Cogn Ther Res (2006) 30:415–425
DOI 10.1007/s10608-006-9056-3

ORIGINAL ARTICLE

Shame Reactions to Everyday Dilemmas are Associated with Depressive Disorder

Renee J. Thompson · Howard Berenbaum

Published online: 22 June 2006

Abstract This study examined whether emotional reactions to everyday dilemmas are associated with depressive disorders in a sample of 195 undergraduates. Depressive disorder was assessed using the Structured Clinical Interview for DSM-IV (SCID). Compared to controls, individuals in current depressive episodes, as well as individuals with a past history of depressive disorder who were in remission, reported more shame in response to both hypothetical interpersonal and real life everyday dilemmas. In contrast, guilt was not significantly associated with depressive disorder. These results raise the possibility that everyday dilemmas and shame responses may play important roles in depressive disorders.

Keywords Depressive disorder · Guilt · Shame · Dilemmas

A wealth of data has documented a link between stress and various forms of psychopathology, including major depressive disorder (e.g., Brown & Harris, 1989; Lewinsohn, Allen, Seeley, & Gotlib, 1999). Much of the literature has focused on major life events, such as divorce or job loss, though researchers have also demonstrated the potential importance of less severe forms of stress, such as daily hassles (e.g., Kanner, Coyne, Schaefer, & Lazarus, 1981; Monroe, Rohde, Seeley, & Lewinsohn, 1999). A possibly significant form of stress, that to our knowledge has received little attention, is dilemmas that occur on a day-to-day basis.

This study focused on events we have labeled as everyday dilemmas—dilemmas in which one must choose between two competing alternatives. An example of an everyday dilemma is having to choose between going to your daughter's soccer game or staying at work to complete a project that is due. Thus, these dilemmas refer to situations in which there are drawbacks and advantages to any decision. Although these

R. J. Thompson (✉) · H. Berenbaum
Department of Psychology, University of Illinois at Urbana/Champaign, 603 E. Daniel St., Champaign, IL 61820, USA
e-mail: rjthomps@cyrus.psych.uiuc.edu

dilemmas are not as severe as events that can be labeled as major life stressors, everyday dilemmas occur on a more regular basis and can still be interpreted as stressful.

The current study investigated whether emotional reactions of shame and guilt to everyday dilemmas are associated with depressive disorder. There are two reasons why everyday dilemmas are likely to elicit shame or guilt. First, the sorts of dilemmas we are describing necessarily lead to the self and/or someone else being disappointed. Second, the distress caused by everyday dilemmas is a direct outcome of a personal choice.[1] Because dilemmas necessarily result in the self and/or someone else being disappointed, and the disappointment is associated with a personal choice, they are likely to elicit moral emotional responses (Tangney, 1992) such as shame or guilt.

Shame has been hypothesized to be a vulnerability factor for depression (e.g., Andrews, 1995; Andrews, Qian, & Valentine, 2002; Ferguson, Stegge, Miller, & Olsen, 1999; Lewis, 1987; Tangney, Wagner, & Gramzow, 1992). Several researchers have found that in non-clinical samples, dimensional measures of depression (e.g., scores on the Beck Depression Inventory and the Child Behavior Checklist) are associated with shame proneness (Ferguson et al., 1999; Tangney et al., 1992) and what we are labeling as trait shame (e.g., characterological shame; Andrews et al., 2002). Using clinical interviews to assess depression, Andrews (1995) found that chronic or recurrent depression was associated with how ashamed women felt about their bodies. What past research has not yet examined is whether shame in response to one's own behavior (e.g., shame in response to an individual's choice about how to deal with a dilemma) is associated with depressive disorder.

Guilt is another emotion that may be best understood in an interpersonal context. The interpersonal perspective of guilt suggests that moderate levels of it serve multiple functions benefiting social relationships (e.g., Baumeister, Stillwell, & Heatherton, 1994; Tangney, 1991). Although many use these two emotions interchangeably, researchers have theoretically and empirically differentiated shame and guilt (e.g., Lewis, 1971; Tangney, 1995; Wicker, Payne, & Morgan, 1983). For example, the emotions differ in their focus of evaluation—individuals who feel guilty negatively evaluate a behavior, whereas individuals who feel shameful negatively evaluate their entire selves. The subjective experience is also different—when individuals feel shameful, they feel worthless and exposed; in contrast, when they feel guilty, they feel remorse and regret. Shameful individuals often want to hide and avoid the negative evaluation of others. On the other hand, guilty individuals want to apologize and ''make right'' their wrongdoings.

A variety of theorizing and research from several different sets of literature suggest that depressive disorder is particularly strongly associated with shame responses to everyday dilemmas, as opposed to guilt responses. Several researchers have proposed that moderate levels of guilt are likely to be interpersonally adaptive (e.g., Baumeister et al., 1994; Ferguson et al., 1999; Tangney, 1991).[2] In contrast, shame (at least as defined by researchers such as Lewis (1971) and Tangney (1995)) is (a) by definition, associated with self-deprecation; and (b) is also associated with withdrawal (e.g., wanting to hide). Similarly, depression (a) is associated with feelings of subordination

[1] In contrast, hassles are the frustrating demands that are characteristic of everyday transactions, such as traffic jams and losing a set of keys (Kanner et al., 1981).

[2] Some researchers have argued that guilt is also maladaptive. However, as pointed out by Tangney (1993), such conclusions may be the result of many measures of guilt (e.g., Mosher, 1966) being confounded with shame.

(Gilbert, 1989) and a schema of oneself as being inadequate or flawed (e.g., Beck, Rush, Shaw, & Emery, 1979; Segal, Gemar, Truchon, Guirguis, & Horowitz, 1995); and (b) can be considered a form of withdrawal and the absence of approach behavior (e.g., Davidson, Pizzagalli, Nitschke, & Putnam, 2002). Given that interpersonal factors are particularly important for the development and maintenance of depressive disorder (e.g., Hammen, 2000; Joiner & Coyne, 1999), we further predicted that shame reactions to everyday dilemmas that are interpersonal in nature, but not those that are achievement-focused, will be associated with depressive disorder. Everyday interpersonal conflicts that elicit shame reactions may set into motion a maladaptive cognitive–affective spiral that has been extensively linked to depression (e.g., Beck, 1967; Teasdale, 1983). In other words, shame may set in motion a series of responses (e.g., sense of self as subordinate and inadequate, withdrawal) which may either result in a depressive episode or serve to maintain a depressive episode. In summary, the goal of the present study was to test the hypothesis that depressive disorder would be particularly strongly associated with shame responses to everyday interpersonal dilemmas.

Method

Participants and procedure

A total of 195 introductory psychology students at a large Midwestern university were assigned to participate in this study. They received class credit for participating. They were mostly freshman and sophomores (76%), approximately half (52%) were female, and they ranged in age from 17 to 44 (M = 19.3, SD = 2.4). Most (81%) of the participants were European American, with Asian American, African American, Latino/a, and biracial making up 4%, 7%, 2%, and 5% of the sample, respectively. One percent of the sample did not report their ethnicity.

Participants completed questionnaires and an interview assessing current and past mood disorders. Half completed the interview first, and the other half completed the questionnaires first.

Diagnostic interview

The mood disorders module of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I; First, Spitzer, Gibbon, & Williams, 2001) was used to examine whether the participants were currently experiencing a depressive, manic, or dysthymic episode and whether they had a history of depressive disorder or mania. The SCID was administered (and audiotaped) by one of the authors (RJT), who had received extensive training in its use.

Thirteen individuals were in the midst of mood episodes at the time of the study. Six individuals were in a current minor depressive episode, six were in a current major depressive episode, and one met criteria for dysthymia. Fifty-eight participants had a past history of depressive disorder currently in remission (i.e., no longer meeting criteria for minor or major depressive disorder), 33 (61% female) of whom had a past history of major depressive disorder, and 25 (44% female) of whom had a past history of minor depressive disorder. None of the participants had a history of manic or hypomanic episodes. A total of 124 participants had no history of mood disorder and served as the comparison group. Control participants did not differ significantly from individuals with

current/past depressive disorder in either age, $t(192) = 1.48$, *NS*, or sex, $\chi^2(1, N = 195) = 2.10$, *NS*.

To examine interrater reliability of the diagnostic judgments using the SCID interviews, the second author (HB) listened to audiotaped SCID interviews and independently diagnosed lifetime history of depressive disorder for 30 of the participants (15 randomly selected from among those diagnosed by RJT with a past history of depressive disorder in remission, and 15 randomly selected from among those considered by RJT to not have any depressive history). Collapsing across major and minor depression, percentage agreement was 93% (kappa = .87). When major and minor depression were separated, percentage agreement was 87% (kappa = .79).

Measures

Current mood

Current levels of negative affect (NA) were measured by asking participants to indicate, using a 5-point scale, the degree to which they felt each of 10 negative mood states (e.g., upset) *that day*. The 10 mood items were taken from the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988), which has been found to have excellent psychometric properties. The correlation between the PANAS NA scale and the PANAS positive affect scale is low, demonstrating good discriminant validity (Watson et al., 1988). In addition, although PANAS NA scores are associated with scores on the Beck Depression Inventory, the moderate correlation does not suggest interchangeability (Watson et al., 1988). Internal consistency in the present sample was $\alpha = .74$.

Hypothetical dilemmas

The participants were presented with six scenarios depicting everyday dilemmas sampling different life domains. Three of the scenarios depicted interpersonal–interpersonal dilemmas, and three of the scenarios depicted achievement–achievement dilemmas.[3] *Achievement–achievement* dilemmas were defined as situations in which the individual must choose between two alternatives that are achievement in nature (e.g., work, school). For example, in one of the achievement–achievement scenarios, participants were presented with the dilemma of skipping a lecture to finish a paper or going to lecture and turning in a paper that does not meet their standards. *Interpersonal–interpersonal* dilemmas were defined as situations in which the individual must choose between two alternatives that are social in nature. For example, in one of the interpersonal–interpersonal scenarios, participants are presented with a situation where they need to cancel plans with either their significant other or their best friend. Since the participants were from an introductory psychology course, the dilemmas were constructed to reflect situations common to such an undergraduate sample.[4]

[3] Participants also responded to three interpersonal–achievement dilemmas. Since the results of analyses examining these three dilemmas fell between the results of analyses examining interpersonal–interpersonal and achievement–achievement dilemmas, they are not discussed further in this paper.

[4] Copies of the scenarios are available upon request.

Real life dilemmas

The participants wrote examples of recent everyday dilemmas from their own lives. They were asked to describe two situations that had occurred in the past month in which they felt conflicted over what to do. For example, one participant wrote, ''It was the end of the week. My brother-in-law needed help to remodel his new house, but I had a test and lengthy assignment due Tuesday and an essay due Monday. I went home to help my brother-in-law.''

Dilemma coding

Two advanced undergraduate research assistants and the first author (RJT) coded the real-life dilemmas for (a) life impact of each dilemma (i.e., the potential life consequences of the event); and (b) type of dilemma. For *life impact*, the dilemmas were coded on a 4-point scale (1 = inconsequential, 4 = life altering). For example, deciding whether to take a nap or exercise would be coded as inconsequential, whereas deciding whether to go to graduate school or whether to get married would be coded as life altering. Interrater reliability of the impact ratings, measured using the intraclass correlation, treating raters as random effects and the mean of the raters as the unit of reliability, was .80. The mean of the three raters was used in the data analyses. Across all participants, the mean impact score was 2.0 (SD = 0.4), with the majority of the dilemmas rated somewhere between inconsequential and life altering (18% rated as former and 2% as latter).

For *type* of dilemmas, each part of the conflict (e.g., choose option A versus option B) was coded as one of the following: interpersonal, achievement, financial, self-focused (e.g., exercise), and other (e.g., whether to go to church). For example, a dilemma in which someone had to decide whether to help his/her sister or study for an exam would have been coded as interpersonal–achievement. The three raters coded every dilemma separately. All three raters agreed on 67% of all ratings. When two of the three raters agreed (28%), the majority rating was used. On the seldom occasions (5%) when all three raters disagreed, the raters discussed the dilemma until they reached consensus. Interrater reliability, measured using pairwise kappas, ranged from .66 to .74.

The most common dilemma types were interpersonal–interpersonal (30%), interpersonal–achievement (30%), and achievement–achievement (12%). We explored whether dilemma types were associated with a history of depressive disorder. To do so, each participant received two scores: (a) a score based on the number of interpersonal aspects of the two dilemmas; and (b) a score based on the number of achievement aspects of the two dilemmas. For example, if a participant had an achievement–interpersonal and an interpersonal–interpersonal dilemma, s/he would receive an interpersonal dilemma score of three (since three of the four parts of the dilemmas were interpersonal) and an achievement dilemma score of one (since one of the four dilemma parts was achievement).

Emotional reactions

After reading each hypothetical dilemma or writing about a real life dilemma, participants were asked what they would do (or what they did) and how they thought they would feel (or how they felt). Participants rated the intensity (1 = not at all, 7 = a great deal) and duration (1 = few minutes, 7 = more than a week) of their emotional reactions of guilt and shame. Because many individuals use the words shame and guilt interchangeably and do not use these words to represent the specific phenomena we

were interested in measuring, we did not measure them using only the words shame and guilt. Instead, we included statements to assess guilt and shame that represented brief phenomenological descriptions of guilt and shame. These statements were adapted from a well-validated measure of shame and guilt, the Test of Self-Conscious Affect—3 for adults (TOSCA-3: Tangney, Dearing, Wagner, & Gramzow, 2000). We did not use the TOSCA-3 because we were interested specifically in measuring emotional reactions to everyday dilemmas over which the person has control, and the TOSCA measures emotional reactions to a wide variety of situations. *Guilt* was assessed using the word ''guilt'' and using the following two statements adapted from the TOSCA: ''I feel like finding a way to make up for what I did,'' and ''I feel like I deserve criticism for what I did.'' Ratings of intensity and duration of the word guilt and the two guilt phrases were averaged for the guilt score. The alphas for guilt were: .75 for real life dilemmas, .79 for achievement–achievement hypothetical dilemmas, and .85 for interpersonal–interpersonal hypothetical dilemmas. *Shame* was assessed using the word ''shame'' and the following two statements adapted from the TOSCA: ''I feel self-conscious,'' and ''I feel like avoiding people.'' Ratings of intensity and duration of the word shame and the two shame phrases were averaged for the shame score. The alphas for shame were .76 for real-life dilemmas, .77 for achievement–achievement hypothetical dilemmas, and .83 for interpersonal–interpersonal hypothetical dilemmas. Because intensity and duration were strongly correlated for each emotion or emotional statement (mean *r* of .90), the reported emotional reaction score was an average of the intensity and duration ratings.

Results

We began by examining whether individuals' emotional reactions to everyday dilemmas were associated with depressive disorder. We compared controls with individuals with current and/or past depressive disorder in terms of their guilt and shame responses to real life dilemmas, hypothetical interpersonal–interpersonal dilemmas, and hypothetical achievement–achievement dilemmas. As can be seen in Table 1, the participants with depressive disorder reported more shame than did controls in response to real life

Table 1 Mean (SD) emotional reactions to real life, hypothetical interpersonal–interpersonal (II), and hypothetical achievement–achievement (AA) dilemmas

	Shame responses			Guilt responses		
	Controls	Depressive disorder	Past depressive disorder[a]	Controls	Depressive disorder	Past depressive disorder[a]
Type of Dilemma						
Real life						
M	1.6	2.2	2.0	3.0	3.3	3.3
SD	0.8	1.2	1.1	1.4	1.5	1.5
Hypothetical II						
M	1.8	2.1	2.0	3.7	3.9	4.0
SD	0.8	1.1	1.1	1.2	1.1	1.1
Hypothetical AA						
M	1.7	1.9	1.8	2.4	2.6	2.5
SD	0.7	0.7	0.8	1.1	1.0	1.0

Note: [a]The past depressive disorder group is composed of individuals with a past history of depressive disorder, excluding individuals in current depressive episodes

dilemmas, hypothetical interpersonal–interpersonal dilemmas, and hypothetical achievement–achievement dilemmas, $t(193) = 3.85$, $P < .001$, $t(193) = 2.37$, $P < .05$, $t(193) = 2.04$, $P < .05$, respectively. In contrast, the depressive disorder and control groups did not differ significantly in their guilt responses to any of the dilemma types.

We next began to explore the plausibility of the following two alternative explanations for the findings described above: (a) the association between depressive disorder and elevated levels of shame is merely an artifact of state effects—in other words, individuals who are currently depressed report more shame than controls; versus (b) a stable characteristic of some individuals predisposes them to both experience shame and develop depressive disorder. To explore these two alternatives we began by redoing the analyses described above after excluding members of the depressive group who were currently in depressive episodes. Even after excluding individuals in current depressive episodes (who had, on average, reported the highest levels of shame), the depressive and control groups differed in their shame responses.[5] Compared to controls, individuals with past (but not current) histories of depressive disorder reported significantly more shame in response to both real life dilemmas, $t(180) = 2.73$, $P < .01$ (2-tailed), and hypothetical interpersonal–interpersonal dilemmas, $t(180) = 2.04$, $P < .05$ (2-tailed), but not in response to hypothetical achievement–achievement dilemmas, $t(180) = 1.05$, *NS*.

We then examined different types of real life dilemmas. Consistent with the analyses examining the hypothetical dilemmas, as can be seen in Table 2, compared with controls, individuals with past (but not current) histories of depressive disorder reported significantly more shame in response to real life interpersonal–interpersonal dilemmas, $t(82) = 2.98$, $P < .01$, but not in response to real life achievement–achievement dilemmas,[6] $t(39) = .77$, *NS*.

The finding that individuals with past (but not current) histories of depressive disorder report elevated levels of shame suggests that the association between depressive disorder and elevated levels of shame is not merely an artifact of state effects. However, as it turned out, participants with a past history of depressive disorder reported more

Table 2 Mean (SD) shame reactions to real life everyday dilemmas

	Controls	Past depressive disorder
Interpersonal–Interpersonal		
M	1.8	2.5
SD	0.9	1.2
Achievement–Achievement		
M	1.5	1.3
SD	0.8	0.4

[5] The finding that the depressive and control groups differed in their shame responses even after excluding individuals in current depressive episodes was not significantly altered when sex was controlled in the analyses.

[6] When a participant did not write about a specific type (e.g., achievement–achievement) of real life dilemma, they were not included in that analysis. In other words, not every individual was included in these two additional analyses because not every individual provided an example of an achievement–achievement or interpersonal–interpersonal real life dilemma. On the other hand, when a participant wrote about two of the same kind of specific type of real life dilemma, their shame responses to those two dilemmas were averaged. Thus, different subsets of individuals were included in the analyses examining the hypothetical dilemmas and the analyses examining specific types of real life dilemmas.

NA ($M = 1.6$, $SD = 0.5$) than did those without a past history of depressive disorder ($M = 1.4$, $SD = 0.4$), $t(180) = 2.98$, $P < .01$. Therefore, to test further whether the associations between depressive disorder and shame responses to dilemmas were artifacts of state effects, we conducted hierarchical logistic regression analyses, using history of depressive disorder as the dependent variable (after excluding participants in current depressive episodes). Current NA was entered in the first block, and shame was entered in the second block. We conducted logistic regressions for the two shame responses that were associated with a history of depressive disorder when not taking into account baseline NA (i.e., responses to real life dilemmas and hypothetical interpersonal–interpersonal dilemmas). Even after taking into account baseline NA, shame responses to real life dilemmas predicted a history of depressive disorder, $\beta = .39$, $P < .05$. After taking into account baseline NA, shame responses to hypothetical interpersonal–interpersonal dilemmas were associated with a history of depressive disorder in the expected direction, $\beta = .25$, though the association was no longer statistically significant ($P = .15$).[7]

Individuals with depressive disorder (past and/or current episodes) did not differ from the controls in either the life impact of the real life dilemmas they described, $M = 2.1$ ($SD = 0.4$) and $M = 2.0$ ($SD = 0.4$), respectively, or in the degree to which their real life dilemmas were interpersonal in nature, $M = 2.1$ ($SD = 1.0$) and $M = 1.9$ ($SD = 1.2$), respectively. Similarly, no differences emerged between those with depressive disorder (past and/or current episodes) and those without a past history in the degree to which their dilemmas were achievement-focused, $M = 1.2$ ($SD = 1.0$) and $M = 1.3$ ($SD = 1.0$), respectively. Thus, the group differences in emotional responses to real life dilemmas are unlikely to be artifacts of the kinds of dilemmas the two groups reported.

Discussion

As we had hypothesized, depressive disorder was associated with shame responses to everyday dilemmas. Further, the association remained after both excluding individuals who were currently in depressive episodes and removing shared variance with current mood. One reason we are relatively confident that there is an association between depressive disorder and shame responses to everyday dilemmas (especially everyday dilemmas involving potential interpersonal conflict) is that this association was found using both hypothetical and real life dilemmas. The hypothetical dilemmas controlled for the *type* of dilemma. In other words, because the results were replicated for participants' responses to the hypothetical dilemmas, we can rule out the alternative hypothesis that increased shame among individuals with depressive disorder is due to their finding themselves in qualitatively different everyday dilemmas than those without a depression history. On the other hand, the inclusion of the real life dilemmas provides increased ecological validity. Lack of such validity is often a central complaint from critics of hypothetical scenario based measures (e.g., Andrews, 1998).

The results of this study suggest that depressive disorder is associated with particular types of dilemmas. As predicted, shame reactions to both hypothetical and real life interpersonal–interpersonal dilemmas, but not achievement–achievement dilemmas,

[7] When the preceding two logistic regression analyses were conducted after excluding the word "ashamed" from computation of the PANAS NA score, the betas were similar ($\beta = .40$, $P < .05$, and $\beta = .25$, $P = .15$, respectively).

were associated with depressive disorder. This pattern of results suggests that it is not all experiences of shame that are associated with depressive disorder, but rather the experience of shame in an interpersonal context that is associated with depressive disorder. There are a variety of reasons why shame responses could be associated with depressive disorder. One possibility is that shame plays a causal role in contributing to depressive disorder. Alternatively, it is possible that the causal arrow points in the opposite direction. There are three ways in which depressive disorder could contribute to shame: (a) the elevated levels of negative affect that typically accompany depressive disorder make people more likely to experience shame; (b) people with depressive disorder select or get stuck in bad shame eliciting situations; and (c) past depressive episodes lead to some sort of scar (Lewinsohn, Steinmetz, Larson, & Franklin, 1981) which somehow makes people prone to experience shame. The first two of these possibilities seem unlikely given that (a) shame and depressive disorder continued to be associated even after excluding individuals in depressive episodes and after removing shared variance with current negative affect; and (b) individuals with depressive disorder differed from controls not only in their shame responses to real life dilemmas but in their shame responses to hypothetical interpersonal dilemmas as well. Thus, it appears that the most likely explanation for the link between depressive disorder and shame responses is that (a) shame contributes to depressive disorder; and/or (b) an as yet unidentified scar of past depressive episodes makes individuals vulnerable to shame; and/or (c) an as yet unidentified third variable contributes to both shame and depressive disorder.

Although we cannot be certain that shame plays a causal role in the development of depressive disorder, we posit that this is indeed the direction of the causal arrow. There are two (related) mechanisms that we propose may play a role in leading shame responses to contribute to depressive disorder. First, shame responses may activate latent schemas of the self as inadequate or flawed (though it also seems plausible that the presence of such latent schemas may actually predispose to shame, which when elicited, activates the schema). Second, shame responses may lead to withdrawal. In particular, shame responses to interpersonal dilemmas seem likely to lead to withdrawal from other people (Tangney, 1995). Thus, shame may set into motion maladaptive cognitive–affective spirals that can lead to depressive episodes.

Two separate lines of research have found associations between shame and depression, though the conclusions they draw differ. Tangney and colleagues have linked episode-based measures of shame proneness with psychological distress (e.g., Tangney et al., 1992). In contrast, Andrews and colleagues (Andrews, 1995; Andrews et al., 2002) have found that depression is associated with trait shame (e.g., bodily shame). In our opinion, these two viewpoints are compatible in that each shame measure incorporates interpersonal domains. The TOSCA contains 16 scenarios—12 of which contain explicit interpersonal components. Each of the shame areas covered in the Experience of Shame Scale (ESS) includes a cognitive component tapping concern over others' opinions (Andrews et al., 2002). In fact, Andrews et al. (2002) found that trait shame as measured by the ESS was highly associated with the TOSCA shame proneness scale. Thus, we hypothesize that (a) some individuals are prone to experience shame in interpersonal contexts over which they have control (e.g., interpersonal dilemmas); (b) that reported bodily shame, as well as other forms of trait shame (e.g., characterological shame) provide a particularly reliable and sensitive index of proneness to experience shame in interpersonal contexts; and (c) it is the experience of shame in interpersonal contexts that contributes to depressive disorder. Of course, future research is needed to test these hypotheses.

Unlike shame responses, guilt responses were not associated with depressive disorder. These findings are consistent with the expectations of several researchers (Baumeister et al., 1994; Ferguson et al., 1999; Tangney, 1991) who have suggested that moderate levels of guilt are more interpersonally adaptive. Although our results suggest that shame may be more strongly associated with depressive disorder than is guilt, we do not recommend that researchers stop exploring the potentially important role of guilt. It is possible, for example, that guilt in response to ambiguous situations may be associated with psychological distress (Zahn-Waxler, 2000).

A great deal of past research has examined depressogenic cognitions, or depressive thinking (e.g., Beck, 1967; Ingram, Miranda, & Segal, 1998). One aspect of shame responses is self-deprecating thoughts (e.g., I am a failure) that may themselves be considered examples of depressive thinking. It will be important for future research to explore whether (a) those types of depressive thinking that are facets of shame responses play larger or smaller roles in the development and/or maintenance of depression than those types of depressive thinking that are not facets of shame responses; and (b) whether the most critical aspect of shame responses are those that are cognitive, as opposed to behavioral, in nature.

Future research should explore whether shame responses are associated specifically with depressive disorder or whether they are also associated with other emotional disorders. In particular, it will be critical to examine social phobia and generalized anxiety disorder because they are often comorbid with depression, and they are also likely to be associated with shame. In addition, it will be important to determine whether shame responses are differentially associated with different specific types of depressive disorders (e.g., double depression, hopelessness depression, depressive disorder comorbid with anxiety disorder). Because the present study was conducted with college students, additional studies are necessary to insure that the association between shame and depressive disorder is not specific to young, well-educated individuals. Finally, it will be critical for future research to employ prospective longitudinal designs in order to elucidate exactly how and why shame responses to everyday dilemmas, especially those associated with potential interpersonal conflict, are associated with depressive disorder. That much additional research is still needed is not surprising given the paucity of research on shame and depressive disorder. Nonetheless, the results of the present study suggest that such research is well worth pursuing.

Acknowledgments We thank Tara Day, Ashley Michaels, Amanda Taylor, and Rachel Williams for their assistance with data management and coding. We also thank John Baker and Karen Rudolph for their valuable comments on an earlier draft of this paper.

References

Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and depression. *Journal of Abnormal Psychology, 104*, 277–285.

Andrews, B. (1998). Methodological and definitional issues in shame research. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 39–54). New York: Oxford Press.

Andrews, B., Qian, M., & Valentine, J. (2002). Predicting depressive symptoms with a new measure of shame: The Experience of Shame Scale. *British Journal of Clinical Psychology, 41*, 29–42.

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin, 115*, 243–267.

Beck, A. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York: Harper & Row.

Beck, A., Rush, A., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Brown, G. W, & Harris, T. O. (1989). *Life events and illness*. New York: Guilford Press.

Davidson, R., Pizzagalli, D., Nitschke, J., & Putnam, K. (2002). Depression: Perspectives from affective neuroscience. *Annual Review of Psychology, 53*, 545–574.

Ferguson, T. J., Stegge, H., Miller E. R., & Olsen, M. E. (1999). Guilt, shame, and symptoms in children. *Developmental Psychology, 35*, 347–357.

First, M. B., Spitzer, R. L., Gibbon, M, & Williams, J. B. W. (2001). *The structured clinical interview for DSM-IV-TR Axis I disorders*. New York: Biometrics Research, New York State Psychiatric Institute.

Gilbert, P. (1989). *Human nature and suffering*. London: Erlbaum.

Hammen, C. (2000). Interpersonal factors in an emerging developmental model of depression. In S. Johnson, A. Hayes, R. Field, N. Schneiderman, & P. McCabe (Eds.), *Stress, coping and depression* (pp. 71–88). Mahwah, NJ: Erlbaum.

Ingram, R. E., Miranda, J., & Segal, Z. V. (1998). *Cognitive vulnerability to depression*. New York: Guilford Press. .

Joiner, T., & Coyne, J. C. (Eds.). (1999). *The interactional nature of depression*. Washington, D.C.: American Psychological Association.

Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine, 4*, 1–39.

Lewinsohn, P. M., Allen, N. B., Seeley, J. R., & Gotlib, I. H. (1999). First onset versus recurrence of depression: Differential processes of psychosocial risk. *Journal of Abnormal Psychology, 108*, 483–489.

Lewinsohn, P. M., Steinmetz, J. L., Larson, D. W., & Franklin, J. (1981). Depression-related cognition: Antecedents or consequence? *Journal of Abnormal Psychology, 90*, 213–219.

Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press.

Lewis, H. B. (1987). The role of shame in depression over the life span. In H. B. Lewis (Ed.), *The role of shame in symptom formation* (pp. 29–50). Hillsdale, NJ: Erlbaum.

Monroe, S. M., Rohde, P., Seeley, J. R., & Lewinsohn, P. M. (1999). Life events and depression in adolescence: Relationship loss as a prospective risk factor for the first onset of major depressive disorder. *Journal of Abnormal Psychology, 108*, 606–614.

Mosher, D. L. (1966). The development and multitrait-multimethod matrix analysis of three measures of three aspects of guilt. *Journal of Consulting Psychology, 30*, 25–29.

Segal, Z., Gemar, M., Truchon, C., Guirguis, M., & Horowitz, L. (1995). A priming methodology for studying self-representation in major depressive disorder. *Journal of Abnormal Psychology, 104*, 205–213.

Tangney, J. P. (1991). Moral affect: The good, the bad and the ugly. *Journal of Personality and Social Psychology, 61*, 598–607.

Tangney, J. P. (1992). Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin, 18*, 199–206.

Tangney, J. P. (1993). Shame and guilt. In C. G. Costello (Ed.), *Symptoms of depression* (pp. 161–180). New York: Wiley.

Tangney, J. P. (1995). Shame and guilt in interpersonal relationships. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 114–139). New York: Guilford.

Tangney, J. P., Dearing, R. L., Wagner, P. E., & Gramzow, R. (2000). *The Test of Self-Conscious Affect-3 (TOSCA-3)*. Fairfax, VA: George Mason University.

Tangney, J. P., Wagner, P. E., & Gramzow, R. (1992). Proneness of shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology, 101*, 469–478.

Teasdale, J. D. (1983). Negative thinking in depression: Cause effect or reciprocal relationship? *Advances in Behavior Research and Therapy, 5*, 3–25.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.

Wicker, F. W., Payne, G. C., & Morgan, R. D. (1983). Participant descriptions of guilt and shame. *Motivation and Emotion, 7*, 25–39.

Zahn-Waxler, C. (2000). The development of empathy, guilt, and internalization of distress: Implications for gender differences in internalizing and externalizing problems. In R. Davidson (Ed.), *Anxiety, depression, and emotion* (pp. 222–265). New York: Oxford University Press.