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# A Randomized Controlled Trial of Group Psychoeducation for Carers of Persons With Borderline Personality Disorder

Brin F. S. Grenyer

*University of Wollongong*, [grenyer@uow.edu.au](mailto:grenyer@uow.edu.au)

Rachel C. Bailey

*University of Wollongong*, [rbailey@uow.edu.au](mailto:rbailey@uow.edu.au)

Kate L. Lewis

*University of Wollongong*, [katelew@uow.edu.au](mailto:katelew@uow.edu.au)

Michael Matthias

*University of Wollongong*, [matthias@uow.edu.au](mailto:matthias@uow.edu.au)

Toni Garretty

*Illawarra Shoalhaven Local Health District, South East Sydney Local Health*

*See next page for additional authors*

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## **Abstract**

Carers of persons with borderline personality disorder (BPD) experience high burden. Treatment guidelines advocate involving carers in comprehensive therapy approaches. This study is a randomized controlled trial of group psychoeducation, compared to waitlist. Group psychoeducation involved 6-8 carers per group and focused on improving relationship patterns between carers and relatives with BPD, psychoeducation about the disorder, peer support and self-care, and skills to reduce burden. Carers were randomized into intervention (N = 33) or waitlist (N = 35). After 10 weeks, those in the intervention reported improvements in dyadic adjustment with their relative, greater family empowerment, and reduced expressed emotion, sustained after 12 months. There were also improvements in carers' perceptions of being able to play a more active role, such as interacting with service providers. This study demonstrates that providing structured group programs for carers can be an effective way of extending interventions to a group experiencing high burden.

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## **Authors**

Brin F. S Grenyer, Rachel C. Bailey, Kate L. Lewis, Michael Matthias, Toni Garretty, and Annemaree Bickerton

## **A RANDOMIZED CONTROLLED TRIAL OF GROUP PSYCHOEDUCATION FOR CARERS OF PERSONS WITH BORDERLINE PERSONALITY DISORDER**

Brin F. S. Grenyer, PhD Clin Psyc,  
Rachel C. Bailey, PhD Clin Psyc,  
Kate L. Lewis, Grad Dip Ed,  
Michael Matthias, PhD, Toni Garretty,  
and Annemaree Bickerton, MBBS, FRANZCP

Carers of persons with borderline personality disorder (BPD) experience high burden. Treatment guidelines advocate involving carers in comprehensive therapy approaches. This study is a randomized controlled trial of group psychoeducation, compared to waitlist. Group psychoeducation involved 6–8 carers per group and focused on improving relationship patterns between carers and relatives with BPD, psychoeducation about the disorder, peer support and self-care, and skills to reduce burden. Carers were randomized into intervention ( $N = 33$ ) or waitlist ( $N = 35$ ). After 10 weeks, those in the intervention reported improvements in dyadic adjustment with their relative, greater family empowerment, and reduced expressed emotion, sustained after 12 months. There were also improvements in carers' perceptions of being able to play a more active role, such as interacting with service providers. This study demonstrates that providing structured group programs for carers can be an effective way of extending interventions to a group experiencing high burden.

Caring for a person with mental illness is a significant burden and responsibility (Bauer, Koepke, Sterzinger, & Spiessl, 2012). This is well documented for persons caring for others with psychotic, mood, and cognitive disorders (Awad & Voruganti, 2008; Eters, Goodall, & Harrison, 2008; Heru & Ryan, 2004). Recent evidence indicates that families and carers of people with borderline personality disorder (BPD) report similar or more severe burden (Bailey & Grenyer, 2014).

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From Illawarra Health and Medical Research Institute and School of Psychology, University of Wollongong, Australia (B. F. S. G., R. C. B., K. L. L., M. M.); and Family and Carer Mental Health Program, Illawarra Shoalhaven and South East Sydney Local Health Districts, New South Wales Ministry of Health, Australia (T. G., A. B.).

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Address correspondence to Professor Brin F. S. Grenyer, School of Psychology, University of Wollongong, NSW 2522, Australia. E-mail: [grenyer@uow.edu.au](mailto:grenyer@uow.edu.au)

Specifically, compared to other serious mental illnesses, evidence suggests that carers of persons with BPD experience elevated levels of objective burden, such as financial problems, household disruption, or disruption to one's own work or leisure activities, and also subjective burden, including worry, embarrassment, and guilt (Bailey & Grenyer, 2013). Findings suggest that carers of individuals with BPD may also report psychiatric symptoms, including symptoms of depression, anxiety, and emotion regulation difficulties (Bailey & Grenyer, 2013, 2014).

One of the defining features of BPD is dysfunctional relationships (Gunderson, 2007); thus, the study of carer relationships and burden of BPD is of particular significance. Specifically, research has demonstrated that people with BPD experience difficulties in social and cognitive prediction of relationship outcomes (King-Casas et al., 2008), interpersonal deficits (Gunderson, 2007), and insecurity of emotional attachments (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004). Thus, it is likely that caring for someone with BPD will have considerable negative effects on social and marital life.

Some of the sources of carer stress and burden relate directly to the symptoms of the disorder, including dealing with a person who may deliberately self-harm, be impulsive and angry, and engage in destructive and suicidal behaviors (Zanarini, Laudate, Frankenburg, Reich, & Fitzmaurice, 2011). These impacts are already known to affect the relationship with health care providers (Bourke & Grenyer, 2013). Some qualities relating to the carer's role may also affect the relationship. For example, studies focusing on the family environment suggest that people with BPD report benefits from relationships that have high carer overinvolvement (overprotection and anxious concern) and interpersonal criticism (Hooley et al., 2010; Hooley & Hoffman, 1999). However, other studies have demonstrated that such environments are deleterious to the mental health of the family member or carer (Bailey & Grenyer, 2014).

Clinical and empirical evidence suggests that personality disorder is often poorly understood, both by patients and their families. Zanarini and Frankenburg (2008) reported that often patients are not given accurate and current information on their diagnosis and, similarly, other authors have suggested that carers and families are also not equipped with the knowledge and skills necessary to support them (Hoffman, Fruzzetti, & Buteau, 2007; Lawn & McMahon, 2015). The benefits of psychoeducation for patients have been supported in randomized controlled trials (Zanarini & Frankenberg, 2008); however, there has been limited analysis of the impact of carer interventions. To date, five carer support programs have been described in the literature for personality disorders, and these have been limited in their evaluation.

These programs have similar overall aims and tend to all address the core components of psychoeducation, support, and skill development. However, they vary in their delivery, intensity, and theoretical orientation. Two support programs based on dialectical behavior therapy (DBT) have been described in the literature: DBT Family Skills Training (DBT-FST; Ekdahl, Idvall, & Perseus, 2014; Hoffman, Fruzzetti, & Swenson, 1999) and Family Connections (Hoffman et al., 2007; Hoffman et al., 2005; Krawitz, Reeve, Hoffman, & Fruzzetti, 2016). Both programs aim to equip carers (family members) of

persons with personality disorder with education, communication skills, and support. The Oxford Friends and Family Empowerment Service (OFAFE; Sanders & Pearce, 2010) is another program designed to support carers; however, it focuses on personality disorder more generally, rather than BPD, and is embedded with a transactional and cognitive-behavioral approach and a strong emphasis on psychoeducation, sharing of experiences, and providing a supportive environment. The fourth, the McLean Program, developed at Harvard, is oriented toward the future and is focused mostly on group discussion and problem solving (Berkowitz & Gunderson, 2002; Gunderson, 2008). The final and most recent program is based on the Helping Young People Early (HYPE) model of care (Chanen, McCutcheon, & Kerr, 2014) and cognitive analytic therapy, and has been developed specifically for family and friends of youth with personality disorder (Pearce et al., 2017).

These existing carer support programs have all been preliminarily evaluated, and in general have demonstrated some improvement in knowledge, communication, and empowerment, and a reduction in grief and burden for carers. However, none of these programs have been evaluated with comparison to a control or waitlist group in a controlled study.

Despite limitations in current research, clinical experts agree that providing psychoeducation and support to families and carers is best practice. This is also recommended as gold standard in current treatment guidelines (National Health and Medical Research Council, 2012; Project Air Strategy for Personality Disorders, 2015). In this article, we describe and evaluate in a controlled trial, a purposely designed psychoeducational approach for carers of persons with BPD (Project Air Strategy for Personality Disorders, 2012, 2016).

The program evaluated here is based on the underlying premise that BPD is a disorder of the relationship among affect, identity, and relationship (AIR), and therefore is embedded within a relational model of personality disorder (Bailey & Grenyer, 2014; Project Air Strategy for Personality Disorders, 2015). It has been specifically designed to educate the carer on BPD and to recognize patient relationship needs while providing opportunities to improve the relationship and reduce the burden on carers and families. The intervention focuses on the relationship between the carer and the relative with the disorder to facilitate “staying connected” when emotions run high—a proposition that is consistent with the attachment literature. It aims to improve carers’ knowledge, relationship skills, and the interactional environment with the relative who has BPD (Project Air Strategy for Personality Disorders, 2016).

The intervention is accompanied by a DVD (Project Air Strategy for Personality Disorders, 2012) that closely covers the curriculum content, including key principles and skills, and a readily available manual that also describes the principles and skills, and provides a structure of the four sessions (Project Air Strategy for Personality Disorders, 2016). The intervention is structured but is designed to allow flexible delivery to different groups, individuals, and families.

**TABLE 1. The Key Principles for Carers, Families, and Partners of People With Personality Disorders**

Core Principle	Example of Specific Skills
Carer relates skillfully	Carer attends to the core relationship patterns and needs by modeling effective communication skills that are nonjudgmental, validating, attentive, and appropriate.
Carer remains calm during distress	Carer attends to relationship needs by reducing reactivity and increasing calm, mindful responses through understanding the functions of fear, emotion, and anxiety.
Carer attends to his or her own needs	Carer attends to relationship and mental health needs through staying connected with friends and family, taking carer breaks, engaging with carer organizations, and attending to mental and physical health.
Carer sets appropriate boundaries	Carer attends to the relationship needs by modeling appropriate assertiveness and setting boundaries and ground rules for the relationship.
Carer develops and uses a crisis plan	Carer attends to the relationship needs by developing safety plans and crisis strategies when a relative's mental health problems escalate, by engaging health services while ensuring the carer has appropriate support to help maintain a positive relationship with the relative.

Source: Project Air Strategy for Personality Disorders, 2016, p. 5. Reprinted by permission.

The program delivers its aims through five core principles (Table 1). With comparison to those in a waitlist condition, we anticipate that carers in the intervention group will experience a reduction in self-reported burden associated with caring for a person with BPD, as well as a reduction in the level of expressed emotion toward the person they are caring for. It is also expected that carers in the intervention group will experience an improvement in relationship satisfaction, as well as feelings of empowerment within the relationship, while those in the waitlist condition will experience no change. As a result of positive changes in the relationship, we also anticipate that the mental health of carers in the intervention group may improve.

## METHOD

The program was evaluated by a randomized controlled trial, balanced by age, gender, and severity of the relative's symptoms. The randomization was blocked so that if participants were from the same family unit, they were allocated to the same condition. This was done because in some instances, two carers (i.e., mother and father) attended to the one person with BPD. Randomization sequence was computer generated.

## RECRUITMENT AND PARTICIPANTS

Eligible participants were carers, defined here as a partner or spouse, parents, other family members, cultural elders, unpaid support persons, mentors, or friends of a person with BPD. Recruitment was through calls to attend a local introductory support workshop and through flyers distributed to mental health services, local media, patient advocacy groups, and family and support networks. Participants provided written informed consent following Institutional Board Approval.

Carers were interviewed by a clinician prior to inclusion in the trial to determine their eligibility. Inclusion criteria were (a) being a carer, (b) being

at least 18 years old (or accompanied by a parent or guardian if between the ages of 16 and 18 years), (c) that the person for whom they were providing care must be age 14 or older, and (d) that the person being cared for had a diagnosis of personality disorder or symptoms consistent with personality disorder, including problems with managing strong emotions, self-destructive and/or self-harming behavior, and problems with identity and sense of self. Exclusion criteria were (a) not wanting to continue into a group program, (b) carers with significant current mental health, physical, or drug- and alcohol-related problems that may impede their full involvement, or (c) if the caring was for a person also diagnosed with schizophrenia or the primary presenting problem was substance abuse or dependence. Carers not accepted into the program were provided with a referral to more suitable services that focused on support for the particular problem identified (e.g., schizophrenia).

## PROCEDURE

Eligibility for the trial was assessed during a prescreening interview conducted by a research assistant trained in the study protocol. Upon initial screening, carers were asked if the person whom they were caring for had a diagnosis of personality disorder. They were also given a list of core personality disorder symptoms and asked if these were applicable. Carer reports of personality disorder were supported by scores on the Carer version of the Mclean Screening Instrument (Goodman et al., 2011; Zanarini et al., 2003). Carers were also asked if the person whom they were caring for had a diagnosis of schizophrenia or drug and alcohol problems. If they reported a schizophrenia diagnosis or that substance abuse or dependence was the primary problem, the carer was deemed unsuitable for the trial. Finally, carers were asked directly whether they themselves had any mental health, physical, or drug and alcohol problems that might interfere with full involvement in the program, and in this instance were deemed unsuitable for participation in the trial.

Consenting eligible participants were randomly assigned to the intervention or waitlist condition, and baseline (pre) self-report measures were completed by telephone interview with a psychologist prior to group participation. Self-report measures were readministered upon completion of the program (post) for both groups, and again at 12 months following completion for the intervention group. Those in the waitlist were offered a place in the group following an approximately 3-month delay.

The intervention was delivered in a group therapy format of six to eight participants, with two facilitators, and was designed for carers only. Consumers or relatives with BPD did not attend. The intervention comprised 16 hours of contact delivered face-to-face over 10 weeks as developed and supported by two authors (T.G. and A.B.). Initially, participants engaged in a 1-day psychoeducation group, which included an introduction to the key areas of the program and psychoeducation regarding personality disorders, safety planning, and self-care. This was followed by four 2-hour group sessions every 2 weeks. The sessions focused on implementation of the relation-



ship model and the attendant skills and strategies within and between each family setting. The sequence and content of these sessions were consistent with those outlined in the accompanying resources (Project Air Strategy for Personality Disorders, 2012, 2016).

## INTERVENTION

The intervention “Staying Connected” is a manualized psychoeducation approach, based on a relationship model (Project Air Strategy for Personality Disorders, 2012, 2016). This study involved carers only. The relative with BPD was not included in the group. This was based on two premises: first, that the treatment needs of the relative are independent from the needs of the carer, and second, that carers feel more comfortable discussing their situations and feelings openly when the person whom they are caring for is not present. The latter is supported by evaluation of the McLean Program (Gunderson, Berkowitz, & Ruiz-Sancho, 1997), which also found that when individuals with personality disorders are invited to attend alongside their carers, attendance is poor (Berkowitz & Gunderson, 2002). Delivery of the intervention was by the developing authors (A.B., T.G.) and was based on the supporting resources (Project Air Strategy for Personality Disorders, 2016). Each session was monitored by another member of the research team (R.B.).

The intervention aimed to empower carers with skills to change themselves in relationships, promoting new functioning in their relative with BPD. It also provided carers with knowledge about BPD and associated challenging behaviors (e.g., nonsuicidal self-injury, suicide attempts, and impulsive anger). Options for support and sharing experiences between the group members were facilitated. Experiential exercises, including role play scenarios and communication practice exercises, were delivered to enhance skill development. The core principles of the group program and example strategies are described in Table 1.

Family systems theory (Bowen, 1993) informed the basis of the relationship processes, conceptualized as “carer dances,” and associated understanding of how to resolve problematic core conflictual relationship themes and patterns. A short training film demonstrates key components of the intervention, highlighting a family-inclusive approach to optimizing safety (Bickerton, Hense, Benstock, Ward, & Wallace, 2007; Bickerton, Ward, Southgate, & Hense, 2014) and supporting the dynamic relationship model (Project Air Strategy for Personality Disorders, 2012).

## MEASURES

Carers were asked to respond to a questionnaire before and after the program. Measures were chosen to evaluate the impact on carer functioning and burden, and the impact on the interactional environment. Carers were also asked to make ratings about how satisfied they were with the program, whether they would recommend it to a friend, and whether they found it helpful for improving knowledge and understanding about personality disorders.



*McLean Screening Instrument for BPD–Carer Version (MSI-BPD-C)*. The MSI-BPD (Zanarini et al., 2003) is a brief screening measure for BPD based on the *DSM-IV* and *DSM-5* criteria. The self-report questionnaire consists of 10 true or false items, each item addressing one of the nine diagnostic criteria, with two items for the ninth criterion of paranoia/dissociation. Each “true” item is scored as 1; thus, total scores range 0 through 10. A score of 7 or more indicates likely BPD diagnosis. Using these criteria, the MSI-BPD yields good sensitivity (.81) and specificity (.85) (Zanarini et al., 2003). The instrument has been adapted for use with carer populations (Goodman et al., 2011). The MSI-BPD-C was used in this study to assess BPD severity.

*Burden Assessment Scale (BAS)*. The BAS (Reinhard, Gubman, Horwitz, & Minsky, 1994) is a 19-item measure of objective and subjective burden. Objective burden is reflected in the behavioral and social effects of caregiving (i.e., interruptions to work, social, and family life), and subjective burden is reflected by feelings, attitudes, and emotions in relation to the caregiving role. Previous research with carers of people with personality disorders yielded a good internal consistency (Cronbach’s  $\alpha = .88$ ; Bailey & Grenyer, 2014), and the scale has demonstrated good discriminative validity between different caregiver groups. Higher scores on the BAS indicate higher levels of caregiver burden.

*Dyadic Adjustment Scale–4 (DAS-4)*. The DAS-4 (Sabourin, Valois, & Lusier, 2005) is an abbreviated version of the widely used original 32-item measure of relationship quality (Spanier, 1976). Like the DAS, the DAS-4 has good reliability of .81–.92 for couples in distress compared to couples in little distress (Graham, Liu, & Jeziorski, 2006). For the purposes of this study, items were altered slightly to allow generalizability to nonspousal caregiving relationships; for instance, “How often do you discuss or have you considered divorce, separation, or terminating your relationship” was altered to “How often do you discuss or have you considered cooling off or breaking off your relationship with your relative?” Lower scores on this scale represent poorer satisfaction, with previous research indicating that scores less than 13 may represent interpersonal distress and relationship dissatisfaction (Sabourin et al., 2005).

*Family Empowerment Scale (FES)*. The FES (Koren, DeChillo, & Friesen, 1992) is a 34-item scale, originally developed for use with families of children with emotional disabilities. The scale is based on two dimensions: (a) the level of empowerment (family, service system, community/political), and (b) the way that empowerment is expressed (attitudes, knowledge, behaviors). The FES has robust psychometric properties, with split half reliability for the scale of .93, and internal consistency estimates ranging .78 to .89 for its subscales. Lower scores indicate lower ratings of empowerment.

*Mental Health Inventory–5 (MHI-5)*. The MHI-5 forms the mental health scale from the Medical Outcomes Study Short Form Health Survey (SF-36; Berwick et al., 1991). The scale is sensitive to depression, anxiety, and emo-

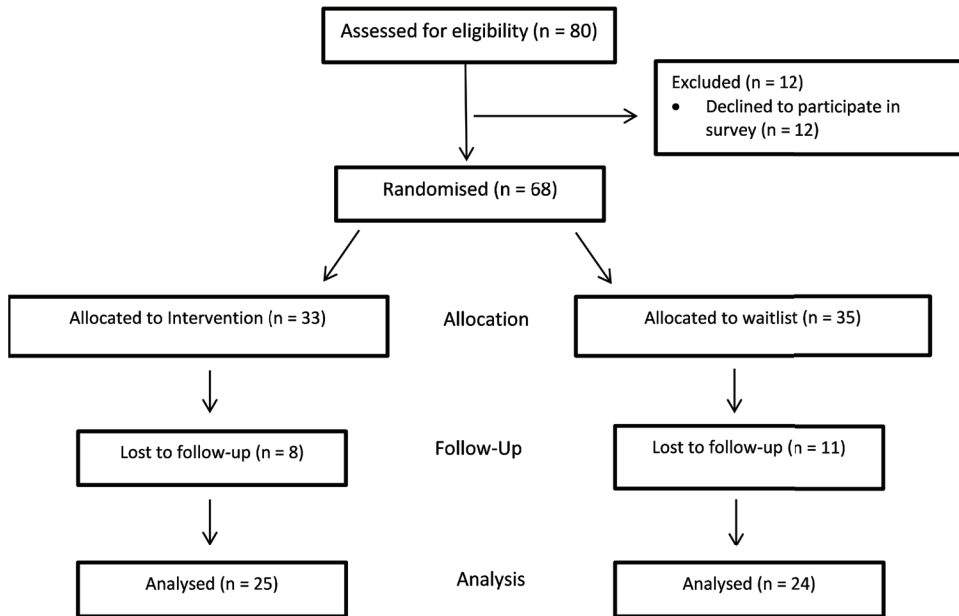


FIGURE 1. Flow diagram showing allocation of participants to intervention and waitlist groups and dropout rates between groups.

tional well-being. Scores are represented on a 100-point scale, with higher scores indicating better mental health. Studies have reported good reliability (.82–.85; Strand, Dalgard, Tambs, & Rognerud, 2003) and validity.

*The Family Questionnaire (TFQ)*. The TFQ (Wiedemann, Rayki, Feinstein, & Hahlweg, 2002) is a 20-item questionnaire measuring the level of expressed emotion in the family environment. Half of the items reflect criticism toward the person being cared for, and the remaining items reflect emotional overinvolvement on the carer's behalf. The TFQ has demonstrated good concurrent validity with the Camberwell Family Interview (Wiedemann et al., 2002).

## STATISTICAL ANALYSIS

Preintervention and postintervention outcomes were assessed using a multilevel modeling approach (SPSS-19 Linear Mixed Models). The data were analysed as intention-to-treat, with time as a repeated measure. Preintervention differences were controlled for by using this method. The covariance structure for the residuals was specified as antedependent (first order). To evaluate whether any improvements were sustained beyond the completion of the program, within-group analyses were conducted for the intervention group by examining any changes in the outcome variables between postintervention and at 12 months following the intervention. Effect sizes and 95% confidence intervals were calculated for within-group effects on the basis of the pooled standard deviation.

TABLE 2. Carer and Consumer Age and Gender, and Proportion of Participants Holding the Primary Carer Role, Across the Intervention and Waitlist Groups

	Intervention (N = 33)	Waitlist (N = 35)	<i>t</i> / $\chi^2$	<i>p</i>
	M (SD) / <i>n</i> (%)	M (SD) / <i>n</i> (%)		
Carer age	54.18 (9.72)	54.14 (9.72)	.017	.987
Consumer age	30.02 (12.79)	30.77 (13.91)	-.233	.817
Carer gender (% female)	21 (63.6)	24 (68.6)	.185	.667
Consumer gender (% female)	25 (75.8)	26 (74.3)	.020	.889
Primary carer (% yes)	21 (65.6)	28 (80.0)	7.758	.185

Note. Two-tailed *t* tests (*df* = 66) and chi-square (*df* = 1) analysis for group differences.

## RESULTS

Eighty carers were assessed for eligibility. Twelve declined to participate. The remaining 68 were randomized (33 to intervention and 35 to control). Figure 1 shows the flow of participants through the study. Feedback for the program was positive, with all participants indicating they would recommend it to a friend, and 96.5% indicating that they found it helpful for improving their knowledge and understanding about BPD, as well as their willingness to care for their relative.

Demographic information for the intervention and waitlist groups and BPD patients (consumers) cared for are shown in Table 2. On these variables, analyses showed that the groups were not significantly different from one another. The median and mean MSI-BPD-C scores were both 8 (out of 10), indicating that most of the relatives with BPD being cared for were currently highly symptomatic, with no difference in severity between groups. Carers were mostly parents of those with BPD (75.8% in intervention group, and 71.4% in waitlist).

Most of the carers allocated to the intervention group completed the program (*n* = 28, 85.4%), and of those who were not lost to follow-up, all but one completed the program. There were no differences in carer gender ( $\chi^2 = .107$ , *p* = .743) or age, *t*(66) = 1.326, *p* = .189, for those who were lost to follow-up (*n* = 8) and those who remained, nor were there any significant differences in the gender of those whom they were caring for ( $\chi^2 = 1.326$ , *p* = .189). Carers who were lost to follow-up, however, tended to be caring for consumers with a higher mean age (*M* = 38.75, *SD* = 16.99) than those who remained in the group (*M* = 27.22, *SD* = 10.02), *t*(31) = -.2375, *p* = .024. Carers in these two groups did not differ significantly for scores on the BAS, DAS-4, FES, TFQ, and MHI-5.

Carers in the intervention group experienced greater improvement than those in the waitlist group. A significant interaction between Time and Condition was found for scores on the DAS, *F*(1, 40.184) = 7.738, *p* = .008, TFQ-Emotional Overinvolvement, *F*(1, 58.510) = 6.068, *p* = .017, TFQ-Criticism, *F*(1, 55.050) = 5.247, *p* = .026, and FES, *F*(1, 55.279) = 9.898, *p* = .003. No significant interactions between Time and Condition were found for scores on the MHI-5, *F*(1, 56.789) = .786, *p* = .379, or BAS, *F*(1, 58.495) = 1.308, *p* = .257. Figure 2 illustrates the changes for the scales of the TFQ.

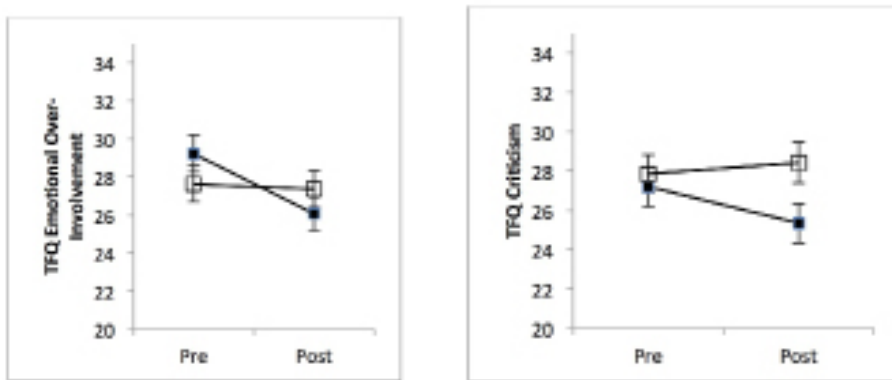


FIGURE 2. Mean change in scores on the TFQ Emotional Overinvolvement (left) and TFQ Criticism Scales (right) at intake (pre) and after 10 weeks (post). Solid squares are the intervention group and open squares are the waitlist group, with bars representing  $\pm$  standard error of the mean.

Post hoc analysis (using Fisher LSD method) for scores on the DAS, TFQ-Emotional Overinvolvement, TFQ-Criticism, and FES show no significant changes in the scores for the waitlist group over time, but they show a significant improvement in scores for the intervention group (see Table 3).

Twenty-seven of the participants allocated to the intervention group participated in a 12-month follow-up assessment (82%). Within-group analysis showed no significant changes in scores on the DAS,  $t(26) = 1.19$ ,  $p = .246$ , TFQ-Emotional Overinvolvement,  $t(26) = 1.43$ ,  $p = .164$ , TFQ-Criticism,  $t(26) = 1.14$ ,  $p = .267$ , and FES,  $t(26) = .439$ ,  $p = .664$ , between postgroup assessment and the 12-month follow-up. However, 12-month follow-up scores on the MHI-5 ( $M = 71.98$ ,  $SD = 14.24$ ) and BAS ( $M = 45.11$ ,  $SD = 11.10$ ) showed significant improvement between these two time points, MHI-5,  $t(26) = -2.086$ ,  $p = .047$ ; BAS,  $t(26) = 2.136$ ,  $p = .042$ , with moderate effect sizes, MHI  $d = .52$ ; BAS  $d = .45$ .

## DISCUSSION

This study evaluated a 10-week psychoeducation program that was specifically designed to improve relationship skills and the interactional environment between carers and a relative with BPD. The intervention aimed to help carers understand BPD and the behaviors that accompany it—ultimately aiming to improve the interactional environment through change in the carers' behaviors. Compared to the waitlist group, those participating in the group program reported improvements in the relationship with the relative with BPD, reductions in expressed emotion (criticism and overinvolvement), and improvements in the carer's perception of being able to play an active role in interacting with BPD service providers. The largest gains from the intervention were in family empowerment, showing a large effect size of 1.4, and dyadic adjustment, with a large effect size of 0.78. The change in the

TABLE 3. Time  $\times$  Group Interactions and Mean (Standard Error) and Effect Size ( $d$ ) of the Clinical Measures of Family Functioning, Burden, and Mental Health at Intake (Pre) and After 10 weeks (Post) Rated by Carers in the Waitlist and Intervention Groups

	Waitlist				Intervention				Effect Size $d$	Time $\times$ Group Interaction	
	Pre <i>M (SD)</i>	Post <i>M (SD)</i>	Mean Diff	$p$	Pre <i>M (SD)</i>	Post <i>M (SD)</i>	Mean Diff	$p$		$F$	$p$
Dyadic Adjustment Scale	10.16 (.62)	9.24 (.62)	.92	.077	10.41 (.65)	11.35 (.62)	-.94	.038	.78	7.738	.008
TFQ-Overinvolvement	27.63 (.94)	27.36 (.97)	.27	.761	29.23 (.97)	26.06 (.90)	3.17	.000	-.35	6.068	.017
TFQ-Criticism	27.86 (.97)	28.43 (1.06)	-.57	.474	27.20 (1.00)	25.34 (1.00)	1.86	.011	-.66	5.247	.026
Family Empowerment Scale	87.40 (3.13)	93.42 (3.54)	2.74	.152	99.93 (3.23)	107.44 (3.33)	2.41	.003	1.40	9.898	.003
Burden Assessment Scale	52.06 (1.92)	49.80 (1.83)	2.26	.105	54.15 (1.98)	49.78 (1.76)	4.37	.001	-.14	1.308	.257
Mental Health Inventory-5	61.18 (3.05)	60.00 (3.60)	1.18	.744	62.22 (3.10)	65.34 (3.22)	-3.11	.339	-.36	.786	.379

Note. TFQ = The Family Questionnaire. Bolded values indicate significant ( $p < .05$ ) findings.

Family Empowerment scale of the FES may suggest that carers were able to feel more active in their role. This change, in turn, may have resulted in further improvements in their relationship (as measured by the DAS) with the person for whom they were caring. Importantly, assessment of the intervention group at 12 months following completion of the intervention showed that these improvements were sustained over a significant duration.

The finding of a reduction in carer criticism and emotional overinvolvement is interesting. Previous research has yielded mixed results, with Hooley and Hoffman (1999) reporting that high levels of expressed emotion can actually benefit the relationship. It is possible in this study, however, that improving and clarifying the role of the carer served the purpose of improving the relationship without the need for maintaining high expressed emotion. These possible mechanisms of change would benefit from further research.

One of the limitations of this study is that we relied on the carer reports of personality disorder and other diagnoses prior to entry into the study, rather than our team performing the diagnosis. Similarly, program efficacy and outcomes were assessed through self-report questionnaires as opposed to interviews. The latter would be recommended for future studies.

Although improvement in carer mental health was not a focus of the intervention, we anticipated some improvement as a result of participation. Analysis of pre- and post-group scores did not indicate such improvement. However, within-group analysis of scores on the mental health status for the intervention group showed significant improvement between completion of the group (post) and 12-month follow-up. A similar pattern was found for scores on the BAS. It may be that the initial nonsignificant findings are a result of low power due to the small sample size or that the measure is not sufficiently sensitive to changes. However, it could also be that improvement in carer mental health and reduction in experience of burden develop more gradually, resulting from an improved interactional environment. Unfortu-

nately, we were not able to conduct between-group analyses at the 12-month follow-up because the control group had participated in the intervention by that point. Further study in larger samples is warranted to understand the effect of the intervention on carer mental health and feelings of burden, as well as the trajectory of improvement in these variables.

On the MHI-5, scores above 68 are generally considered to represent good mental health (Kelly, Dunstan, Lloyd, & Fone, 2008). Neither group in this study had average scores in this range. The high prevalence of mental health problems in relatives of people with personality disorders suggests that further work could be done in ensuring that the mental health concerns of carers are managed outside the group program.

A significant component of the program also focused on providing carers with knowledge and incorporating specific skills (e.g., mindfulness). Although competence and confidence in using learned skills following training were not directly evaluated in this study, further investigation concurrent with a future study that includes a later time point would give a more holistic evaluation of the intervention.

It is interesting to note that carers in this study were predominantly older parents or older persons caring for a younger person with personality disorder, who were mostly females. Anecdotal observations of the program suggested that parents with children with the disorder are particularly interested in participating in such a group program. Indeed, more than 70% of the carers in each group reported being a parent to the person whom they were caring for. Recruiting and retaining the partners or spouses was more difficult. Only four carers (12.1%) from the intervention group and six from the waitlist (17.1%) were providing care for a partner or spouse. Perhaps this is because people with BPD and their spouses may find staying in the relationship less difficult because it represents an active choice, meaning they are less likely to seek an offered group intervention. It is likely, however, that due to the nature of spousal relationships, the experiences of caring may differ from those in other carer groups. Specifically, Lawn and McMahon (2015) found that spousal carers of people with BPD felt they differed from other groups because their relationship was intimate and chosen. Given this finding, exploration of program outcomes for different carer groups may be worthy of further study, as well as the impact on primary carers versus nonprimary carers. Future studies may need to specifically tailor interventions for the needs of different carer groups.

The intervention was multifaceted, offering participants peer support, relationship skills development, and psychoeducation. This study demonstrates that this combination was beneficial in improving dyadic adjustment and family empowerment, and in reducing family criticism and overinvolvement when compared to waitlist control. What is unclear is which therapy elements are most effective, which would warrant further research.

Participants reported to the researchers that meeting and interacting with other carers through the group program provided sources of peer support. In addition, having the diagnosis explained during the psychoeducational groups allowed carers to understand the nature of the disorder and how specific symptoms (such as self-harm) could be explained through scientific



research and discoveries. Further research would benefit from ascertaining whether any longer term clinical benefits of the carer intervention transferred to the individual with BPD.

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