



Shame and guilt-proneness: Divergent implications for problematic alcohol use and drinking to cope with anxiety and depression symptomatology

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ABSTRACT

Shame and guilt are closely related emotions of negative affect that give rise to considerably divergent motivational and self-regulatory behaviors. While shame-proneness has demonstrated replicable relationships with increased alcohol use disorder symptomatology, guilt-proneness appears to protect an individual against development of problematic alcohol use. One prominent but untested hypothesis is that shame-prone individuals are motivated to consume alcohol in order to down-regulate experiences of negative affect. The present study aimed to test this hypothesis by exploring relationships between shame and guilt-proneness with motivations for consuming alcohol. University students ($N = 281$) completed measures of shame and guilt-proneness, measures of alcohol use disorder symptomatology, and a measure assessing five motivational domains for consuming alcohol. Shame-proneness was positively associated with problematic alcohol use and drinking as a means of coping with anxiety and depression-related symptomatology. In contrast, guilt-proneness was inversely related to alcohol problems and drinking to cope with depression. This study provides initial support for the hypothesis that shame-prone individuals are inclined to consume alcohol in order to cope with negative affect states. These findings may help explain the inverse relationship between guilt-proneness and alcohol problems and the apparent positive relationship between shame-proneness and problematic alcohol use.

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1. Introduction

Shame and guilt are similar yet distinct self-conscious emotions of negative affect that lead to notably different motivational and self-regulatory outcomes (Tangney & Dearing, 2002). The two emotions are alike in that they both involve internal attributions for negative events and also have similar antecedents, typically a negative event involving the production of a transgressive behavior that breaches an internalized moral principle (Tangney, 1992). However, a key distinction between shame and guilt lies in the perceived role of the self in each emotion (Lewis, 1971; Tangney, Stuewig, & Mashek, 2007). With highly aversive experiences of shame, the individual focuses squarely on the *self* (e.g., “How could I have done that?”) with reprehensible behavior seen as evidence that the self is flawed (e.g., “I am a *bad person*”). On the other hand, the individual experiencing the unpleasant but less aversive feelings of guilt is focused not on the self, but on their problematic behavior (e.g., “How could I have *done that*?”) and ways in which they may remedy the situation (e.g., “I have to fix this”).

While guilt has been found to be positively associated with a host of adaptive functioning variables including successful emotion-regulation, enhanced empathy, and healthy interpersonal

functioning, shame is associated with a gamut of difficulties including psychopathology, poor anger regulation, and interpersonal problems (see Tangney & Dearing, 2002, for a review). Several researchers have also determined that the two emotions have divergent implications for substance use-related problems (e.g., Dearing, Stuewig, & Tangney, 2005; Meehan et al., 1996; O'Connor, Berry, Inaba, Weiss, & Morrison, 1994), with findings indicating that shame-proneness is positively associated with problematic substance use, while guilt-proneness appears to buffer individuals against developing substance use-related difficulties. Studies by Meehan et al. (1996) and O'Connor et al. (1994) both found that treatment-seeking substance dependent individuals were higher in shame-proneness and lower in guilt-proneness than community drawn individuals without substance use issues. Similarly, Dearing et al. (2005) found that guilt-proneness was inversely related to problematic alcohol use in two samples of undergraduate students, while shame-proneness was found to be positively related with alcohol use disorder symptomatology.

In discussing the apparent link between shame-proneness and alcohol problems, several theorists (e.g., Dearing et al., 2005; Fossum & Mason, 1986; Potter-Efron, 2002; Stuewig & Tangney, 2007; Tangney & Dearing, 2002; Wiechelt, 2007) have hypothesised that shame-prone individuals drink as a means of down-regulating or coping with frequent and highly aversive experiences of shame and other negative emotions. This hypothesis is consistent

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with research indicating that drinking to down-regulate negative affect (e.g., anxiety and depression) is a commonly reported motivation or reason for consuming alcohol (Grant, Stewart, O'Connor, Blackwell, & Conrod, 2007). Generally considered to be problematic and maladaptive, drinking to down-regulate negative affect provides negative-reinforcement for continued alcohol use and appears to place individuals at greater risk of alcohol dependence (Carpenter & Hasin, 1999). Moreover, drinking to cope with negative affect is positively associated with drinking in greater quantities and an increased likelihood of experiencing negative alcohol use-related consequences (Grant, Stewart, O'Connor, Blackwell, & Conrod, 2007).

While a relationship between shame-proneness and drinking as a means of down-regulating negative affect has been proposed by several theorists (e.g., Dearing et al., 2005; Potter-Efron, 2002; Stuewig & Tangney, 2007; Wiechelt, 2007), there does not appear to be any evidence to suggest that this is also true for guilt-proneness. Firstly, guilt-proneness tends to be unrelated or inversely related to proneness to negative affect and psychopathology in general (Tangney & Dearing, 2002). Moreover, guilt is associated with a host of adaptive functioning variables and self-regulatory behaviors, including the successful regulation of alcohol use (Dearing et al., 2005). Taken together, it appears reasonable to suggest that guilt-proneness is unrelated to the motivation to drink as a means of coping with negative affect. Nevertheless, with research indicating that guilt-proneness is inversely related to the experience of alcohol disorder symptomatology, the reasons that guilt-prone individuals report for consuming alcohol certainly warrants exploratory investigation.

The current paper aims to replicate the seemingly divergent relationships between shame and guilt-proneness with problematic alcohol use and extend the existing literature by exploring the unique correlates of shame and guilt-proneness with self-reported reasons for drinking. Drawing on a hypothesis prominent in the shame and alcohol use literature (e.g., Potter-Efron, 2002; Stuewig & Tangney, 2007; Tangney & Dearing, 2002; Wiechelt, 2007), it was expected that shame-proneness would be associated with self-reports of drinking in order to down-regulate depression and anxiety symptomatology. Guilt-proneness, on the other hand, was expected to be unrelated to the use of alcohol in order to cope with these negative affect states.

2. Methods

2.1. Participants

Participants were 281 students, drawn from a variety of degree programs at the University of Tasmania, Australia. The ages of participants ranged from 17 to 62 with a mean age of 22.2 ($SD = 7.8$). The mean age for the 74 male participants was 21.94 ($SD = 6.97$), while the mean age of the 207 female participants was 22.32 ($SD = 8.12$). With regard to ethnicity, the sample was predominately White (90%), 4% were Asian, 1% were Black, 1% was Hispanic, and 4% were of other or mixed ethnicity.

2.2. Materials

2.2.1. Test of Self-Conscious Affect-3: short version

The *Test of Self-Conscious Affect-3* (TOSCA-3; Tangney, Dearing, Wagner, & Gramzow, 2000) is a scenario-based measure that yields indices of Shame-proneness, Guilt-proneness, Externalization, and Detachment/Unconcern. Respondents are presented with a series of 11 negative scenarios they may encounter in daily life. A sample scenario from the TOSCA-3 is "At work, you wait until the last minute to plan a project, and it turns out badly". The response options

that follow this scenario are "You would feel incompetent" (shame response), *You would feel: "I deserve to be reprimanded for mismanaging the project"* (guilt response), *You would think: "There are never enough hours in the day"* (externalization), and *You would think: "What's done is done"* (detached).

Respondents are required to rate their likelihood of each response on a five-point scale with end-point designations of *not likely* (1) and *very likely* (5). In the present study, Cronbach alphas were .69 for Shame-proneness, .68 for Guilt-proneness, .66 for Detachment/Unconcern, and .73 for Externalization. For the purposes of the present study, only the shame and guilt-proneness subscales of the TOSCA-3 were used.

2.2.2. Alcohol Use Disorder Identification Disorder Test

The *Alcohol Use Disorders Identification Test* (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) was used to assess alcohol use disorder symptomatology. Developed by the World Health Organization, the AUDIT is 10-item screening assessment used to identify hazardous and harmful alcohol consumption. The measure assesses three conceptual domains: frequency and quantity of alcohol intake (3 items), dependence indicators (3 items), and adverse alcohol use-related consequences (4 items). An example item from the AUDIT is "How often do you have six or more standard drinks on one occasion?" with response options of *Never, less than monthly, monthly, weekly, and daily or almost daily*. Responses to each question are scored from 0 to 4, giving a maximum possible score of 40. Higher scores on the AUDIT are indicative of progressively more hazardous drinking and an increasing likelihood of dependence.

The AUDIT is widely used and its psychometric properties have been found to be strong (Reinert & Allen, 2007). The AUDIT demonstrated good internal consistency in the present sample with Cronbach alpha = .80.

2.2.3. Young Adult Alcohol Consequences Questionnaire

Negative alcohol use-related consequences were measured using the *Young Adult Alcohol Consequences Questionnaire* (YAACQ; Read, Kahler, Strong, & Colder, 2006). The YAACQ is a 48-item measure that assesses alcohol use-related consequences of varying severity across eight problem domains: Social consequences, impaired control, negative self-perception, self-care neglect, risky behaviors, academic/occupational consequences, physical dependence indicators, and blackout drinking. Example items from the YAACQ are "I have had a hangover (headache, sick stomach) the morning after I had been drinking" and "My drinking has created problems between myself and my boyfriend/girlfriend/spouse, parents, or other near relatives". Individuals are required to indicate whether they have experienced each alcohol use problem in the past year using a dichotomous (Yes/No) rating system. Responses marked "Yes" are given a score of one while responses marked "No" receive zero. The maximum score on the YAACQ is 48, with higher scores indicating that the individual has experienced a greater number of negative alcohol use-related consequences. In the present study, Cronbach alpha for YAACQ was .91.

Kahler, Strong, and Read (2005) used Rasch modeling of the YAACQ to create a unidimensional Alcohol Problem Severity Index which is acquired by summing 24 of the YAACQ's items. Kahler et al. (2005) report that the 24-item Alcohol Problem Severity Index has good internal consistency (Cronbach alpha = .83). In the present study, Cronbach alpha for the Alcohol Problem Severity Index was .90.

2.2.4. Modified Drinking Motives Questionnaire – Revised

The *Modified Drinking Motives Questionnaire – Revised* (MDMQ-R; Grant, Stewart, O'Connor, Blackwell, & Conrod, 2007) was used to assess individual differences in self-reported motives for

consuming alcohol. The 28 item MDMQ-R measures five drinking motive domains, yielding five subscales: Social (5 items), Conformity (5 items), Enhancement (5 items), Coping-Depression (9 items), and Coping-Anxiety (4 items). Participants are asked to take into consideration all the times they consume alcohol and indicate how often they drink for the reason stated using a 5-point Likert scale ranging from 1 (*Almost Never or Never*) to 5 (*Almost Always or Always*). Example items from the Social, Conformity, and Enhancement subscales are “*To be sociable*”, “*To be liked*”, and “*Because I like the feeling*”, respectively. An example item from the Coping-Depression scale is “*Because it helps me when I am feeling depressed*”, while an example item from the Coping-Anxiety scale is “*To reduce my anxiety*”. In the present study, Cronbach alphas ranged between .72 for the Coping-Anxiety subscale and .92 for the Coping-Depression subscale.

2.3. Procedure

Data for the present study were collected as part of a larger investigation of the implications of shame and guilt for the regulation of alcohol use. Approval to conduct the present study was obtained from The Tasmanian Social Sciences Human Research Ethics Committee. Participants were recruited through advertisements placed on notice boards around the University of Tasmania, and those who were undergraduate psychology students received course credit for their participation. Participants were informed that the study was investigating relationships between personality, emotions, alcohol use, and behavior, and that individuals who reported that they consume alcohol at any quantity and frequency were eligible for participation. Participants were provided with anonymous questionnaire booklets and instructed to complete them at a convenient time and return it to the investigator in a provided sealed envelope.

3. Results

3.1. Analysis

Shame and guilt are both self-conscious emotions of negative valence that involve internal attributions for transgressions (Tangney et al., 2007). Due to these similarities and overlapping phenomenology, measures of shame and guilt correlate quite substantially. Consistent in magnitude and direction with past research (Tangney & Dearing, 2002), the shame and guilt scales of the TOSCA-3 correlated positively in the present study ($r = .38$, $p < .001$, $n = 281$).

In light of the substantial and frequently observed correlations between measures of shame and guilt, Tangney and Dearing (2002) recommend partialing out shared variance between shame and guilt to isolate “shame-free guilt” and “guilt-free shame” when examining relationships between shame, guilt, and other constructs. As compared to raw scores, Tangney and colleagues have repeatedly demonstrated that shame and guilt residuals each have functionally distinct and unique variance that will often serve as more substantial predictors of target variables. Therefore, to provide a more refined analysis, part-correlation analysis was used when exploring relationships between shame and guilt with problematic alcohol use and the motivations for drinking assessed in the present study. This part-correlation analysis strategy was adopted for all analyses.

3.2. Relationships between shame and guilt with alcohol use disorder symptomatology, negative alcohol use related consequences, and drinking motives

Descriptive statistics for the AUDIT, YAACQ, Alcohol Problem Severity Index, TOSCA-3, and the MDMQ-R are presented in Table 1. Total scores of eight or more on the AUDIT are seen as an indicator of hazardous and harmful alcohol use, in addition to possible alcohol dependence (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Mean scores on the AUDIT were greater than eight ($M = 9.64$, $SD = 5.90$), which indicates that the sample generally comprised individuals drinking at relatively high levels.

Bivariate and part-correlations between shame and guilt with the AUDIT, YAACQ, and the Alcohol Problem Severity Index are presented in Table 2. Examining the bivariate correlations, shame was positively related to YAACQ and the Alcohol Problem Severity Index. Guilt was unrelated to the AUDIT, YAACQ, and Alcohol Problem Severity Index. However, in keeping with the aforementioned rationale, it is more informative to examine relationships between shame and guilt with other constructs of interest in terms of semi-partial (i.e., residualized) correlations, partitioning guilt out of shame producing shame-free guilt and vice versa. With this done, small-magnitude positive relationships were found between guilt-free shame and total scores on the AUDIT, YAACQ, and the Alcohol Problem Severity Index. In contrast, small-magnitude inverse relationships were found between shame-free guilt and total AUDIT, YAACQ, and the Alcohol Problem Severity Index.

Bivariate and part-correlations between shame and guilt with drinking motives are presented in Table 3. Examining the more informative part-correlations, medium-magnitude positive relationships were found between guilt-free shame and drinking as a

Table 1

Descriptive statistics for the Alcohol Use Disorders Identification Test, Young Adult Alcohol Consequences Questionnaire, Alcohol Problem Severity Index, test of self conscious affect-3 and Modified Drinking Motives Questionnaire-Revised.

Measure	# of items	Possible range	n	Mean	SD	Observed range
AUDIT	12	0–40	281	9.64	5.90	1–32
YAACQ	48	0–48	281	13.64	9.99	0–41
Alcohol prob severity index	28	0–28	281	7.72	5.41	0–21
TOSCA-3						
Shame-proneness	11	11–55	281	33.99	6.37	13–54
Guilt-proneness	11	11–55	281	45.59	4.96	22–55
MDMQ-R						
Social	5	5–25	281	15.83	3.97	7–25
Coping-Anxiety	4	4–20	281	8.24	3.29	4–20
Coping-Depression	9	9–45	280	13.21	6.16	9–45
Enhancement	5	5–25	281	13.51	4.92	5–25
Conformity	5	5–25	281	7.97	3.43	5–21

Note: $N = 280$ – 281 . Increasing scores on the AUDIT indicate a greater likelihood of disordered alcohol use. Increasing scores on the YAACQ and Alcohol Problem Severity Index indicate the greater experience of negative alcohol use-related consequences. Increasing scores on the TOSCA-3 subscales indicate greater levels of shame or guilt-proneness. Increasing scores on the MDMQ-R indicate greater endorsement and more frequent motivation to consume alcohol for each respective motivation domain.

Table 2

Relationships between shame and guilt-proneness with the Alcohol Use Disorders Identification Test (AUDIT), the Young Adult Alcohol Consequences Questionnaire (YAACQ), and the Alcohol Problem Severity Index.

Measure	Bivariate correlations		Part correlations	
	Shame	Guilt	Shame	Guilt
Total AUDIT	.08	-.11	.13*	-.15*
Total YAACQ	.14*	-.12	.20**	-.18**
Alcohol prob severity index	.14*	-.10	.19**	-.17**

Note: $N = 281$. With the part correlations, shame is factored out from guilt and vice versa to produce residualized “guilt-free shame” and “shame-free guilt”.

* $p < .05$.

** $p < .01$.

Table 3

Relationships between shame and guilt-proneness with the MDMQ-R.

Measure	Bivariate correlations		Part correlations	
	Shame	Guilt	Shame	Guilt
MDMQ-R				
Social	.07	.02	.07	-.01
Coping-anxiety	.29**	.03	.30**	-.09
Coping-depression	.27**	-.02	.30**	-.13*
Enhancement	.10	-.13*	.16*	-.18**
Conformity	.27**	.04	.27**	-.07

Note: $N = 280$ – 281 . With the part correlations, shame is factored out from guilt and vice versa to produce residualized “guilt-free shame” and “shame-free guilt”.

* $p < .05$.

** $p < .01$.

means to cope with anxiety and depression. Moreover, a medium-magnitude positive relationship was found between guilt-free shame and the motivation to drink due to conformity. Guilt-free shame was also positively and significantly associated with drinking as means of enhancing mood, but this relationship was small in magnitude. In contrast, a small-magnitude negative relationship was found between shame-free guilt and drinking as a means to cope with depression. Shame-free guilt was also negatively related to drinking as a means of enhancing mood, although the magnitude of this relationship was small.

4. Discussion

The present study sought to replicate the divergent relationships between shame and guilt-proneness with problematic alcohol use and extend the literature by identifying the reasons for which shame and guilt-prone individuals consume alcohol. Consistent with past research (Dearing et al., 2005), shame-proneness was found to be positively associated with alcohol use disorder symptomatology, while guilt-proneness was inversely associated with problematic alcohol use. Findings from the present study also provide empirical support for a component of the prominent, but previously untested, shame-alcohol use-shame spiral hypothesis (see Dearing et al., 2005; Potter-Efron, 2002; Stuewig & Tangney, 2007; Tangney & Dearing, 2002; Wiechelt, 2007), with shame-proneness emerging as positively, albeit moderately, associated with drinking as a means of down-regulating anxiety and depression symptomatology.

The finding that shame-prone individuals are indeed motivated to drink to cope is notable as research indicates that using alcohol to down-regulate negative affective states places individuals at a greater risk of becoming alcohol dependent (Carpenter & Hasin, 1999). In an unexpected finding, shame-proneness was also positively associated with the tendency to drink for mood enhancement purposes. Drinking to enhance mood can also be potentially problematic and lead to dependence in that it is associated with drinking

more frequently and at greater levels (see Grant, Stewart, O'Connor, Blackwell, & Conrod, 2007).

Interestingly, a small-magnitude positive relationship was found between shame-proneness and the motivation to consume alcohol out of reasons of conformity. Cooper (1994) suggests that conformity-related drinking operates according to negative-reinforcement principles in that it may help individuals avoid peer or group-based rejection. Indeed, the finding that shame-prone individuals are inclined to drink due to conformity-related reasons is consistent with research indicating that shame-proneness is positively associated with fear of negative evaluation from others and a fear of the loss of social approval (Lutwak & Ferrari, 1997).

While it was hypothesised that guilt-proneness would be *unrelated* to drinking as a means of down-regulating negative emotions, a small-magnitude *negative* correlation was found between guilt-proneness and drinking to cope with depression symptomatology. Consistent with a large body of research indicating that guilt is associated with adaptive self-regulatory outcomes (Tangney et al., 2007), this finding suggests that guilt-prone individuals are less likely to rely on alcohol as a means of down-regulating and coping with low mood than their less guilt-prone peers. In a finding that further indicates that guilt-prone individuals are disinclined to drink to manipulate mood states, a small-magnitude negative relationship was found between guilt-proneness and drinking for mood enhancement purposes. As guilt-proneness is associated with successful affect regulation (Tangney & Dearing, 2002), it may be that guilt-prone individuals feel less of a need or desire to consume alcohol in order to experience positive emotion.

According to cognitive theories of addiction, relying on alcohol as a mood adjuster can lead to the development of disordered alcohol use (see Beck, Wright, Newman, & Liese, 1993). As such, findings from the present study may help explain the link between shame and alcohol use disorder symptomatology in that it appears shame-prone individuals are inclined to use alcohol as an emotion-regulation strategy. Conversely, guilt-prone individuals do not appear to be inclined to use alcohol to manage their affective states and it seems plausible that this may offer such individuals some degree of protection against developing alcohol problems.

Findings from the present study have relevance for the prevention and treatment of problematic alcohol use, particularly for the shame-prone individual seen in a clinical setting. If it becomes apparent that a shame-prone individual is consuming alcohol in order to down-regulate their negative affect states, intervention focused on improving the individual's ability to regulate their emotions through more adaptive means may be an avenue for the prevention or treatment of disordered alcohol use. Evidence-based Cognitive Behavior Therapy (CBT) treatments for depression and anxiety, which typically involve challenging dysfunctional thought processes and behaviours, may be of some assistance in this endeavour (see Beck et al., 1993). It seems plausible that should shame-prone individuals become more adept at managing negative affect experiences using more adaptive approaches, they may be less inclined to use alcohol consumption as a coping strategy. In turn, this may reduce the likelihood of the shame-prone individual developing alcohol dependence over time.

While the present study focused on examining relationships among dispositional shame and guilt-proneness and trait-like motivations for consuming alcohol, further research is needed to determine whether shame and guilt experienced in-the-moment (i.e., state shame and guilt) relate to different drinking motives and alcohol use patterns. Moreover, further research is needed to examine whether shame and/or guilt-proneness are associated with the tendency to experience alcohol use-related shame and or guilt following transgressive alcohol consumption and the experience of associated negative alcohol use-related harms.

In summary, shame-proneness was positively associated with problematic alcohol use and drinking as a means of down regulating negative emotions. The latter finding is particularly notable as it appears to provide the first empirical support for a component of the shame-alcohol use-shame spiral hypothesis (Dearing et al., 2005; Potter-Efron, 2002; Stuewig & Tangney, 2007; Tangney & Dearing, 2002; Wiechelt, 2007), the notion that shame-prone individuals are motivated to consume alcohol in order to down-regulate negative emotional states. In contrast to shame, guilt-proneness was inversely related to problematic alcohol use, drinking to cope with low mood, and was either unrelated or inversely related to all other motivations for drinking. Taken together, findings from the present study provide additional support for Dearing et al.'s (2005) argument that it is important and necessary to clearly differentiate between shame and guilt-proneness when the constructs are considered in substance use research and treatment contexts. Findings from the present study also suggest that in clinical settings, shame-prone individuals may benefit from learning how to manage negative affect experiences adaptively and without potentially dependence-establishing alcohol use.

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