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The Emotional Attributes Questionnaire: Self- and Other-Reports of Guilt and Shame

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THE EMOTIONAL ATTRIBUTES QUESTIONNAIRE: SELF- AND OTHER-REPORTS OF GUILT AND SHAME

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Shame and guilt are considered to be important emotions for empirical study for a variety of reasons. Developmental psychologists are interested in the emergence of shame and guilt as they relate to the child's understanding of societal and familial expectations/norms and the subsequent development of conscience (Zahn-Waxler & Kochanska, 1990). Social psychologists study how guilt and shame are used to create power differentials and restore equity to relationships (Baumeister, Stillwell, & Heatherton, 1994). Finally, clinicians have long thought shame and guilt to be involved in the development of disorders such as anxiety and depression (H. B. Lewis, 1971). However, those within the clinical realm have often used the words "shame" and "guilt" interchangeably, and even the DSM-IV (American Psychiatric Association, 1994) fails to draw a clear distinction between the two. Because of the lack of conceptual clarity, there is is also confusion regarding whether shame and guilt are distinct precursors to different disorders.

Many psychologists have discussed possible differences between shame and guilt. Shame is defined as an emotion that conveys that there is something fundamentally defective about the person. This often motivates the person who is experiencing shame to attempt to physically withdraw from the shaming situation (e.g., by leaving the room) or, if escape is not feasible, to cognitively withdraw into the self (e.g., cessation of speech, averting gaze downward, slumping and hunching of shoulders, cf. Barrett, Zahn Waxler & Cole, 1993; M. Lewis, 1992).

Guilt, on the other hand, conveys that one has been involved in an untoward action (whether by omission or commission), usually involving physical or psychological harm to another. The focus is on the action, and thus typically

motivates individuals to confess, apologize, and/or attempt to repair the damage that they have caused. The transgressor's guilt is then typically dissipated, either because the other forgives them or dismisses the harmful deed (Baumeister et al., 1994; Ferguson, Stegge, & Damhuis, 1991; Tangney, 1995a,b).

Much effort has been put into developing valid measures of shame and guilt because these emotions are thought to be so important in normal and pathological functioning. Of the many measures that have been developed, three have been identified as the most promising in terms of construct validity (Tangney, 1996).

The first is Harder and Zalma's (1990) Personal Feelings Questionnaire, version 2 (PFQ-2). This measure is a global adjective checklist that asks respondents to rate the frequency with which they feel 16 different feeling states on a continuous basis. Of the 16 states, Harder hypothesizes that blushing, feeling embarrassed, ridiculous, self-conscious, humiliated, stupid, childish, helpless, laughable, and disgusting to others represent shame, whereas guilt is represented by mild guilt, worry about hurting or injuring someone, intense guilt, regret, remorse, and feeling you deserve criticism for what you did. According to Harder (1995), the higher the rating on this instrument, the more likely the person is to experience a chronic or pervasive form of guilt and/or shame. The shame scale's internal consistency reliability (using Cronbach's alpha) was .78, and the guilt scale's was .72.

The second instrument, the Test of Self-Conscious Affect-Modified (TOSCA-M; Ferguson & Crowley, 1993) and its predecessor the Test of Self-Conscious Affect (Tangney, Wagner, & Gramzow, 1989) is a scenario-based measure which asks participants to imagine that they are in 15 situations, and then rate the extent to which they would respond in different ways (coded, among other responses, for guilt and shame).

For example:

You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up.

1) You cannot apologize enough for forgetting the appointment. (ruminative guilt)
2) You would think: "I'm inconsiderate." (shame)
3) You would think: "Well, he'll understand." (detachment)
4) You would try to make it up to him as soon as possible. (non-ruminative guilt)
5) You would think: "My boss distracted me just before lunch." (externalization)

The TOSCA-M is a unique measure, in that it includes a scale to assess both ruminative guilt and nonruminative guilt. According to Ferguson and Crowley (1993; in press), ruminative guilt is a more lingering, pervasive form of guilt (see also Ferguson & Crowley, in press). Ruminative guilt can best be characterized by one of the DSM-IV's criteria for major depression, "feelings of worthlessness or excessive or inappropriate guilt...nearly every day" (p. 327). Nonruminative guilt, in contrast, reflects guilt that is "...designed to enforce the communal norms of mutual concern and nurturance and to protect the interpersonal bond between people." (Baumeister, et al., 1994, p. 246). The internal consistency reliabilities (using Cronbach's alpha) for the TOSCA-M are .78, .77, .75, for shame, nonruminative guilt, and ruminative guilt, respectively.

Finally, the Guilt Inventory (GI; Kugler & Jones, 1992) is a rating scale consisting of 45 items designed to assess morality (e.g., "I believe in a strict interpretation of right and wrong."), state guilt (e.g., "Lately, it hasn't been easy being

me."), and trait guilt (e.g., "Guilt and remorse have been a part of my life for as long as I can recall."). As with the ruminative guilt scale of the TOSCA-M, the trait guilt scale of the GI is designed to assess a more lingering or prolonged form of guilt. Internal consistency reliabilities for the state and trait guilt scales are high, with Cronbach's alphas of .84 and .89, respectively.

Unfortunately, research using these different measures finds discrepant results. One possible reason for these disparate findings concerns the method variance associated with the different measures. Guilt and shame have been operationalized very differently across the various measures, with some researchers using specific situations about which the person can feel shame or guilt and others using more general ratings of adjectives. A second limitation with these measures is that all of them are self-report in nature. In the assessment literature more generally, there have been many issues raised about the validity of self-reports, such as self-presentation response sets and the question of whether the respondent truly has access to the information being requested. Other factors also may influence a person's response, including whether the item is simply the socially desirable way to respond, and whether people can recollect events or general feelings. The type of scale that the person is asked to use when rating an event also affects their responses (Brehm & Kassin, 1996). All of these more general criticisms of self-report measures also specifically apply to the assessment of shame and guilt.

There are two more major problems with using self-reports in the area of shame and guilt assessment. The first is the tendency of individuals to minimize these painful emotions to the point where, either consciously or unconsciously, they under-report their frequency and intensity. A second is that a self-report requires the respondent to report on rapidly changing emotional states to which the person probably has little conscious access and which he or she would be likely to distort

(either intentionally or unintentionally, cf. Ferguson & Stegge, in press). Some researchers believe that for this reason, it is impossible for an individual to accurately report his or her own internal state (Nisbett & Wilson, 1977).

So, it is clear that we should not be relying exclusively on self-reports to measure guilt and shame. The next question is, what other alternatives to self-report measurement are available? We could try to measure the emotions using observations of behavior by trained experimenters and/or outsiders who know the individual well. Trained experimenters have made behavioral observations of shame and guilt in toddlers (Barrett et al., 1993; Lewis, Alessandri, & Sullivan, 1992; Lewis, Stanger, Sullivan, & Barone, 1991), but to date, few have examined whether outside observers (such as friends) can reliably report on another's shame- and guilt-related behaviors (for exceptions, see Ferguson & Stegge, in press; Jones & Kugler, 1993). Nonetheless, we know from research in other contexts (e.g., personality traits, Hayes & Dunning, 1997; emotional traits, Watson & Clark, 1991; childhood behavior problems, Achenbach, McConaughy, & Howell, 1987) that outside observers can provide a unique perspective on the target person's behavior. Using other-reports seems to be a reasonable strategy, because they could give the researcher a broader picture of the target person's typical behavior in different situations. Also, the person who is doing the observations might not be as concerned about self-presentational issues as would be the target person. This could increase the external validity of reports and hopefully reduce bias.

Therefore, the purpose of the present honors thesis was three-fold: (1) to develop an "other-report" measure of guilt and shame, (2) to examine the relationship between the new other-report measures and existing self-report measures, and (3) to determine the predictive validity of the other-report instruments in terms of depression and anxiety (as assessed by subscales of the

Symptom Checklist-90-R; Derogatis, 1983), and internalizing symptoms, externalizing symptoms, and adaptive functioning (as assessed by subscales of the MMPI-2; Butcher, 1990).

Method

Participants were 102 (34 male and 68 female) introductory psychology students who received extra course credit. Students were predominantly middle-class Caucasians, whose mean age was 20.2 years (range 18-38 years). Of these participants, 26 males and 57 females had either his or her spouse or best friend complete a packet of other-report questionnaires. Participants were asked to use the following criteria when selecting the person to complete the other-report packet: "choose someone whom you have known for more than a year, knows you very well, and spends a good deal of time with you in a variety of situations."

Other-Report Instruments

The packet completed by participants consisted of several exploratory other-report instruments (which were not analyzed for this thesis) and a new other-report instrument entitled the Emotional Attributes Questionnaire-Other (EAQ-O; Eyre & Ferguson, 1996) which was designed for this study. The EAQ-O is an adult version of the My Child-Guilt and My Child-Shame parent-report measures (Ferguson, Stegge, & Barrett, 1996). It contains 45 items designed to assess both the ruminative and nonruminative aspects of guilt and 60 items to assess shame. The items are rated on a 7-point Likert scale (1=not at all true to 7=extremely true) and includes a "not applicable" choice. These items were taken from several theoretical scales thought to represent different aspects of the process of feeling guilty or ashamed. The nonruminative guilt scale was composed of items representing six different

subscales. These subscales included nonruminative guilt behaviors (e.g., "Appears anxious or agitated after having done something wrong."), concern over good feelings after wrongdoing (e.g., "When s/he does something wrong, seems to feel relieved when forgiven."), confession (e.g., "May confess to a misdeed even if unlikely to be caught."), apology and/or promise not to do it anymore (e.g., "Will apologize after causing an accident or doing something else wrong."), reparation/amends (e.g., "Is eager to make up after having hurt someone's feelings or breaking a promise."), and empathy (e.g., "Will feel sorry for other people who are hurt, sick, or unhappy."). The ruminative guilt scale consists of items that relate to lingering or pervasive feelings of guilt (e.g., "Seems to remember for a long time past instances when s/he did something wrong.") The shame scale consists of seven subscales that assess shame behaviors (e.g., "After failure, looks like s/he could crawl into a hole and die."), concern over good feelings after wrongdoing or failure (e.g., "When s/he fails on a task, seems to need a lot of reassurance that s/he's till a good person."), denial of feeling (e.g., "Has a hard time admitting to failure or falling short."), excusing or rationalizing (e.g., "S/he blames own failure on others or difficulty of the task."), avoidance (e.g., "Can't seem to look you in the eye after getting caught doing something wrong."), internalized conduct (e.g., "Has a perfectionistic attitude."), and narcissism or self-focus (e.g., "Bends over backwards to be liked by others.").

Self-Report Instruments

All participants completed the original self-report versions of the TOSCA-M, PFQ-2, GI, plus an abbreviated version of the MMPI-2. For comparison with the EAQ-O, a self-report version of this instrument entitled the Emotional Attributes Questionnaire-Self (EAQ-S) was also developed. This instrument consists of the same nonruminative guilt, ruminative guilt, and shame scales as the other-report

version, but the items were presented in first-person.

To assess (mal)adjustment, participants completed two different types of instruments. The MMPI-2 was included as a less transparent, and therefore less reactive, instrument of symptoms of psychopathology and adjustment. The SCL-90-R is thought to be a more transparent measure of general distress. By contrasting these two instruments, we hoped to discover whether guilt and shame interacted differentially with a more versus less transparent measure of (mal)adjustment.

An abbreviated version of the MMPI-2 (Butcher, 1990) was used, consisting of 201 true/false statements which made up 12 scales. The first scale, ego strength (52 items), was included to assess whether nonruminative guilt is really tapping into adjustment. A person rating high on ego strength is likely to be stable, reliable, responsible, independent, self-confident, sociable, have a secure sense of reality and show no chronic psychopathology (Graham, 1993). The remaining 11 scales were factor analyzed and two factors, accounting for 68.1% of the variance, emerged, yielding eigenvalues greater than one. Scales that had high loadings on the factor "internalizing" were psychasthenia or obsessive-compulsive tendencies (48 items), anxiety (39 items), obvious depression (39 items), brooding (10 items), low self-esteem (24 items), shyness/self-consciousness (14 items), and lack of ego mastery (14 items). Scales loading high on "externalizing" were anger (16 items), lack of ego inhibition (11 items), amorality (6 items), and a negative loading on subtle depression (18 items).

The Symptom Checklist-90-R (SCL-90-R; Derogatis, 1983) was included to look at the relationship between shame and guilt and a fairly transparent measure of internalizing symptoms. Although the SCL-90-R consists of more scales, we only looked at the four scales that approximated the internalizing factor on the MMPI-2. These four scales are thought to clearly represent anxiety (e.g., spells of terror or

panic), depression (e.g., feelings of worthlessness), obsessions or compulsions (e.g., having to check and double-check what you do), and phobic anxiety (e.g., having to avoid certain things, places, or activities because they frighten you).

Results

Psychometric properties of the EAQ-O and EAQ-S

Item-total correlations were calculated for each item on the shame, nonruminative guilt, and ruminative guilt scales of the EAQ-O and EAQ-S. The nonruminative guilt and ruminative guilt scales yielded no items with very low item-total correlations. For the shame scale, however, every item on the internalized conduct subscale showed zero or near-zero correlations with the overall shame scale. Since it showed such low correlations, this subscale was dropped from the overall shame scale of both the EAQ-O and EAQ-S.

For this revised version, internal consistency reliabilities were high for both the EAQ-O scales (Cronbach's alphas of .91 for nonruminative guilt, .86 for ruminative guilt, and .92 for shame) and EAQ-S scales (alphas of .85 for nonruminative guilt, .88 for ruminative guilt, and .94 for shame).

The correlations between the same scales on the self- and other-report were very high (.74 for nonruminative guilt; .56 for ruminative guilt; .54 for shame, $p < .001$). However, it should be noted that the correlations across scales for the self- and other-reports were moderate to high, with a range of .24 (between EAQ-O shame and EAQ-S nonruminative guilt) to .53 (between EAQ-O nonruminative guilt and EAQ-S ruminative guilt). This could possibly be due to method variance (cf. Ferguson & Crowley, in press) or a tendency to respond with general negative emotion (cf. Watson & Clark, 1992).

Table 1 depicts the correlations between the guilt and shame scales of the self- and other-reports. For both the self- and other-reports, the ruminative guilt and shame scales correlate the highest, while shame and nonruminative guilt, as predicted, have the lowest correlations. It is interesting to note that the ruminative guilt and shame correlation is higher than the ruminative guilt and nonruminative guilt correlations. The ruminative guilt and nonruminative guilt scales yielded the most discrepant correlations between the self- and other-reports (.51 for the EAQ-S and .36 for the EAQ-O).

Rather than relying solely on univariate techniques, canonical correlation analysis was also used to analyze the data. The following rationale for using canonical correlation analysis and explanation of the technique is essentially borrowed from the text of Ferguson and Crowley (in press).

To analyze variables that are highly interrelated, such as ruminative guilt, nonruminative guilt, and shame, statisticians recommend using canonical correlational analyses (Pedhazur, 1982; Tabachnick & Fidell, 1996; Thompson, 1984). Canonical correlations are unique in that, unlike multiple regression, they can analyze two sets of interrelated variables while accommodating the intercorrelation between those variables. Univariate analyses (i.e., bivariate correlations, partial correlations, and regression analyses) can only consider a single variable at a time and therefore may distort the multivariate relationships existing in the data.

There are two components to a canonical correlation. The first is a function coefficient which is essentially a beta weight. In order to determine if a function is meaningful, common practice dictates that it be significant at the $p < .05$ level and account for at least 10% of the variance. The second component is a structure coefficient, which represents the correlation between the variable(s) of interest (e.g., EAQ-S shame) and the canonical variate. This coefficient is used for interpretation

purposes, and may be considered in the same manner as a bivariate correlation coefficient, using 10% of the explained variance (approximately $\underline{r} \geq .30$) as a guide for identifying meaningful correlations. For the first set of analyses, the extant self-report measures are predictor variables, while the EAQ-S and EAQ-O are criterion variables. However, for the second set of analyses, all of the guilt and shame instruments serve as predictor variables and the (mal)adjustment scales as the criterion.

For the EAQ-S in conjunction with the other guilt and shame self-report instruments, canonical correlational analysis revealed that there were two significant functions that accounted for more than 10% of the variance. As seen in Table 2, the first function, accounting for 70.6% of the variance, shows that both the predictor variables and criterion variables are all highly related. The second function, which accounted for an additional 43.8% of the variance, indicates that nonruminative guilt as measured by the TOSCA-M and EAQ-S are both correlated in the same direction, which is opposite of all other variables. Ruminative guilt (in both the TOSCA-M and EAQ-S) are not related to the other scales. It is interesting to note that the GI scales have a strong relationship, while the the PFQ-2 guilt scale only has a moderate relationship. It is also interesting that the PFQ-2 shame scale has a much stronger relationship than does the TOSCA-M shame scale. This second function is important, since it indicates that a meaningful distinction does exist between ruminative guilt and shame, an issue that has been a contentious one in this measurement area (Denham, 1996).

The analysis between the EAQ-O and the TOSCA-M, PFQ-2, and GI also revealed two significant functions that accounted for more than 10% of the variance. The first function, accounting for 62.2% of the variance, behaves in a similar fashion to the first function of the EAQ-S, as illustrated in Table 3. The second function

(accounting for 43.9% of the remaining variance), however, does show some slightly different patterns. Again, nonruminative guilt (in the EAQ-O and TOSCA-M) seems to go in the opposite direction of all other scales. The TOSCA-M shame and ruminative guilt scales have no relationship with the canonical variable, but in this case both the ruminative guilt and shame scales from the EAQ-O do have a fairly strong relationship. Both the PFQ-2 and GI have moderately strong correlations. In general, the bivariate correlations support the canonicals for both the self- and other-reports of the EAQ.

Predictive validity of the EAQ and other guilt and shame instruments

This final section is devoted to the analysis of the ability of the EAQ, TOSCA-M, PFQ-2, and GI to predict symptoms of psychopathology, specifically symptoms related to internalizing and externalizing disorders as measured by the MMPI-2 and internalizing symptoms as measured by the SCL-90-R. Also, we looked at ego strength as an index of adjustment, in relation to guilt and shame.

At the bivariate level, many of the results found using the MMPI-2 replicate and extend previous findings. The scenario-based measure of nonruminative guilt is unrelated to this less transparent assessment of (mal)adjustment, whereas instruments assessing more general guilt reactions (the PFQ-2 and GI) are related positively to internalization and (to a far lesser extent) negatively to ego strength. Self- and other-reports of nonruminative guilt-related behaviors also are unrelated to indices of (mal)adjustment.

The scenario-based assessment of shame and ruminative guilt are related positively to less transparent measures of internalization (especially) and externalization, but negatively to ego strength. The PFQ-2 shame measure, although unrelated to externalization, is related as would be expected to both internalization and ego strength. Self- and other-reports of shame and ruminative

guilt-related behaviors also related especially to the internalization measure of maladjustment.

To further analyze the multivariate relationship between scenario-type reports, adjective checklist reports, and other-reports in predicting psychopathology, canonical correlations were performed. The analyses were broken down by scale type (guilt scales versus shame scales) in looking at both maladjustment and adjustment. For the first canonical analysis, because there were no differences between the self- and other-reports of EAQ shame scales in relation to the SCL-90-R, they were put in the equation together, reanalyzed, and are reported together in Table 5.

One significant function which accounted for 44.8% of the variance emerged in this analysis. Table 5 indicates that all four indices of shame relate to the SCL-90-R, with the relationship between shame and depression being the strongest.

There were two significant functions that accounted for the relationship between the TOSCA-M, PFQ-2, and EAQ-S shame scales, which are depicted in Table 6. The first function (accounting for 42.9% of the variance) shows that the TOSCA-M, PFQ-2, and to a lesser extent, the EAQ-S shame scales are related to primarily internalizing disorders. The relationship with externalizing is smaller than with internalizing, but there is a strong inverse relationship between ego strength and shame. However, the second function (accounting for 14.1% of the remaining variance) depicts a completely different type of relationship. This function shows no relationship between the TOSCA-M and PFQ-2 and (mal)adjustment. However, there is a positive relationship between the EAQ-S shame scale and internalizing, externalizing, and ego strength (<u>not</u> inversely).

The analysis between the TOSCA-M, PFQ-2, EAQ-O and (mal)adjustment failed to reveal the second function that was present with the EAQ-S. The first

function, however, is very similar to the first function of the previous analysis. All three shame scales are related to internalizing, to a lesser degree externalizing, and negatively to ego strength.

For the following analyses of guilt in relation to (mal)adjustment, only the trait guilt scale of the GI was used because we were interested in the relationship between pervasive traits and (mal)adjustment, rather than momentary states. Also, the self- and other-report versions of the EAQ are analyzed separately due to the small number of participants compared to variables being analyzed.

When comparing both ruminative and nonruminative guilt to the SCL-90-R, some interesting results emerge (this function accounted for 56.7% of the variance). As illustrated in Table 7, the ruminative guilt indices (TOSCA-M ruminative guilt, PFQ-2 guilt, GI trait guilt, and EAQ-S ruminative guilt) were all related to symptoms of psychopathology. Even though lower, it is interesting that the nonruminative guilt scales are also similarly related to SCL-90-R symptom scores.

As evident in Table 8, the same trend emerges for the analysis involving the EAQ other-reports, as does with the self-reports. Again, both ruminative and nonruminative guilt (only marginally with the EAQ-O nonruminative guilt scale) relates to the SCL-90-R scales.

The pattern of correlations found for the ruminative guilt scale in relation to the MMPI-2 is similar to that found for the SCL-90-R. This function accounted for 59.7% of the variance. As shown in Table 9, ruminative guilt relates to internalizing, to a lesser degree, externalizing, and inversely to ego strength. However, a very different pattern emerges when comparing the nonruminative guilt scales to the MMPI-2 — they do not relate at all to internalizing, externalizing, or ego strength. In fact, the near zero structure coefficient combined with the nonzero function coefficient for nonruminative guilt on the EAQ-S indicates that

this variable acts as a suppressor effect relative to the remaining emotion variables. By removing the high covariance among the emotion variables (part of which simply reflects the focus of all scales on negative emotions and behaviors), nonruminative guilt acts to increase the relations between the MMPI-2 scales and the remaining emotion variables.

The comparison between the TOSCA-M guilt scales, PFQ-2 guilt, GI trait guilt, and the EAQ-O guilt scales reveals virtually the same results as does the comparison involving the self-report version (as seen in Table 10).

When looking at the overall trends in the canonical correlations, there seems to be an predominant factor of general negative emotion. This general negative emotion then predicts to internalizing, to some extent externalizing disorders, and negatively to ego strength.

In conclusion, the two different indices of (mal)adjustment used in this study (MMPI-2 versus SCL-90-R) showed differential relationships to the various measures of guilt and shame. Both in the bivariate and multivariate analyses, we essentially find that symptom indices from the SCL-90-R are consistently related to shame, nonruminative guilt, and ruminative guilt (although less so for the behaviorally-based measure of nonruminative guilt when compared to the other guilt measures).

When we combine the various indices of guilt into one multivariate analysis, we find essentially that the best predictors of (mal)adjustment on the less transparent measure again are those that assess more general guilt reactions (the PFQ-2 and GI) or more ruminative forms of the emotion. Shame in these multivariate analyses also is related as would be expected to these indices of maladjustment (although the loadings are lower for a behaviorally-based measure than ones assessing general shame reactions or shame responses to concrete

situations). The behaviorally-based self-report measure of shame reactions showed, in fact, a curious positive relationship not only to internalizing and externalizing, but also to ego strength.

Summary and Discussion

Using a less reactive measure of symptoms (the MMPI-2), we replicated earlier findings that nonruminative guilt, measured using a scenario-type procedure, is a weaker predictor of problems or adjustment compared to reports of more chronic manifestations of the emotion. Our confidence that nonruminative guilt truly is unrelated to psychopathology is strengthened by the even lower links found between behaviorally-oriented self-assessments of the nonruminative guilt construct and indicators of (mal)adjustment. We interpret the findings involving a more reactive measure of symptoms (the SCL-90-R) to mean that the various measures of self-conscious emotion assess a distress or negativity component in people's reactions. This conclusion is least warranted, however, for the more behaviorally-based assessment of nonruminative guilt responses. When we combine the findings for univariate and multivariate relationships of nonruminative guilt responses to both the MMPI-2 and the SCL-90-R, one conclusion seems reasonable: A behaviorally-based assessment of nonruminative guilt is the best reflection that we have to date of how the tendency to experience remorse or regret does <u>not</u> contribute to psychological functioning once we take into account emotion-nonspecific variance accounted for by negative valence or hedonic tone (Watson & Clark, 1992).

The results for shame also replicate and extend previous findings. It is clear from the bivariate and multivariate results using a more reactive measure of

symptoms that all of the shame measures contain a large distress or negative valence component. Results for the MMPI-2 also generally show that the three measures of shame are related positively to symptoms but negatively to ego strength. However, there are some intriguing differences at the bivariate level in how the three shame measures are related to the less reactive indices of (mal)adjustment. At the bivariate level, all three measures are positively related to internalization, but the additional positive association between shame and externalization is found for the behavioral assessments and TOSCA-M measure of shame and not for the PFQ-2 index. Also at the bivariate level, the TOSCA-M and PFQ-2 measures of shame are negatively related to ego strength, whereas the same relationships for behavioral assessments are negligible. These individual relationships combine to account neatly for the pattern of relationships reflected in the first canonical function at the multivariate level (see Tables 5 and 6).

Why would there be a positive association between shame and externalization for the behaviorally-based and scenario-based assessments but not for an adjective checklist measure? An easy answer is available for the behavioral indices, since this measure explicitly incorporated externalization-type shame responses (e.g., "S/he blames own failure on others or difficulty of the task." or "Tries to justify or rationalize bad performance."). In terms of the TOSCA-M, the strong shame-externalization link replicates previous findings (H. B. Lewis, 1971; M. Lewis, 1992; Retzinger, 1995; Scheff, 1995; Tangney, Burggraf, & Wagner, 1995) and — given the immediate nature of the situations used — could reflect participants' strong intentions or desires to defend against shame via extrapunitive responses. However, the strong immediate links between shame and externalization might not become transferred into participants' longer-term representations of shameful feelings themselves, which could be what participants draw on when they make

global shame assessments (PFQ-2). This interpretation is admittedly speculative but is not inconsistent with clinicians' discussions of the defensive blocking involved in shame-externalization or shame-rage cycles (H. B. Lewis, 1971; Scheff, 1995)

Turning to the relation between ego strength and the shame measures, it is not surprising that global or intense and cross-situationally consistent self-flagellation, which is what the shame responses represent in both the PFQ-2 and TOSCA-M, is negatively related to a measure of psychological resilience. Surprising at first glance is, however, the positive association between a behavioral assessment of shame and ego strength, once variance due to the general distress encompassed by shame is removed (see Table 6). There are several possible interpretations of this result — all of which are purely speculative and only two of which will be mentioned here.

One possibility is that once one removes the variance due to general distress, the index of ego strength and the behavioral index of shame are each strongly tapping into the person's concern with interpersonal rejection or acceptance. The EAQ-S includes many interpersonally-oriented shame behaviors (which is the premise behind an other-report measure), with items such as, "After I have failed or done something wrong, I want reassurance that others don't view me as a 'failure'." The ego strength scale also incorporates this interpersonal orientation by including items that reflect having healthy relationships with others. Most shame items on the TOSCA-M have less to do with the person's socially-oriented reactions than with their desire simply to protect the self (through avoidance) or with the affect of shame itself. Similarly with the PFQ-2, the participant is simply rating the frequency with which they feel shame-related affect. The other possibility is that being able to admit to, or engage in, concrete and common shame behaviors (which is what participants are doing in the EAQ-S) indirectly assesses the person's

nondefensiveness, which also is involved in ego strength. We obviously need to further explore links between ego strength and various subscales of the EAQ to adequately examine these ideas.

In conclusion: There are indications from our research that behavioral self-report assessments of guilt and shame yield somewhat different links to symptoms and indices of well-being than the measures reported thus far in the literature. These differential relationships need to be studied further paying close attention to both the emotion and criterion measures used. Like Watson and Clark, we suspect that many of the emotion-symptom links reported in this area say more about the unspecific distress common to measures of emotion and symptoms than they provide unique information about specific emotion-symptom liaisons. In addition, the structure of all of these emotions needs to be unpacked more carefully (Russell, 1997) — paying close attention to the possibly nested, yet overlapping, relationship of nonruminative guilt to both positive and negative affect and the tighter affinity between negative affect and shame or ruminative guilt.

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Table 1

EAQ-S and EAQ-O Nonruminative Guilt, Ruminative Guilt, and Shame Scale Correlations

EAQ-S	Nonruminative guilt	Ruminative guilt	Shame
Nonruminative guilt	(.85)[a]		
Ruminative guilt	.51***	(.88)[a]	
Shame	.23	.69***	(.94)[a]

EAQ-O	Nonruminative guilt	Ruminative guilt	Shame
Nonruminative guilt	(.91)[a]		
Ruminative guilt	.36**	(.86)[a]	
Shame	.25	.71***	(.92)[a]

** $p < .01$

*** $p < .001$

[a] Internal consistency reliabilities (Cronbach's alphas)

Table 2

Canonical Correlation Results for EAQ-Self: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function			Second Function		
	Function	r_s	r_s^2(%)	Function	r_s	r_s^2(%)
EAQ-Self Variate Set						
EAQ Shame	-.24	-.66	43.6	.98	.74	54.8
EAQ Rum. Guilt	-.46	-.89	79.2	-.17	.19	3.6
EAQ Nonrum. Guilt	-.53	-.83	68.9	-.61	-.50	25.0
Predictor Variate Set						
Tosca-M Shame	-.06	-.79	62.4	-.03	.31	9.6
Tosca-M Rum. Guilt	-.27	-.87	75.7	.14	.13	1.6
Tosca-M Nonrum. Guilt	-.62	-.90	81.0	-.59	-.35	13.3
PFQ-2 Shame	.03	-.40	16.0	.65	.64	40.1
PFQ-2 Guilt	-.04	-.47	22.1	-.57	.34	11.6
GI State Guilt	.02	-.53	28.1	.69	.70	49.0
GI Trait Guilt	-.30	-.58	33.6	.12	.62	38.4

Table 3

Canonical Correlation Results for EAQ-Other: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function			Second Function		
	Function	r_s	r_s^2(%)	Function	r_s	r_s^2(%)
EAQ-Other Variate Set						
EAQ Shame	.67	.80	64.0	-.52	-.59	34.8
EAQ Rum. Guilt	-.04	.70	49.0	-.39	-.45	20.2
EAQ Nonrum. Guilt	.63	.79	62.4	.88	.59	34.8
Predictor Variate Set						
Tosca-M Shame	-.32	.74	54.8	.62	-.11	1.2
Tosca-M Rum. Guilt	.60	.86	73.4	-.77	-.10	1.0
Tosca-M Nonrum. Guilt	.47	.81	65.6	.91	.45	20.2
PFQ-2 Shame	.23	.63	39.7	.02	-.43	18.5
PFQ-2 Guilt	.24	.66	43.6	-.48	-.49	24.0
GI State Guilt	-.17	.53	28.1	-.83	-.57	32.5
GI Trait Guilt	.23	.58	33.6	.36	-.31	9.6

Table 4

Bivariate Correlations for the Shame and Guilt Scales with the Measures of (Mal)adjustment

	MMPI-2 Internal	MMPI-2 External	MMPI-2 Ego Str	SCL Anx	SCL Dep	SCL OCD	SCL Phobia
EAQ-S Shame	.41**	.20	-.01	.36**	.46**	.40**	.31**
EAQ-S Rum. Guilt	.43**	.25*	-.03	.39**	.51**	.45**	.28*
EAQ-S Nonrum. Guilt	.08	.08	.04	.09	.23	.25*	.13
EAQ-O Shame	.37**	.21	-.07	.34**	.40**	.36**	.35**
EAQ-O Rum. Guilt	.37**	.22*	-.14	.35**	.43**	.36**	.23*
EAQ-O Nonrum. Guilt	.12	.07	.00	.21	.28*	.29*	.19
TOSCA-M Shame	.55**	.30**	-.36**	.53**	.61**	.52**	.39**
TOSCA-M Rum. Guilt	.47**	.21*	-.24*	.41**	.55**	.47**	.36**
TOSCA-M Nonrum. Guilt	.08	.08	.08	.24*	.34**	.32**	.17
PFQ-2 Shame	.40**	.04	-.36**	.48**	.56**	.53**	.40**
PFQ-2 Guilt	.48**	.11	-.28**	.51**	.56**	.54**	.39**
GI Trait Guilt	.53**	.23*	-.14	.44**	.55**	.60**	.39**
GI State Guilt	.53**	.24*	-.18	.50**	.61**	.59**	.35**

* $p < .05$

** $p < .01$

Table 5

Canonical Correlation Results for TOSCA-M, PFQ-2, EAQ-Self, and EAQ-Other Shame Scales with the SCL-90-R: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function		
	Function	r_s	r_s^2(%)
Shame Variate Set			
TOSCA-M Shame	-.51	-.88	77.4
PFQ-2 Shame	-.26	-.77	59.3
EAQ-S Shame	-.29	-.77	59.3
EAQ-O Shame	-.20	-.65	42.3
SCL-90-R Variate Set			
Anxiety	.21	-.79	62.4
Depression	-.67	-.94	88.4
Obsessive-Compulsive	-.32	-.84	70.6
Phobic Anxiety	-.36	-.73	53.3

Table 6

Canonical Correlation Results for TOSCA-M, PFQ-2, and EAQ-Self Shame Scales with the MMPI-2: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function			Second Function		
	Function	r_s	r_s^2(%)	Function	r_s	r_s^2(%)
Shame Variate Set						
TOSCA-M Shame	.52	.88	77.4	-.05	.10	1.0
PFQ-2 Shame	.56	.89	79.2	-.67	-.21	4.4
EAQ-S Shame	.08	.58	33.6	1.10	.78	60.8
MMPI-2 Variate Set						
Internalizing	.73	.89	79.2	1.27	.42	17.6
Externalizing	.02	.35	12.3	-.76	.45	20.3
Ego Strength	-.49	-.70	49.0	1.26	.65	42.3

Table 7

Canonical Correlation Results for TOSCA-M, PFQ-2, and EAQ-Self Guilt Scales with the SCL-90-R: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function		
	Function	r_s	r_s^2(%)
Guilt Variate Set			
TOSCA-M Rum. Guilt	-.50	-.83	68.9
TOSCA-M Nonrum. Guilt	-.25	-.57	32.5
PFQ-2 Guilt	-.42	-.79	62.4
GI Trait Guilt	-.22	-.79	62.4
EAQ-S Rum. Guilt	-.04	-.68	46.2
EAQ-S Nonrum. Guilt	.25	-.35	12.3
SCL-90-R Variate Set			
Anxiety	.09	-.85	72.3
Depression	-.65	-.97	94.1
Obsessive-Compulsive	-.31	-.91	82.8
Phobic Anxiety	-.24	-.73	53.3

Table 8

Canonical Correlation Results for TOSCA-M, PFQ-2, and EAQ-Other Guilt Scales with the SCL-90-R: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function		
	Function	r_s	r_s^2(%)
Guilt Variate Set			
TOSCA-M Rum. Guilt	-.52	-.88	77.4
TOSCA-M Nonrum. Guilt	-.14	-.60	36.0
PFQ-2 Guilt	-.29	-.78	60.8
GI Trait Guilt	-.27	-.81	65.6
EAQ-O Rum. Guilt	-.09	-.67	44.9
EAQ-O Nonrum. Guilt	.12	-.37	13.7
SCL-90-R Variate Set			
Anxiety	.30	-.82	67.2
Depression	-.62	-.95	90.3
Obsessive-Compulsive	-.49	-.93	86.5
Phobic Anxiety	-.29	-.71	50.4

Table 9

Canonical Correlation Results for TOSCA-M, PFQ-2, and EAQ-Self Guilt Scales with the MMPI-2: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function		
	Function	r_s	r_s^2(%)
Guilt Variate Set			
TOSCA-M Rum. Guilt	.70	.71	50.4
TOSCA-M Nonrum. Guilt	-.18	.24	5.8
PFQ-2 Guilt	.45	.79	62.4
GI Trait Guilt	.24	.77	59.3
EAQ-S Rum. Guilt	.07	.56	31.4
EAQ-S Nonrum. Guilt	-.35	.09	0.8
MMPI-2 Variate Set			
Internalizing	.96	.98	96.0
Externalizing	-.07	.53	28.1
Ego Strength	-.17	-.57	32.5

Table 10

Canonical Correlation Results for TOSCA-M, PFQ-2, and EAQ-Other Guilt Scales with the MMPI-2: Function Coefficients, Structure Coefficients, and Percentage of Variance Accounted for by each Variable

	First Function		
	Function	r_s	r_s^2(%)
Guilt Variate Set			
TOSCA-M Rum. Guilt	-.66	-.74	54.8
TOSCA-M Nonrum. Guilt	.37	-.28	7.8
PFQ-2 Guilt	-.32	-.80	64.0
GI Trait Guilt	-.27	-.78	60.8
EAQ-O Rum. Guilt	-.24	-.71	50.4
EAQ-O Nonrum. Guilt	.09	-.20	4.0
MMPI-2 Variate Set			
Internalizing	-.89	-.99	98.0
Externalizing	.03	-.60	36.0
Ego Strength	.19	.74	54.8