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The Role of Depression, Shame-Proneness, and Guilt-Proneness in Predicting Criticism of Relatives Towards People With Bipolar Disorder

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Abstract

Expressed emotion (EE) has been associated with poor patient outcomes in many different psychiatric disorders. Given its robust association with relapse, EE has become a major target of family psychoeducational interventions. Most psychoeducational interventions to date have failed to change EE levels among families of those with bipolar disorder. Better intervention strategies, then, may depend on an increased understanding of the predictors of EE. Although EE has traditionally included many facets, criticism appears to be the most robust predictor of outcome within bipolar disorder. The present study tested three primary predictors of criticism among family members of people with bipolar disorder: shame-proneness, guilt-proneness, and depression. Depressive symptoms were significantly associated with EE. Discussion focuses on limitations and implications of the study and suggestions for future research.

The Role of Depression, Shame-Proneness, and Guilt-Proneness in Predicting Criticism of Relatives Towards People With Bipolar Disorder

Bipolar disorder is associated with significant costs to the diagnosed individual, his or her family, and society, as perhaps best documented by the 12-to-15-fold increase in rates of completed suicide compared to the general population (Angst, Stassen, Clayton, & Angst, 2002) and the substantially elevated rates of disability (Murray & Lopez, 1996). Indeed, half of the mental health inpatient costs in the United States are associated with bipolar disorder (Kent, Fogarty, & Yellowlees, 1995).

The course of bipolar symptoms over time varies considerably. Some people with bipolar disorder experience only one episode in their lifetime, whereas most experience frequent episodes. A 12-year longitudinal study found that people with bipolar I and bipolar II disorder were symptomatic about half of the time (Judd et al., 2002, 2003). Hence, there is a substantial need for a better understanding of key risk variables within this disorder.

DEFINING EXPRESSED EMOTION (EE)

EE is a measure of the extent to which a family member speaks about another person in the family in a critical or hostile way or in a manner indicating negative emotional overinvolvement

(Barrowclough & Hooley, 2003). EE has been associated with poor patient outcomes in many different psychiatric disorders, including schizophrenia, major depressive disorder, as well as bipolar I disorder (Barrowclough & Hooley, 2003; Butzlaff & Hooley, 1998).

EE is a particularly robust risk factor for mood disorders ($r = .39$) (Butzlaff & Hooley, 1998; Lam, 1991). For example, one study examined EE among people with bipolar disorder over the course of 9 months and reported a relapse rate of 90% among patients returning from the hospital to high EE homes compared with a relapse rate of 54% for patients returning to live in low EE home environments (Miklowitz, Goldstein, Nuechterlein, Snyder, & Doane, 1986). Another study extended previous findings by showing that compared to low EE, high EE, as measured by the Five Minute Speech Sample (FMSS), predicted a five-fold increase in the risk of depressive recurrence over a 1-year period, after controlling for prior symptom severity (Yan, Hammen, Cohen, Daley, & Henry, 2004). EE has also been found to predict depressive symptoms among patients enrolled in treatment for bipolar disorder (Kim & Miklowitz, 2004).

Empirical evidence has indicated that criticism is the most important element of EE for understanding the course of disorder (Hooley, Rosen, & Richters, 1995; Rosenfarb et al., 2001). Therefore, within this study, criticism was used as the primary index of EE.

EE AND FAMILY MEMBER CHARACTERISTICS

Given the robust influence of EE on the course of symptoms, a key question is what predicts EE. (Hooley 1986, 1987) hypothesized that criticism among relatives of those with mental illness reflects their belief that patients could do much more to control their behavior and symptoms. Consistent with theory, research findings have indicated that, compared to relatives who are low in EE, relatives who are high in EE tend to view patients as having control over their symptoms (see Barrowclough & Hooley, 2003; Barrowclough, Johnston, & Tarrier, 1994). Such relatives often make internal, personal, and controllable attributions, also referred to as blaming attributions, about the patients' behaviors, such as, "You do things just to be difficult" (Brewin, MacCarthy, Duda, & Vaughn, 1991; Wendel, Miklowitz, Richards, & George, 2000). Support for this pattern has been documented in a study of bipolar disorder (Wendel et al., 2000). In sum, it appears that attributions of control are associated with EE.

Other than attributional style, only a relatively small body of research has investigated family member characteristics that might explain what drives EE. As is the case throughout the EE literature, most studies examining predictors of EE have focused on people with schizophrenia. In such studies, high EE relatives have been found to be more conventional in their attitudes and behavior and to report feeling less capable, empathic, tolerant, and optimistic compared to low EE relatives (Hooley & Hiller, 2000). Furthermore, findings suggest that high EE family members of people with schizophrenia tend to be socially bold, extraverted, tense, group-oriented, anxious, and independent compared to family members low in EE (Sanger, 1997). With respect to diagnoses, studies indicate that EE is unrelated to family psychopathology (Goldstein et al., 1992) and, more specifically, unrelated to family history of schizophrenia spectrum disorders. On the other hand, higher EE was inversely associated with familial affective disorders (Subotnik, Goldstein, Nuechterlein, Woo, & Mintz, 2002).

More closely related to the current focus on bipolar disorder, one study investigated the relationship between EE, psychiatric diagnoses and lifetime subsyndromal mood disturbances, as assessed by the General Behavior Inventory (GBI) scores, of relatives of people with bipolar disorder (Goldstein, Miklowitz & Richards, 2002). EE status was not related to individual psychopathology in family members, nor was it related to subsyndromal lifetime mood disturbances. This study, as well as the above-mentioned studies, is consistent in suggesting that high and low EE attitudes are not only epiphenomena of a family member's own

vulnerability toward mental illness (Goldstein et al., 2002). Nonetheless, questions remain about family member characteristics that help explain EE among relatives of people with bipolar disorder.

There are several variables that one might expect to relate to and be predictive of EE that have not been examined to date. Moreover, the literature to date has focused on EE as a whole, rather than criticism, which appears to be more closely tied to the course of bipolar disorder. In this paper, we focus on three characteristics among family members of people diagnosed with bipolar disorder: depressive symptoms, shame-proneness, and guilt-proneness.

Although lifetime mood disorders have not been found to predict EE (Goldstein et al., 2002), researchers have not examined current depressive symptoms as a predictor in bipolar disorder. One reason to consider depressive symptoms is that as many as one-third of family members of those with bipolar disorder report significant depressive symptoms (Perlick, Hohenstein, Clarkin, Kaczynski, & Rosenheck, 2005). Beyond this, there is robust evidence that depression is tied to social difficulties, particularly in marital and family relationships (Barnett & Gotlib, 1988). Furthermore, it is well-established that depressive symptoms predict declines in the quality of intimate relationships (Hooley & Teasdale, 1989). Some have conceptualized these difficulties as bidirectionally relevant to the course of disorder, with more severe symptoms manifesting in conflict and conflict exacerbating and maintaining depression (e.g., Gotlib & Beach, 1995). Beyond directionality and more directly relevant to the current study, there is substantial evidence that people who are depressed are often hostile (Hops et al., 1987), particularly with family members (Coyne, Burchill, & Stiles, 1991). Given the impact that depression has on interpersonal relations, it is likely that depression in a relative of a person with bipolar disorder could create or exacerbate conflict and hostility. Therefore, in the present study, depression was hypothesized to relate to the number of critical comments made by family members.

Beyond examining the role of current depressive symptoms, a second goal was to examine shame-proneness. Although shame and guilt have historically been conceptualized as similar (Tangney, 1995; Tangney, Burckgraf, & Wagner, 1995), recent theories distinguish between these two constructs on the basis of the target of the person's evaluation. According to Tangney (1991), when a person is shamed, the self rather than the behavior is the object of negative evaluation. The individual experiences global self-devaluation ("I am a bad person for doing such a horrible thing") and often feels a desire to escape or hide. In addition, shame interferes with other-oriented empathy and is related to the tendency to blame others (Tangney, 1995). More specifically, shame reduces a person's capacity to experience empathy because it involves an intense self-focus rather than a focus on the other's experience (Reimer, 1996). Therefore, experiencing shame may lead to blame, lack of empathy, and increased criticism and hostility toward a family member with a psychiatric illness. In contrast, the person experiencing guilt evaluates the behavior, but not their entire self, negatively. Furthermore, the person who experiences guilt often feels a sense of remorse and is compelled to take reparative action (Tangney, 1995, 1996). Experiencing guilt, then, would make a person more likely to engage in encouraging and positive communications with family members.

Shame-proneness is related to many poor psychological and interpersonal adjustment outcomes, including greater levels of anger, depression, hostility, anxiety (Tangney, Wagner, Barlow, Marschall, & Gramzow, 1996; Tangney, Wagner, & Gramzow, 1992), as well as problematic relationships (Tangney, 1995; Tangney & Dearing, 2002). For example, Armesto and Weisman (2001) examined the role of shame- and guilt-proneness in parental reactions after a hypothetical child's disclosure of homosexuality. Compared with those who were relatively higher in guilt-proneness, those high in shame-proneness reported greater negative emotional reactions and were more likely to experience adverse emotions such as anger, hatred,

and frustration towards their “imagined” gay child. Furthermore, (Weisman de Mamani 2006) reported that shame-proneness was strongly associated with greater emotional distress among caregivers who had relatives with schizophrenia, whereas guilt-proneness was associated with less emotional distress.

Given the differences in how they affect emotional experiences, shame and guilt may be differentially associated with interpersonal functioning among families of people with bipolar disorder. Because of the often destructive nature of symptoms, managing a relationship with a person who has bipolar disorder can be difficult. To cope, family members often engage in limit-setting, avoiding or withdrawing from their ill relatives, which may produce feelings of guilt or shame. An understanding of the relative influence of shame and guilt on family interactions and more specifically, the expression of criticism, appears to be an important area to examine. In the present study, it was predicted that shame-proneness would be related to more critical comments whereas guilt proneness would be associated with less criticism.

SUMMARY OF THE PROBLEM

Given that high EE can have detrimental consequences for relapse, there is a need to understand the predictors of EE. The goal of this study was to evaluate whether elevated depression, elevated shame-proneness, and diminished guilt-proneness would predict the number of critical comments made by family members of people with bipolar disorder.

METHOD

OVERVIEW OF DESIGN

To evaluate the proposed hypotheses, relatives of people with bipolar disorder were recruited to take part in a 6-hour family psychoeducational workshop. On the day of the workshop, they completed a measure of EE, as well as self-report measures of depressive symptoms and shame- and guilt-proneness.

PARTICIPANTS

The present study included self-identified relatives of people with bipolar disorder who agreed to take part in a 6-hour family psychoeducational workshop. Therefore, in the current study, “participants” refers to the relatives of people with bipolar disorder. All participants were recruited from the South Florida community through local outpatient hospitals, support groups, educational talks, fliers, and newspaper and internet advertising. Participants were between the ages of 18 and 64. These multifamily groups were held at the University of Miami and consisted of 4 to 12 participants from three or more families.

Eighty-two people were screened by phone. Potential participants were questioned about their relative's mood symptoms using items drawn from the Structured Clinical Interview for DSM-IV (SCID), as well as a question regarding whether their family member had received a diagnosis of bipolar disorder. Inclusion criteria for participants were as follows: age 18 or older, having the ability to complete measures in English and having at least 5 hours of contact per week with a family member (over the age of 12) who had either been diagnosed with bipolar disorder by a clinician or met SCID criteria for bipolar disorder. It should be noted that all diagnostic information about the relative was obtained through the potential participant.

Potential participants were excluded for not having a relative who appeared to have bipolar disorder ($n = 5$), the relative being under the age of 12 ($n = 1$), and the relative being out of contact ($n = 1$) or deceased ($n = 1$). In addition, several potential participants failed to return study coordinator phone calls. Of the initial 82 persons who contacted the study coordinator, 60 expressed interest in and were eligible for the study. Only 42 (13 male, 29 female) adults

from 19 different families actually attended a workshop and enrolled in the study. Despite attempts to contact those who did not attend, most calls were not returned.¹

PROCEDURE

Potential participants were screened by phone for study eligibility. Once deemed eligible, participants were mailed the consent forms, HIPPA forms, and self-report measures to be returned at the psychoeducational workshop. The FMSS was administered on the day of the workshop before psychoeducational material was presented.

MEASURES

EE—Traditionally, EE has been measured using the Camberwell Family Interview (CFI), a semistructured interview that takes about 1 to 2 hours to conduct and three hours to code. Given the considerable time required to administer and code the CFI, a team of researchers developed the FMSS, a shorter measure of EE, in which the participant is asked to speak about his or her relative with a psychiatric illness while being audiotaped (Magaña, Goldstein, Karno, & Miklowitz, 1986). The FMSS has shown to be a valid measure of criticism in mood disorders (Hooley & Teasdale, 1989; Magaña et al., 1986; Shimodera et al., 2002; Van Humbeeck, Van Audenhove, De Hert, Pieters, & Storms, 2002) and has been shown to predict depressive recurrence in bipolar disorder over a 1-year period (Yan et al., 2004). Instructions for the task are as follows (Van Humbeeck et al., 2002):

I'd like to hear your thoughts and feelings about [relative's name], in your own words without my interrupting with any questions or comments. When I ask you to begin I'd like you to speak for five minutes, telling me what kind of a person [relative's name] is and how the two of you get along together. After you begin to speak, I prefer not to answer any questions until after the five minutes.

In the current study, each recording was transcribed and then coded on four dimensions: (1) quality of the initial statement, (2) quality of relationship, (3) criticism, and (4) emotional over-involvement. To be classified as high critical, relatives must have made a negative opening statement, described a negative relationship with their relative, or made at least one critical comment about the ill family member. For the purposes of this study, the number of critical comments was used as the primary index of EE. This index was chosen because empirical evidence has shown that it is the FMSS index most predictive of outcomes (Hooley, Rosen & Richters, 1995). Therefore, throughout this manuscript, the number of critical comments is used as a proxy for EE.

Four undergraduate raters and two graduate student raters were trained in FMSS ratings by a graduate student with extensive experience coding FMSS tapes. Training involved a didactic session, then practice coding of 6 training tapes, with group review to establish consensus. Consensus was further established on four speech samples. Then, a random sample of 10 tapes was selected for reliability analyses. Unfortunately, the initial inter-rater reliability estimate between the graduate student raters and the undergraduate student raters was determined to be inadequate ($ICC < .60$). To address this issue, a new undergraduate rater was trained following the same procedures and re-rated tapes by the unreliable raters. Based on independent review of 10 randomly selected FMSS tapes, interrater reliability of the new undergraduate student, two graduate student raters, and the EE graduate student trainer in this study was adequate for number of critical comments, $ICC(9, 18) = .71$.

¹No demographic data are available on those people who were scheduled and did not attend, as minimal information was collected during the phone screening process to protect caller confidentiality.

Depression—The Beck Depression Inventory–Short Form (BDI-SF) is a widely used 13-item self-report measure of current depressive symptoms (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Scoring was completed by summing the individual items, which are rated on a 4-point scale. The scale has been shown to have high internal consistency and to achieve robust correlations with other measures of depression, such as the Modified Hamilton Rating Scale for Depression (Miller, Bishop, Norman, & Maddever, 1985).

Shame- and guilt-proneness—The Test of Self-Conscious Affect, Version 3 (TOSCA; Tangney, Wagner, & Gramzow, 1989) is designed to assess the tendency to experience guilt and shame. The scale consists of 11 negatively valenced and 5 positively valenced scenarios involving shame, guilt, and pride experiences that were commonly reported in a sample of several hundred college students and non-college adults (e.g., “You walk out of an exam thinking you did extremely well. Then you find out you did poorly.”). Each scenario is followed by five potential responses, which capture features of shame and guilt. For each scenario, participants rate their likelihood of responding on a 5-point scale from “not likely” to “very likely.” The TOSCA allows for a person to report both shame and guilt in a given scenario. The TOSCA has demonstrated adequate test-retest stability (.85 and .74 for shame-proneness and guilt-proneness, respectively) and internal consistency (Cronbach's $\alpha = .76$ and $.66$ for shame-proneness and guilt-proneness, respectively), expected correlations among subscales, with other measures of shame, guilt, and with theoretically related constructs such as depression, anxiety, and anger (Tangney, 1990, 1991, 1996; Tangney et al., 1992).

Results

The configuration of missing data suggested no systematic response bias—that is, missing values were not clustered for any independent variable or for any participant. The percentage of missing data for the outcome variable, number of criticisms, was 7.1% due to mechanical errors while audiotaping. The percentage of missing data for each of the three predictors—shame-proneness, guilt-proneness and depression—was 2.4%. Missing data were imputed for all variables (with the exception of categorical variables) using the expectation maximization (EM) method in SPSS Missing Value Analysis software (Little & Rubin, 1987). Missing data were not and cannot be imputed for categorical variables with these algorithms. After conducting missing data analysis, there were a total of 38 participants with complete data. Demographic variables are reported in Table 1 and Table 2. Means and standard deviations of all measures are reported in Table 3. Compared to general population norms (Brown, Henteleff, Barakat, & Rowe, 1986; Tangney et al., 1992), this sample reported significantly more depressive symptoms, $t(37) = 3.64, p < .01$, and guilt-proneness $t(37) = 6.41, p < .01$, but not more shame-proneness, $t(37) = -1.02, p = .316$. The numbers of critical comments made by this sample was significantly lower, $\chi^2(1, N = 2) = 7.0, p \leq .05$, than EE levels in comparable samples of relatives of people with bipolar disorder (Yan et al., 2004).

Distributions were examined for outliers and normality. All distributions were relatively normal, with the exception of number of criticisms. Given that the restricted range of criticisms (0–4) did not allow for extreme outliers and multilevel linear modeling is quite robust to violations of normality (Yuan & Bentler, 2006), the decision was made not to transform distributions. Potential confounds, including demographic variables such as age, familial relationship (e.g., parent, spouse), number of previous hospitalizations, and severity of illness indices were examined. None of these variables were significantly related to number of critical comments. In addition, to consider issues of multicollinearity, intercorrelations of the predictor variables were examined (see Table 4).

PRIMARY ANALYSES

The primary hypothesis was that the independent variables (depressive symptoms, shame-proneness, guilt-proneness) would be correlated with the dependent variable, criticism. The potential interdependence between members of the same family was modeled by including a random effect for family in the linear regression model. This model was then considered to be hierarchical or multilevel because participants were nested within the families (Hesketh-Rabe, Touloupoulou, & Murray, 2001). The MIXREG program (Hedeker & Gibbons, 1996) was used to examine random effects. An alpha level of .05 was used for all statistical tests. Predictor variables were transformed into *z*-scores before conducting analyses.²

RELATIONSHIP OF DEPRESSION WITH CRITICISM

In the first model, criticism was regressed on depression. As shown in Table 5, depressive symptoms were significantly related to number of criticisms ($p < .05$). For every one point increase in BDI score, number of criticisms increased by .07. The intraclass correlation was very low (.00), indicating that criticism scores were not correlated within families.

RELATIONSHIP OF SHAME-PRONENESS AND GUILT-PRONENESS WITH CRITICISM

In the second model, criticism was regressed on both shame- and guilt-proneness. Neither shame-proneness nor guilt-proneness were related to number of criticisms (see Table 5).

Discussion

For the past several decades, the concept of EE has occupied a central role in the literature regarding psychosocial influences on the course of severe mental illness (Barrowclough & Hooley, 2003). EE has been associated with poor patient outcomes in several psychiatric disorders, including schizophrenia, major depressive disorder, and bipolar disorder (Barrowclough & Hooley, 2003; Butzlaff & Hooley, 1998), and it appears to be a particularly robust risk factor for mood disorders (Butzlaff & Hooley, 1998).

Given the strong association between EE and relapse in bipolar disorder, psychosocial treatments have focused on reducing EE via improving family communication, increasing coping skills, and decreasing symptoms. Whereas such interventions have provided encouraging results across many outcomes (e.g., Bland & Harrison, 2000; Brent, Poling, McKain, & Baugher, 1993), only one study has documented significant reductions in EE compared to control conditions (Honig et al., 1997); most studies have failed to change EE (Fristad, Goldberg-Arnold, & Gavazzi, 2003; Simoneau, Miklowitz, Richards, Saleem, & George, 1999). These null findings suggest that there are additional variables driving EE that are not being addressed through current interventions. Thus, this study sought to examine additional variables that may give rise to criticism within families. A better understanding of family characteristics associated with EE is valuable for predicting who will cope well in the management of chronic psychiatric illness.

The present study tested three predictors of criticism among family members of people with bipolar disorder: current depressive symptom severity, shame-proneness, and guilt-proneness. Depression, but not shame-proneness or guilt-proneness, was significantly associated with number of critical comments.

To our knowledge, this is the first examination of the relationship of current depressive symptoms to the number of critical comments, despite the high rates of depressive symptoms

²Separate, parallel primary analyses were conducted excluding the single outlier. Results were parallel to those conducted with the outlier included.

in these families (Perlick et al., 1999). Previous studies found that EE was unrelated to major depressive disorder (Goldstein et al., 2002). Given this context, the present study examined depressive symptoms, rather than diagnosis *per se*, and found that subsyndromal symptoms were related to increased family criticism levels. Taken together, the pattern of findings suggests that it might be important to consider milder levels of symptoms in understanding family criticism.

Hypotheses that guilt and shame-proneness would be related to family criticism were not supported. Other studies have found elevated shame-proneness among family members of persons with mental illnesses such as schizophrenia (Stalberg, Ekerwald, & Hultman, 2004; Wong, 2000), but shame-proneness was not elevated in the current sample (Tangney et al., 1992). It may be that having a relative with bipolar disorder is not typically as shame-inducing as having a relative with a disorder such as schizophrenia, perhaps due to factors like the known association of bipolar disorder with high achievement (e.g., Johnson, 2005) and creativity (e.g., Andreasen, 1987; Santosa et al., 1999). Hence, dynamics of shame and criticism may not generalize from schizophrenia to bipolar disorder.

Although shame was not related to number of critical comments specifically, shame and guilt do appear to be an important construct for further research in these families for two reasons. First, the current sample reported elevated guilt-proneness compared to the general population (Tangney et al., 1992). Second, shame was highly correlated with depressive symptoms, and so speculatively, could play a role in generating depression. Hence, although shame and guilt may not help explain family criticism levels, they may be related to other important aspects of adaptation in these families.

LIMITATIONS

There are several important limitations to the present study. First and foremost, the small sample size limited power to detect effects accounting for less than 12% of the variance in criticism. Nonetheless, some effects were so small (e.g., effect of shame-proneness on number of criticisms $d = .01$; effect of guilt-proneness on number of criticisms, $d = .01$), that we cannot assume power is the only explanation for the null findings.

Problems with power were compounded by the lack of variability in the chief outcome variable: number of criticisms. In the current sample, 31.8% made at least one critical comment (the threshold for high EE on the FMSS), but very few made more than one critical comment. The limited range of the criticism scale would artificially attenuate observed relationships with criticism. One reason that the range of criticisms might have been so low relates to the choice of assessment tool. Findings from various studies indicate that FMSS has the propensity to categorize 20% or more of the people categorized as high EE on the CFI as low EE (Heikkila et al., 2002; Hirokazu et al., 2002; Hooley & Parker, 2006). In sum, although it is more time-consuming than the FMSS, the CFI may be a better measure of criticism.

Sampling biases also may have artificially diminished levels of observed criticism. As previously noted, the sample demonstrated a smaller number of criticisms than comparable samples of relatives of people with bipolar disorder (Kim & Miklowitz, 2004; Yan et al., 2004). Most had been involved in support groups, so likely had obtained information about the disorder that might have reduced criticism levels. The healthiness of this sample might also reflect the focus on people who participated in a 6-hour family psychoeducation workshop. Although reasons for attendance were not examined, it may be that people willing to attend an intensive workshop are particularly committed to helping their relative. It is worth noting that there are contradictory findings regarding sustained levels of EE over time (Lenior, Dingemans, Schene, Hart, & Linszen, 2002); some studies have found that EE decreases over time (e.g., Stirling et al., 1991), but other studies have found it to remain stable irrespective of intervention

(e.g., McCreadie et al., 1991; McCreadie, Robertson, Hall, & Berry, 1993). Therefore, the timing of EE assessments might be an important consideration.

A final limitation of the study is that the relatives of study participants were not formally diagnosed with bipolar disorder. Hence, it is possible that workshop participants did not actually have a relative with bipolar disorder.

In sum, the current study was limited by sample size, choice of EE assessment, sampling biases, and the lack of formal diagnostic assessment of the relatives presumed to have bipolar disorder. Future studies should consider a larger sample size, more sensitive EE assessment tools, formal diagnostic procedures, and recruiting strategies designed to obtain a more representative sample at a time when the symptoms are of critical concern. Until such data are available, conclusions about the relationships between shame-proneness, guilt-proneness, depression, and EE must remain tentative.

STRENGTHS AND CLINICAL IMPLICATIONS

Notwithstanding the limitations, the present study has several strengths. To begin, the study considers a new topic in the bipolar disorder literature. This study is the first to examine how shame-proneness and guilt-proneness relate to criticism among family members of people with bipolar disorder. In addition, the results of this study have important clinical implications. Given that family criticism was related to depressive symptoms, better clinical intervention should be provided to people who experience such symptoms. That is, providing treatment to alleviate even minor depressive symptoms may be useful in reducing criticism in families. Treatments with demonstrated efficacy in the management of depression, such as cognitive-behavior therapy (Beck, Rush, Shaw, & Emery, 1979), should be considered. Such interventions could provide a less blaming and more empathic therapeutic environment compared to family treatments. Indeed, critics argue that the degree of attention given to family factors in EE research implies familial responsibility for the behaviors exhibited by mentally ill relatives (Lefley, 1992). Whereas traditional interventions designed to reduce EE target family members' beliefs and behaviors, therapy could focus on providing emotional relief through the treatment of depression. Beyond treatments designed to address depression, psychoeducational family interventions might address caregiver distress and subjective burden. Compared to a control group, family members who received 12 psychoeducational, 90-minute sessions about bipolar disorder and coping skills reported reduced distress and subjective burden (Reinares et al., 2004). These findings coupled with the current findings draw attention to the importance of considering caregiver distress as it relates to depression.

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Table 1Demographic Characteristics of Study Participants ($N = 38$)

	% (n)
Gender	
Male	31.0% (11)
Ethnicity	
Caucasian	71.4% (28)
Hispanic	19.0% (8)
African-American	4.8% (2)
Marital Status	
Single	11.9% (5)
Married	66.7% (25)
Divorced	21.4% (8)
Employment Status	
Full-time	50.0% (19)
Part-time	11.9% (5)
Language	
English	88.1% (33)
Bilingual	28.6% (10)
Education	
High school/Some College	31% (12)
BA or higher	69% (26)

Table 2Demographic and Clinical Characteristics of Individuals with Bipolar Disorder ($N = 28$)

	% (n)
Type of Relative	
Parent	14.3% (4)
Sibling	3.6% (1)
Child	53.6% (15)
Spouse	28.6% (8)
Living with bipolar relative	60.7% (17)
Gender	
Male	53.6% (15)
Mean Age	35.2 ($SD = 16$)
English as Primary Language	92.9% (26)
Began showing signs/symptoms of bipolar disorder	
Less than 1 yr – 2 years	7.1% (2)
2–5yrs	10.7% (3)
5–10yrs	35.7% (10)
> 10	46.4% (13)
Number of manic episodes	
1	3.6% (1)
2–3	7.1% (2)
>4	28.6% (8)
>6	60.7% (17)
Number of depressive episodes	
None	3.6% (1)
1	7.1% (2)
2–3	7.1% (2)
4–6	3.6% (1)
>6	75.0% (20)
Number of hospitalizations	
None	35.7% (10)
1	21.4% (6)
2	14.3% (4)
3	7.1% (2)
>4	21.4% (6)

Table 3Means, Standard Deviations, and Cronbach's Alphas for Main Measures ($N = 38$)

Measure	Mean	S.D.	Cronbach's α
Shame	43.27	9.97	.80
Guilt	64.82	6.73	.80
BDI-SF	17.88	5.40	.92
FMSS: Number of Criticisms	0.44	0.82	-

Note. BDI-SF = Beck Depression Inventory-Short Form; FMSS=Five Minute Speech Sample.

Table 4

Intercorrelations of Main Measures

Measure	1.	2.	3.	4.
1. Shame	-	.51**	.48**	.21
2. Guilt	-	-	.07	.17
3. BDI-SF			-	.44**
4. Number of criticisms				-

Note. BDI-SF=Beck Depression Inventory-Short Form.

*
 $p < .05$

**
 $p < .01$.

Table 5Hierarchical Linear Model of Predictors of Number of Criticisms ($N = 38$)

Variable	Estimate	SE B	Effect Size
Depressive Symptoms	.07**	.03	.88
Shame	-.01	.02	.01
Guilt	.02	.02	.01

*Note.**
 $p < .05$.**
 $p < .01$.