

EVALUATING THE EFFICACY OF THE
FAMILY CONNECTIONS PROGRAM FOR FAMILY MEMBERS OF INDIVIDUALS WITH
BORDERLINE PERSONALITY DISORDER

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Abstract

Background: Family members of those with mental illness frequently assume roles of caregiver, advocate, and guardian, often resulting in experiences of burden, grief, and depression. Prior research has found that family members of individuals with Borderline Personality Disorder (BPD) report more severe consequences to their mental health compared to family members of people suffering other psychiatric diagnoses. BPD is a psychological disorder characterized by unstable, intense affect and typically associated with behaviors (e.g., suicide attempts, self-harm) that shape stressful, chaotic family environments. Family Connections (FC) is a psychoeducational and support intervention for family members of individuals with BPD or those experiencing emotion regulation difficulties. **Aims:** The present study explores whether participation in FC is associated with: 1) reductions in various forms of negative emotionality (i.e., depression, burden, grief, negative affect, anger), 2) higher levels of positive affect, 3) increases in breadth and use of skillful coping mechanisms, and 4) gains in relationship satisfaction with their loved one. **Method:** Six FC groups, totaling 64 participants, were conducted in a university training clinic across three years with both family members and graduate student clinicians serving as group leaders. Participants completed a battery of self-report questionnaires prior to, after the sixth session, after the twelfth session, and three months following FC. **Results:** FC participation was associated with decreases in various negative emotions and increases in positive affect, skills use, and dyadic functioning, as findings yielded statistically significant levels of change for all variables examined pre- to post-assessment. Current results aligned with previous empirical studies on FC that revealed major improvements for burden and grief. Despite the changes demonstrated at post-treatment, not all significant changes were maintained three months following the program. **Conclusions:** Given the

complexity of treating BPD, opportunities to approach psychological treatment from multiple perspectives is likely to be correlated with positive outcomes for clients and family members alike. This present study supported and expanded previous research prompting family members to participate in FC, while encouraging clinicians and clients to involve important people to the individual with BPD in treatment, progress, and growth.

Dedication

This dissertation is dedicated to my Family Connections participants, for without your strength and courage, this project would not have been possible. Time and time again, you have done anything and everything for your loved ones, now including: attending several sessions of this strange group, learning truly difficult skills, and making adjustments to your patterns of thought and behavior. None of this came easily and without having to face difficult challenges in yourselves. And yet, in my heart, I know this work to be true. Over our time together, your successes validated, in a very concrete sense, that which I strongly felt.

Thank you for entrusting me with this tender part of your lives. I am forever grateful to all my family participants for inspiring me to become not only a more skillful DBT clinician, but also a more skillful human being. Witnessing your kind of love—so strong, genuine, and tenacious in its quality—provided me the hope and strength to continue with this dark chapter of my life (i.e., graduate school).

A line has been drawn from my heart to yours. We are interconnected.

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Chapter I: Introduction

Regardless of psychiatric diagnoses, family members have often been the first line of care for their mentally ill relatives, particularly following the mandate of deinstitutionalization which decreased the amount of systematic care given to the mentally ill (Adamec, 1988). Yet, family members are often untrained and unprepared to assume the role of caregiver (Lefley, 1996). Not only are family members usually the primary caregivers for those with serious mental illness, but they often assume other significant roles in their loved ones' lives, such as that of advocates, guardians, coaches, and/or confidants (Hoffman & Fruzzetti, 2007). These multiple roles and their associated challenges are often of such magnitude that they deplete family members' capacities to effectively cope; as such, their own mental health begins to experience adverse effects. For example, Noh and Turner (1987) found that caring for a relative with mental illness is associated with burden, depression, grief, and isolation. However, Fruzzetti & Hoffman (2004) suggest family members caring for relatives of those with Borderline Personality Disorder experience even more deleterious challenges to their mental health (i.e., burden, depression, and grief) than family members of those struggling with other psychiatric diagnoses (e.g., Schizophrenia).

Borderline Personality Disorder (BPD) is one of several serious mental illnesses theorized to result from a core inability to regulate one's emotional experiences. The *DSM-5* (American Psychiatric Association, 2013) outlines nine diagnostic criteria for BPD, of which an individual must meet five to be diagnosed. The nine include: fears of abandonment, unstable interpersonal relationships, identity disturbance, impulsivity, suicidality, affective instability, emptiness, anger, and stress-related dissociation. Among the personality disorders (PDs), BPD is the most prevalent and most widely researched, with individuals diagnosed with BPD reporting

greater utilization of psychosocial services compared to individuals primarily diagnosed with other PDs or major depression (Hoffman, Fruzzetti, & Buteau, 2007). In fact, Bender et al. (2001) conducted a study wherein the utilization of mental health services was compared between patients diagnosed with PDs and patients diagnosed with Major Depressive Disorder (MDD) without co-occurring PDs. Overall, results indicated patients diagnosed with PDs had more extensive psychiatric histories of outpatient, inpatient, and psychopharmacological treatment than patients with MDD; additionally, patients with BPD were significantly more likely to have received every type of psychosocial treatment, except self-help groups, compared to the MDD group.

According to the *DSM-5*, the median population prevalence of BPD is estimated at 1.6% but could actually be as high as 5.9%. Furthermore, research summarized within the *DSM-5* has reported BPD prevalence rates according to various settings, which was estimated at approximately 6% in primary care settings, about 10% in outpatient mental health clinics, and roughly 20% in inpatient psychiatric hospitals (American Psychiatric Association, 2013). Meanwhile, Torgersen, Kringlen, and Cramer (2001) estimated incidence rates of BPD for the general population lie approximately between 0.7% and 2%.

Not only does BPD present numerous challenges for clients themselves, but BPD bears significant problems for family members of those diagnosed with BPD as well. More than 70% of BPD clients report a history of multiple episodes and methods of non-suicidal self-injury and 60% report multiple suicide attempts (Zanarini et al., 2008). Indeed, disruptive, maladaptive behaviors typically accompanying BPD (e.g., self-harm behaviors, suicide attempts, inappropriate yelling) understandably create stressful, overwhelming, and chaotic family environments for all involved. Consequently, such family members have been found to

experience notable levels of burden, depression, loss, and grief (Berkowitz & Gunderson, 2002; Baronet, 1999; Hoffman & Hooley, 1998).

In addition to enduring negative consequences as a result of their loved one's psychopathology, family members are commonly misunderstood by their own family members and friends, consequently entering their own cycles of experienced invalidation from supposed support systems. As such, family members of those with BPD are proposed to experience "surplus stigma" in ways family members of those diagnosed with other mental illnesses do not; surplus stigma refers to stigma above and beyond what is typically experienced by family members (Hoffman et al., 2005). For example, families experience surplus stigma when healthcare professionals inform family members they do not accept or admit BPD in their private practice or hospitals, which thereby neglects and invalidates the needs of these concerned family members. Furthering the notion of surplus stigma, while family programs exist for relatives of individuals struggling with Schizophrenia, Bipolar Disorder (BD), and Major Depressive Disorder (MDD), few programs have been developed to serve families with relatives diagnosed with personality disorders (McFarlane, Dixon, Lukens, & Lucksted, 2003). Additionally, family programs addressing Schizophrenia, BD, and MDD are even valued in particular treatment settings, while family programs have not been historically recognized within the majority of treatment settings for BPD (Hoffman et al., 2005; Dixon et al., 2001). Moreover, stigma towards BPD is evident in scientific research, as admittedly, the number of studies examining the prognosis for clients with BPD is extremely small compared to the number of research studies conducted for clients diagnosed with Schizophrenia or Bipolar Disorder (Fruzzetti & Boulanger, 2005).

Whereas families were once blamed for the development of psychiatric illnesses in their children, families are no longer viewed as fully responsible for the mental health struggles their children face, and many therapists have since acknowledged the perspective that family members themselves are uniquely burdened by their children's psychopathology (Noh & Turner, 1987). In fact, therapists now find that family members can often be useful allies in psychotherapy treatment (Paris, 2005). Certain evidence-based therapies, such as DBT for Adolescents (DBT-A), have espoused the necessity of familial involvement if a client is to make therapeutic progress. DBT-A specifically asserts that the inclusion of parents in adolescent treatment can increase their children's capabilities and use of skills outside session, as well as structure the environment to reinforce progress (Miller, Rathus, Linehan, Wetzler, & Leigh, 1997).

For family members themselves, psychotherapy has traditionally been recommended as the primary intervention to help them handle difficult struggles encountered while navigating their loved ones' psychiatric challenges. Despite this traditional recommendation, Dixon et al.'s (2001) research on evidence-based family interventions found that families have benefited the most from psychoeducation that disseminates basic information about the illness, provides ongoing support, and teaches techniques for living with and managing the illness.

Family Connections

Specifically, family intervention programs have been categorized into two broader models: family psychoeducation and family education (Hoffman et al., 2005; Hoffman & Fruzzetti, 2007; McFarlane et al., 1995). The family psychoeducation (FPE) model enlists the aid of mental health professionals in leading educational support groups, which may involve both the family member and loved one, and addresses the needs of family members' mentally ill relatives. Meanwhile, in the family education (FE) model, trained family members lead educational

support groups consisting solely of fellow family members (Hoffman et al., 2005). Although FE groups teach similar strategies to FPE, in terms of psychoeducation and effective coping skills, the needs of the family members themselves, instead of the needs of their mentally ill loved ones, serve as the primary targets in FE groups. FE groups have demonstrated significant improvements in family members' well-being, despite the lack of focus on targeting direct change in their loved ones (Dixon et al., 2001; Falloon & Pederson, 1985); therefore, FE is more often promoted and experienced as an education and support intervention for family members of loved ones experiencing a range of psychiatric challenges than FPE (Hoffman & Fruzzetti, 2007).

Consequently, Family Connections (FC), developed by the National Education Alliance for BPD (NEABPD), subscribes to the FE model, as FC was structurally modeled after the National Alliance for Mental Illness' (NAMI) Family-to-Family Program (FFP)—another example of a family education model. Unlike FFP though, which was designed as a program focusing on mental illness more broadly, FC was specifically designed to meet the needs of relatives of persons with BPD and/or significant emotion dysregulation—an attempt to provide mental health services for this often-overlooked population.

Underlying FC's theoretical foundation is Dialectical Behavior Therapy (DBT), as the content of the FC program was adapted largely from prior curricula on relationship and family skills created by Drs. Alan Fruzzetti and Perry Hoffman—two prominent DBT psychologists. FC was additionally developed in consultation with several family members and individuals with BPD. As an example of DBT's underlying influence on FC, psychoeducational material discusses the biosocial theory, which explains the etiology of BPD from a DBT framework.

Furthermore, a great deal of FC content teaches skills related to and/or adapted from DBT (Linehan, 2014).

Family Connections is offered as a twelve-week group, with each group typically lasting two hours. The curriculum of FC (Fruzzetti & Hoffman, 2004) is organized into six modules: basic introduction, family education, relationship mindfulness skills, family environment skills, validation skills, and problem management skills. Module One (Basic Introduction) discusses current information and research on BPD (e.g., symptoms, course of illness), while Module Two (Family Education) provides psychoeducation regarding the development of BPD, available treatments, common comorbidities with BPD, and a primer on emotion reactivity and dysregulation. Following, Module Three (Relationship Mindfulness Skills) teaches relationship mindfulness skills (i.e., Mindfulness of Others) to promote family member well-being, in conjunction with emotion self-management (i.e., decreasing emotional reactivity). Module Four (Family Environment Skills) focuses on acceptance skills to improve the quality of familial relationships (i.e., letting go of blame, Radical Acceptance), while Module Five (Validation Skills) emphasizes accurate and effective self-expression by way of validation skills. Lastly, Module Six (Problem Management Skills) highlights problem management skills (e.g., defining problems effectively, collaborative problem solving). Each of these modules incorporates and teaches different concepts and skills derived from DBT, with handouts distributed and worksheets assigned as homework directly from the DBT Skills Training Manual (Linehan, 2014).

Throughout the program, FC provides a forum through which family members can build a support network; within its six modules, the FC manual addresses various consequences of surplus stigma family members may have experienced (e.g., self-invalidation)—furthering the

likelihood of a cohesive and supportive space. For example, the first session of Family Connections encourages people to share whatever aspects of their stories they feel comfortable sharing, during which self-invalidation has often been clinically observed by group leaders. In attempts to mitigate one such example of surplus stigma's unintended consequences on mental well-being, these patterns of self-invalidating behavior are later addressed in Module Five when discussing Validation Skills.

Concerning group leadership, Family Connections is typically led by trained family members. These family members first participated in their own FC group and then were recommended as future FC leaders, after which they completed a required training course led by developers Drs. Fruzzetti and Hoffman. Of note, the leader training has been highly standardized to closely follow the FC manual (Fruzzetti & Hoffman, 2004). Only after completion of such steps are family members considered adequately prepared to conduct groups in their respective, geographic areas. In certain cases, mental health professionals, who have also attended the training course, may lead FC groups with either another professional or family member.

Empirical Studies of Family Connections

To date, there have been four published research studies on Family Connections. In the initial pilot study, Hoffman et al. (2005) hypothesized the FC program would result in reductions of burden, grief, and depression, with an increase in mastery. Furthermore, they hypothesized these changes would be maintained throughout the three-month, follow-up assessment. This study's sample consisted of 44 participants (i.e., parents, partners/spouses, and a sibling of loved ones with BPD and/or emotion dysregulation), representing 34 families, and was designed as an uncontrolled study with pre-, post-, and three-month, follow up evaluations. Of note, family members who had completed both the FC program and leader training served as group leaders.

Using hierarchical linear modeling, their results indicated levels of burden and grief were significantly reduced, while mastery increased; meanwhile, results indicated that levels of depression did not change. Additionally, results found these results were maintained three months following the end of their respective FC groups.

Hoffman, Fruzzetti, & Buteau (2007) replicated the Hoffman et al. (2005) pilot study of FC, wherein 55 participants were administered pre-, post-, and three-month, follow-up assessments on outcomes of well-being, including: burden, grief, empowerment, and depression. In this replication study, family members represented parents, partners/spouses, and children of those experiencing BPD and/or emotion regulation difficulties. Ages of participants ranged from 27 to 75, with an average of 53.40 years ($SD = 8.84$). Important to note, FC leaders in this study were the same family members who had previously led groups in the pilot study. These researchers extended the pilot study by evaluating whether outcome differences would be found between male and female participants. Findings suggested that family members improved on all well-being variables, demonstrating increases in empowerment and significant reductions in burden, grief, and depression. Moreover, outcomes for male versus female participants were comparable at the completion of FC. The one exception was grief, on which women remained higher than men, despite significant improvements for both.

Rajalin, Wickholm-Pethrus, Hursti, & Jokinen (2009) evaluated the effects of FC for family members of suicide attempters, differing from the previous two studies in which research participants qualified if they self-identified a loved one with BPD and/or emotion regulation difficulties more broadly rather than a loved one who had specifically attempted suicide. In their uncontrolled study, eighteen family members (i.e., parents, partners/spouses, and a sibling) were randomized into two groups, with thirteen participants ultimately completing the nine-week FC

program, in addition to pre- and post-, self-report questionnaires. To note, although their nine-week program had strayed from the standard, twelve-week model, the authors indicated Dr. Fruzzetti, co-developer of FC, had granted permission to modify their FC program. Unlike the previous two studies, in which family members served as group leaders, groups in this study were conducted by cognitive-behavioral therapists who had been trained in FC by Dr. Fruzzetti. Further adaptations were made in that the psychoeducational portion of FC additionally utilized the most current research on risk factors for suicide attempts and completed suicide, as well as providing information on psychiatric disorders with high suicide risk (i.e., mood disorders, personality disorders, and substance abuse disorders). Ultimately, their results noted a trend in the reduction of depressive symptoms, a significant reduction in burden, improved psychic health, and an increase in well-being regarding relationships with their ill loved ones. Such results provided support for the importance and need of a DBT-based, skills training program for family members of suicide attempters.

Meanwhile, a non-randomized, controlled study of FC from Flynn et al. (2017), conducted in Ireland, similarly included burden, grief, depression, and mastery as outcome variables to advance Hoffman et al.'s (2005) field of research. Flynn et al. (2017) compared FC to an optimized, treatment-as-usual condition (OTAU), such that a three-week psycho-educational program was the OTAU condition for 29 family members, while the standard twelve-week FC program was comprised of 51 participants. Overall, these 80 family members represented 53 families, in which the majority of participants were parents of a family member with BPD, while their age ranged from 18 to 70 years old. Both the FC and OTAU conditions were facilitated by clinical psychologists, all of whom had received training in DBT and FC, while the co-facilitators varied between clinical psychologists and family members who had

completed both the FC program and leader training. After analyzing pre-, post-, three-month follow-up, and long-term follow-up data, their research indicated the FC group showed significantly larger reductions in burden and grief, while the FC and OTAU groups did not differ significantly in terms of changes in depression or mastery levels. While the OTAU condition showed changes in the same direction as the FC condition, none of the changes were established as statistically significant. Regarding their follow-up data, following the three-month completion of FC, further decreases in burden and grief were demonstrated. Meanwhile, depression and mastery scores showed no change at the three-month follow-up, and no further changes were observed at either timepoints of the long-term evaluations (i.e., either 12 or 19 months after FC completion). Due to the study's location in Ireland, the authors argued a consistency exists within the FC program, regardless of location and country.

Though Ekdahl, Idvall, & Perseius (2014) examined DBT Family Skills Training (DBT-FST) and not Family Connections, per se, the two programs possess fundamentally common goals for family members. Like Family Connections, DBT-FST has two primary goals: for family members to become educated as to how emotional sensitivity and dysregulation impact relationships with their loved ones and to learn effective relationship and self-management skills. Unlike FC though, DBT-FST is specifically organized by the four skills modules comprising typical DBT Skills Training groups, in this order: Mindfulness, Interpersonal Effectiveness, Emotion Regulation, and Distress Tolerance. Although FC teaches some skills from the aforementioned modules, its organizational structure has a broader, less DBT-specific approach. Furthermore, while FC is taught by family members who have undergone both a round of FC and FC leader training, DBT-FST is offered by mental health professionals. Due to significant similarities in the aims of DBT-FST and FC, the following research appears noteworthy.

Ekdahl, Idvall, & Perseius' (2014) research aim was to describe significant others' experiences of DBT-FST and their life situation before and after DBT-FST, along with assessing any possible levels of change in anxiety and depressive symptoms. This study had a descriptive mixed methods design, and data was analyzed by qualitative content analysis and descriptive and inferential statistics. Qualitative results indicated life before DBT-FST was a struggle, but DBT-FST restored their hope for the future and provided helpful strategies for daily life. For the subgroup without symptoms of anxiety and depression before DBT-FST, anxiety increased significantly. For the subgroup with symptoms of anxiety and depression, both categories of symptoms decreased significantly. Consequently, despite increased anxiety for one group, DBT-FST was recommended a beneficial intervention and most beneficial for those with higher levels of anxiety and depression.

Meanwhile, Fruzzetti & Payne (2015) conducted research that demonstrated teenagers exhibiting suicidality and self-harm behaviors reported statistically significant reductions in parental invalidation, with corresponding increases in validation, following their parents' involvement in FC. In doing so, their research focused on treatment outcomes through the lens of children, rather than their parents, which previous studies had yet to examine. Finally, according to Krawitz, Reeve, Hoffman, and Fruzzetti (2016), a replication pre-post study of FC has begun in New Zealand, with data collected but not yet reported.

Various similarities and differences between the four empirical studies of FC are important to acknowledge at this time. While all four examined depression, burden, and grief as outcomes of interest, different studies chose to study other particular variables (i.e., empowerment, mastery, psychic health, and relationship satisfaction). Additionally, three-month post questionnaires were used in three of the studies, with the exception of Rajalin, Wickholm-

Pethrus, Hursti, & Jokinen (2009). Their 2009 study also specifically recruited family members of suicide attempters and additionally modified the length of FC to nine weeks instead of the standard twelve. Furthermore, the majority of FC research to date has not implemented a control condition, with only Flynn et al. (2017) having advanced FC literature in this crucial manner. Flynn and colleagues' research is further distinct from the other three in terms of its location, as it was based in Ireland and not in the United States, which may have cultural implications. Thus, conclusions from these four FC research trials may be less generalizable to the overall population than initially hoped due to the number of relevant and noteworthy differences amongst them.

The Current Study

The current study aims to replicate and extend research on the efficacy of Family Connections, support growing research on this community-based program, and add to the overall literature of family and mental illness research. In keeping with the pattern of research formerly conducted on Family Connections, particularly the initial pilot study, this current study examined the same outcome variables of depression, grief, and burden. At the same time, in hopes of extending former research published on FC, this research study evaluated other outcome variables related to mental health as well, including: dyadic functioning, positive and negative affect, DBT skills use, and anger.

Although prior research studies on FC have examined changes occurring within family members, they did not investigate whether relationship change occurs between a family member and his/her loved one as a result of FC participation. While the overall aim of FC is to increase the well-being of family members (rather than those diagnosed with BPD), FC simultaneously maintains that improvements in oneself can potentially lead to improvements in relationships with loved ones. This outcome variable of dyadic functioning reflects the biosocial theory, which

proposes BPD etiology as a chronic transaction between biological and environmental factors (e.g., emotional sensitivity of the loved one and family members, respectively). Thus, an improved relationship between family member and loved one can have serious clinical implications for the person struggling with BPD or emotion regulation difficulties.

Despite the number of dependent variables having represented various forms of positive and negative emotionality (e.g., mastery, depression, and grief), no FC studies to date had specifically examined positive and negative affects in their discrete entities. This level of specificity could be important in discovering whether results trend towards an increase in positive affect or decrease in negative affect as a result of Family Connections participation.

Concerning DBT skills use, this outcome variable was particularly relevant, as the majority of FC's twelve-week groups teach skills related to and/or adapted from DBT (e.g., relationship mindfulness and validation skills). To increase the likelihood that skills would generalize to daily life, psychoeducational handouts were distributed and worksheets were assigned as homework, most of which were directly acquired from the DBT Skills Training Manual (Linehan, 2014). As the practice of DBT skills is proposed as one of the main mechanisms of improved mental health in FC, this study sought to expand the literature by evaluating a previously overlooked outcome—a limitation of past FC studies.

Finally, anger was included as a dependent variable of interest, based on observations gleaned during the FC Leader Training. Throughout the training weekend, family members expressed feelings of frustration and anger towards loved ones—emotions that appeared to particularly resonate with all family members, as they were witnessed nodding their heads along in understanding. Additionally, several questions were asked of the trainers as to how using DBT

skills could manage intense feelings of anger. Thus, anger was determined a pertinent research outcome for this dissertation study.

Along with the exploration of new outcome variables of interest, this dissertation study sought to further contribute to the overall literature on FC by including mid-treatment assessments, which had yet to be implemented in former studies. Such midpoint assessments are essential to assessing the course of change (i.e., “Did all gains occur within the first half of FC, or did they occur over the twelve weeks of the program?”).

Chapter II: Aims and Hypotheses

Despite the growing popularity on Family Connections, the literature examining the efficacy of this program remains largely limited. Yet, increased knowledge regarding the efficacy of this community-based intervention would be important for family members as well as clinicians and BPD clients. Given the difficulty and complexity of treating BPD, if treatment can be approached from multiple angles (i.e., individual psychotherapy for the client with BPD, along with FC for his/her family member), there is expected to be an increased likelihood of positive treatment outcomes (e.g., decreased levels of depression) for both the client and his/her family member. Moreover, results gleaned from this study have the potential to provide additional research backing from which to encourage family member participation in FC, along with potentially increasing clinician and BPD client willingness to recommend this family education group to clients and/or family members, respectively. To clarify, the current research study broadly defined a “family member” as any type of family member (e.g., brother, aunt-in-law) or meaningful individual (e.g., best friend, boyfriend).

Overall Aim: Explore whether participation in Family Connections is affiliated with positive mental health outcomes for family members.

Aim 1: Determine whether participation in FC is associated with a reduction in various forms of negative emotionality, including: depression, burden, grief, anger, and negative affect.

Aim 2: Determine whether positive affect is significantly higher following a course of FC compared to baseline.

Aim 3: Evaluate whether any significant increases in family members' breadth and use of skillful coping mechanisms are found following a course of FC.

Aim 4: Assess whether family members experienced a significant increase in their relationship satisfaction with their loved one following FC participation.

Aim 5: Assess whether the structure of group leadership (i.e., two graduate students versus one graduate student and one trained family member) significantly impacted treatment outcomes.

Chapter III: Methodology

Inclusion and Exclusion Criteria for Research Participants

Six inclusion criteria were determined for participants' involvement. First, members were required to be 18 years or older. Second, they must have agreed to take part in assessments, videotaping/audiotaping, and potential coding of their sessions by research personnel. Third, research subjects' loved ones must have been identified as having BPD and/or emotion regulation difficulties. Additionally, it was necessary that participants reside within commuting distance of the clinic (i.e., <60 minutes) and be English-speaking. Finally, subjects must have expressed an initial commitment to attend the full course of the group. Meanwhile, no explicit

exclusion criteria were outlined for this study, as NEABPD had agreed to refer all interested participants.

Recruitment of Participants

Participants for the DBT-RU Family Connections groups were recruited via two pathways: the NEABPD's New Jersey FC waiting list and the Rutgers Psychological Services Clinic. As the umbrella organization, NEABPD maintains a running waitlist of all family members who wish to participate in a FC group. Approximately one to two months before running the first session, this author emailed the NEABPD representative responsible for managing and distributing the most updated waitlist to group leaders. Soon afterward, this author received a Google Spreadsheet with the names and contact information (i.e., telephone numbers and electronic mail addresses) of all those interested and living within one hour distance from Middlesex County where Rutgers University (Busch Campus) is located.

Additionally, flyers with basic information about upcoming FC groups were posted in the hallways of the Rutgers Psychological Services Clinic and/or distributed to current clients of the Dialectical Behavior Therapy Clinic at Rutgers University (DBT-RU), in the event their family members were interested in joining FC. At times, official NEABPD flyers and brochures were electronically mailed to family members who requested further information due to initial hesitation about joining the program.

Participants

Six separate groups were conducted in succession, in which the total number of research participants was 64 adults ($M_{age} = 54.97$, $SD = 12.49$, range 25—75) who joined Family Connections at Rutgers University between September 2016 and September 2018. The predominantly female sample ($n = 43$, 67.2%) reported White (84.4%), Hispanic (3.1%), Black

(4.7%), Asian (9.4%), and multiple (1.6%) racial and ethnic backgrounds. The majority of the sample was employed full-time (59.4%), while 20.3% of the sample was unemployed, with 10.9% of the sample working part-time and 7.8% of the sample working as volunteers.

Procedures

After receiving statements of interest following the initial contact, Family Connections was described in greater detail, as well as the research components, over a telephone call. When family members remained interested in FC following this conversation, an electronic link to an online consent form and questionnaires was then electronically sent, with each participant assigned a unique ID number in order to track his or her respective assessments. Family members were asked to review the Informed Consent form, which was included in the initial questionnaire; only if family members agreed to all research conditions outlined in the form, did the survey then advance to the Demographics form, which collected family member information on various demographic factors, including: age, gender, race/ethnicity, and annual income, amongst others. Following completion of this form, the seven research measures were then administered (see “Measures” below). Participants were strongly encouraged to complete the online consent and initial questionnaire prior to their first group.

At the beginning of the first group, participants were then asked to sign a hard copy of the same consent form. At mid-treatment (after the sixth session) and post-treatment (after the twelfth session), participants were asked to complete the same battery of questionnaires. Three months following the end of their respective groups, participants were contacted and asked to complete the same questionnaires for purposes of follow-up data.

In order to best ensure the confidentiality of research participants, this study de-identified all data (e.g., consent forms, video recorded group sessions) supplied by participants. As is

standard for group treatments, FC groups spent time at the beginning of group sessions discussing the importance of confidentiality as it related to other group members. Furthermore, group members were advised to not disclose personal information about themselves that they considered deeply personal during group. Meanwhile, all de-identified research data has been, and is still being, stored in Rutgers Qualtrics system.

Six individuals served as Family Connections leaders for the six groups. Of these six facilitators, four were graduate student clinicians (including this author), and two were trained family members. As such, the six FC groups at Rutgers were led by various combinations of these individuals. Specifically, this author conducted five of the six groups.

Measures

To note, all measures described below were administered at pre-treatment, mid-treatment (i.e., six weeks), post-treatment (i.e., twelve weeks), and three-month post-treatment.

Depression. The Beck Depression Inventory—Second Edition (BDI-II; Beck, Steer, & Brown, 1996) contains 21 questions assessing depressive symptoms experienced over the past two weeks and is administered as a self-report measure, with each item scored on a scaled value between zero and three (e.g., assessing the symptom of “Sadness,” possible item choices include: “I do not feel sad,” “I feel sad much of the time,” “I am sad all the time,” and “I am so sad or unhappy that I can’t stand it”). The BDI-II has been positively correlated with the Hamilton Depression Rating Scale, showing good agreement. Additionally, the BDI-II has been indicated as having a high one-week, test–retest reliability ($r=.93$). Such findings suggested the BDI-II was not overly sensitive to daily variations in mood (Beck, Steer, & Brown, 1996). Good internal consistency was achieved in the present study, with Cronbach's $\alpha= 0.87$ to 0.89 .

Burden. The Burden Assessment Scale (BAS; Reinhard, Gubman, Horwitz, & Minsky, 1994), developed by Reinhard and Horwitz, contains 19, Likert-scaled items capturing both objective and subjective consequences of providing ongoing care to the seriously mentally ill and distinguishes burden from the measurement of the ill relative's disruptive behaviors and the family's caregiving activities. The measure is administered as a self-report measure and assesses the extent of one's experiences with burden over the past six months. Sample items include: "I cut down on leisure time" and "I felt trapped by my caregiving role." This measure was shown to have good to excellent internal consistency amongst various timepoints in this study, with Cronbach's α ranging between 0.88 and 0.94.

Anger. The State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988) examines various areas of anger and traits of experiencing anger, wherein participants are asked to respond to 44 items using a four-point, Likert scale. The STAXI is composed of six scales: State Anger, Trait Anger, Anger-In, Anger-Out, Anger Control, and Anger Expression. Sample items include those such as: "I boil inside, but I don't show it," "I say nasty things," and "I feel like breaking things." Normative data on the STAXI were based on a sample of more than 9,000 subjects, including adolescents, college students, and adults. High internal consistency was found for the STAXI in this dissertation study ($\alpha=0.91$ to 0.93).

Grief. The Grief Scale (Struening et al., 1995) is comprised of 15 items that assess current feelings of grief associated with having a relative with mental illness. Participants rate items based on a five-point, Likert scale ranging from "never true" to "always true," with sample items including: "I feel like, in some ways, I have lost the person I once knew" and "I feel sad when I compare my relative to others his/her age." This self-report questionnaire demonstrated excellent internal consistency at all timepoints in the present study ($\alpha=0.92$ to 0.95).

Positive and Negative Affect. The Positive and Negative Affect Schedule—Expanded Form (PANAS-X; Watson & Clark, 1994) contains 60 items (e.g., “jittery,” “proud,” “downhearted”), including two subscales of Positive Affect and Negative Affect, in addition to 11 specific affects (Watson & Clark, 1994). The psychometric properties of the PANAS-X have been relatively well-researched, and the measure has consistently been identified as a reliable and valid measure of positive and negative affect (Crawford & Henry, 2004; Watson, Clark, & Tellegen, 1988). The Positive Affect subscale demonstrated somewhat higher internal consistency than the Negative Affect subscale, with $\alpha = 0.89$ between 0.94 and $\alpha = 0.88$ between 0.93, respectively.

DBT Skills Use. The DBT-Ways of Coping Check List (DBT-WCCL; Neacsiu, Rizvi, Vitaliano, Lynch, & Linehan, 2010) is a 59-item, self-report questionnaire developed to measure the use of both DBT skills and dysfunctional, non-DBT coping strategies over the previous month. To minimize potential response bias, DBT-specific language and terms have been avoided. Respondents rate items from zero (“never use”) to three (“always use”). The DBT-WCCL includes two subscales: the Dysfunctional Coping Subscale (DCS), which assesses for dysfunctional coping strategies (e.g., “refused to believe that it had happened”), and the DBT Skills Subscale (DSS), which examines use of DBT skills as coping strategies (e.g., “tried to get centered before taking any action”). The DBT-WCCL has demonstrated adequate test-retest reliability ($r = .71$) and sensitivity to receiving DBT skills training (Neacsiu et al., 2010). The DSS subscale demonstrated higher internal consistency than the DCS subscale, with $\alpha = 0.93$ between 0.96 and 0.84 between 0.86, respectively.

Relationship to Loved One. The Dyadic Adjustment Scale (DAS-7; Spanier, 1976) was used to assess whether relationships improved between family members and their mentally ill

relatives. Of significance, an abbreviated version of the DAS was used, which utilized a total of seven items. Three items were rated along a six-point, Likert scale from zero (“always disagree”) to five (“always agree”), while three other items were also rated along a six-point, Likert scale from zero (“never”) to five (“more often than once a day”). Meanwhile, the seventh and last item, measuring degree of happiness, was rated on a seven-point, Likert scale between zero (“extremely unhappy”) and six (“perfect”). Of significance, the DAS’ original text was modified to examine relationships with “relatives” instead of romantic partners, as the DAS was originally designed to assess marital relationships. Thus, sample items asked participants: “What is the approximate extent of agreement or disagreement between you and your family member regarding amount of time spent together”, “How often do you and your family member calmly discuss something together,” and “What is the degree of happiness, all things considered, in your relationship with your family member?” Overall reliability of the DAS has been indicated as $r=.96$ (Spanier, 1976; Sharpley & Cross, 1982). The DAS demonstrated good internal consistency in the present research (α ranging between 0.82 and 0.91).

Data Analysis

Descriptive analyses were used to calculate the mean and standard deviation from all seven measures completed by group participants at each of the four timepoints (i.e., pre-treatment, mid-treatment, post-treatment, and three-month post-treatment). As levels of change in outcome variables between pre-, mid-, post-, and three-month follow-up assessments were the main area of interest, data was statistically analyzed using hierarchical linear modeling (HLM). Using HLM analysis allows for better control of within-person differences and better accounts for missing data from dropouts compared to other statistical methods. To clarify, two sets of

analyses were run in this study. The first set compared pre-treatment and post-treatment levels of change, while the second compared pre-treatment and three-month post-treatment differences.

Non-parametric correlations were also conducted to assess whether changes in depression, burden, anger, grief, positive affect, negative affect, DBT skills use, and dyadic relationships correlated with the structure of FC group leadership (i.e., groups led solely by graduate students versus groups led by one graduate student and one family member).

Chapter IV: Results

Demographic characteristics of this sample are summarized in Table 1. The total number of research participants was 64 adults ($M_{age} = 54.97$, $SD = 12.49$, range 25—75). The predominantly female sample ($n = 43$, 67.2%) reported White (84.4%), Hispanic (3.1%), Black (4.7%), Asian (9.4%), and multiple racial and ethnic backgrounds (1.6%). The majority of the sample was employed full-time (59.4%), while 20.3% of the sample was unemployed, with 10.9% of the sample working part-time and 7.8% of the sample working as volunteers. Nearly half the sample (48.4%) earned more than \$100,000 per year, with 10.9% of the sample earning between \$40,000 and \$49,999 per year. The majority of the sample identified as parents (79.7%) of those diagnosed with BPD and/or emotion dysregulation, while 12.5% of the sample identified as partners (e.g., spouses, boy/girlfriends) and 7.8% of the sample identified as children of those diagnosed with BPD and/or experiencing emotion regulation difficulties. In terms of group leadership, 68.8% of the sample participated in FC groups led by a graduate student in clinical psychology and trained family member, and 31.3% of the sample participated in FC groups led by two graduate students.

Table 1.
Demographic Characteristics

Demographics	(n=64)
Age (years)	<i>M</i> =54.97 (<i>SD</i> =12.49)
Gender	
Female	67.2%
Male	32.8%
Ethnicity	
White	84.4%
Hispanic	3.1%
Black	4.7%
Asian	9.4%
Multiracial	1.6%
Employment Status	
Full-time	59.4%
Unemployed	20.3%
Part-time	10.9%
Volunteers	7.8%
Income	
\$100,000+	48.4%
\$99,999 - \$50,000	31.3%
\$49,999 - \$40,000	10.9%
<\$40,000	9.4%
Relationship to Loved One	
Parents	79.7%
Partners	12.5%
Children	7.8%
Group Leadership	
Graduate Students + Family Members	68.8%
Graduate Students	31.3%

Attendance and dropout data for this dissertation research has been organized in Table 2.

Attendance information for the second FC group, which totaled eight people, is missing as a

result of an administrative error and was thus not included in the following calculations. Overall, research participants attended 82.78% of sessions held, averaging about 9 groups per participant with a standard deviation of 2.70 groups. The minimum number of groups attended by any participant was two, with the maximum being 12—the full course of Family Connections. Eight family members participated in the full twelve sessions of FC. Meanwhile, eight participants dropped out of this study. Dropouts attended approximately three groups on average with a standard deviation of 1.27 groups. At a minimum, they attended two groups with a maximum of five sessions attended.

Table 2.

Attendance and Dropout Data

FC Group	<i>n</i>	Dropout Rate	Overall Attendance Rate*
Group 1	13	0% (<i>n</i> = 0)	88.46%
Group 2	8	12.5% (<i>n</i> = 1)	**
Group 3	10	10% (<i>n</i> = 1)	74.07%
Group 4	11	27.27% (<i>n</i> = 3)	91.66%
Group 5	12	25% (<i>n</i> = 3)	80.55%
Group 6	10	0% (<i>n</i> = 0)	79.16%
Total*	56	14.29% (<i>n</i> = 8)	82.78%
			<i>M</i> = 9.32 groups
			<i>SD</i> = 2.70 groups
* Excluding dropouts			
** Group 2 attendance data missing as a result of administrative error			

In terms of changes over time, overall, results yielded statistically significant levels of change for all variables examined from pre- to post-assessment (Table 2). Findings from the present study have been categorized by the five aims of this dissertation. They are further explicated below.

Table 3.

Descriptive Statistics

Measure	Pre Mean (SD)	Mid Mean (SD)	Post Mean (SD)	Three Month Post Mean (SD)
BDI-II	11.08 (8.90)	9.65 (8.97)	6.89** (6.94)	7.27* (7.60)
WCCL				
Dysfunctional Coping Subscale	1.36 (0.47)	1.29 (0.45)	1.17** (0.41)	1.06** (0.41)
DBT Skills Subscale	1.81 (0.48)	1.86 (0.50)	2.07** (0.50)	1.95 (0.46)
PANAS				
Negative Affect	24.57 (9.36)	23.38 (8.44)	19.83** (7.06)	20.88** (7.97)
Positive Affect	30.92 (8.14)	31.83 (8.06)	33.39* (8.81)	31.60 (7.42)
DAS	15.14 (6.63)	16.40 (7.05)	16.78 (7.22)	17.07 (7.19)
BAS	54.12 (12.31)	44.59** (11.33)	40.68** (10.56)	43.17** (13.63)
Grief Scale	52.38 (14.50)	48.23* (13.58)	44.39** (12.92)	44.26** (11.82)
STAXI				
State Anger	16.38 (7.27)	15.25 (8.14)	12.46** (3.89)	13.24* (6.04)
Anger Expression	46.73 (9.21)	44.97 (8.61)	42.93** (7.92)	43.18* (7.53)

**p<.001, *p<.01, p<.05

The first aim was to determine whether participation in FC was associated with a reduction in various forms of negative emotionality. Findings demonstrated significant decreases in depression ($p<.001$), burden ($p<.001$), grief ($p<.001$), and negative affect ($p<.001$), with significant reductions in state anger ($p<.001$) and anger expression ($p<.001$) at post-treatment. Three months following the end of FC, compared to baseline, significant decreases were found in burden ($p<.001$), grief ($p<.001$), and negative affect ($p<.001$), in addition to depression ($p=.002$), state anger ($p=.004$), and anger expression ($p=.004$). Additionally, by comparing mid-treatment

results to baseline, analyses determined that only burden ($p<.001$) and grief ($p<.01$) levels had significantly improved during the first six weeks of group. Figures 1 and 2 visually depict findings for burden and grief at all four timepoints.

Figure 1.
Means of BAS

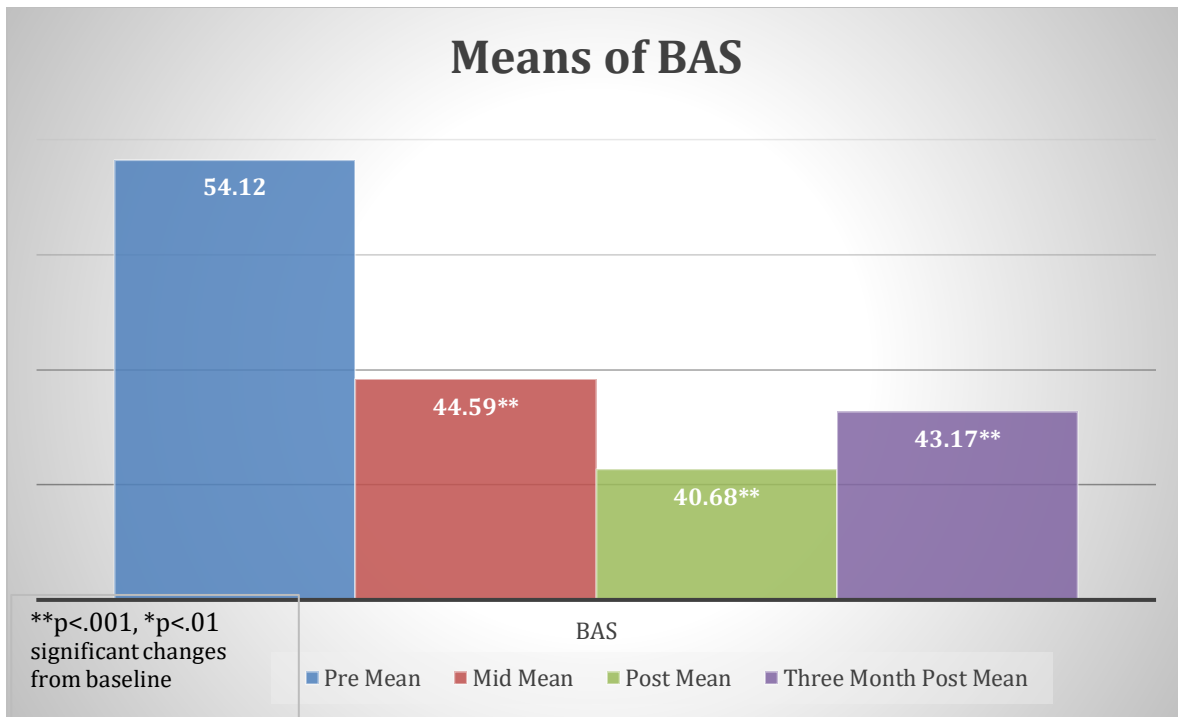
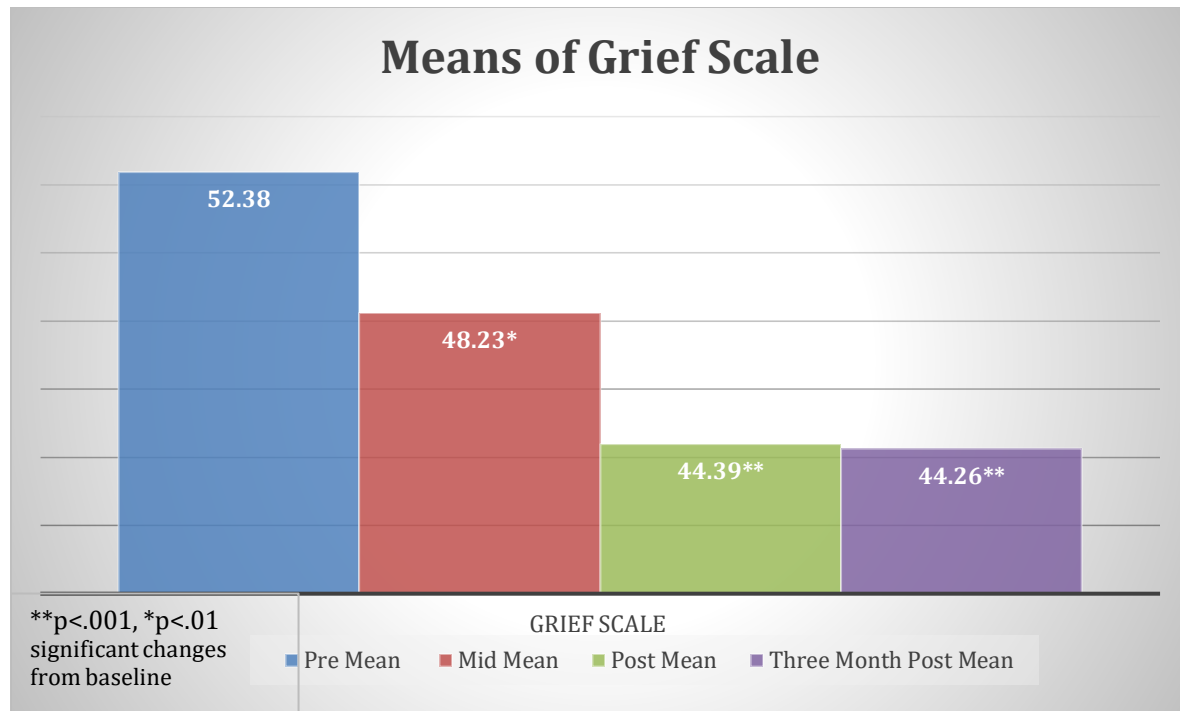


Figure 2.
Means of Grief Scale



Regarding the second aim, positive affect was significantly higher following the immediate completion of FC compared to baseline levels ($p=.01$). However, such gains were not maintained, as scores on the Positive Affect subscale of the PANAS-X at 3-month follow-up were not significantly different from baseline.

The study's third aim examined participants' breadth and use of skillful coping mechanisms following a course of FC using the DBT-WCCL. While significant increases on the DBT Skills Subscale were found at post-treatment ($p<.001$), they were not maintained at the three-month post-treatment mark. Meanwhile, family members' engagement in dysfunctional coping strategies were significant at both post- and three-month post-treatment timepoints ($p<.001$) on the Dysfunctional Coping Subscale of the DBT-WCCL.

In terms of feeling satisfied in their relationships with their loved one, results on the DAS indicated family members experienced significant increases ($p=.038$) by the end, but not three

months following, their respective FC programs. This result suggests some level of increased interpersonal strain that occurred during the follow-up period.

Regarding group leadership, this dissertation study's final aim, non-parametric correlations did not find any significant differences in treatment outcomes between groups run by two graduate students versus groups run by one graduate student and one FC-trained family member.

Chapter V: Discussion

Although Borderline Personality Disorder can greatly impact one's interpersonal functioning more generally, it tends to affect familial and other meaningful relationships in more salient ways. At the extreme, those suffering from difficulties stemming from BPD may be estranged from their family members, with few other supports in place, if any. Yet, few studies have been conducted on interventions for families with a loved one suffering from BPD, with only four studies published on Family Connections to date. Overall, stigma towards BPD in scientific research has resulted in an extremely small number of studies examining BPD prognosis compared to, for example, Schizophrenia and Bipolar Disorder (Fruzzetti & Boulanger, 2005). Family members of those with BPD have indeed been a neglected population.

Given that personality disorders occur in the context of relationships and families can be conceptualized as complex systems in-and-of-themselves, it is imperative to implement a systems-level approach to treating BPD. Although psychotherapy for the individual with BPD has traditionally been recommended as the main intervention, Dixon et al.'s (2001) research on evidence-based family interventions found that families have benefited the most from psychoeducation that disseminates basic information, provides ongoing support, and teaches

techniques for living with the illness. Thus, this dissertation research on one such evidence-based family intervention (i.e., FC) is important. It advances both the scientific literature and clinical support of FC to better serve those impacted by the public health challenges of BPD, as publicly funded health systems struggle to balance effective interventions for this complex, challenging-to-treat illness with limited clinical and financial resources.

This dissertation study was the first in the FC literature to expand outcome variables to include whether FC participation had been affiliated with significant changes in: positive and negative affect, anger, dyadic functioning, and use of adaptive versus dysfunctional coping strategies, as no prior published FC studies have assessed such mental health outcomes. At the same time, the current research extended prior FC studies that examined depression, burden, and grief. This dissertation also expanded the methodology of FC research by incorporating the use of mid-treatment assessments, which allowed this author to examine whether participants had reported any significant improvements after attending the first half of the FC course. With initial results revealing only notable changes at midpoint on measures of burden and grief, findings suggest that participation throughout the full course of FC may be necessary to achieve positive effects. Such outcomes additionally provide a starting point from which to test subsequent hypotheses that can enhance the future efficacy of Family Connections (discussed further in “Future Directions and Conclusions”).

Overall Aims

Several aspects of family members’ well-being improved significantly from pre- to post-FC participation. Statistically significant levels of change were found for all variables examined, specifically: decreases in depression, burden, grief, negative affect, state anger, and anger expression, and increases in positive affect, skillful coping, and relationship satisfaction. Thus,

this study contributed further support to the literature that Family Connections is an empirically-supported community intervention for loved ones of those experiencing emotion regulation difficulties (Hoffman et al., 2005; Hoffman, Fruzzetti, & Buteau, 2007; Rajalin et al., 2009; Flynn et al., 2017).

The first aim explored negative emotionality of different types. Findings demonstrated significant decreases in depression, burden, grief, and negative affect, with significant reductions in state anger and anger expression at post-treatment. Of these variables, three have been consistently researched by all four prior studies on FC: depression, burden, and grief.

Former FC research has shown mixed data for the decrease of depressive symptoms, with half of the studies finding a lack of statistical significance for change in depression (Hoffman et al., 2005; Flynn et al., 2017). Unlike these two studies, this study replicated findings from Rajalin, Wickholm-Pethrus, Hursti, & Jokinen (2009) and Hoffman, Fruzzetti, & Buteau (2007), in which depression levels significantly decreased from pre-to-post FC. Meanwhile, all FC studies have shown significantly larger reductions from pre- to post- for experiences of burden and grief for family members, which current research similarly found—the sole exception being Rajalin, Wickholm-Pethrus, Hursti, & Jokinen (2009), as burden was assessed but not grief.

Meanwhile, three-month post results of this dissertation demonstrated that, compared to baseline, significant decreases were found in burden, grief, and negative affect, in addition to depression, state anger, and anger expression. Present findings are consistent with the FC pilot study conducted by Hoffman et al. (2005), in which decreases in burden and grief were also maintained three months following FC. It is possible that particular topics taught (e.g., “Observing Limits,” “Setting Relationship Priorities,” “Relationship Mindfulness”) highlighted participants’ experiences of subjective burden and grief that may not have been in their complete

awareness, while accompanying practice assignments encouraged the use of DBT skills to care for their own needs in ways that ultimately ameliorated overall burden and grief.

Regarding the second aim, positive affect was significantly higher following the completion of FC compared to baseline levels. However, significant increases from baseline were not found on the Positive Affect subscale of the PANAS-X three months after FC participation. Despite three-month follow-up results, this study differed from other FC trials by providing a pilot study of FC's impact on positive affect.

The third aim examined breadth and use of skillful coping mechanisms following a course of FC using the DBT-WCCL. While significant increases on the DBT Skills Subscale were found at post-treatment, they were not maintained at the three-month post-treatment mark. Meanwhile, family members' engagement in dysfunctional coping strategies were significant at both post- and three-month post-treatment timepoints on the Dysfunctional Coping Subscale of the DBT-WCCL.

As for the fourth aim, results on the DAS indicated family members had experienced significant increases in their relationship satisfaction with their loved one at the end of their respective FC groups but not three months following. Unfortunately, it is unclear how to interpret this trend, as it is impossible to accurately classify potentially higher levels of conflict as either: more instances of conflict organically occurring or the same levels of conflict occurring but with poorer coping that ultimately led to worse interpersonal outcomes. Similarly to positive affect, although gains were not maintained for either skillful coping or relationship satisfaction, this dissertation has nonetheless contributed some initial findings from which future researchers can replicate and extend.

Lastly, the fifth aim focused on determining whether the status of FC group leadership, either graduate student or family member, influenced differences in treatment outcomes.

Findings from the current study did not reveal any significant correlations in group leadership.

Despite not being able to make conclusions about the mechanisms of change behind this community-based intervention, this research has nonetheless strengthened our understanding into Family Connections. It examined new outcomes for family members, utilized mid-treatment assessments, included analyses to examine the effects of group leadership, and discovered that progress observed following FC significantly weakens three months after the end of group. Based on present findings, this research study asserts that major improvements must be made to the Family Connections program that addresses the time period following group graduation in order to better maintain family members' gains and successes. Such implications are elaborated further in "Future Directions and Conclusions."

Limitations

First and foremost, this dissertation study was an uncontrolled trial. Given that there was no control group in this study, results should be interpreted with caution, as changes in family members' well-being cannot be attributed solely to their engagement in FC. Thus, causal conclusions cannot be drawn from this research and other explanations for changes (e.g., regression toward the mean) cannot be ruled out. Furthermore, this study was also limited by incomplete data for 8 dropouts out of 64 total participants. The small sample size itself likely contributed to the low statistical power found in this study.

Further limitations include the sample's lack of diversity, which makes it difficult to generalize such research findings, as the majority of people in this study belonged to a higher socioeconomic status and identified as White parents of a loved one with BPD. Additionally, no

fidelity measures have yet been developed for FC as of the present research. As such, findings derived from the six groups at Rutgers may not reflect FC groups held across the greater community, let alone those run in other countries. The sole use of self-report measures, which may be biased by emotional feelings at the time of completion, also narrowed the scope of this dissertation's research. Lastly, results were limited by the fact that information had not been collected as to whether the BPD loved one had been in treatment simultaneously to their family member participating in FC. If gathered, such accompanying information may have revealed early implications of the Family Connections Program on the emotionally dysregulated individual.

Future Directions and Conclusions

Results of the present research demonstrated stronger efficacy levels of Family Connections for post-treatment than three-month post. This discrepancy is crucial to note for both ongoing FC research and the overall improvement of the FC program for future generations of family members. It is clear that changes to FC are necessary to best maintain the learning and gains that family members accomplish throughout their involvement in FC. It is possible that with the addition of "booster sessions," groups held after the 12th and final group of the program with increasingly more time in between them, family members' understanding of DBT skills would deepen, crystallize, and be better implemented in daily life. Alternatively, the provision of "FC graduate groups" (for those interested in honing their skills) may better ensure that treatment outcomes last for a longer duration of time. Future FC research may also explore the impact of increasing the total amount of FC sessions held in one cycle: would a FC group consisting of 15 groups total have more positive sustainment over time than the standard 12-week format?

Future research should also test hypotheses that could explain the trend of undesirable outcomes being upheld over a three-month follow-up period (e.g., depressive symptoms, anger) and more desirable outcomes not being sustained (e.g., positive affect, relationship satisfaction). Results gleaned from mid-treatment analyses indicated positive benefits for only burden and grief, suggesting that the latter half of FC, which includes the bulk of DBT skills acquisition, may be more helpful than the first half, which more so involves sharing one's narrative/journey thus far and learning psychoeducational material (e.g., symptoms of BPD, available treatments for BPD). Thus, at the present time, it appears that learning about and using DBT skills is quite helpful for family members, but it is still not clearly understood how more formal DBT helps or by how much.

Relatedly, only by evaluating Family Connections in comparison to an alternative control condition can the extent of its true impact be measured. If FC is compared to one or more control conditions, the relative impacts of its psychoeducational versus skills teaching versus social support components could be better understood, distinguished, and strengthened. It is imperative that a second randomized controlled trial on FC be conducted, if not many more, to better apprehend changes in people's well-being following this community-based program.

Given that the transactional model is a theoretical underpinning of FC, positive effects for the BPD loved one are anticipated following their family members' involvement in Family Connections (Hoffman, Fruzzetti, & Buteau, 2007). If family members learn to: manage their impulses more effectively, find more balance cognitively and emotionally, reduce negativity and judgmental thinking, and validate their loved ones more skillfully, it is hoped that the loved one with BPD would also show improvements in their mental well-being. Yet, to this author's knowledge, no research to date has evaluated such outcomes. Future research must consider

examining any impacts occurring in the individual with BPD when their family member(s) participate in Family Connections, as it is plausible that, for example, people with BPD would report receiving higher levels of validation as their family progresses through twelve weeks of FC acquiring various skills (e.g., noticing invalidating, judgmental comments as they arise; validating in a variety of styles). As a result, the individual with BPD may perceive others to better understand the extent and depth of their pain and suffering, thereby fostering an increased sense of connection between them and their parents, partners, spouses, children, co-workers, employers, etc.

Moreover, this dissertation research supports the portability of the Family Connections program, as treatment outcomes did not appear to significantly differ based on group leadership (i.e., two graduate students versus one graduate student and one trained family member). This is remarkable, as current findings suggest that interested, committed, and well-trained individuals can lead FC no matter their prior level of knowledge regarding BPD or DBT. This indisputable advantage of Family Connections thus allows NEABPD to flexibly recruit additional group leaders with more ease than psychoeducational/support groups run solely by professional staff. Given that Flynn et al.'s (2017) study in Ireland showed comparable results to FC studies conducted in the United States, this author surmises that Family Connections is consistently beneficial for those who join—independent of location. It is strongly encouraged that further research on FC explicitly test such hypotheses, evaluating mediating effects that the composition of group leadership and location may potentially have on treatment outcomes.

In conclusion, this dissertation study adds to the existing literature that participation in Family Connections affords various mental health benefits for family members of loved ones struggling with Borderline Personality Disorder and/or emotion dysregulation, demonstrating

that the Family Connections Program is a community-based intervention worth continuing to fund, strengthen, and implement. Given the complexity of treating BPD, opportunities to approach treatment from multiple perspectives is likely to be associated with positive outcomes for struggling clients and family members. This present study supported and expanded previous research prompting family members to participate in Family Connections, while encouraging clinicians and clients alike to involve cherished individuals to the person with BPD in treatment, progress, and growth.

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