



Caring in the Shadows: Emotional and Caregiving Challenges Faced by Families of Individuals in Coercive Controlling Groups and Relationships

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Accepted: 17 June 2025
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Abstract

Purpose Studies on families of individuals experiencing coercive control have generally considered them as informants or supporters, often overlooking their own difficulties and needs. Evidence from other areas highlights the importance of acknowledging family emotions and caregiving experiences, emphasizing their impact on family mental health and the progression of their relatives' condition. This study aimed to explore the emotional and caregiving challenges faced by family members and friends of individuals in coercive controlling groups and relationships, along with their associations with distress, well-being, and mastery.

Methods Using data from the *Family Caring Survey*, a quantitative study investigating family members' experiences and needs, we examined the factor structure, internal reliability, measurement invariance across gender, and criterion-related validity of the Family Questionnaire (FQ) and the Brief Experience of Caregiving Inventory (BECI) in a convenience sample of 264 family members of individuals in coercive controlling groups or relationships.

Results Interpretable and well-fitting factor structures emerged for both the FQ (intense emotional expression, over-concern, critical comments, monitoring) and BECI (stigma, difficult behaviors, positive personal experiences). Families face substantial emotional turmoil and caregiving challenges, significantly related to distress, anxiety, depression, and lower mastery. Stigma and Intense Emotional Expression were notably linked to poorer mental health outcomes. Strong ties existed between Difficult Behaviors and Critical Comments, both strongly associated to potential family separation. Gender differences in caregiving experiences and expressed emotion were mostly nonsignificant, though women exhibited a slightly heightened Over-Concern.

Conclusions The findings provide insights to understand the unique challenges these families face, underscoring the importance of developing family-based intervention programs and enhancing support for a population traditionally marginalized in scientific literature.

Keywords Expressed emotion · Caregiving · Family measures · Coercive control · Abusive groups · Intimate partner violence · Informal supporters

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Clinical reports and a limited body of research provide consistent evidence of the profound disruptions that occur within families when one of their members becomes entangled in a coercive controlling relationship (Goldberg & Goldberg, 1989; Gregory et al., 2017). Power and control strategies, especially those that dominate others and restrict their beliefs, attitudes, and behaviors, have been extensively studied and found to be common across a range of exploitative relationships and victimization experiences (Rodríguez-Carballeira et al., 2013). A coercive control framework, as evidenced by Duron et al. (2021), reveals a pattern of strategies utilized by perpetrators to assert and maintain dominance over their victims. Among these tactics, one of the most significant is the deliberate effort to weaken or sever existing social connections, particularly with family members and friends, as a means of isolating individuals from their support networks (Stark, 2007). This isolation can manifest physically, such as through geographical relocation, or emotionally through manipulation and distancing (Rodríguez-Carballeira et al., 2013). However, the impact of these strategies on the family and friends of individuals in coercive controlling relationships has been inadequately explored in empirical research (Gregory et al., 2021). To address this research gap, we adapted and applied established research methodologies from the study of caregiving experiences and expressed emotion (O'Driscoll et al., 2018; Szmukler et al., 1996; Wiedemann et al., 2002) to examine families and friends of individuals victimized by coercive control.

Coercive Controlling Groups and Families

A widely accepted definition of cults, high-demand, totalitarian, controlling or abusive groups (Langone, 1992) describes them as any social group or movement of any kind exhibiting a great or excessive devotion or dedication to a person, idea, or thing and employing unethically manipulative persuasion and control practices designed to restrict freedoms and advance the goals of the group's leaders, to the actual or possible detriment of members, their families, or the community (West & Langone, 1986). As Lalich (1997) explains, cultic relationships involve profound power imbalances, deception, and exploitation, leading to significant harm. Coercive control is not limited to groups but can also occur in one-on-one relationships, such as coercive pseudotherapeutic contexts and intimate partner relationships. Among various predatory victimization experiences that have been examined (Duron et al., 2021), coercive groups and intimate partner violence share key dynamics, including manipulation, isolation, and control over autonomy (Rodríguez-Carballeira et al., 2015). In both contexts, abuse

is typically inflicted by individuals who hold emotional significance to the victim (Almendros et al., 2011), with the goal of submission, unlike abuse in the workplace or school, where the primary aim is exclusion (Rodríguez-Carballeira et al., 2013). This highlights the need to study both group-level and individual relational control.

A growing body of scientific research has extensively documented psychologically abusive behaviors prevalent within group contexts (Almendros et al., 2011; Saldaña et al., 2017). Moreover, researchers have identified significant mental health and psychosocial adjustment problems experienced by both current members and survivors of such abusive group settings (Antelo et al., 2021; Matthews & Salazar, 2014). These issues often stem from psychological distress caused by group-induced humiliation, intimidation, and exploitation, along with directives and practices that disrupt relationships with family members, friends, and other social connections. Given the substantial yet often overlooked impact on these families, Schwartz (1986) characterized them as "hidden victims" (p. 190), emphasizing the need for more research to understand their unique challenges and needs.

The limited literature on families of individuals involved in abusive groups has primarily focused on two aspects. First, some studies have explored their possible instrumental role in either facilitating their loved one's entry into or exit from such groups. Family deprivation theory links conversions to dysfunctional family patterns (Wright & Piper, 1986), with some arguing that these groups fill needs unmet by families (Curtis & Curtis, 1993). However, solid evidence for these claims is lacking. Clinical experience and research findings indicate that individuals who join these groups often come from "normal" families (Almendros et al., 2010; Singer & Lalich, 1995). On the other hand, families play a pivotal role in members' decision to leave these groups (Almendros et al., 2009; Rousselet et al., 2017), with parental disapproval as a major dropout factor (Wright & Piper, 1986).

Second, other studies have taken them as key informants about the practices and the processes associated with involvement in these groups (Castaño et al., 2022; Sullivan, 1984). Sullivan (1984) surveyed 105 relatives of abusive group members and identified psychological control, authoritarianism, and isolation as defining characteristics of these groups. Families perceived negative effects such as a restrictive lifestyle, family separation, loss of critical thinking, and economic exploitation, with psychological control being particularly distressing. A more recent study by Castaño et al. (2022) with 100 relatives of cult members, identified early warning signs of cult conversion, which included distancing from loved ones, behavioral changes (e.g., emergence of violent behavior), and emotional shifts, among other factors.

Family members of individuals involved in abusive groups often experience a range of emotional reactions. Schwartz (1986) conducted studies with samples of 15 and 58 relatives and reported that parents' responses included anxiety, worry, fear, confusion, shock, disbelief, helplessness, sadness, panic, and terror. These intense emotions are sometimes compounded by feelings of rejection and resentment toward their child (Ross & Langone, 1988). Similarly, Goldberg and Goldberg (1989) noted four predominant emotions in most families, namely, guilt, anger, anxiety, and sadness, with guilt being a particularly common and paralyzing problem among relatives according to Hassan (1988). Beyond these emotional responses, Goldberg and Goldberg (1989) outlined several stages that families of young adults involved in abusive groups often navigate: ignorance or denial, recognition, exploration, and action. These stages illustrate the gradual process families undergo in recognizing and responding to changes in their loved ones (Bardin, 2002). Initially, they may attribute these changes to more common explanations (Goldberg & Goldberg, 1989), deny undesirable events (Hassan, 1988), or lack understanding of how these groups function (Singer & Lalich, 1995).

Until the turn of the century, most people seeking assistance from specialized mental health professionals were abusive group members' parents, spouses, or close friends (Langone, 1990, 2019), few of whom had ever belonged to an abusive group (Ross & Langone, 1988; Schwartz, 1986). In recent decades, however, most persons entering the cult help network have been former group members (Langone, 2019). Moreover, while early researchers primarily focused on those who joined groups in late adolescence or adulthood, i.e., first-generation abusive group members (FGA), some scholars in the last two decades have examined problems faced by individuals born and/or raised in abusive groups, i.e., second-generation adults (SGA - Furnari, 2005; Goldberg, 2006; McCabe et al., 2007) and individuals whose parents, or even older generations, were raised in these groups as well, i.e., multiple-generation adults (MGA) (Aebi-Mytton, 2017). Both individuals born into or raised within abusive groups (M/SGA) and those who joined as adults experience significant emotional and interpersonal difficulties. Although current instruments may not distinguish the differences in abusive practices endured by these groups, the impact appears to be more severe in M/SGAs (Aebi-Mytton, 2017; Furnari, 2005; Goldberg, 2006; Matthews & Salazar, 2014; McCabe et al., 2007; Whitsett & Kent, 2003). Findings indicate that SGAs exhibit greater symptoms, including distress, anxiety and depression, and face greater emotional challenges such as grief, loss, fear, shame, despair, rage, and low self-esteem (Saldaña et al., 2019), as well as lower social functioning, than FGAs do (Antelo et al., 2021). Members of abusive groups experience

stunted or damaged parent-child emotional bonds, intimate partner relationships, or friendships (Coates, 2010; Whitsett & Kent, 2003) because loyalty and commitment to the group leader/s are paramount (Schwartz, 1986). Once out, individuals raised in abusive groups, in addition to lacking the skills demanded by an unfamiliar world, very often must address the complete or partial loss of friends and family ties (Matthews & Salazar, 2014). Furthermore, an understudied population comprises individuals who have left abusive groups, whether FGA or M/SGA, and remain concerned for their still-involved loved ones.

The study by Castaño et al. (2022), which examined the experiences of family members with loved ones involved in cultic groups, revealed a significant negative impact on their lives. Family members frequently reported suffering from anxiety, depression, trauma, and fear, among other health-related issues, followed by experiencing family breakdown and losing contact with their loved ones. Conflicts with in-group relatives were also common, reported as disputes, rejections, hatred, and manipulation. Additionally, many family members receive little or no assistance due to the lack of societal awareness and specialized mental health professionals or helping resources (Almendros et al., 2009; Castaño et al., 2022; Langone, 1990; Matthews & Salazar, 2014). This lack of understanding from professionals in various disciplines often leads to misinterpretation of the family's reactions as pathological (Baamonde, 1991). Furthermore, psychological stress in those close to abusive group members can negatively affect relationships with relatives. However, when family members respond constructively by staying connected, building trust through appropriate communication, and avoiding criticism (Bardin, 2002; Goldberg & Golberg, 1989), they are better equipped to help their loved ones reassess their group membership (Hassan, 1988; Langone, 1990) or maintain a relationship despite differing views on their involvement.

Appraisal of Caregiving Experiences and Expressed Emotion

Recent studies have increasingly examined the role of emotions and relationships within families. The Expressed Emotion (EE) model evaluates the attitudes and behaviors expressed by relatives about a family member, serving as an indicator of family stress and a predictor of outcomes in various psychiatric disorders (Wearden et al., 2000). EE is linked to caregiving experiences and psychological distress (Barrowclough & Parle, 1997; Zabala et al., 2009), with evidence suggesting a bidirectional relationship between EE and negative caregiving elements (Anastasiadou et al., 2014). Findings also indicate that family dynamics influence

the evolution of a problem/dysfunction/disease (Wearden et al., 2000).

The constructs of Expressed Emotion and caregiving experiences have primarily been studied in the context of schizophrenia, with a focus on the impact of family dynamics on the progression of this mental illness. Researchers have developed various objective tools to assess these family-related factors, enhancing understanding of how familial interactions influence schizophrenia outcomes (Szmukler et al., 1996; Vaughn & Leff, 1976). This relationship between family variables and clinical outcomes extends to other mental health conditions as well, demonstrating consistent effects across various disorders (Wearden et al., 2000).

The Camberwell Family Interview (CFI), introduced by Vaughn and Leff in 1976, was the first tool developed to assess EE. This interview-based tool is often regarded as the gold standard but has limitations, such as the need for considerable time and specialized training for administration. In response to these challenges, alternative measurement instruments have been devised. A notable alternative is the Family Questionnaire (FQ), designed by Wiedemann et al. in 2002, which provides a more efficient approach to assessing Expressed Emotion (EE). Unlike lengthier interview-based assessments, the FQ is a self-report measure consisting of 20 items, structured into two dimensions: Emotional Over-Involvement (EOI) and Critical Comments (CC), each comprising 10 items. A noteworthy advantage of the FQ is its adaptability to different cultural contexts (e.g., Sepúlveda et al., 2014). Research findings in these diverse contexts have consistently supported the two-dimensional structure of the questionnaire, effectively measuring both EOI and CC, aligning with the CFI classification (Wiedemann et al., 2002), and demonstrating strong psychometric properties across a range of issues. Furthermore, research employing the FQ has revealed gender differences, relationships between EE and various family psychological variables, and the predictive significance of EE for the well-being of caregivers and relatives (Sepúlveda et al., 2014; Zabala et al., 2009).

Regarding the assessment of caregiving experiences, the Experience of Caregiving Inventory (ECI; Szmukler et al., 1996), which has well-established psychometric properties (Sepúlveda et al., 2020; Zabala et al., 2009), stands out. Notably, the ECI is versatile and suitable for assessing caregiving experiences across a wide range of issues, as documented in an extensive body of research (Whalen & Buchholz, 2009). A key strength of the ECI is its incorporation of both positive and negative elements in evaluating caregiving experiences. This feature is particularly significant because these experiences play a crucial role in caregivers' adaptation (Kulhara et al., 2012; Lespine et al., 2023). However, the comprehensive nature of the ECI,

with its 66 items, can render it impractical for application in certain contexts. To address this challenge, a brief version of the ECI, the Brief Experience of Caregiving Inventory (BECI), was developed by O'Driscoll et al. in 2018. The BECI maintains appropriate psychometric properties, similar to the ECI, but it should not be considered a replacement for the original inventory (O'Driscoll et al. 2018). It comprises 19 items categorized into four factors: "Difficult Behaviors," "Positive Personal Experiences," "Problems with Services," and "Stigma/Effects on the Family." Findings from studies using the BECI indicate significant effects of stigmatization, social isolation, and family disruption on caregivers of individuals with severe mental disorders (Lespine et al., 2023). A lack of positive personal experiences has been linked to hopefulness, whereas "Stigma/Effects on the Family" has been associated with caregiver stress and depression (Lespine et al., 2023).

Psychological Distress Indicators Associated with a Loved One's Involvement in Coercive Controlling Relationships

Family members of individuals involved in coercive groups often experience heightened anxiety and depression, significantly impacting their well-being and quality of life (Castaño et al., 2022; Goldberg & Goldberg, 1989; Schwartz, 1986). The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) is a widely used tool for assessing these symptoms across various caregiving contexts (Chan et al., 2018; Sepúlveda et al., 2020; Zabala et al., 2009). Additionally, the General Health Questionnaire (GHQ; Goldberg & Williams, 1988) measures general well-being and has proven effective in detecting psychological distress among caregivers (Sepúlveda et al., 2020; Zabala et al., 2009).

Both anxiety and depression, as well as general well-being, are closely related to the concept of mastery, which reflects the extent to which individuals perceive control over their circumstances. This construct is measured using the Mastery Scale (Pearlin & Schooler, 1978). Consistent evidence suggests that a lack of mastery is associated with increased caregiver burden and distress and has been linked to higher levels of anxiety and depression in response to stress (Chan et al., 2018).

In coercive groups, family members face unpredictable challenges that increase stress and limit coping strategies, reducing their sense of control. Assessing distress through anxiety, depression, well-being, along with mastery, offers insight into their emotional toll and informs interventions to enhance coping and well-being. Given the limited research, integrating these measures is crucial for developing evidence-based support.

Study Purpose

This review suggests that there is a need to empirically study the difficulties, emotional experiences, and stress that family members of people involved in abusive groups or relationships may experience. Families often serve as caregivers for loved ones in coercive and controlling dynamics, yet their own emotional and self-care needs remain underexamined. Evaluating constructs such as expressed emotion and caregiving experiences—well-established in the caregiving literature—represents an important step toward a more comprehensive understanding of family dynamics in these contexts.

Traditionally, research on coercive groups has been limited, often depicting families solely as informants or sources of support for their loved ones while overlooking their own challenges. This study seeks to address this gap by using validated measures to assess family dynamics, distress, well-being, and sense of mastery. Findings from this research have significant implications for mental health providers, as families are often the first to seek psychological support, urgently requesting help for their loved ones and themselves when they suspect coercive group or relationship involvement. However, access to trained professionals remains limited. By examining family dynamics through the lens of expressed emotion and caregiving experiences, this study provides a framework for understanding and addressing the challenges these families face while informing tailored interventions and treatment approaches. It also highlights the need for researchers and mental health professionals to recognize families not merely as peripheral figures but as central to understanding and intervention in coercive control dynamics. Building on this rationale, the present research studied a sample of family members or individuals concerned about a loved one currently or formerly involved in a controlling or abusive group or relationship. The study focused on two specific objectives, each addressing critical gaps in the understanding of caregiving experiences and expressed emotion in this context.

The first objective was to investigate whether the Family Questionnaire (FQ) and the brief version of the Experience of Caregiving Inventory (BECI) are applicable and valid for studying caregiving and expressed emotion among families and friends of individuals victimized by coercive controlling groups or relationships. To achieve this, we examined the factor structure, measurement invariance across gender, and internal consistency of these instruments. In line with this objective, we hypothesized that the FQ and BECI would demonstrate adequate psychometric properties, reflecting the original factor structures of the instruments, achieving gender invariance, and exhibiting satisfactory reliability. These analyses are critical to ensure that these widely used

measures are both reliable and valid in capturing the unique experiences of this population.

The second objective was to examine the relationships between caregiving experiences, expressed emotion, psychological distress, well-being, and sense of mastery. Based on prior research, we hypothesized that expressed emotion (FQ) would correlate positively with the negative caregiving dimensions (BECI) and negatively with the positive caregiving dimension (PPE; BECI). Additionally, we anticipated that expressed emotion and negative caregiving experiences would be positively associated with distress indicators, including anxiety and depressive symptoms (HADS) and general distress (GHQ-12 Negative), while negatively associated with positive caregiving experiences (PPE). We also expected negative associations between expressed emotion and negative caregiving experiences with well-being (GHQ-12 Positive), while positive caregiving experiences (PPE) would correlate positively with well-being. Finally, we hypothesized that expressed emotion and negative caregiving experiences would be negatively related to perceived mastery (Mastery Scale), whereas positive caregiving experiences (PPE) would show a positive relationship with mastery.

By addressing these specific objectives, this study contributes to a deeper understanding of the emotional and caregiving challenges faced by families and friends of individuals involved in coercive control dynamics, providing a validated framework to assess these experiences and their broader psychological implications.

Method

Participants

The study sample included 264 English-speaking participants, predominantly women (74.2%), with an average age of 54.72 years ($SD=15.09$). They were mainly from the U.S. (69.2%), followed by Australasia (8.4%), the U.K. (7.6%), Canada (5.7%), and other countries (9.1%). The participants reported their racial/ethnic background as follows: White (88.9%), White Latin (3.6%), White Jew (2.0%), Black or African American (1.6%), Asian (0.8%), and Mixed Race, Multiracial, or Multiethnic (3.2%). Educational backgrounds varied: 20.5% had completed high school, 40.3% had a bachelor's degree, 28.1% had a master's degree, and 8% had a doctorate. Every participant was related to someone involved in an abusive group or relationship, with the majority (49.8%) concerned about one individual and as many as 33.1% about four or more ingroup relatives. They had to focus on a single person for the questionnaire. The nature of these relationships included parents (29.3%

mothers and 7.2% fathers), children (20.9%), siblings (19%), partners (11.4%), friends (9.1%), and other relatives (3%). These coercive groups were defined as mainly religious (56.7%), pseudotherapeutic (12.2%), or one-on-one partner relationships (8%). Over half (53.1%) of the participants had belonged to the same group or relationships in which their relatives were involved, and 34.7% of all participants were M/SGAs. With respect to their relatives, who were primarily female (65.8%), their average age was 48.5 years ($SD=18.79$). They joined their group/relationship with a mean age of 18.64 years ($SD=14.67$) and stayed there for an average of 20.03 years ($SD=17.47$). Most participants had limited face-to-face contact with these relatives (“none”: 42.6%; “not regular”: 25.1%), with reasons ranging from group-imposed isolation, post-group ostracization, or the COVID-19 pandemic’s impact. In addition, only 19.7% of the participants maintained weekly non-face-to-face communications such as phone or email.

Procedure

The authors use data collected as part of the *Family Caring Survey*, a wider project investigating family members’ concerns, emotional and caregiving experiences, coping strategies, mastery, perceived needs, and distress. The study employed a cross-sectional design, administering an online survey at a single time point. It was approved by the Ethics Committee of the university to which the first author is affiliated (CEI 112–2192). Data were gathered from February to December 2021 via an online survey employing convenience and snowball sampling methods. Most participants were reached through international helping organizations (51%), victim-survivor forums (40.7%), North American and British specialized mental health professionals (3%), and prior study participants (5.3%). Each source shared a unique password for study access. Participants met the inclusion criteria by being family members or friends of individuals currently or formerly involved in a group or relationship they identified as abusive. Exclusion criteria included self-reported insufficient reading or comprehension skills in English. All participants were informed of the study’s goals, assured anonymity, and provided informed consent. Of the 413 survey accesses, 63.92% provided substantial participation, including complete FQ and BECI responses. Items in these tools had “non-applicable” options, which were treated as missing values in the analysis.

Measures

Family Questionnaire (FQ)

The FQ (Wiedemann et al., 2002) is a self-report questionnaire consisting of 20 items, divided into two subscales of 10 items each: Emotional Over-Involvement (EOI) and Critical Comments (CC). Respondents rate items from 1 (*never/very rarely*) to 4 (*very often*), with higher scores indicating greater Expressed Emotion. The FQ was originally developed and standardized in samples of caregivers of individuals diagnosed with psychosis, primarily schizophrenia. In this study, a discussion group comprising three family members and two experts evaluated the clarity, applicability, and relevance of each item for the target population. Based on their feedback, the term ‘illness’ in Item 5 was replaced with “involvement” to better reflect the context (“I keep thinking of the reasons for his/her involvement”). Additionally, Item 6 (“I have to try not to criticize him/her”) was excluded based on these evaluations, reducing the survey to 19 items, each including a “non-applicable” response option (see Supplemental Table 1).

Brief Experience of Caregiving Inventory (BECI)

The BECI (O’Driscoll et al., 2018) was originally standardized in caregivers of individuals diagnosed with psychosis, primarily schizophrenia, to capture both the challenges and positive aspects of caregiving. It comprises 19 items rated on a 5-point Likert scale ranging from 0 (*never*) to 4 (*nearly always*), with higher scores indicating more negative caregiving experiences. These items are grouped into four factors: three negative (difficult behaviors, stigma/effects on the family, and problems with services), and one positive (positive personal experiences). For this study, Items 3, 7, 10, and 11, were excluded based on evaluations and comments from three family members and two experts. These items were considered less applicable or potentially confusing for families dealing with individuals in coercive controlling groups or relationships. Additionally, the term “illness” in Items 1, 9, and 13 was replaced with “situation” (e.g., Item 1: “feeling unable to tell anyone of the situation”). Furthermore, Item 13 (“the situation causing a family breakup”), only remaining item alluding to the original ECI’s Effects on the Family subscale following the removal of Item 11, was included as a criterion variable in this study and analyzed separately from the other BECI items. The 15 remaining items included a “non-applicable” response option to ensure participant comfort (see Supplemental Table 2).

Hospital Anxiety and Depression Scale (HADS)

The HADS (Zigmond & Snaith, 1983) is a widely used self-report measure composed of 14 items to assess the presence and severity of Anxiety (HADS-A; 7 items); and Depression (HADS-D; 7 items). Scores are rated using a 4-point Likert scale (ranging from 0 to 3), taking the past week as a time reference. The higher the score in each of the subscales is, the higher the levels of anxiety and depression. In the current study, Cronbach's alpha (and McDonald's Omega) coefficients were 0.90 (0.90) and 0.86 (0.87) for Anxiety and Depression, respectively.

General Health Questionnaire (GHQ-12)

The GHQ-12 (Goldberg & Williams, 1988) was employed to assess family members' distress levels. This questionnaire, which is widely used among caregivers (Zabala et al., 2009), consists of 12 items, each rated on a 4-point Likert scale (ranging from 0 to 3). Total scores can range from 0 to 36 for the overall score and from 0 to 18 for its two subscales. The questionnaire items are divided into positive and negative categories, with 6 items each. Higher scores indicate greater psychological distress. Cronbach's alpha (and McDonald's Omega) coefficients for the Positive and Negative items were calculated, yielding values of 0.84 (0.85) and 0.88 (0.89), respectively.

Mastery Scale

The Mastery Scale (Pearlin & Schooler, 1978) was used to evaluate the perceived level of self-mastery. Mastery refers to the extent to which people see themselves as being in control of the factors that influence their life. The instrument consists of 7 items that are answered using 4-point Likert-type scale (from "*strongly disagree*" to "*strongly agree*") with total scores ranging from 7 to 28. In this study, Cronbach's alpha (and McDonald's Omega) coefficient was 0.82 (0.83).

Data Analysis

First, item-level descriptive statistics were obtained, and the normality of the item scores was evaluated by means of the Shapiro-Wilk test. Second, the Kaiser-Meyer-Olkin (KMO) index was computed to assess the factorial adequacy of the data correlation matrix for both the FQ and BECI questionnaires, where a value higher than 0.80 is regarded as appropriate (Kaiser, 1970). Third, dimensionality of the FQ and BECI questionnaires was assessed using parallel analysis with resampling, principal components extraction, mean eigenvalue criterion and polychoric correlations (Horn,

1965), as well as with the minimum average partial (MAP) index (Velicer, 1976), and parametric bootstrap exploratory graph analysis (EGA) using 500 replicates, graphical LASSO regularization and Louvain algorithm (Golino & Epskamp, 2017). Parallel analysis with polychoric correlations is usually preferred when working with asymmetrical variables (Garrido et al., 2013), whereas EGA has been shown to perform comparatively better when factors are moderately correlated (Golino & Epskamp, 2017). Fourth, a confirmatory factor analysis (CFA) was conducted using robust weighted least squares estimator using a diagonal weight matrix (WLSMV; due to the categorical and non-normal nature of the data) for each questionnaire (i.e., FQ and BECI) following the original, theoretical model formulation. The two resulting models were evaluated in terms of model fit and reliability. Regarding the former, values higher than 0.95 were considered as satisfactory for the CFI and TLI, whereas values lower than 0.08 were regarded as appropriate for the RMSEA (Hu & Bentler, 1999; Marsh et al., 2004). Reliability was assessed in terms of internal consistency using Cronbach's alpha and McDonald's omega (McDonald, 1999) and the determinacy of factor score estimates. Values higher than 0.70 were deemed adequate for Cronbach's alpha and McDonald's omega. For the determinacy of factor score estimates, the least squares regression approach was used to estimate factor scores, and then the square multiple correlation between each factor and the original variables was computed (Grice, 2001). Square correlations lower than 0.50 are problematic (Grice, 2001). Fifth, an exploratory factor analysis (EFA) with Oblimin rotation (to minimize the number of cross-loadings in search of a simpler structure; Schmitt & Sass, 2011) and WLSMV estimation was also conducted for each questionnaire. Sixth, scalar invariance (i.e., equal factor loadings and intercepts) across gender was assessed for both the FQ and BECI to determine whether the scores for both groups are comparable. Finally, aiming to find criterion validity evidence, Pearson correlations were computed between the scores of the FQ and BECI subscales and each of six criterion variables (i.e., HADS Anxiety and Depression, GHQ-12 Positive and Negative, Mastery scale, and Item 13 of the BECI). Each item was assigned to the subscale for which the largest loading was obtained. To mitigate the potential impact of sample variability, a multiple imputation procedure was conducted; namely, 10,000 datasets were generated by randomly resampling 263 (i.e., the original sample size) participants from the original dataset and then Pearson correlations were computed with such resampled datasets. We report the mean Pearson correlations across the 10,000 replications, as well as whether the confidence interval (95%) includes zero. In addition, the intercorrelations between the subscale scores

of both questionnaires (i.e., FQ and BECI) were also examined by using the same approach.

All analyses were performed with R software (R Core Team, 2022) using psych version 2.2.5 (Revelle, 2022), cdmTools version 1.0.3 (Nájera et al., 2023), EGAnet version 1.1.0 (Golino & Christensen, 2022), except for the factor analysis estimation, which was conducted with *Mplus* version 8 (Muthén & Muthén, 2017) via MplusAutomation version 1.1.0 (Hallquist & Wiley, 2018).

Results

Family Questionnaire

Descriptive statistics and dimensionality assessment. A summary of the item-level statistics for the FQ can be found in Table 1. All response categories for all items obtained a fair frequency of election, and only five items had more than 10% of missing values. None of the items distributed normally according to the Shapiro-Wilk test. The KMO index was equal to 0.87, which reflects an appropriate factor adequacy of the correlation matrix.

With respect to the dimensionality of the FQ, the MAP index and parallel analysis suggested the presence of 3 and 4 latent factors, respectively. Moreover, the bootstrap EGA suggested the existence of 2, 3, 4, and 5 dimensions in 0.2%, 9.6%, 47.2%, and 43.0% of the replicas, respectively. Given that both parallel analysis with polychoric correlations and the EGA are regarded as the golden rules in these conditions

(i.e., skewed variables and correlated factors), the solution with 4 factors was considered the most plausible one. This suggested that the dimensionality is certainly greater than that considered in the original formulation of the FQ's internal structure (i.e., two factors). Both the two-dimensional original model and an alternative four-dimensional model are evaluated by means of a CFA and EFA, respectively.

Theoretical model. The CFA factor loading estimates ranged from 0.33 to 0.92 (*Mean*=0.72). Despite these moderately high loadings, the two-dimensional CFA obtained an unsatisfactory model fit, with values of 0.905, 0.892, and 0.107 for the CFI, TLI, and RMSEA, respectively. An additional two-dimensional EFA was fitted to evaluate the unrestricted solution of the original formulation of the FQ model; however, the model fit remained unsatisfactory (CFI=0.937; TLI=0.919; RMSEA=0.093).

Alternative model. The EFA model with four dimensions achieved satisfactory model fit (CFI=0.979; TLI=0.965; RMSEA=0.061). Additionally, the factor loading matrix (see Table 2) provided a sound interpretation of the model. The third factor encompasses most of the items relative to the Critical Comments (CC) scale of the original FQ formulation. Two of the remaining factors cover different aspects related to the other original FQ scale, which is Emotional Over Involvement (EOI). Specifically, factors 1 and 2 are referred to as Intense Emotional Expression (IEE) and Over-Concern (OC), respectively.

The IEE factor contains items related to the implications of the situation on oneself (e.g., "I tend to neglect myself because of him/her"), whereas the OC factor involves items

Table 1 Item-level descriptive statistics for the FQ

	0	1	2	3	%NA	Mean	SD	Skew	Kurt.	SW
Item 1	75	75	42	24	3.14	1.07	0.99	0.54	-0.79	***
Item 2	76	28	24	26	30.94	1.00	1.15	0.66	-1.12	***
Item 3	14	39	58	110	0.90	2.19	0.95	-0.84	-0.45	***
Item 4	43	56	63	51	4.48	1.57	1.06	-0.10	-1.23	***
Item 5	26	46	62	85	1.79	1.94	1.04	-0.52	-0.98	***
Item 7	70	59	56	31	3.14	1.22	1.06	0.28	-1.18	***
Item 8	16	30	61	81	15.70	2.10	0.96	-0.77	-0.46	***
Item 9	10	34	66	95	8.07	2.20	0.89	-0.82	-0.30	***
Item 10	47	27	41	69	17.49	1.72	1.21	-0.31	-1.49	***
Item 11	66	51	52	43	4.93	1.34	1.12	0.17	-1.36	***
Item 12	40	47	75	38	10.31	1.55	1.02	-0.18	-1.09	***
Item 13	15	38	47	122	0.45	2.24	0.97	-0.95	-0.37	***
Item 14	84	38	43	35	10.31	1.15	1.15	0.41	-1.33	***
Item 15	86	37	40	44	7.17	1.20	1.19	0.36	-1.44	***
Item 16	64	40	27	30	27.80	1.14	1.14	0.48	-1.23	***
Item 17	20	28	41	127	3.14	2.27	1.01	-1.10	-0.13	***
Item 18	87	37	34	21	19.73	0.94	1.07	0.69	-0.92	***
Item 19	72	44	36	50	9.42	1.32	1.20	0.24	-1.49	***
Item 20	57	74	51	39	0.90	1.33	1.05	0.25	-1.13	***

Note. 0–3: Frequency of selection of item category; %NA: percentage of missing responses; SD: standard deviation; Kurt.: kurtosis; SW: Shapiro-Wilk normality test; ***: *p*-value lower than 0.001

Table 2 Four-dimensional EFA model for the FQ

	IEE	OC	CC	MO
<i>FQ Items</i>	<i>Factor Loadings</i>			
1. I tend to neglect myself because of him/her	0.85	-0.06	-0.01	0.06
15. I thought I would become ill myself	0.75	-0.07	0.14	0.01
19. I have given up important things in order to be able to help him/her	0.71	0.12	-0.07	0.11
11. I regard my own needs as less important	0.70	0.26	-0.08	-0.05
7. I can't sleep because of him/her	0.48	0.41	0.05	0.01
3. I often think about what is to become of him/her	-0.06	0.81	-0.02	0.11
5. I keep thinking of the reasons of his/her involvement	-0.02	0.59	0.28	0.06
13. I am very worried about him/her	0.12	0.79	0.14	-0.03
17. He/She is an important part of my life	0.38	0.51	-0.32	-0.05
16. When he/she constantly wants something from me, it annoys me	0.44	-0.28	0.50	0.23
4. He/She irritates me	-0.09	-0.02	0.99	-0.05
8. It's hard for us to agree on things	-0.01	0.13	0.60	0.13
10. He/She does not appreciate what I do for him/her	0.13	0.19	0.54	0.18
12. He/She sometimes gets on my nerves	-0.03	0.06	0.89	0.09
14. He/She does some things out of spite	0.22	0.09	0.56	0.21
20. I'm often angry with him/her	0.06	0.01	0.87	-0.03
18. I have to insist that he/she behave differently	0.08	0.09	0.14	0.85
2. I have to keep asking him/her to do things	0.30	0.19	0.04	0.42
9. When something about him/her bothers me, I keep it to myself	0.20	0.20	0.40	-0.55
	<i>Factor Correlations</i>			
OC	0.47			
CC	0.30	0.16		
MO	0.35	0.08	0.36	

Note. IEE: Intense emotional expression; OC: Over-concern; CC: Critical comments; MO: Monitoring. Highest loading (in absolute value) for each item is highlighted in bold

that express worry about the relative's situation (e.g., "I often think about what is to become of him/her"). The fourth factor, denoted as Monitoring (MO), encompasses three items implying the expression of requests, demands, or objections

to the relative (e.g., "I have to insist that he/she behaves differently"), ultimately pretending to generate changes in their loved ones. Note that some of the items obtained substantial cross-loadings. For example, Item 7 ("I can't sleep because of him/her") obtained loadings equal to 0.48 and 0.41 on the IEE and OC factors, respectively. This is reasonable as it alludes to both the concern for the relative and the consequence of such worry on oneself. The four factors achieved substantial loadings on their main indicators (from 0.42 to 0.99; *Mean*=0.68) and were moderately intercorrelated (from 0.16 to 0.47), except for OC and MO, which showed a low correlation (0.08). With respect to reliability, IEE, OC, and CC obtained a large internal consistency (ω =0.86, 0.84, and 0.90, respectively), but MO obtained a lower value (ω =0.54), mainly due to the smaller number of items. These results were consistent with the Cronbach's alpha values for each subscale, formed by the items with the largest absolute factor loadings (see Table 2): α =0.81, 0.74, 0.89, and 0.47, respectively. Nevertheless, all factors achieved a high determinacy of the factor score estimates (R^2 =0.90, 0.88, 0.96, and 0.91 for IEE, OC, CC, and MO, respectively).

Measurement invariance. Scalar invariance was evaluated for the FQ by fitting an EFA as in the previous subsection, with factor loadings and intercepts restricted to be equal across gender. Table 3 summarizes model fit for the original, previously shown model, as well as the scalar model. The scalar model achieved a satisfactory model fit according to the CFI=0.988, TLI=0.986, and RMSEA=0.040. A *t*-test was conducted to evaluate differences in the sum scores of each subscale (measured by items with the highest loading on each factor; see Table 2) between males and females. No statistically significant differences were observed for the subscales, except for the OC subscale, where females (*Mean*=9.12) obtained a larger value than males (*Mean*=7.45; *t*=3.49; *p*<.001).

Brief Experience of Caregiving Inventory

Descriptive statistics and dimensionality assessment. Table 4 summarizes the item-level statistics for the BECI. All categories for all items obtained a fair frequency of election, with only three of them showing more than 10% of

Table 3 Model fit for the scalar invariance model for the FQ and the BECI

	χ^2	Df	<i>p</i> -value	CFI	TLI	RMSEA
<i>Family Questionnaire (FQ)</i>						
One-group	184.92	101	***	0.98	0.97	0.06
Scalar	348.83	296	0.02	0.99	0.99	0.04
<i>Brief Experience of Caregiving Inventory (BECI)</i>						
One-group	96.98	51	***	0.99	0.97	0.06
Scalar	263.18	176	***	0.97	0.97	0.07

Note. ***: *p*-value lower than 0.001

Table 4 Item-level descriptive statistics for the BECI

	0	1	2	3	4	%NA	Mean	SD	Skew	Kurt.	SW
Item 1	34	40	58	42	52	2.59	2.17	1.37	-0.12	-1.18	***
Item 2	60	28	36	32	42	14.66	1.84	1.53	0.12	-1.47	***
Item 4	22	34	68	46	41	9.05	2.24	1.23	-0.17	-0.87	***
Item 5	12	12	56	57	86	3.88	2.87	1.15	-0.80	-0.11	***
Item 6	27	27	44	43	42	21.12	2.25	1.36	-0.26	-1.11	***
Item 8	36	30	31	38	61	15.52	2.30	1.50	-0.28	-1.38	***
Item 9	16	26	69	55	58	3.45	2.50	1.20	-0.38	-0.70	***
Item 12	20	17	56	63	68	3.45	2.63	1.24	-0.65	-0.47	***
Item 14	47	31	46	51	46	4.74	2.08	1.43	-0.15	-1.31	***
Item 15	25	16	29	54	99	3.88	2.83	1.36	-0.94	-0.39	***
Item 16	26	15	44	52	76	8.19	2.64	1.35	-0.70	-0.68	***
Item 17	47	34	43	39	51	7.76	2.06	1.48	-0.07	-1.38	***
Item 18	32	26	50	41	73	4.31	2.44	1.42	-0.41	-1.13	***
Item 19	50	42	33	36	57	6.03	2.04	1.53	-0.01	-1.49	***

Note. 0–4: Frequency of selection of item category; %NA: percentage of missing responses; SD: standard deviation; Kurt.: kurtosis; SW: Shapiro-Wilk normality test; ***: p -value lower than 0.001

missing values. The Shapiro-Wilk test determined that none of the item scores were normally distributed. The KMO index obtained a value of 0.80, indicating proper factor adequacy of the correlation matrix.

The MAP index and parallel analysis suggested 3 factors for the BECI. This dimensionality was also supported by the bootstrap EGA in 69.0% of the replicas, where 4 factors were suggested in the remaining 31.0% replicas. According to the inter-method agreement, the three-factor solution was considered the most plausible one. This is lower than the original formulation of the BECI, which considered the presence of four factors. As in the previous case, both the original model and an alternative three-dimensional model are tested by means of a CFA and EFA in the next subsections.

Theoretical model. The CFA estimated factor loadings ranged from 0.52 to 0.92 ($Mean=0.79$). Nevertheless, the four-dimensional CFA obtained an unsatisfactory model fit ($CFI=0.914$; $TLI=0.889$; $RMSEA=0.128$). As with the FQ, we conducted an additional EFA with the originally hypothesized dimensionality. The four-dimensional EFA model achieved a satisfactory model fit ($CFI=0.989$; $TLI=0.975$; $RMSEA=0.061$). Table 5 shows the factor loading matrix and factor correlations between the dimensions. The first factor covers those items that were categorized as measuring stigma in the original formulation of the BECI (Items 1 and 9) along with two items (Items 2 and 8) that were originally intended to measure problems with services. However, these two last items are closely related to how health professionals react to the situation (e.g., “How health professionals do not take you seriously”), which is closely related to the feeling of stigma covered by the former items (e.g., “How to explain his/her situation to others”). Thus, the first factor is referred to as Stigma. The second factor contains

three items of the originally defined Positive Personal Experiences (PPE) factor (e.g., “I have become more confident in dealing with others”) in addition to Item 6 (“How to deal with mental health professionals”), keeping the name PPE. Finally, the third and fourth factors contain the items that were originally categorized as measuring Difficult Behaviors (DB). The third factor implies more negative behaviors or emotions (e.g., “Inconsiderate”), whereas the fourth factor contains two items that are particularly focused on the lack of interaction (e.g., “Not interested”). However, these two factors are facets of problematic and detrimental interactions, which is why they were originally included in the same factor. Moreover, the intercorrelation between these two factors was particularly high (0.65), suggesting that they are close to each other in meaning. This is why we explore the three-dimensional model (as suggested by the empirical dimensionality assessment methods) in the next subsection.

Alternative model. The three-dimensional EFA provided a sound and interpretable factor loading matrix, where the main factor loadings coincided with those of the previous model, but with all the Difficult Behaviors items loading on the same, unique dimension. Despite this promising solution, the model fit was not satisfactory ($CFI=0.951$; $TLI=0.914$; $RMSEA=0.113$). However, in accordance with the four-dimensional model, where items 15 and 16 were the only ones loading on one dimension, inspection of the modification indices revealed that the residuals of these two items were moderately correlated. Thus, after including the correlated residual between these two items in the EFA, model fit substantially improved ($CFI=0.985$; $TLI=0.974$; $RMSEA=0.062$), with the factor loading matrix remaining almost unmodified (the congruent coefficient for all factors was equal to or greater than 0.99). Table 5 shows the loadings

Table 5 EFA models for the BECI

BECI Items	Four-dimensional EFA model				Three-dimensional EFA model			
	Stig.	PPE	DB1	DB2	Item	Stig.	PPE	DB
<i>Factor Loadings</i>								
1. feeling unable to tell anyone of the situation	0.58	−0.07	−0.08	0.28	1	0.61	−0.09	0.13
2. how health professionals do not take you seriously	0.99	−0.07	0.14	−0.11	2	0.96	−0.06	0.01
8. how health professionals do not understand your situation	0.80	0.10	−0.01	0.04	8	0.85	0.09	−0.03
9. how to explain his/her situation to others	0.60	0.19	−0.20	0.35	9	0.64	0.16	0.07
4. I have become more confident in dealing with others	−0.15	0.89	0.01	−0.00	4	−0.13	0.89	0.01
5. I have become more understanding of others with problems	0.10	0.77	−0.02	−0.05	5	0.11	0.77	−0.06
6. how to deal with mental health professionals	0.15	0.55	0.08	0.03	6	0.16	0.54	0.09
12. I have discovered strengths in myself	0.05	0.79	0.07	−0.02	12	0.06	0.79	0.04
14. unpredictable	0.13	0.01	0.69	0.08	14	0.10	0.01	0.74
17. irritable	0.11	0.08	0.78	−0.01	17	0.07	0.08	0.76
18. inconsiderate	−0.13	0.04	0.79	0.18	18	−0.16	0.03	0.96
19. behaving in a reckless way	0.06	−0.02	0.76	0.04	19	0.03	−0.02	0.78
15. uncommunicative	0.00	−0.00	0.08	0.85	15 ^a	0.12	−0.03	0.65
16. not interested	−0.01	−0.04	0.19	0.82	16 ^a	0.09	−0.07	0.74
<i>Factor Correlations</i>								
PPE	0.15				PPE	0.15		
DB1	0.27	0.16			DB	0.35	0.17	
DB2	0.27	0.11	0.65					

Note. Stig.: Stigma; PPE: Positive personal experiences; DB: Difficult Behaviors. ^a: Items 15 and 16 obtained a residual correlation equal to 0.68. Higher loadings (in absolute value) for each item are highlighted in bold

of the definitive three-dimensional solution. The correlated residual between items 15 and 16 obtained a value of 0.68. As stated before, the loading matrix has the same interpretation as that of the four-dimensional model, with the only difference being that Items 15 and 16 are considered part of the Difficult Behaviors factor (as in the original BECI formulation). The particularly close relationship between these two items is thus considered by means of a correlated residual instead of a unique factor for them. With respect to reliability, the Stigma, PPE, and DB factors obtained high internal consistency ($\omega=0.87, 0.85$, and 0.91 , and $\alpha=0.82, 0.80$, and 0.88 , respectively) and high determinacy of the factor score estimates ($R^2=0.73, 0.71$, and 0.77 , respectively).

Measurement invariance. Scalar invariance was evaluated for the BECI as was done with the FQ. Table 3 summarizes model fit for the one-group and scalar models. The scalar model achieved a similar model fit as the one-group model, with CFI=0.971, TLI=0.970, and RMSEA=0.066. Given these results, which support scalar invariance, a *t*-test was conducted to examine the differences in the sum scores of each subscale (measured by items with the highest loading on each factor; see Table 4) between males and females. No statistically significant differences were observed for any of the subscales across gender.

Relation with Other Variables

Family Questionnaire. Table 6 shows the average Pearson correlations between the FQ subscales and each of the

criterion variables across the 10,000 bootstrap replicas. Overall, all correlations were significantly different from zero, except for BECI Item 13 with the OC and MO subscales. These results support previous findings on the strong correlation between EE components and family distress. Criticism and intense emotional expressions risk harming family cohesion, as evidenced by their links to family breakup risk (BECI Item 13). However, simply expressing concern or monitoring does not seem to increase breakup risk. Notably, all EE aspects negatively correlated with mastery, underscoring that a negative family emotional environment can reduce perceived control over life situations.

Brief Experience of Caregiving Inventory. Table 6 shows the average Pearson correlations between the BECI subscales and the criterion variables. The Stigma and Difficult Behaviors subscales were significantly correlated with all the criterion variables, particularly with HADS Anxiety and HADS Depression. The findings align with prior research, underscoring the strong link between caregiving dimensions and adverse mental health outcomes. Handling difficult behaviors can heighten anxiety and depression in family members, often stemming from group directives that strain family bonds and increase breakup risk, as shown by the correlation with BECI Item 13. Perceived stigma intensifies feelings of alienation, harming mental health and diminishing confidence in life control. However, positive experiences (PPE) do not significantly reduce distress symptoms.

Relation between the FQ and BECI dimensions. Finally, the correlations between the FQ and BECI subscales were

Table 6 Pearson correlations between the FQ and BECI subscales and the criterion variables

	FQ				BECI		
	IEE	OC	CC	MO	Stigma	PPE	DB
HADS Anxiety	0.54*	0.39*	0.40*	0.37*	0.52*	0.03	0.39*
HADS Depression	0.52*	0.26*	0.31*	0.36*	0.42*	−0.08*	0.29*
GHQ-12 Positive	0.41*	0.17*	0.25*	0.29*	0.32*	−0.22*	0.15*
GHQ-12 Negative	0.48*	0.25*	0.36*	0.36*	0.39*	−0.15*	0.27*
Mastery	−0.30*	−0.20*	−0.31*	−0.36*	−0.26*	0.04*	−0.17*
BECI Item 13	0.23*	0.10*	0.42*	0.15*	0.26*	0.11*	0.36*
<i>Correlations between the BECI and FQ subscales</i>							
Stigma	0.58*	0.40*	0.36*	0.53*			
PPE	0.08*	0.26*	−0.03*	0.21*			
DB	0.57*	0.47*	0.75*	0.53*			

Note. IEE: Intense emotional expression; OC: Over-concern; CC: Critical comments; MO: Monitoring; PPE: Positive personal experiences; DB: Difficult Behaviors. *: The confidence interval (95%) does not include zero

calculated (see Table 6). Most correlations were significantly different from zero. Notably, the only nonsignificant correlations concerned PPE and IEE, as well as PPE and CC. The former is an unexpected result, considering that a negative relationship was expected between PPE (related to self-empowerment) and IEE (associated with self-neglect). The remaining significant positive relations are congruent with the previous literature, thus showing that the different factors involved in coping with relatives who are ensnared in coercive controlling situations encompass distinct facets of a unique and multifaceted caregiving experience.

Discussion

A primary objective of this study was to evaluate the psychometric properties of the Family Questionnaire (Wiedemann et al., 2002) and the Brief Experience of Caregiving Inventory (O'Driscoll et al., 2018) for assessing family members of individuals in controlling or abusive relationships or groups. Notably, this research is the first to systematically document family distress using well-established instruments in the coercive control field. By shedding light on the experiences, concerns, and discomforts of this population, this study aimed to address an important gap in the literature. Through the lenses of expressed emotion and caregiving experiences, the research highlights the importance of understanding the intricacies of family dynamics when one or more of their members are entrapped in a coercive controlling relationship. The results support the reliability and validity of the FQ and BECI in this context.

Distinct from traditional studies on expressed emotion and caregiving, this study's context has unique characteristics. First, it deviates from the standard concept of illness. Coercive controlling relationships might seem ordinary (e.g., Craven et al., 2006), often evading family detection. Yet, beneath this veneer, disruptive dynamics within the

family may emerge as a direct or indirect consequence of submission to the coercive relationship. Victims, although they do not exhibit conventional illness symptoms, may tolerate or engage in self-harming behaviors due to their subjugation. However, they often remain oblivious to domination, interpreting family interventions as inappropriate interference. Second, a salient feature of coercive relationships is their intent to sever victims from their families. In our study, limited face-to-face contact between victims and their families was observed, attributed either to FGA distancing from unaffiliated families or to ostracization following a family member's exit from the coercive environment. These nuances prompted adjustments to the questionnaires, resulting in subtle shifts from the original FQ and BECI structures.

In our study, the FQ evolved into a four-factor solution, as supported by both empirical evidence (i.e., parallel analysis, EGA, and appropriate model fit) and theoretical interpretation. Notably, the EOI factor split into two facets: Intense Emotional Expression and Over-Concern, with a strong correlation between them. IEE captures the emotional strain on families with members in coercive dynamics, reflecting reactions associated with sacrifice, discomfort, and feelings of burden (Kageyama & Solomon, 2018). It is consistent with findings from Castaño et al. (2022), suggesting that such situations can profoundly affect the health of family members. OC, on the other hand, reflects the heightened concern family members feel about the well-being of their loved ones ensnared in coercive dynamics. This includes apprehensions about their safety, health, and future. Literature documents the common feelings of fear, worry, and uncertainty among these families (Castaño et al., 2022; Ross & Langone, 1988). Such concern intensifies when families observe significant changes in their loved ones (Goldberg & Goldberg, 1989; Ross & Langone, 1988) or sense them growing distant (Rodríguez-Carballeira et al., 2013; Stark, 2007). Previous involvement in coercive relationships may

amplify these feelings, given past experiences of abuse and manipulation (Langone, 2019; Sullivan, 1984).

In our study, the “Critical Comments” factor from the original FQ (Wiedemann et al., 2002) distinctly appeared in our four-dimensional EFA model. It encompasses family members’ critical, hostile, or resentful (Ross & Langone, 1988) attitudes toward their loved ones. These may arise from a belief in their loved one’s self-responsibility in their situations (Barrowclough & Hooley, 2003) and their ongoing behaviors. However, this might overlook the manipulative nature of coercive control (Almendros et al., 2011; Langone, 1992; Rodríguez-Carballeira et al., 2015). The family’s critical stance can be exacerbated by the rejection, animosity, and disturbing behaviors they often face from their involved loved ones (Castaño et al., 2022). Additionally, a “Monitoring” factor emerged, portraying efforts to induce change in loved ones. It involves actions such as making demands or expressing objections to loved ones’ actions. Families commonly engage in attempts to oversee and influence their loved one’s behavior (McCabe et al., 2007). This construct absorbs two items from CC and one from EOI. Notably, Item 9 (“When something about him/her bothers me, I keep it to myself”) should be reversed, contrary to its classification as an EOI item in the original FQ. It may be more appropriate to reinterpret in line with recommendations advising families against direct criticism and confrontations, urging active listening instead (Bardin, 2002), which might be particularly significant because individuals within coercive relationships may be conditioned to react defensively to anticipated criticism. Monitoring may arise from both the family’s anxiety (Schwartz, 1986) and their critical appraisal of the situation, which is reflected in the similar strength of the relationship between MO and both IEE and CC factors.

In our analysis of the BECI’s factor structure, a three-dimensional solution was established on empirical and theoretical foundations. The “Problems with Services” (PwS) factor became less relevant, possibly because of the scarcity and challenging accessibility of specialized resources. Nevertheless, Items 2 and 8, denoting misunderstandings family members face with health professionals, are recurrent in this population (Baamonde, 1991; Goldberg & Goldberg, 1989). These family members, often consulting with nonspecialized professionals in areas such as mental health, legal, or education, encounter frequent misunderstandings or misguided advice (Almendros et al., 2009; Hassan, 1988). These misunderstandings parallel challenges in sharing or explaining their situation to others, as captured by the two items originally included in the Stigma factor (1 and 9). These communication challenges may be linked to self-stigma, where family members internalize societal assumptions about cults, resulting in feelings of shame or

reluctance to discuss their experiences (Bardin, 2002; Hassan, 1988). The ensuing communication hurdles with their social circles, compounded by public stigma, can adversely affect their well-being and hinder help-seeking (Corrigan, 2004). Furthermore, merging PwS with the Stigma factor is supported by a study from Lespine et al. (2023) reporting their close correlation.

The “Positive Personal Experiences” factor is consistent with the original BECI, emphasizing potential growth derived from supporting a loved one in a coercive environment. Findings from research and clinical reports underscore personal development, positive emotions, and strengthened family ties as potential positives in this caregiving role (Bardin, 2002; Castaño et al., 2022). Notably, Item 6 (“how to deal with mental health professionals”), originally in PwS, consistently loaded within the PPE factor. This finding suggests that, despite challenges in seeking help, interactions with specialized mental health professionals may offer valuable insights for family members. Trained psychologists can play a pivotal role in helping and equipping families with the necessary tools to address their situation (Bardin, 2002).

The “Difficult Behaviors” factor aligns with O’Driscoll et al. (2018). It highlights the challenges faced by families of those in coercive groups. Coerced individuals may display unsettling behaviors due to group pressures and abuse, often leading to confusion and distress. Committing to the group or relationship may entail compliance with the group’s escalating demands and routines that can be both exhausting and time-consuming (Bardin, 2002). This, in turn, can cause the person to become increasingly unavailable to their family and be perceived as distant and apathetic (Hassan, 1988; Langone, 1990; Singer & Lalach, 1995). For families outside the group, understanding these changes can be an arduous task, further complicated by unexpected reactions from their loved ones. Family members often endure extreme signs of disaffection and disapproval from their loved ones, which can escalate into sudden accusations or even violent outbursts. These reactions may result from subtle manipulation of intimate family information, which coercive control perpetrators use to distort or even fabricate nonexistent past events (e.g., a coercive group member was persuaded that his spouse cheated on him in a past life). Additionally, such reactions may derive from intolerance for dissenting views or can be triggered by family members’ lack of adherence to the group’s faith or ideological beliefs, leading to disdain (e.g., the absence of care in the event of a family member’s illness perceived as divine punishment for disbelief). They can also result from the family’s failure to fulfill valued group directives, which may even remain unknown to family members (e.g., anger directed by the group member toward a sibling for wearing jeans, something criticized within the group). Those who were once part of the coercive

groups are often branded as “traitors” and shunned. For those raised within these groups, the complexity intensifies, especially when their loved ones (e.g., a parent) might have participated in their own victimization while both were group members. A correlated residual was found between Items 15 (“uncommunicative”) and 16 (“not interested”), which reinforces the notion that being uncommunicative and lacking interest are closely linked to the overall lack of interaction among family members, a finding that’s echoed in O’Driscoll et al. (2018).

As expected, the factors Stigma and DB, which represent the challenges of the caregiving experience, showed moderate association. In contrast, low correlations were observed between these negative aspects and the positive caregiving dimension (PPE). This aligns with past research suggesting distinct caregiving dimensions (O’Driscoll et al., 2018; Sepúlveda et al., 2020). Our study revealed PPE had no significant associations with traditional negative emotional expressions such as IEE and CC. Overall, these findings suggest that family members might derive positive personal outcomes from caregiving irrespective of perceived stigma, enduring loved one’s difficult behaviors or their own emotional reactions. On the other hand, PPE did not seem to lessen anxiety, depression, or distress symptoms, which is consistent with previous research (Kulhara et al., 2012). However, its link with the Positive subscale of GHQ-12 suggests it aids emotional well-being. In contrast, the emerging EE elements proposed for the FQ, OC and MO, exhibited weak but significant associations with positive caregiving elements. This may suggest that family members who display more concern and actively supervise their loved ones may be inclined to seek learning opportunities or expert advice. This knowledge could potentially enhance their understanding and perceived strengths but also possibly increase their concern and oversight of loved ones. This family commitment may help avoid or better handle circumstances that could lead to family rupture. The lack of association among the three mentioned factors (PPE, OC, and MO) and BECI Item 13 supports this. But, although PPE might indicate some empowerment for families, it does not seem to increase their sense of mastery. This suggests that participants may perceive positive personal outcomes even if they have come to accept limited influence over the situation, for example, in cases of long-term involvement in coercive environments or periods of no contact with their loved ones.

The negative caregiving elements, Stigma and DB, showed considerable associations with the FQ factors, consistent with literature highlighting the link between EE and caregiving challenges. DB’s correlation with all FQ factors, especially CC and IEE, supports past findings (Kyriacou et al., 2008; Wearden et al., 2000). Unaware families may

initially respond ineffectively to the group-related expressions of their loved ones. As they perceive disturbing behavioral changes, radicalization, loss of autonomy and critical thinking, disorientation, negative emotionality, or distancing (Almendros et al., 2011; Castaño et al., 2022; Langone, 1992; Rodríguez-Carballeira et al., 2015), families may react with sorrow or anger, often labeling their loved ones as misled or involved in a “cult” (Bardin, 2002). Ultimately, coercive controlled individuals may be indoctrinated to see family members in a bad light as nonbelievers and perceive them as dangers to their own salvation or well-being (e.g., two young siblings, who had unusual bowel movements apparently caused by a substance their perpetrator added to their food, were persuaded that these were signs of cancer caused by their parents). As a result of deteriorated family dynamics and the perpetrator’s directives (Whitsett & Kent, 2003), coerced individuals may display a myriad of difficult behaviors to which family members may respond with criticism (Bardin, 2002; Ross & Langone, 1988). Such dynamics can strain relationships, leading coercive controlled individuals to cut ties. Both CC and DB strongly associated with BECI item 13, concerning family splits. This breakup could be due to increased family conflict or an intentional outcome desired by coercive groups (Bardin, 2002). Informed family members might understand that their loved ones are not intentionally hurtful but are manipulated. This comprehension could reduce criticism. Future research should investigate whether a deeper understanding of abuse and manipulation within coercive controlling relationships, measured by tools such as PAEGS (Saldaña et al., 2017), are associated with reduced CC levels.

All FQ factors and negative BECI dimensions correlated significantly with measures of anxiety, depression, and distress. This supports past findings linking distress with EE and the challenges of caregiving for family members of individuals with other mental health issues (Lespine et al., 2023; Zabala et al., 2009). The association was especially pronounced for IEE and Stigma, suggesting that feelings of misunderstanding by professionals or acquaintances and self-neglect are especially harmful to family members’ mental health and overall well-being. This is consistent with Castaño et al. (2022), where participants reported mental health issues, a lack of helping resources, feelings of isolation, and misunderstanding by others. Additionally, Stigma and IEE were notably associated, suggesting that those facing stigma due to their caregiving role might experience heightened emotional turmoil.

This study underscores how negative emotional expressions and caregiving adversities erode family members’ sense of mastery. Faced with the overwhelming challenge of managing an unfamiliar situation without accessible professional, social, or personal support, family members often

experience profound feelings of helplessness (Addis et al., 1984; Schwartz, 1986), doubt their own capabilities, and lose self-confidence, thereby potentially undermining their sense of control and competence. The broader public tends to be skeptical about human susceptibility to persuasion and manipulation (Cialdini, 2001), making it challenging for family members to acknowledge that some of the sudden changes and disturbing behaviors exhibited by their loved ones (DB) are a result of manipulation. Uninformed family members may attempt to manage the situation based on their previous understanding of family dynamics, which may no longer apply, and might be taken as CC or MO, leading to frustration and feelings of inadequacy. Additionally, they may face external perceptions and judgments from others who lack a comprehensive understanding of their situation (Stigma), leading to emotions such as shame, embarrassment, and isolation. These negative experiences may limit their access to emotional support and practical assistance. The awareness of the complexity of the situation may also increase concerns (potentially OC) about their loved one's physical and emotional safety. Furthermore, recognizing the manipulation at play means acknowledging that someone else holds control over their loved one's unpredictable behavior and fluctuating mood, indirectly influencing family conflicts. As family members are exposed to these challenges over time, they may begin to feel overwhelmed (potentially IEE) and ill-equipped to effectively cope with the situation, eroding their sense of mastery in managing family issues.

In our study, a consistent factor structure emerged for both genders within the FQ and BECI parameters. Predominantly, gender differences in caregiving experiences and expressed emotion were not significant. However, women had significantly higher scores on the OC factor, reflecting increased concern for their loved ones. This disparity might be rooted in traditional gender roles, especially considering mothers as primary caregivers (Matthews & Salazar, 2014; Sepúlveda et al., 2014), a demographic prominently represented in our sample. This heightened concern could be accentuated in mothers previously involved in coercive relationships, as awareness of the group's operations can potentially intensify their feelings of guilt for inadvertently exposing their offspring to such environments and possibly witnessing their exploitation (Coates, 2010; Matthews & Salazar, 2014; Whitsett & Kent, 2003). Another contributing factor may be the exacerbated mistreatment that women encounter in coercive groups, which frequently amplify gender disparities and perpetuate patriarchal aggression (Boeri, 2002; Lalich, 1997; Matthews & Salazar, 2014). In addition, the absence of significant gender differences beyond OC may reflect the distinct caregiving dynamics in coercive control contexts, where prolonged uncertainty and

crisis disrupt traditional roles. Men, despite societal expectations, may adopt caregiving behaviors typically associated with women in these situations (Bueno & Chase, 2022), minimizing observable differences.

Our research identified that family members of individuals enmeshed in coercive settings exhibit repercussions mirroring those discerned in studies on expressed emotion and caregiving. Despite the unique characteristics and distinct features of these situations, our results resonate with established literature examining the interplay between EE, caregiving, and psychological distress (Anastasiadou et al., 2014; Barrowclough & Parle, 1997). This underscores the validity and relevance of the EE and caregiving constructs within the framework of coercive controlling relationships. The tools used in our study exhibited sound psychometric properties, suggesting their prospective utility in the field of coercive control studies. Still, further research is needed to corroborate and extend our findings.

Limitations

This study has several limitations. A nonprobabilistic sampling method was employed, making it challenging to assess broader population representation, given the hard-to-reach nature of the sample of family members in coercive relationships (Saldaña et al., 2017). The predominance of White participants and female respondents in the sample composition should be considered when interpreting the results, as it may influence the generalizability and applicability of the findings to more racially, ethnically and gender diverse populations. Additionally, only 8% of participants reported a loved one in a one-on-one intimate partner relationship. While these relationships share coercive control dynamics with group settings, they also have distinct characteristics. Given this small percentage, generalizing the findings to intimate partner relationships is limited. Future research should include a larger sample from this context to better examine its specific dynamics. Also, since data collection occurred during the COVID-19 pandemic, its restrictions may have impacted participants' caregiving experiences and distress. Isolation increased stress, disrupted family dynamics, and reinforced coercive control by restricting victims' external contact. These factors may have influenced responses, emphasizing the need for post-pandemic research on the dynamics in coercive controlling situations.

The sample was more heterogeneous than that in past studies, which focused predominantly on help-seeking parents who had never been directly involved in coercive controlling relationships (Ross & Langone, 1988; Sullivan, 1984). In contrast, this study's sample included varied relationships to their loved ones, individuals born and/or raised into coercive groups and those reflecting on past coercive

relationships. Although our findings may be influenced by this diversity, the results of this study remain significant. With 264 English-speaking participants, this study is the first, to our knowledge, to utilize established psychological instruments to document emotional expressions, caregiving challenges, and distress among families in the coercive control field, paving the way for future research in this under-explored area.

Research Implications

This study underscores the need for developing comprehensive frameworks that integrate the emotional and caregiving dimensions of families affected by coercive control. By incorporating instruments such as the Family Questionnaire (FQ) and the Brief Experience of Caregiving Inventory (BECI), this research provides a foundation for refining and expanding assessment tools tailored to the unique emotional and relational challenges faced by this population. However, replication studies are crucial to validate these findings further and several avenues for further research and improvement should be considered. This study focused on family members of individuals involved in various coercive groups and intimate partner relationships. Still, it's imperative to recognize the diversity of predatory victimization experiences. Different groups and relationships may employ varying techniques and dynamics. These differences might lead to unique experiences for family members. Future research should consider and account for these variations. To gain a more comprehensive understanding, further exploration of differences among family members with distinct relationships to their loved ones (e.g., parents, intimate partners, siblings, and children.), as well as distinguishing those who have or have not been involved themselves in the coercive relationships, is crucial. A particular focus on individuals born and/or raised in these relationships and the unique challenges faced by this subgroup would provide valuable insights. Additionally, future research should explore how expressed emotion and caregiving experiences interact with power and control within family systems. Developing frameworks that integrate these factors could provide a more comprehensive understanding of the emotional and relational challenges faced by this population, ultimately informing more effective interventions and support strategies. Future studies should also consider measures related to perceived abusiveness within groups or intimate relationships. This will assess whether increased awareness of the manipulative nature of a loved one's relationship affects the emotions and caregiving experiences reported by family members. Moreover, it would be beneficial to incorporate measures that address family concerns, coping strategies, and help-seeking behaviors. Incorporating

qualitative methods, such as in-depth interviews, could offer richer insights into the personal narratives and unique challenges these families face. Additionally, future studies should investigate whether expressed emotion, distress, or perceived burden of family members affects the outcomes of individuals in coercive controlling relationships.

Clinical and Policy Implications

The findings bear importance for mental health professionals. A nuanced understanding of the emotional and caregiving experiences of affected family members is essential for designing tailored interventions. Practitioners should address specific challenges these families face, such as managing emotional distress and burden, improving communication and negotiation skills, and enhancing coping strategies. Developing family-based intervention programs that incorporate insights from other caregiving areas, specifically tailored for families in coercive control situations with a focus on psychoeducation and skills training, could represent a significant advancement. This support can lead to a significant shift in their relationship with their loved ones and their perceived ability to exert some control over the situation, potentially enhancing support for individuals experiencing coercive control in their relationships. From a policy perspective, recognizing the extensive impact of coercive control is vital. Policymakers should ensure that family members have access to necessary resources, promoting a comprehensive societal response to coercive control.

Conclusion

This study provides evidence of the reliability and validity of the FQ and BECI for evaluating the experiences of family members impacted by coercive control. These tools hold substantial promise for mental health professionals working with affected families, providing valuable insights into their experiences. The findings of this study suggest that coercive controlling relationships not only harm the involved individuals but also significantly affect their family members who care for them. As a first effort in this realm, it underscores the need for ongoing research in this underrepresented area to improve our understanding of and support for these families.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s10896-025-00930-0>.

Acknowledgements Our sincere gratitude to Dr. Michael D. Langone for his invaluable contributions to this project, from its inception to his thoughtful revisions and insightful feedback on this manuscript.

We also thank the organizations—most notably the International Cultic Studies Association (ICSA), Freedom of Mind Resource Center, and FACT—and professionals, particularly Patrick Ryan and Dr. Doni Whitsett, for their assistance in disseminating information about our study. Finally, we are deeply grateful to the family members who generously shared their experiences. We hope this work accurately represents their voices and brings greater visibility to their challenges and needs.

Funding Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature. Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature. This research was supported by grant from the Spanish State Research Agency, Ministry of Science and Innovation, Spain (PID2019-110963GB-00/AEI/10.13039/501100011033). Francisco González-Espejito, was supported by a predoctoral contract for the training of research personnel (FPI-UAM) in the 2022 call.

Declarations

Ethical Approval The study was approved by the Autonomous University of Madrid Ethics Committee (CEI 112–2192).

Conflict of interest The authors have no conflicts of interest to declare.

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References

- Addis, M., Schulman-Miller, J., & Lightman, M. (1984). The cult clinic helps families in crisis. *Social Casework*, 65(9), 515–522. <https://doi.org/10.1177/104438948406500901>
- Aebi-Mytton, J. (2017). *A Narrative Exploration of the Lived Experience of being Born, Raised in, and Leaving a Cultic Group: The Case of the Exclusive Brethren* [Doctoral Dissertation, Middlesex University/Metanoia Institute Psychology]. Middlesex University Research Repository <https://repository.mdx.ac.uk/item/88199>
- Almendros, C., Carrobbles, J. A., Rodríguez-Carballeira, A., & Gámez-Guadix, M. (2009). Abandono y malestar psicológico En exmiembros de grupos sectarios [Disaffiliation and psychological distress in former members of cultic groups]. *Behavioral Psychology*, 17(2), 181–202.
- Almendros, C., Rodríguez-Carballeira, A., Carrobbles, J. A., & Gámez-Guadix, M. (2010). Los motivos de vinculación a sectas coercitivas [The reasons for involvement to coercive cults]. *Revista De Psicoterapia*, 20(78–79), 43–60.
- Almendros, C., Gámez-Guadix, M., Carrobbles, J. A., & Rodríguez-Carballeira, A. (2011). Abuso psicológico En grupos manipuladores [Psychological abuse in manipulative groups]. *Behavioral Psychology*, 19(1), 157–182.
- Anastasiadou, D., Medina-Pradas, C., Sepúlveda, A. R., & Treasure, J. (2014). A systematic review of family caregiving in eating disorders. *Eating Behaviors*, 15(3), 464–477. <https://doi.org/10.1016/j.eatbeh.2014.06.001>
- Antelo, E., Saldaña, O., & Rodríguez-Carballeira, A. (2021). The impact of group psychological abuse on distress: The mediating role of social functioning and resilience. *European Journal of Psychotraumatology*, 12(1). <https://doi.org/10.1080/20008198.2021.1954776>
- Baamonde, J. M. (1991). *Sectas y Lavado de cerebro*. Editorial Bonum.
- Bardin, L. (2002). *Coping with cult involvement: A handbook for families and friends* (2nd ed.). American Family Foundation.
- Barrowclough, C., & Hooley, J. M. (2003). Attributions and expressed emotion: A review. *Clinical Psychology Review*, 23(6), 849–880. [https://doi.org/10.1016/S0272-7358\(03\)00075-8](https://doi.org/10.1016/S0272-7358(03)00075-8)
- Barrowclough, C., & Parle, M. (1997). Appraisal, psychological adjustment and expressed emotion in relatives of patients suffering from schizophrenia. *The British Journal of Psychiatry*, 171, 26–30. <https://doi.org/10.1192/bjp.171.1.26>
- Boeri, M. W. (2002). Women after the utopia: The gendered lives of former cult members. *Journal of Contemporary Ethnography*, 31(3), 323–360. <https://doi.org/10.1177/0891241602031003003>
- Bueno, M. V., & Chase, J. A. D. (2022). Gender differences in adverse psychosocial outcomes among family caregivers: A systematic review. *Western Journal of Nursing Research*, 45(1), 78–92. <http://s://doi.org/10.1177/01939459221099672>
- Castaño, Á., Bélanger, J. J., & Moyano, M. (2022). Cult conversion from the perspective of families: Implications for prevention and psychological intervention. *Psychology of Religion and Spirituality*, 14(1), 148–160. <https://doi.org/10.1037/rel0000410>
- Chan, E. Y., Glass, G., Chua, K. C., Ali, N., & Lim, W. S. (2018). Relationship between mastery and caregiving competence in protecting against burden, anxiety and depression among caregivers of frail older adults. *The Journal of Nutrition Health and Aging*, 22(10), 1238–1245. <https://doi.org/10.1007/s12603-018-1098-1>
- Cialdini, R. B. (2001). The science of persuasion. *Scientific American*, 284(2), 76–81. <https://www.jstor.org/stable/26059056>
- Coates, D. D. (2010). Post-Involvement difficulties experienced by former members of charismatic groups. *Journal of Religion and Health*, 49(3), 296–310. <https://doi.org/10.1007/s10943-009-9251-0>
- R Core Team (2022). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing. <https://www.R-project.org>
- Corrigan, P. (2004). How stigma interferes with mental health care. *The American Psychologist*, 59(7), 614–625. <https://doi.org/10.1037/0003-066X.59.7.614>
- Craven, S., Brown, S., & Gilchrist, E. (2006). Sexual grooming of children: Review of literature and theoretical considerations. *Journal of Sexual Aggression*, 12(3), 287–299. <https://doi.org/10.1080/13552600601069414>
- Curtis, J. M., & Curtis, M. J. (1993). Factors related to susceptibility and recruitment by cults. *Psychological Reports*, 73(2), 451–460. <https://doi.org/10.2466/pr0.1993.73.2.451>
- Duron, J. F., Johnson, L., Hoge, G. L., & Postmus, J. L. (2021). Observing coercive control beyond intimate partner violence: Examining the perceptions of professionals about common tactics used in victimization. *Psychology of Violence*, 11(2), 144–154. <https://doi.org/10.1037/vio0000354>
- Furnari, L. (2005). Born or Raised in closes, High-Demand groups: Developmental considerations. *ICSA Enewsletter*, 4(3). <https://www.icsahome.com/elibrary/topics/articles/born-or-raised-furnari-i-en4-3>
- Garrido, L. E., Abad, F. J., & Ponsoda, V. (2013). A new look at horn's parallel analysis with ordinal variables. *Psychological Methods*, 18(4), 454–474. <https://doi.org/10.1037/a0030005>

- Goldberg, L. (2006). Raised in cultic groups: The impact on the development of certain aspects of character. *Cultic Studies Review*, 5(1), 1–28.
- Goldberg, L., & Goldberg, W. (1989). Family responses to a young adult's cult membership and return. *Cultic Studies Journal*, 6(1), 86–100.
- Goldberg, D. P., & Williams, P. (1988). *A user's guide to the general health questionnaire*. NFER-NELSON.
- Golino, H., & Christensen, A. P. (2022). *EGAnet: Exploratory Graph Analysis – a Framework for Estimating the Number of Dimensions in Multivariate Data using Network Psychometrics*. R package version 1.1.1. <https://CRAN.R-project.org/package=EGAnet>
- Golino, H. F., & Epskamp, S. (2017). Exploratory graph analysis: A new approach for estimating the number of dimensions in psychological research. *Plos One*, 12(6), e0174035. <https://doi.org/10.1371/journal.pone.0174035>
- Gregory, A. C., Williamson, E., & Feder, G. (2017). The impact on informal supporters of domestic violence survivors: A systematic literature review. *Trauma Violence & Abuse*, 18(5), 562–580. <http://doi.org/10.1177/1524838016641919>
- Gregory, A., Taylor, A. K., Pitt, K., Feder, G., & Williamson, E. (2021). The forgotten heroes: A qualitative study exploring how friends and family members of DV survivors use domestic violence helplines. *Journal of Interpersonal Violence*, 36(21–22), NP11479–P11505. <https://doi.org/10.1177/0886260519888199>
- Grice, J. W. (2001). Computing and evaluating factor scores. *Psychological Methods*, 6(4), 430–450. <https://doi.org/10.1037/1082-989X.6.4.430>
- Hallquist, M. N., & Wiley, J. F. (2018). MplusAutomation: An R package for facilitating Large-Scale latent variable analyses in Mplus. *Structural Equation Modeling: A Multidisciplinary Journal*, 25(4), 621–638. <https://doi.org/10.1080/10705511.2017.1402334>
- Hassan, S. (1988). *Combating cult Mind control*. Park Street.
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30(2), 179–185. <https://doi.org/10.1007/BF02289447>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kageyama, M., & Solomon, P. (2018). Characteristics of parents with high expressed emotion and related factors: A study of parents of adults with schizophrenia. *The Journal of Nervous and Mental Disease*, 206(12), 955–961. <https://doi.org/10.1097/NMD.0000000000000902>
- Kaiser, H. F. (1970). A second generation little Jiffy. *Psychometrika*, 35(4), 401–415. <https://doi.org/10.1007/BF02291817>
- Kulhara, P., Kate, N., Grover, S., & Nehra, R. (2012). Positive aspects of caregiving in schizophrenia: A review. *World Journal of Psychiatry*, 2(3), 43–48. <https://doi.org/10.5498/wjp.v2.i3.43>
- Kyriacou, O., Treasure, J., & Schmidt, U. (2008). Expressed emotion in eating disorders assessed via self-report: An examination of factors associated with expressed emotion in carers of people with anorexia nervosa in comparison to control families. *International Journal of Eating Disorders*, 41(1), 37–46. <https://doi.org/10.1002/eat.20469>
- Lalich, J. (1997). Dominance and submission: The psychosexual exploitation of women in cults. *Cultic Studies Journal*, 14(1), 4–21.
- Langone, M. D. (1990). Working with Cult-Affected families. *Psychiatric Annals*, 20(4), 194–198. <https://doi.org/10.3928/0048-5713-19900401-07>
- Langone, M. D. (1992). Psychological abuse. *Cultic Studies Journal*, 9(2), 206–218.
- Langone, M. D. (2019). 1979–2019: The changing population of ICSA. *ICSA Today*, 10(1). <https://www.icsahome.com/elibrary/topics/articles/1979-2019-the-changing-population-of-icsa>
- Lespine, L. F., Bohec, A. L., Dorey, J. M., Berbey, C. D., Lourioux, C., D'amato, T., & Rey, R. (2023). Caregiving-related experiences associated with depression severity And its symptomatology among caregivers of individuals with a severe mental disorder: An online cross-sectional study. *European Archives of Psychiatry and Clinical Neuroscience*, 273(4), 887–900. <https://doi.org/10.1007/s00406-022-01451-3>
- Marsh, H. W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on Hypothesis-Testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and bentler's (1999) findings. *Structural Equation Modeling: A Multidisciplinary Journal*, 11(3), 320–341. https://doi.org/10.1207/s15328007sem1103_2
- Matthews, C. H., & Salazar, C. F. (2014). Second-Generation adult former cult group members' recovery experiences: Implications for counseling. *International Journal for the Advancement of Counseling*, 36(2), 188–203. <https://doi.org/10.1007/s10447-013-9201-0>
- McCabe, K., Goldberg, L., Langone, M., & DeVoe, K. (2007). A workshop for people born or Raised in cultic groups. *ICSA E-Newsletter*, 6(1). https://www.icsahome.com/elibrary/topics/articles/s_gaworkshop
- McDonald, R. P. (1999). *Test theory: A unified treatment*. Lawrence Erlbaum Associates.
- Muthén, B., & Muthén, L. (2017). Mplus. In W. J. van der Linden (Ed.), *Handbook of item response theory* (pp. 507–518). Chapman and Hall/CRC.
- Nájera, P., Sorrel, M. A., & Abad, F. J. (2023). *cdmTools: Useful Tools for Cognitive Diagnosis Modeling*. R package version 1.0.3. <http://CRAN.R-project.org/package=cdmTools>
- O'Driscoll, C., Farrelly, S., Burgess, P., Szmukler, G., & Shaikh, M. (2018). The development and validation of the brief experience of caregiving inventory (BECI). *Comprehensive Psychiatry*, 86, 54–59. <https://doi.org/10.1016/j.comppsy.2018.07.003>
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19(1), 2–21. <https://www.jstor.org/stable/2136319>
- Revelle, W. (2022). *psych: Procedures for Psychological, Psychometric, and Personality Research*. R package version 2.2.5. <https://CRAN.R-project.org/package=psych>
- Rodríguez-Carballeira, A., Almendros, C., Escartín, J., Porrúa, C., Martín-Peña, J., Javaloy, F., & Carrobes, J. A. (2013). Preliminary taxonomy of psychological abuse strategies: Within partner relationships, at the workplace, and in manipulative groups. *International Journal of Cultic Studies*, 4, 1–14.
- Rodríguez-Carballeira, A., Saldaña, O., Almendros, C., Martín-Peña, J., Escartín, J., & Porrúa-García, C. (2015). Group psychological abuse: Taxonomy and severity of its components. *The European Journal of Psychology Applied To Legal Context*, 7(1), 31–39. <https://doi.org/10.1016/j.ejpal.2014.11.001>
- Ross, J. C., & Langone, M. D. (1988). *Cults: What parents should know: A practical guide to help parents with children in destructive groups*. American Family Foundation.
- Rousselet, M., Durete, O., Hardouin, J. B., & Grall-Bronnec, M. (2017). Cult membership: What factors contribute to joining or leaving? *Psychiatry Research*, 257, 27–33. <https://doi.org/10.1016/j.psychres.2017.07.018>
- Saldaña, O., Rodríguez-Carballeira, A., Almendros, C., & Escartín, J. (2017). Development and validation of the psychological abuse experienced in groups scale. *The European Journal of Psychology Applied To Legal Context*, 9(2), 57–64. <https://doi.org/10.1016/j.ejpal.2017.01.002>

- Saldaña, O., Antelo, E., Almendros, C., & Rodríguez-Carballeira, A. (2019). Development and validation of a measure of emotional distress in survivors of group psychological abuse. *The Spanish Journal of Psychology*, 22, e33. <https://doi.org/10.1017/sjp.2019.32>
- Schmitt, T. A., & Sass, D. A. (2011). Rotation criteria and hypothesis testing for exploratory factor analysis: Implications for factor pattern loadings and interfactor correlations. *Educational and Psychological Measurement*, 71(1), 95–113. <https://doi.org/10.1177/0013164410387348>
- Schwartz, L. (1986). Parental responses to their children's cult membership. *Cultic Studies Journal*, 3, 190–203.
- Sepúlveda, A. R., Anastasiadou, D., Rodríguez, L., Almendros, C., Andrés, P., Vaz, F., & Graell, M. (2014). Spanish validation of the family questionnaire (FQ) in families of patients with an eating disorder. *Psicothema*, 26(3), 321–327. <https://doi.org/10.7334/psicothema2013.310>
- Sepúlveda, A. R., Almendros, C., Berbel, E., Andrés, P., Parks, M., & Graell, M. (2020). Psychometric properties of the Spanish version of the experience of caregiving inventory (ECI) among caregivers of individuals with an eating disorder. *Eating and Weight Disorders-Studies on Anorexia Bulimia and Obesity*, 25(2), 299–307. <https://doi.org/10.1007/s40519-018-0587-x>
- Singer, M. T., & Lalich, J. (1995). *Cults in our midst*. Jossey-Bass/Wiley.
- Stark, E. (2007). *Coercive control: How men entrap women in personal life*. Oxford University Press.
- Sullivan, L. (1984). Family perspectives on involvements in new religious groups. *Cultic Studies Journal*, 1(1), 79–102.
- Szmukler, G. I., Burgess, P., Herrman, H., Benson, A., Colusa, S., & Bloch, S. (1996). Caring for relatives with serious mental illness: The development of The experience of caregiving inventory. *Social Psychiatry and Psychiatric Epidemiology*, 31, 137–148. <https://doi.org/10.1007/BF00785760>
- Vaughn, C., & Leff, J. (1976). The measurement of expressed emotion in the families of psychiatric patients. *British Journal of Social and Clinical Psychology*, 15(2), 157–165.
- Velicer, W. F. (1976). Determining the number of components from the matrix of partial correlations. *Psychometrika*, 41(3), 321–327. <https://doi.org/10.1007/BF02293557>
- Wearden, A. J., Tarrier, N., & Barrowclough, C. (2000). A review of expressed emotion research in health care. *Clinical Psychology Review*, 20, 633–666. [https://doi.org/10.1016/S0272-7358\(99\)0008-2](https://doi.org/10.1016/S0272-7358(99)0008-2)
- West, L. J., & Langone, M. D. (1986). Cultism: A Conference for Scholars and Policy Makers. *Cultic Studies Journal*, 3(1), 117–134.
- Whalen, K. J., & Buchholz, S. W. (2009). The reliability, validity and feasibility of tools used to screen for caregiver burden: A systematic review. *JBIC Evidence Synthesis*, 7(32), 1373–1430. <https://doi.org/10.11124/jbisrir-2009-213>
- Whitsett, D., & Kent, S. A. (2003). Cults and families. *Families in society. The Journal of Contemporary Human Services*, 84(4), 491–502. <https://doi.org/10.1606/1044-3894.147>
- Wiedemann, G., Rayki, O., Feinstein, E., & Hahlweg, K. (2002). The family questionnaire: Development and validation of a new self-report scale for assessing expressed emotion. *Psychiatry Research*, 109(3), 265–279. [https://doi.org/10.1016/S0165-1781\(02\)00023-9](https://doi.org/10.1016/S0165-1781(02)00023-9)
- Wright, S. A., & Piper, E. S. (1986). Families and cults: Familial factors related to youth leaving or remaining in deviant religious groups. *Journal of Marriage and the Family*, 48(1), 15–25. <https://doi.org/10.2307/352224>
- Zabala, M. J., Macdonald, P., & Treasure, J. (2009). Appraisal of caregiving burden, expressed emotion and psychological distress in families of people with eating disorders: A systematic review. *European Eating Disorders Review: the Professional Journal of the Eating Disorders Associations*, 17(5), 338–349. <https://doi.org/10.1002/erv.925>
- Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67(6), 361–370. <https://doi.org/10.1111/j.1600-0447.1983.tb09716.x>

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