

# Self-Conscious Emotions, General Emotional Distress, and Expressed Emotion in Family Members of Patients With Schizophrenia

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**Abstract:** This study examined the association of self-conscious emotions (shame and guilt) with general emotional distress (GED) and expressed emotion (EE) in family members of patients with schizophrenia. Fifty-seven relatives were given the test of self-conscious affect Tangney et al., 1989, *The Test of Self-Conscious Affect*. Fairfax, VA: George Mason University) to evaluate their proneness to shame and guilt and the Depression Anxiety Stress Scale Lovibond and Lovibond, 1995. *Behav Res Ther.* 33:335–343) to assess GED. Participants were also interviewed using the Camberwell Family Interview to measure EE. Consistent with Tangney's theory of self-conscious emotions and with study hypotheses, simultaneous regression analyses indicated that increasing shame proneness was strongly and positively associated with caregivers' reported GED whereas increasing guilt proneness was negatively associated with GED. Expressed emotion was not found to relate to self-conscious emotions nor to GED when rated as a dichotomous variable (high vs. low). However, greater shame proneness was associated with lower ratings of emotional overinvolvement, one component of EE. Study implications are discussed.

**Key Words:** Shame, guilt, schizophrenia, family, EE.

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Caring for a relative with schizophrenia often results in serious general emotional distress (GED), triggered by a range of factors including social stigma, economic hardships, and loss of leisure time (Bhatia et al., 2003). Greater distress in caregivers is likely to result in fewer emotional resources available to help their loved ones with schizophrenia thrive. Thus, understanding potential triggers of GED in family members of patients with schizophrenia is paramount. The study of self-conscious emotions, namely one's proneness to experience shame and guilt, may offer important insights into GED in caregivers of patients with schizophrenia.

Tangney (1991) postulates that the process of judging and responding to interpersonal events is mediated, in part, by emotional experiences that she refers to as moral affect. Included in her definition of moral affect are the personality characteristics of shame and guilt proneness. Although shame and guilt have conventionally been viewed as synonymous, more recent research clearly differentiates these constructs. Tangney et al., (1996) found, for example, that when shamed, a person's focus of concern is the entire self (i.e., "I am a bad person for doing such a horrible thing"). The shamed person often further experiences feelings of worthlessness and an overall sense of exposure associated with a desire to hide (Tangney et al., 1996). Drawing from this, individuals who are shame prone

may also endure greater levels of GED, particularly when they are exposed to stressful and potentially embarrassing life circumstances, such as having and caring for a relative with a mental illness.

In contrast, Tangney's et al. (1996) findings indicate that when experiencing guilt, the person's primary concern is with a specific negative behavior and not with the entire self (i.e., "I did something bad"). Although experienced as unpleasant, guilt-related emotions often produce a sense of remorse and regret over a bad act and a desire to undo the perceived negative behavior or event and repair the relationship. In schizophrenia, guilt-prone caregivers may be less apt to berate themselves, and instead may make an effort to correct unpleasant situations and maintain their social ties with the patient and with others, even in the midst of coping with their loved one's illness. Consequently, guilt-prone caregivers may be less vulnerable to GED.

The study of self-conscious emotions may also elucidate another important predictor of functioning in patients with schizophrenia, namely, expressed emotion (EE). Forty years of research indicates that when family members express high levels of criticism, hostility, and emotional overinvolvement (EOI; high EE) when talking about a relative with schizophrenia during a semi-structured interview, patients have a significantly poorer course of illness (see Butzlaff and Hooley, 1998 for a review).

Why might shame and guilt proneness be relevant to the study of EE? Tangney et al. (1996) found that shame-prone people tend to experience high levels of anger arousal, lack of trust, and a tendency to externalize blame and low levels of empathy. Shame is also related to indirect ways of expressing anger by either projecting blame outside the self or by hiding from others. Thus, more shame-prone people might also be more likely to respond to stressors, such as mental illness in a relative, with criticism and high EE attitudes toward their ill relative. In contrast, proneness to guilt has been found to be negatively correlated with externalization of blame, interpersonal anger, and hostility (Tangney et al., 1996).

Bentsen et al. (1998) have demonstrated some support for a connection between guilt proneness and some aspects of EE in relatives of patients with schizophrenia. Specifically, in their study guilt proneness was negatively correlated with the criticism and hostility components of EE and positively associated with EOI. Thus, we might expect to replicate this finding in this study.

In this study, the association of self-conscious emotions (shame and guilt) with GED and EE are evaluated in 57 family members of patients with schizophrenia. On the basis of Tangney's theory of self-conscious emotions and findings from previous research, it is hypothesized that increasing shame proneness and decreasing guilt proneness will be associated with greater GED in caregivers. The association between self-conscious emotions and EE is also tested in this study. It is hypothesized that family members who have greater proneness to experience shame and lesser proneness to experience guilt will be more likely to be designated as high EE.

Although criticism and EOI have been lumped together in high EE ratings because both have been found to be associated with

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poor prognosis for schizophrenia, they appear to capture different phenomena and are not typically correlated (Hooley et al., 1995). Thus, in the present study, we will also examine EOI and criticism separately. In line with the findings of Bentsen et al. (1998), it is hypothesized that guilt proneness will be positively associated with EOI. To the best of this author's knowledge, the relationship between shame proneness and EOI has not yet been assessed and will be examined on an exploratory basis.

## METHOD

### Participants

Participants consisted of 57 relatives of patients diagnosed as having schizophrenia or schizoaffective disorder (based on criteria of the Diagnostic and Statistical Manual of Mental Disorders-IV, DSM-IV; American Psychiatric Association, 1994). See Table 1 for basic demographic information on participants and their relative with schizophrenia. Only 1 relative per family (generally the one reported as most involved in the patients' care) was interviewed and enrolled in the study.

### Design and Procedure

Patients who received a prior diagnosis of schizophrenia or schizoaffective disorder by a qualified mental health practitioner (e.g., licensed psychiatrist, psychologist) and appeared to clearly meet DSM-IV criteria for the illness based on self-report of symptoms during a phone interview were invited to participate in the study. An assessment was scheduled for those who met study criteria and had an eligible family member who was willing to participate. Assessments generally occurred in the home of the patient or

relative, but occasionally at an alternative site (e.g., patient's mental health agency).

Three of the 4 assessors in this study were fully proficient in Spanish. Spanish-speaking participants were given a choice of completing the assessments in either English or Spanish. Seventeen of the family members completed the assessments in Spanish. An editorial-board approach (Geisinger, 1994) was used for the translation of measures. This method accounts for the fact that there is often language variations within Spanish speaking groups, and is therefore considered an effective alternative to translation back-translation. See Weisman de Mamani et al. (2007) for a detailed description of translation methods, sample characteristics, and other study procedures.

### Measures

For all of the following assessments, the participants were asked to focus their responses on the past 3 months.

#### Shame and Guilt

Shame and guilt proneness were measured from the Test of Self-conscious Affect (Tangney et al., 1989). The Test of Self-conscious Affect is composed of 15 brief scenarios that most people have encountered at least once in everyday life. Following is an example, "While out with a group of friends, you make fun of a friend who is not there." Each scenario is followed by 1 response that is thought to be prototypic of shame and another that is thought to be prototypic of guilt. Participants are next instructed to rate, on separate 5-point Likert scales (from 1 = not at all likely to 5 = very likely), the probability that they would respond in a shame-prone manner (e.g., "You would feel small . . . like a rat") and the likelihood that they would respond in a guilt-prone manner (e.g., "You would apologize and talk about the person's good points"). The 15 responses are summed across the scenarios to create discrete ratings of shame proneness and guilt proneness. Cronbach's alphas for the shame and guilt scales in the current study were found to be 0.79 and 0.59, respectively.

#### General Emotional Distress

GED was measured using the 42-item Depression Anxiety Stress Scale (Lovibond and Lovibond, 1995). This measure assesses 3 factors: depression, anxiety, and stress. Each scale consists of 14 items rated on a 0 to 3 scale with higher scores reflecting greater endorsement of that item. A total score is obtained by summing across the 42 responses. In this study, Cronbach's alpha for the combined 42 item measure was 0.96, suggesting that the measure does tap 1 cohesive construct of "emotional distress."

#### Expressed Emotion

EE was rated for an earlier study (Weisman de Mamani et al., 2007) based on an audiotaped semi-structured interview called the Camberwell Family Interview (CFI). This interview requires approximately 1.5 hours to administer and focuses on the emotional climate of the patient's home. Information is gathered regarding events that occurred during the previous 3 months and about relative's feelings toward the patient and his or her condition. Following conventional guidelines, relatives who made 6 or more critical comments, expressed any type of hostility, and/or were rated as 4 or above on a 5-point scale of EOI were rated as showing high EE attitudes toward the patient. All other relatives were designated as showing low EE attitudes. Two coders rated EE from the CFI. They corated 5 of the EE tapes used in this project and had 100% agreement for rating total EE (high vs. low) and for rating number of critical comments. The intraclass (agreement) coefficient between raters for EOI was 0.77.

**TABLE 1.** Demographic Statistics, Means, and Standard Deviations for Primary Study Variables

	Percentage	
	Relative	Patient
Gender		
Male	29.82%	48.94%
Female	70.18%	51.06%
Ethnicity		
Caucasian	35.08%	34.04%
Hispanic	36.84%	36.17%
African-American	28.08%	29.79%
Age	M = 54.33 SD = 14.43	M = 39.11 SD = 11.32
EE		
High	33.3%	
Low	63.2%	
Critical comments	M = 3.82 SD = 3.81	
EOI scores	M = 1.93 SD = 1.14	
Shame scores	M = 46.33 SD = 11.90	
Guilt	M = 61.96 SD = 6.91	
General emotional distress	M = 24.9 SD = 21.16	

EE indicates expressed emotion; EOI, emotional overinvolvement.

## RESULTS

### Preliminary Analyses

Preliminary analyses were conducted on relatives to assess for gender, age, and ethnic patterns related to the primary variables of interest in this study (see Table 1 for means and standard deviations). No gender differences in shame  $t(52) = -0.70$ , guilt  $t(54) = -0.06$ , GED  $t(52) = 1.18$ , or EE  $\chi^2(1, N = 55) = 0.28$  were found ( $p > 0.05$  for all). Age was also unrelated to shame ( $r = -0.11$ ), guilt ( $r = 0.01$ ), and GED ( $r = -0.19$ ) ( $p > 0.05$  for all). No age differences were found between high and low EE family members  $t(53) = -1.78, p > 0.05$ ).

In a previous study that used CFI data from the same White and Latino participants as in this study, Weisman de Mamani et al. (2007) found that Whites were rated as high EE significantly more often than were Latinos  $\chi^2(1, N = 39) = 4.79, p < 0.05$  (see Weisman de Mamani et al. for a discussion of these findings and their cultural implications). Data from Black participants were not examined as part of that study. In this study, a marginally significant tendency was found for Blacks also to be rated as high EE more often than Latinos  $\chi^2(1, N = 36) = 3.66; p = 0.06$ . No significant ethnic differences in EE were found between Whites and Blacks,  $\chi^2(1, N = 35) = 0.83; p < 0.05$ . An ANOVA with 3 levels (White, Latino, Black) did not reveal any ethnic patterns with respect to shame  $F(2, 51) = 0.04$ ; guilt  $F(2, 53) = 0.35$ , or GED  $F(2, 51) = 0.04$  ( $p > 0.05$  for all, and effect sizes are near zero for all). Because ethnicity was not found to be related to any primary variable of interest (shame, guilt, nor and GED), it was not controlled in any of the following analyses.

### Self-Conscious Emotions and GED

To test the first set of primary hypotheses, GED was simultaneously regressed on shame proneness and guilt proneness. These 2 predictors together accounted for 27% of the variation in GED ( $R^2 = 0.27$ ), which was highly significant ( $F(2, 50) = 8.65, p < 0.001$ ). In line with study hypotheses, increasing shame proneness ( $b = 0.74, p < 0.001$ ) was strongly associated with greater caregivers' reported GED. Also consistent with study hypotheses, increasing guilt proneness ( $b = -0.50, p < 0.01$ ) was moderately associated with decreasing GED.

### EE and Self-Conscious Emotions

The hypothesis that greater shame proneness and lower guilt proneness would predict high EE was evaluated using a binary logistic regression. The overall model was not significant,  $\chi^2(2, N = 52) = 0.74, p > 0.05$ , nor were the Wald statistics for the  $B$  coefficients for shame ( $B = -0.01, p > 0.05$ ) nor for guilt ( $B = -0.03, p > 0.05$ ). Thus, contrary to expectations, greater shame proneness and lower guilt proneness did not predict greater likelihood of being classified as high EE.

Secondary analyses were also conducted to assess the associations between self-conscious emotions and the 2 specific components of high EE, number of critical comments and EOI scores (rated continuously from 1 to 5). Contrary to study hypotheses, guilt proneness was not associated with the number of critical comments expressed by relatives ( $r = -0.02; p > 0.05$ ), even when partialling for shame proneness ( $r = 0.03; p > 0.05$ ). Shame proneness ( $r = -0.11; p > 0.05$ ) was also found to be unrelated to number of critical comments expressed by relatives, even when partialling for guilt proneness ( $r = -0.10, p > 0.05$ ). Interestingly, however, higher levels of shame proneness were associated with lower EOI scores ( $r = -0.34, p < 0.05$ ), even when partialling for guilt proneness ( $r = -0.31, p < 0.05$ ). A significant association was not found between EOI and guilt proneness ( $-0.16; p > 0.05$ ), even when partialling for shame proneness ( $r = 0.07, p > 0.05$ ).

## DISCUSSION

### Self-Conscious Emotions and GED

In line with hypotheses, in this study when shame and guilt were simultaneously entered in a regression analyses, increasing shame proneness was strongly associated with greater caregiver distress, whereas increasing guilt proneness was associated with less distress. This may be viewed as support for Tangney's (1991) model. The present findings suggest that caregivers of patients with schizophrenia who are shame prone may be disposed to view incidents, such as having a relative with a mental illness, as something that reflects negatively upon themselves ("I am a bad relative" or "I have faulty genes"). Consequently, they may be more likely to experience high levels of the type of GED tapped by the Depression and Anxiety Stress Scale.

In contrast, results from this study indicate that guilt proneness is associated with lower levels of GED. In line with Tangney's theory, guilt proneness may be associated with a certain level of interpersonal problem-solving in family members of schizophrenia patients that directly or indirectly lowers GED. For example, guilt proneness may encourage relatives to make amends after being frustrated with a patient, or to try to help an ill relative that one has recently shunned.

### Self-Conscious Emotions and EE

Surprisingly, neither guilt proneness nor shame proneness were associated with relative's critical attitudes toward the patient. Results from this study may suggest that instead, shame-prone relatives internalize their cognitive processes and in its place, feel badly about themselves. On the other hand, guilt-prone relatives may channel their negative energies toward doing something constructive for the patient. Longitudinal research, which examines guilt proneness during a baseline assessment and subsequently assesses feelings and behaviors toward patients at a future assessment, is needed.

Findings from this study appear to contradict Bensten's earlier finding that higher levels of guilt were associated with greater EOI. One methodological difference between the studies is that the current one used a behaviorally driven assessment of guilt based on participants' responses to how they would act in specific hypothetical situations. Bentsen et al., however, used a more conventional approach that specifically asked participants about their general propensity toward guilt-based emotions (e.g., "After an argument, I am sorry for my actions"). Differences in responses based on generic predilections toward experiencing guilt versus ratings of guilt extracted in response to specific situations may account for the discrepancies in study findings. This methodological issue should be addressed further in future research.

Interestingly, in the current study greater shame proneness was associated with lower EOI. To some degree this may be intuitive. Individuals who are prone to feel embarrassment, disgrace, and dishonor may be less likely to become overly emotionally invested in another person, even a close family member. Instead, they may be more likely to pull away from strong degrees of connection with others, and instead turn maladaptive emotions inward, in the form of depression, anxiety, and stress. Although one must be very careful of interpreting low levels of shame proneness (as this has not previously been found to be meaningful), findings from the current study beg the question: at what point (if ever) do very low levels of shame proneness in family members become a risk factor for patients in close contact with them (given that higher levels of EOI in relatives are associated with poorer course of illness for patients with schizophrenia)? This would make for an interesting area of further study.

## Clinical Implications

For clinicians, evaluating caregivers' shame proneness at the outset of family treatment could help to identify family members early on, who may be at particularly high risk for experiencing depression, anxiety, and stress. Efforts to directly target shame and shame proneness may be worthwhile for relatives who are designated as high in this personality style. Results from this study indicate that guilt proneness may have an ameliorating effect on one's GED. Direct attempts to induce guilt or increase a guilt-prone personality style do not seem prudent. However, results from this study do suggest that clinicians may wish to be careful of automatically attempting to reduce or eliminate client guilt that is associated with having a loved one with mental illness. Instead, helping family members continue to find productive ways to channel their guilt (e.g., providing advice, support, or other types of assistance to the patient), while also taking care of their own needs may prove therapeutic.

## Study Limitations

This study is marked by several limitations. For example, the internal reliability of the guilt measure was relatively low (0.59). Perhaps a more reliable measure of guilt would have shown stronger associations with GED and EE, as would be expected from prior research. Furthermore, a formal entrance interview was not conducted with patients to verify their mental health practitioner's report of schizophrenia, although cases that appeared to be of questionable diagnosis were ruled out during a prescreening phone interview. Fortunately, schizophrenia is one of the mental disorders with the strongest inter-rater consensus among professionals. Thus, it is likely that all participants met study criteria. Nonetheless, future studies in schizophrenia will be strengthened by screening study participants with a psychometrically validated diagnostic entrance interview.

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