean of 15.3 for men in Glaesmer et al.'s (2012) population-based study. In the absence of specific interventions, optimism is a trait that is generally stable over time; in previous studies measuring optimism using the LOT-R, test–retest correlations have been reported to be quite high, ranging from r = .58 to r = .79 over periods from a few weeks to 3 years (Carver, Scheier, & Segerstrom, 2010; Scheier et al., 1994). Thus, it is perhaps not surprising that LOT-R scores in this study showed a high level of stability and minimal change from pre- to postintervention.

Coping Strategies

The results showed no significant changes on any of the WCQ subscales from pre- to postintervention. Despite the fact that the support group was not designed to teach specific coping strategies, we measured this variable because we hoped that opportunities to share perspectives, experiences, and solutions would enable the participants to acquire better coping skills incidentally. Unfortunately, this was not the case, even though the social support provided by the group was perceived as valuable by almost all of the group members, as reflected in their comments on the social validity questionnaire. Future research on support groups should consider adding topics designed to teach constructive coping strategies, perhaps over a longer period of time, as parents' coping skills have been shown to significantly affect their experiences of stress (Zaidman-Zait et al., 2013).

Preintervention to Follow-up Comparisons

On the basis of two previous studies in which a sleeper effect was found 6–12 months following interventions aimed at parents of children with ASD (Tonge et al., 2006; Vadasy et al., 1985), it seemed important to examine the possibility of such effects for at least one group in the present study, even though the support group intervention was different from those implemented by previous researchers. The results showed no significant follow-up changes for any of the dependent variables for Group 1, with the exception of the Self-Controlling score on the WCQ. This scale describes efforts to regulate one's feelings and actions (e.g., "I maintained my pride and kept a stiff upper lip," "I tried to keep my feelings to myself") and is one of the nonconstructive coping strategies on the WCQ. The significant decrease in this score from pretest to follow-up might reflect the fact that the men in Group 1 were able to share their feelings and experiences through the support group. Perhaps substantive changes in other measures would have been

evident if the intervention had been of a longer duration or if the follow-up period had been longer, as was the case in the previous studies that found sleeper effects.

Social Validity

Despite the lack of statistically significant findings based on standardized, quantitative measures, the participants were unanimous in their endorsement of the support group as valuable and helpful, and strongly recommended it to other fathers of children with ASD. These findings are similar to other published research on support groups. For example, Bitsika and Sharpley (1999) also failed to find statistically significant changes over time for parents of children with ASD participating in a face-to-face support group, yet parents reported that the group was helpful, especially because of the opportunity to connect with other parents. Similarly, in an evaluation of the impact of an online support group for parents of children with ASD, Clifford and Minnes (2013a) found no significant changes on measures of parental stress and coping, anxiety, or depression, or on parents' perceptions of their children with ASD. However, most parents reported that having other parents to talk to was helpful and said that the support, understanding, and validation received from other parents were the most useful aspects of participating in the group.

The excellent attendance rate of 94% of sessions in this study, which contrasts markedly with that reported in previous literature on support group attendance, can be interpreted as additional verification of the appeal and utility of the group. For example, of the 36 parents who registered for the online support group evaluated by Clifford and Minnes (2013a), only 64% attended three or more sessions, 25% attended six or more sessions, and only one parent attended all eight sessions. This relatively poor attendance occurred despite the fact that parents were able to participate from their homes and were able to choose the times, dates, and frequency of meetings. The high attendance rate in the present study suggests that the support group met a genuine need and offered a unique opportunity to meet other fathers, counteract the social isolation that participants reported feeling, and provide validation for the unique and oftentimes challenging issues related to parenting a child with ASD. Furthermore, because the group was designed exclusively for fathers, no spouses or other family members were present. Some group members commented that this allowed them to speak freely and openly about their experiences in a safe, supportive environment.

Limitations and Future Research

The lack of a control group is the first limitation of this study that should be redressed in future research. The present study was also limited by its sample size, which decreased the power available for statistical analysis. However, the sample size was not unusually small for pilot studies of this type (e.g., Banach et al., 2010). A larger sample size would enable (a) the addition of instruments to measure a greater variety of dependent variables (e.g., anxiety, hopefulness) and/or (b) the analysis of more subscales of the existing instruments, which would permit a

more fine-grained examination of the constructs being measured. It would also be valuable to assess the psychological variables of interest (e.g., depression, marital functioning, etc.) both pre- and postintervention in the fathers who participate in the group and in their spouses who do not.

The present study was proportionally representative of the language population from which the sample was drawn but was not representative of the cultural diversity of the province, in that only 3 of the 12 men (25%) were visible minorities. According to Statistics Canada (2011), 15.9% of individuals in the province where this study was conducted speak a primary language other than English, and visible minorities make up 38% of the population in the region of the province where this study took place (British Columbia Multicultural and Immigration Branch, 2008).

Self-selection is another concern with the design of the current study, meaning that the fathers in this study chose to participate in a discussion group with other fathers and/or were encouraged by their spouses to do so. Perhaps, this can account (at least in part) for the fact that participants reported relatively high psychological well-being prior to the intervention (e.g., low levels of depression, average levels of optimism), as fathers who were more distressed might have been less willing to volunteer. More substantive improvements might have been evident in individuals who were more distressed preintervention; Tonge et al. (2006) found that family functioning significantly improved over time in the 33–43% of families who had the highest levels of distress, such as fathers of newly diagnosed children with ASD and those with older children.

Although the psychological measures chosen for this study have been widely used in other research and have good psychometric properties, they may not have been sufficiently sensitive and/or specific to detect changes over the time frame of the group. In addition, data collection may have been influenced by social desirability bias, the tendency to provide answers that are deemed to be more socially acceptable than a "true" answer. Spector (2004) noted that this type of bias is more likely to occur for items or questions that deal with personally or socially sensitive content, which was certainly the case for the measures used in this study. In addition, although a meta-analysis of 64 studies found therapist gender to be a poor predictor of psychotherapy outcomes for both male and female clients (Bowman, Scogin, Floyd, & McKendree-Smith, 2001), the fact that the group facilitator was female may have affected the outcomes. Furthermore, the group facilitator was also the researcher and participants were aware of this, which may have influenced the results.

Clearly, further research is needed to determine the effectiveness of support groups for fathers of children with ASD. Such studies might examine the impact of structural factors such as group size, time of day, and location, as well as the relative effectiveness of having one vs. two facilitators, perhaps one of whom is male. Studies comparing various subgroups of fathers (e.g., those with newly diagnosed children vs. older children, those with one child with ASD vs. more

than one child, single parents vs. parents with spouses) might also reveal differential effects of support groups. Numerous variables related to the design of the support groups themselves also warrant examination. Perhaps a longer course of intervention would have yielded more changes in fathers' well-being. Evidence for this possibility comes from research by Vadasy et al. (1985), who found that fathers who participated in a support group for at least one year had significantly lower levels of depression and less child-related stress compared to preintervention levels. In addition, the weekly discussion topics used in this study were based on the limited research examining the impact of ASD on fathers' well-being, the facilitator's previous experiences leading support groups of this type, and input from the participants themselves during the first support group session. However, it is possible that other topics might have led to more substantive changes in wellbeing. Alternatively, it may be that a support group is not the appropriate format for inducing changes in major psychological variables or experiences such as stress and marital satisfaction, especially with parents who are in chronically stressful and challenging situations. Future research is needed to compare the effectiveness of support groups such as the one examined in this study and alternative support formats, such as psychoeducational groups that are designed to teach specific skills (e.g., coping strategies, stress management skills).

Clinical Recommendations

Based on the researcher/facilitator's experiences and participants' feedback, a number of recommendations can be made to clinicians who are interested in designing and implementing support groups for fathers of children with ASD. First, it is recommended that the group facilitator is knowledgeable about and has experience with (a) children with ASD and their families, including knowledge of best practices/current research, the core impairments of autism, and managing challenging behaviours; (b) working and interacting with fathers/men; and (c) group counselling. This represents a unique skill set, but someone trained in counselling techniques and also knowledgeable about ASD is best able to facilitate group discussion, help fathers understand and process their psychological/ emotional experiences, and provide them with accurate and important ASD-specific information. It might also be possible to have two group facilitators, who together embody the full skill set.

A second recommendation is to be transparent about the group's purpose and describe the expectations regarding group participation, both when recruiting potential participants and also when meeting as a group for the first time. It is important to ensure that all group members have the same understanding of the purpose of the group (i.e., to share experiences and perspectives, rather than to receive training in a specific skill set). Similarly, it is important to spend adequate time at the beginning of the first session discussing group norms—the informal but explicit rules that set the standard for how members of a group should behave. This undertaking is particularly important when group members have never participated in such a group, and might feel some confusion or anxiety regarding

their behaviour and what to expect when interacting with others. A third suggestion is to ensure that the topics being discussed reflect the interests and needs of the group members, which can be accomplished by giving members input into the weekly topics. Finally, it is important to encourage a diverse group consisting of members who have children of different ages and developmental stages. In the present study, fathers of older children in both groups appeared to value their roles of "wise elders" from whom other group members often sought advice, support, comfort, and hope. The general message from the fathers of older children was that "things get better over time," which appeared to provide some solace and encouragement to fathers who were struggling with challenges of parenting younger children.

CONCLUSION

Sadly, the vast majority of research conducted with parents of children with ASD still includes mothers—either exclusively or primarily—as participants. This study represents an effort to learn more about the fathers and the potential impact of participation in a support group on their psychological experiences. From an empirical perspective, studying fathers provides important information about their unique experiences and how they differ from (or are similar to) those of mothers. Furthermore, it demonstrates respect and appreciation for the unique identity and contributions of fathers, separate from that of mothers. From a clinical perspective, the information gathered via research can be used to develop effective interventions to support and assist fathers to be better parents and partners. In this study, although significant changes were not found on most standardized measures of well-being, participants reported that the group was valuable and worthwhile and recommended it highly to other fathers, pointing to an important and exciting area for future research and community intervention.

Note

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Appendix A *Social Validity Questions*

- 1. Did you find this group helpful? If yes, how and why was it helpful? If no, why was it *not* helpful?
- 2. What were the things that you enjoyed *most* about participating in the group?
- 3. What were the things that you enjoyed *least* about participating in the group?
- 4. The group was organized in eight sessions of 2 hours duration, with meetings every week. What are your thoughts about the frequency, duration, and timing of the sessions?
- 5. Do you have any suggestions for topics that should be deleted or reduced in emphasis? Are there any other topics to add or suggest?
- 6. Please describe the group facilitator's strengths and how the group facilitator could have improved her performance.
- 7. Would you recommend this support group to other fathers of children with autism?

Appendix B

Topics Addressed in Weekly Support Group Sessions

- Session 1: Introduction of individual group members, including information about each participant's child with ASD and other immediate family members; discussion of participants' experiences with the diagnostic/assessment process.
- Session 2: Being an advocate and team player; working with professionals; finding effective, quality treatment for the child.
- Session 3: How having a child with ASD impacts relationships with colleagues and friends.
- Session 4: How having a child with ASD affects relationships with immediate and extended family members (e.g., parents, other children); cultural concerns and considerations.
- Session 5: How having a child with ASD affects the relationship with the wife/ partner.
- Session 6: Looking to the future and contemplating lifespan issues regarding the child's development; hopes, dreams, fears, reflections.
- Session 7: Redefining and redeveloping one's self as a parent, partner, and person; how to continue making changes that promote improved mental health and quality of life.
- Session 8: Reviewing/debriefing the support group, wrap-up, and feedback.

About the Authors

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