Published in final edited form as:

Crim Justice Behav. 2011 July 1; 38(7): 710–734. doi:10.1177/0093854811405762.

Assessing Jail Inmates' Proneness to Shame and Guilt: Feeling Bad About the Behavior or the Self?

June P. Tangney¹,
George Mason University

Jeffrey Stuewig,
George Mason University

Debra Mashek, and
Harvey Mudd College

Mark Hastings
George Mason University

Abstract

This study of 550 jail inmates (379 male and 171 female) held on felony charges examines the reliability and validity of the Test of Self Conscious Affect –Socially Deviant Version (TOSCA-SD; Hanson & Tangney, 1996) as a measure of offenders' proneness to shame and proneness to guilt. Discriminant validity (e.g., vis-à-vis self-esteem, negative affect, social desirability/impression management) and convergent validity (e.g., vis-à-vis correlations with empathy, externalization of blame, anger, psychological symptoms, and substance use problems) was supported, paralleling results from community samples. Further, proneness to shame and guilt were differentially related to widely used risk measures from the field of criminal justice (e.g., criminal history, psychopathy, violence risk, antisocial personality). Guilt-proneness appears to be a protective factor, whereas there was no evidence that shame-proneness serves an inhibitory function. Subsequent analyses indicate these findings generalize quite well across gender and race. Implications for intervention and sentencing practices are discussed.

Shame and guilt are emotions with special relevance to the field of criminology, and to the rehabilitation process in particular. They are generally regarded as quintessential “moral” emotions because of their presumed roles in inhibiting immoral, socially undesirable behavior and in fostering altruistic, prosocial behavior. Conversely, serious persistent deviation from moral and societal standards is thought to reflect a fundamental impairment in the capacity to experience shame and guilt. Recent theory and research from psychology, however, call into question the noble reputation of shame. Across study after study, the propensity to experience shame has been linked not to fine, upstanding moral character and behavior, but rather to evading responsibility, blaming the victim, mismanaging anger, and, in the extreme, hostile aggression. What is this problematic shame emotion according to social-personality and clinical psychologists, and how is it different from guilt?

Good Ways and Bad Ways to Feel Bad

Clinical theory (Lewis, 1971), clinical observation (Lewis, 1987; Lindsay-Hartz, 1984), and psychological studies, drawing on multiple research methods (for reviews, see Tangney,

¹Correspondence should be addressed to June P. Tangney, Department of Psychology, MSN 3F5, George Mason University, Fairfax VA 22030, jtangney@gmu.edu.

Stuewig & Mashek, 2007; Tracy & Robins, 2006), have identified two distinct ways that humans feel bad about their failings and transgressions. They can focus on, and feel bad about, the *self* – as in: “How could *I* have done that?” Or they can focus on, and feel bad about, the *behavior* – as in: “How could I have *done that*?”

Contemporary psychologists are apt to refer to the latter behavior-focused negative self-conscious emotion as “guilt.” Clinical theory, clinical observations, qualitative and quantitative empirical studies indicate that when people feel guilt about a specific behavior, they are motivated to confess, apologize, and repair, they are more empathic with the victims of their misdeeds, they are more likely to take responsibility, and they are more likely to make amends (Lewis, 1971; Lindsay-Hartz 1984; Tangney & Dearing, 2002b; Tangney, Miller, Flicker & Barlow, 1996; Wallbott & Scherer, 1995; Wicker, et al., 1983). By focusing on a specific “bad,” “immoral,” or “subpar” behavior, without making more global ascriptions to the self, people retain their sense of identity and integrity. They feel pain, but it’s not overwhelming. They have a do-able job (fix the behavior and/or its consequences) and they are inclined to do it.

When people feel shame about the self over a failure or transgression, a very different phenomenology unfolds, as indicated by empirical research employing diverse methods (Ketelaar & Au, 2003; Lewis, 1971; Lindsay-Hartz 1984; Tangney, & Dearing, 2002b; Tangney, Miller, et al., 1996; Tangney, Stuewig & Mashek, 2007; Wallbott & Scherer, 1995; Wicker, et al., 1983). When shamed, people feel physically, psychologically, and socially diminished. There’s a dramatic shift in one’s perception and experience of the self. People in the midst of a shame experience feel small, inferior, unworthy, despicable, even. Research indicates that elevations in pro-inflammatory cytokines accompany episodes of shame, prompting muscles to contract into an archetypal posture of submission (Dickerson, Gruenwald, & Kemeny, 2004). At the same time, there is an acute sensitivity to the possibility of social evaluation. Shamed people feel the eyes of others upon them, even when experiencing the emotion in solitude. The knee-jerk response is *not* to apologize and repair, but rather to hide or escape. This is understandable because the pain is great, the self is impaired, and the job (to transform the self from fundamentally flawed to good) is impossibly immense.

In short, there is ample evidence that humans have the capacity to (and frequently do) experience two distinct types of negative “self-conscious” emotions – one self-focused and linked to hiding/escape; another behavior-focused and linked to reparation.²

Reintegrative Shaming Theory

Most social and clinical psychologists refer to the behavior-focused “moral” emotion as “guilt” and they refer to the self-focused “moral” emotion as “shame.” We think that John Braithwaite’s notions of *reintegrative shame* and *disintegrative shame* map closely onto clinical-social psychologists’ notions of *guilt* and *shame*, respectively. Braithwaite’s (1989) Reintegrative Shaming Theory (RST) distinguishes between two types of shaming practices. The first, labeled “reintegrative shaming,” deals with practices that identify the crime or behavior, not the person, as irresponsible, wrong, or bad. While the act is looked down upon, the person is respected, accepted back into society, and given the chance to make atonement

²The field, of course, is not unanimous. There continues to be debate about the nature of “maladaptive” guilt (Harder, Cutler & Rockart, 1992; Luyten, Fontaine & Corveleyn, 2002), and the potential benefits of shame (Sabini & Silver, 1997). The importance of *actual public exposure* (as opposed to heightened *awareness* of audience evaluation) for the experience of shame also remains unresolved (Fontaine, Luyten, de Boeck, Corveleyn, Fernandez, Herrera, et al., 2006; Smith, Webster, Parrott & Eyre, 2002; Wolf, Cohen, Panter, & Insko, 2009). But the weight of evidence, and an emerging consensus among psychologists (e.g., de Hooge, Zeelenberg & Breugelmans, 2007; Joireman, 2004; Leith & Baumeister, 1998; Paulhus, Robins, Trzesniewski & Tracy, 2004; Tracy & Robins, 2006, and many others), supports the self-behavior distinction originally proposed by Lewis (1971) and emphasized here.

for the behavior. As detailed in Braithwaite and Mugford (1994), in reintegrative shaming, self and behavior are explicitly “uncoupled” so that the “self of the perpetrator is sustained as sacred rather than profane” (p. 146). This focus on behavior, not the person, together with Braithwaite’s emphasis on apology and remediation, seems much more congruent with the dynamics of guilt, as described in the psychological literature. The second type of shaming practice is labeled “disintegrative shaming” or stigmatization. Here the individual is not forgiven but stigmatized, isolated, and humiliated as a person, in an attempt to instill feelings more akin to our notion of shame.

Tibbetts (2003) presented an impressive review of psychological and criminological perspectives on shame and guilt. In his review, Tibbetts observed that criminologists often use the terms “shame” and “guilt” interchangeably (e.g. Elis & Simpson, 1995; Grasmick & Bursik, 1990; Nagin & Paternoster, 1993; Wortley, 1996) not taking into account the important self (shame) vs. behavior (guilt) distinction that Lewis (1971) described. In fact, Tibbetts (2003) notes, “In the criminological research, virtually all measures of self-conscious emotions consist of one- or two-item measures...” (p. 110), and “have tended to operationalize shame as the amount of ‘guilt’ one feels (or would feel) if they were to commit a given act.” (p. 107).

In contrast, theory and research from the field of psychology underscore the distinction between shame and guilt, and call into question the function of shame as inhibitor of immoral or illegal behavior (for reviews, see Tangney, Stuewig & Mashek, 2007; Stuewig & Tangney, 2007). Whatever terminology one wishes to use – shame and guilt or disintegrative shame and reintegrative shame – there appear to be two ways to feel bad about one’s failures and transgressions, one more adaptive than the other.

State of the Empirical Research

In this brief review, we omit studies from psychology and criminology that assessed shame and guilt in a way that confounded the two emotions. We focus on studies based on Reintegrative Shaming Theory (Braithwaite, 1989) or Lewis’s (1971) self vs. behavior distinction. Both share the view that there are “good ways” and “bad ways” to feel bad for one’s transgressions or failures. We also include studies that did not explicitly utilize this distinction but that employed methods yielding a measure of shame conceptually distinct from guilt, a measure of guilt conceptually distinct from shame, or (ideally) both. Empirical data examining the link between these “moral” emotions and actual criminal behavior is surprisingly sparse.

Research on Reintegrative Shame Theory—Braithwaite’s (1989) influential Reintegrative Shame Theory (RST) emphasizes the utility of reintegrative shaming (rather than “disintegrative” shaming) in reconciliation encounters. Although there has not been an abundance of systematic empirical research on RST, most studies have been at least partially supportive of the theory (Ahmed, Harris, Braithwaite, & Braithwaite, 2001; Harris, 2006; Hay, 2001; Makkai & Braithwaite, 1994; Murphy & Harris, 2007, but see Botchkovar & Tittle, 2005). Braithwaite and his colleagues (Braithwaite & Mugford, 1994) have pioneered an innovative set of procedures designed to induce what sounds more like guilt (as opposed to shame) in an effort to constructively reintegrate offenders back into the community. Most of this research has focused on the practice of reintegratively (vs. “disintegratively”) shaming perpetrators (e.g., Makkai & Braithwaite, 1994), not whether perpetrators actually experience guilt or shame and how these emotions are then related to behavior. In a rare study explicitly examining the emotional impact of shaming practices, Murphy and Harris (2007) evaluated whether feelings of shame mediated the effect of shaming practices on offending behavior. In this cross-sectional study of 652 tax evaders, there was clear support

for Braithwaite's proposition that stigmatizing practices (in this case, perceptions of stigmatizing practices) of the disintegrative shame variety are associated with higher rates of re-offense. The mediational hypotheses involving the emotion of shame, however, were largely unsupported, perhaps because the model failed to distinguish between disintegrative shame and reintegrative guilt. In fact, results suggested the importance of a "remorse/desire to put matters right" affective factor, consistent with psychologists' distinction between shame and guilt.

Psychological Research on Shame and Guilt—Research in psychology has focused heavily on dispositional tendencies to experience shame and guilt, although psychological studies of state shame and guilt converge with individual difference studies (for a review, see Tangney, Stuewig & Mashek, 2007). Most studies were conducted on community samples, a few employed clinical samples; and studies of criminal offenders are exceptionally rare.

Empirical research with non-offenders suggests that shame and guilt are not equally "moral" emotions. On balance, guilt appears to be the more adaptive emotion, benefiting individuals and their relationships in a variety of ways (Baumeister, Stillwell & Heatherton, 1994; Tangney, 1991, Tangney & Dearing, 2002b). Five lines of research illustrate the adaptive functions of guilt, in contrast to the hidden costs of shame (for more comprehensive reviews see Tangney & Dearing, 2002b; Tangney, Stuewig, & Mashek, 2007).

First, research consistently shows that shame and guilt lead to contrasting motivations or "action tendencies" in that guilt often motivates reparative action but shame often motivates efforts to deny, hide, or escape (Ketelaar & Au, 2003; Lindsay-Hartz 1984; Tangney, 1993; Tangney, Miller, et al., 1996; Wallbott & Scherer, 1995; Wicker, et al., 1983). Second, proneness to guilt is positively related to other-oriented empathy while proneness to shame is either unrelated or negatively related (Joireman, 2004; Leith & Baumeister, 1998; Stuewig, et al., 2010; Tangney, 1991).

Third, guilt-prone individuals are inclined to take responsibility for their transgressions and errors, when angry tend to manage their anger constructively (e.g., non-hostile discussion, direct corrective action), and are *disinclined* toward aggression (Lutwak, et al., 2001; Paulhus et al., 2004; Stuewig, et al., 2010; Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). In contrast, proneness to shame is positively correlated with anger, hostility, and the propensity to blame others (Andrews, Brewin, Rose & Kirk, 2000; Bennett, Sullivan, & Lewis, 2005; Harper, Austin, Cercone and Arias, 2005; Harper & Arias, 2004; Luyten, et al., 2002; Paulhus, et al., 2004). In an effort to escape painful feelings of shame, shamed people are inclined to defensively "turn the tables," externalizing blame and anger outward onto a convenient scapegoat.

Fourth, research consistently shows a link between shame-proneness and all manner of psychological symptoms, including low self-esteem, depression, anxiety, eating disorders, PTSD, suicidal ideation, and substance dependence (e.g., Andrews et al. 2000; Crossley & Rockett 2005; Dearing, Stuewig, & Tangney, 2005; Feiring, Taska & Lewis, 2002; Ferguson, Stegge, Miller & Olsen, 1999; Henderson & Zimbardo, 2001; Leskela, Dieperink & Thuras, 2002; Luyten, et al., 2002; Mills 2003; Orsillo, Heimberg, Juster & Garret, 1996, Sanftner, Barlow, Marschall & Tangney, 1995, Stuewig & McCloskey 2005; Tangney, et al., 1992). The negative psychological implications of shame are evident across measurement methods, diverse age groups and populations. When proneness to guilt is assessed using measures sensitive to Lewis's (1971) distinction between shame about the self vs. guilt about a specific behavior, the propensity to experience "shame-free" guilt (guilt uncomplicated by shame) is essentially unrelated to psychological symptoms (Bybee, et al.,

1996; Gramzow & Tangney, 1992; Leskela et al. 2002; Quiles & Bybee, 1997; Tangney, 1999). Problems with guilt appear more likely to arise when people have an exaggerated or distorted sense of responsibility for events (Tangney & Dearing, 2002b; Zahn-Waxler & Robinson, 1995), or when guilt becomes fused with shame.

Finally, a fifth line of research examines the relation of shame and guilt to criminal behavior. Tibbetts (1997) found that undergraduates' *intention* to drive drunk or shoplift was negatively related to anticipated shame, but not the dispositional tendency to experience shame. Regarding *actual illegal behavior*, Tibbetts (2003) found that undergraduates' criminal offending indexed by number of illegal behaviors (including use of marijuana and other illegal drugs) was consistently negatively related to guilt-proneness whereas results involving shame-proneness were mixed. An overall shame-proneness index, comprising three dispositional measures of shame, was unrelated to illegal behavior, calling into question the often assumed inhibitory function of shame. Similarly, college undergraduates' self-reported moral behaviors (assessed by the Conventional Morality Scale; Tooke & Ickes, 1988) were substantially positively correlated with proneness to guilt, but unrelated to proneness to shame (Tangney, 1994). For example, compared to their less guilt-prone peers, guilt-prone individuals were more likely to endorse such items as "I would not steal something I needed, even if I were sure I could get away with it."

Do studies conducted in community settings involving relatively minor transgressions generalize to more serious offenses, among individuals involved in the criminal justice system? Only a few studies have stepped outside the college subject pool to examine the implications of shame and guilt for delinquent or criminal behavior.

Harris (2003) examined event-specific shame and guilt among drunk driver offenders, following their appearance in court or at a restorative justice conference. In contrast to most extant studies, Harris found no evidence that shame and guilt form distinct factors. This study, however, focused on a unique, homogeneous sample (convicted drunk drivers, many with substance abuse problems) and a single type of transgression. Harris's findings raise the intriguing possibility that individuals with substance abuse problems may not have well-differentiated experiences of shame and guilt. Alternatively, guilt and its attendant empathic focus on the harmed other may be less relevant to transgressions such as drunk driving which typically do not result in objective physical harm to others. (Only drunk drivers not involved in automobile accidents were selected for the study.) In short, generalizability is unclear given the unique, homogenous population and the consideration of moral emotional responses to a single type of transgression.

Two prospective studies of community samples investigated the long-term effects of shame and guilt-proneness in predicting adolescents' criminal behavior. In the first, a study of public school children, shame-proneness in the 5th grade was unrelated to either arrests or convictions reported by the participant at age 18. In contrast, guilt-proneness negatively predicted both (Tangney & Dearing, 2002b). In the second study, Stuewig and McCloskey (2005) examined whether proneness to shame or guilt in early adolescence mediated the relationship between maltreatment in childhood and subsequent delinquency and depression measured in late adolescence. Proneness to "guilt-free" shame was unrelated to delinquency using either juvenile court records or self-report of delinquency while proneness to "shame-free" guilt negatively predicted delinquency. Furthermore, in the full path models guilt-proneness continued to be negatively related to delinquency even when a number of other variables including symptoms of conduct disorder in childhood and parenting in adolescence were integrated in the model.

We were able to locate only four published studies that attempted to examine shame and guilt in incarcerated samples. In a study of incarcerated adolescent male offenders ($n=64$) and a community comparison group ($n=60$), shame- and guilt-proneness only marginally differentiated between groups (Robinson et al., 2007). Consistent with the age-crime curve, however, adolescents from the community sample also engaged in antisocial behavior at a fairly high rate. When the two samples were combined, there were robust negative correlations between guilt-proneness and self-reported antisocial attitudes and behavior. Shame-proneness was unrelated to these antisocial indicators, with the exception of a *positive* link with aggression and anger.

In a study of 60 male offenders detained in a forensic psychiatric unit in England (90% diagnosed with schizophrenia or schizo affective disorder), Wright and Gudjonsson (2007) examined the convergent validity of a new measure of offense-related shame and guilt with several existing measures, including our TOSCA-3 designed for use with community samples. No measures of criminal behavior or psychosocial adjustment were included.

Using the Delphi method, Xuereb, Ireland and Davies (2009) generated items for a new measure of shame, guilt, and denial specifically for offender respondents. An initial version of the measure comprising 56 shame, 40 guilt, and 30 denial items was constructed and piloted with a sample of 339 offenders from a Medium Secure English prison. Confirmatory factor analyses indicated a poor fit for the hypothesized three factor structure. Shame, guilt, and denial did not represent empirically distinct factors, likely owing to the heterogeneity of items hypothesized to load on their respective factors. For example, it's not clear how certain stable factors (e.g., "I have been told that I respect other people's opinions") map on to any of the key constructs (shame, guilt, and denial). According to Xuereb et al. (2009), the main finding was a lack of support for the shame-guilt distinction. However, as noted by the authors, the theoretical background (if any) of the Delphi method "experts" was not assessed. It is not clear how many were familiar with current distinctions between shame and guilt, as two thirds of the experts were described as having "published work about shame, guilt, denial *and/or offenders*" [italics added] (p. 644).

Finally, in a German sample of 1,243 incarcerated adolescents and young adults (ages 14–24), single item shame and guilt ratings assessed within four weeks of incarceration predicted post-release recidivism (Hosser, Windzio & Greve, 2008). Specifically, shame ratings at the outset of incarceration predicted higher recidivism rates whereas guilt ratings predicted lower recidivism. These findings held when controlling for a host of potentially confounding variables.

Summary of Empirical Literature—In sum, empirical results from community samples converge indicating that guilt but not shame is most effective in motivating people to choose the "moral paths" in life. The degree to which these findings generalize to adult offender populations is still an open question.

The Current Study

The current study seeks to extend the literature by examining the concurrent and background correlates of proneness to shame and proneness to guilt in a sample of 550 (379 male and 171 female) adult jail inmates detained on felony charges. Three sets of questions are addressed focusing on both methodological and substantive issues.

First, can we measure shame- and guilt-proneness in an inmate population? Specifically, (1a) are there individual differences in proneness to shame and guilt among serious offenders of a magnitude worth consideration? (1b) Is this reliable variance? (1c) Is this valid variance -- as indicated by discriminant validity and by convergent correlations

parallel to those observed in community samples? The findings reviewed above regarding action tendencies (hiding vs. amending), empathy, anger and aggression, and psychological symptoms and substance misuse are well enough established in community samples to provide a meaningful basis for deciding whether shame and guilt have the same psychological meaning – serve the same functions --among offenders as among community samples. These previous findings and associated theory provide a “nomological net” that can be used to evaluate the construct validity of the Test of Self Conscious Affect – Socially Deviant Version (TOSCA-SD).

The second set of questions concern the relation of proneness to shame and guilt to (2a) criminal history and (2b) psychological factors known by criminologists to be important in predicting crime. Surprisingly, given its importance in offender rehabilitation, little research has been conducted on the associations between shame and guilt with crime and delinquency. Proneness to guilt about behaviors is anticipated to be inversely related to all crime-relevant variables and positively correlated with self-control. We guess that proneness to shame about the self serves far less inhibitory functions, perhaps at times positively related to crime-relevant variables.

The third set of questions concern the relevance of gender and race. Specifically: (3a) Are there gender, and/or race differences in average levels of shame and guilt that need to be taken into account in both treatment and research settings? (*This is a question about means*). And (3b) do the observed correlates of proneness to shame and guilt generalize across gender and race? (*This is a question about relationships among variables*). Based on previous research with community samples (Tangney & Dearing, 2002a), we anticipate that female offenders will score higher than male offenders on both shame- and guilt-proneness. Based on scant extant research, we anticipate no gender differences in correlations. Regarding race, based on previous research (Tangney & Dearing, 2002b), we anticipate no mean differences in levels of shame and guilt, nor in their relationship to other constructs.

Method

Participants

Participants were 550 (379 male and 171 female) pre- and post-trial inmates held on felony charges in a 1,000 bed county jail, located in a suburb of Washington DC enrolled in an on-going longitudinal study of moral emotions and criminal recidivism (Tangney, Mashek & Stuewig, 2007). To identify incoming inmates likely to serve at least 4 months (i.e., long enough to complete baseline assessment and to have the opportunity to engage in at least some jail programs and services), selection criteria were (1) either (a) sentenced to a term of 4 months or more, or (b) arrested and held on at least one felony charge, with no bond or greater than \$7,000 bond, (2) assigned to the jail’s medium and maximum security “general population” (e.g., not in solitary confinement, not in a separate forensics unit for actively psychotic inmates), and (3) sufficient language proficiency to complete study protocols in English or Spanish.

Of the inmates who met criteria and who were invited to participate in this multi-wave longitudinal study (granting access to criminal, jail, medical and forensic records, as well as access to credit and other official records for several years post-release), 74% agreed (N=628). Regarding validity, 26 individuals were dropped based on several criteria. First, two validity scales from the Personality Assessment Inventory (PAI, see below) – Inconsistency and Infrequency – were examined. Participants were dropped if one of the scales was above the recommended cut-offs (T scores of 72 and 74, respectively, Morey, 1991) and the other was considered elevated (above 69). Second, interviewers routinely reported if there were validity concerns during data collection. In cases where interviewer

concerns were raised, data were further examined for response bias, response sets, elevation of other validity scales, and documentation of problems from other sessions. Of the 602 remaining participants, (91.3%) remained at the jail long enough to complete portions of the 4–6-session initial assessment (1–3 weeks) relevant to this report, with most lost due to bond out or transfer to another facility.

The current analyses included 550 valid participants (31% female) who were on average 32 years old ($SD = 10$, range 18 to 69), had completed 11.7 years of education ($SD=2.3$, range 0 to 19), and were diverse in terms of race and ethnicity: 44% African American, 36% Caucasian, 9% Latino, 3% Asian, 4% “Mixed,” and 4% “Other.”

Measures and Procedures

Several days into incarceration, after assignment to the jail’s general population, as part of informed consent procedures, eligible inmates were presented with a description of the study and assured of the voluntary and confidential nature of the project. In particular, it was emphasized that the decision to participate or not would have no bearing on their status at the jail nor their release date. Regarding confidentiality, interviews were conducted in the privacy of professional visiting rooms, used by attorneys, or secure classrooms; data are protected by a Certificate of Confidentiality from DHHS. Inmates who agreed to participate, and who completed the 4–6 session baseline assessment, received a \$15–18 honorarium.

Participants with sufficient English verbal comprehension skills (over 95% of the sample) completed questionnaires using “touch-screen” computers not requiring computer literacy (e.g., no keyboard, no mouse). In addition to presenting questionnaire items visually, the computer read each item aloud to participants via headphones, accommodating participants with limited reading proficiency. For participants requiring Spanish versions of the measures, questionnaire responses were gathered via individual interview. Both interviewers and participants had paper copies of the translated measures. Participant followed along as interviewers read items aloud.

Measures: Psychological Constructs—*Shame-proneness, guilt-proneness, and externalization of blame* were assessed with the Test of Self Conscious Affect – Socially Deviant Version (TOSCA-SD; Hanson & Tangney, 1996), developed for use with incarcerated respondents, as well as other “socially deviant” groups. As with the family of TOSCA measures developed for children, adolescents, and adults living in the community, the TOSCA-SD utilizes a scenario-based approach where respondents are asked to imagine themselves in a series of situations they’ve likely encountered in day-to-day life (e.g., “You go out on a date with a woman/man and have sex. Afterwards she/he says that she/he felt forced into it.”). Each scenario is followed by responses that describe shame and guilt experiences with respect to the specific context (e.g., for shame, “You would think: ‘I am a disgusting person’;” for guilt, “You would try to understand what you did to hurt him or her;” and for externalization of blame, “You would think that she/he really enjoyed it and is just trying to get back at you”). The measures are not forced-choice in nature. Respondents rate, on a 5-point scale (“not at all likely” to “very likely”) their likelihood of responding in each manner indicated, allowing for the possibility that feelings of shame and guilt may co-occur in connection with a given situation. Notably, rather than relying on the often misused terms “shame” and “guilt,” TOSCA items represent brief phenomenological descriptions of a shame or guilt experience, as defined in the theoretical, phenomenological, and empirical literatures (e.g., Lewis, 1971; Lindsay-Hartz, 1984; Tangney, 1992; Wicker, Payne & Morgan, 1983).

In preliminary work with undergraduates, the TOSCA-SD has been reliable and correlated highly with the original TOSCA, and it has demonstrated reliability and validity in two

preliminary studies of incarcerated sex offenders (Hanson, 1996; Cripps, 1997). For example, Hanson (1996) and Cripps (1997) found that the TOSCA-SD Guilt scale, administered to offenders, was similarly correlated with other constructs (e.g., externalization of blame, etc.) as observed in community samples with the original TOSCA measures. Cripps (1997) also found that guilt-proneness was inversely correlated with the PCL-R Factor 2 psychopathy score.

Preliminary analyses suggested that special issues arise in the assessment of shame with incarcerated offenders. In a first study of 35 inmates (Hanson, 1996), internal consistency for the guilt ($\alpha=.92$) and externalization of blame ($\alpha=.88$) scales were comparable to internal consistencies typically observed with the original TOSCA. There was much more heterogeneity, however, in the shame scale ($\alpha=.47$), apparently due to inmates' idiosyncratic responses to the avoidance items (Hanson, 1996). The TOSCA shame scale taps various affective, cognitive, and motivational components of the shame experience. Hanson found it useful to distinguish between "negative self-appraisal" items (e.g., global negative evaluations of the self, the sense of being small, worthless, powerless, defective, etc.) and "behavioral avoidance" items (e.g., desire to hide, escape, leave at the first opportunity, feeling exposed). Years of research with non-offenders indicates that these two components are positively correlated, representing two closely linked facets of the shame experience (Tangney, 1990, 1991, 1996). Among offenders, however, the meaning of behavioral avoidance items may be very different – signifying a desire to avoid detection and *punishment*, rather than detection and consequent *shame* (bad feelings about the self). Supporting this notion, Hanson found that Negative Self-Appraisal and Behavioral Avoidance shame subscales had *higher* reliabilities (α s=.62 and .65, respectively) than the total Shame scale. Furthermore, although substantially positively correlated among college students, the two components of shame were essentially unrelated among the 35 sex-offenders ($r=-.04$). Finally, among college students, both shame subscales were positively correlated with guilt, whereas in that modest sample of offenders, only the Negative Self-Appraisal subscale was positively correlated with guilt ($r=.40$); Behavioral Avoidance was *negatively* correlated with offender guilt ($r=-.32$). One aim of the current study is to assess the reliability of TOSCA shame scores in a much larger and more heterogeneous sample of offenders, to determine whether it is necessary to assess offender shame with negative self-appraisal items only.

Empathic Concern, Perspective Taking and Personal Distress: The Interpersonal Reactivity Index (IRI; Davis, 1983), a paper-and-pencil measure of cognitively-oriented and emotionally-oriented empathy, was used. The Empathic Concern Scale ($\alpha = .69$) assesses the extent to which respondents experience "other-oriented" feelings of compassion and concern (e.g., "I often have tender, concerned feelings for people less fortunate than me"). The Perspective Taking Scale ($\alpha = .70$) assesses the ability to "step outside of the self" and take another's perspective (e.g., "Before criticizing somebody, I try to imagine how I would feel if I were in their place"). Personal Distress ($\alpha = .67$) involves a primary focus on the feelings, needs, and experiences of the empathizer (e.g., "I sometimes feel helpless when I am in the middle of a very emotional situation"). Davis (1983; Davis & Oathout, 1987) has provided evidence supporting the reliability and validity of his measure.

Psychological and Behavioral Problems: Aggressive Attitudes (6 items, $\alpha = .83$), Anxiety (24 items, $\alpha = .89$), Traumatic Stress (8 items, $\alpha = .86$), Obsessive-Compulsive (8 items, $\alpha = .56$), and Depression (24, $\alpha = .89$) symptoms were measured using the Personality Assessment Inventory (PAI; Morey, 1991). The PAI is a widely used, well-validated, self-report measure of psychopathology and personality traits. Respondents indicated whether each item was "False," "Sometimes True," "Mainly True," and "Very True." Items were developed through thorough literature reviews and written to directly target core

components of clinical disorders as defined by the DSM-III-R. PAI scales were created using T-scores based on the census standardization sample and demonstrated good to excellent levels of reliability, consistent with those observed in the standardization samples (Morey, 1991) and in correctional samples (Edens & Ruiz, 2005).

Self-Esteem: The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) is a widely used measure of global self-esteem. Ten items are answered on a 5 point scale ranging from “Always False” to “Always True” ($\alpha = .87$).

Drug and alcohol problems were assessed using Simpson and Knight’s (1998) Texas Christian University Correctional: Residential Treatment Form, Initial Assessment (TCU-CRTF). Specifically, participants reported the frequency of alcohol, marijuana, opiates, and cocaine use during the year prior to incarceration (0 = “never” to 8 = “more than once a day”). In addition, four substance dependence scales were created to assess dependency on alcohol (17 items, $\alpha = .93$), marijuana (8 items, $\alpha = .92$), opiates (18 items, $\alpha = .99$), and cocaine (14 items, $\alpha = .98$) in the year prior to incarceration. Item responses ranged from 0 = “never” to 4 = “7 or more times.” Each scale was composed of items that assess the DSM-IV (American Psychiatric Association, 1994) substance dependence domains (e.g., for the domain of tolerance participants answered the question “How often did you find that your usual number of drinks had much less effect on you or that you had to drink more in order to get the effect you wanted?”). For domains with multiple items, responses were averaged within domain and a total score was computed by taking the mean across the seven domains (six in the case of marijuana because withdrawal is not considered part of the criteria). An additional index was created to assess polydrug use, defined as the number of different illegal substances used in the year prior to incarceration from a list of 9 substances. Alcohol and drug problems also were assessed by the Alcohol Problems (12 items, $\alpha = .92$) and Drug Problems (12 items, $\alpha = .91$) scales from the PAI (Morey, 1991).

Criminological Constructs

Psychopathy, Risk for Violence, and Criminal Behavior: Hare Psychopathy Checklist: Screening Version (PCL:SV; Hart, Cox, & Hare, 1995) was used to assess psychopathy. An in-depth psychosocial history interview and review of criminal and jail records were used by trained clinicians to complete this 12 item checklist. A randomly selected set of 54 cases were double-coded by a referent clinician who brought to the project 15 years of professional experience conducting forensic psychological evaluations, as well as advanced training in the administration and scoring of the PCL-R and PCL:SV. Single measure intraclass correlations, using a one-way random effects model, were .85, .79, and .85 for Part 1, Part 2, and Total PCL:SV scores, respectively, showing high interrater reliability.

The *Violence Risk Appraisal Guide* (VRAG; Harris, Rice, & Quinsey, 1993; Quinsey et al., 1998) is a 12 item actuarial risk instrument tool that has been validated for use in a wide variety of offender populations. Similar to the PCL:SV, we assessed interrater reliability with a single measure intraclass correlation using a one-way random effects model. The randomly selected 52 cases showed high reliability (ICC = .89).

Violence Potential Index (VPI) from the PAI (Morey, 1991), was created using T-scores based on the census standardization sample. The VPI consists of 20 features of the PAI profile that are consistent with empirical results from the violence risk assessment literature (e.g., history of antisocial behavior, impulsivity, alcohol and drug abuse, and physical aggressiveness). Morey (1991) found higher VPI scores among individuals with histories of violent behavior or current convictions for violent behavior compared to a community sample.

Antisocial Personality was measured with the PAI (Morey, 1991) using the Total scale (24 items, $\alpha = .85$) as well as subscales measuring Antisocial Behaviors (8 items, $\alpha = .70$), Egocentricity (8 items, $\alpha = .67$), and Stimulus Seeking (8 items, $\alpha = .74$).

Criminogenic Cognitions: The Criminogenic Cognitions Scale (CCS; Tangney, Meyer, Furukawa, & Cosby, 2002) is a 25 item self-report measure ($\alpha = .81$) designed to tap 5 dimensions: (a) Failure to Accept Responsibility (“Bad childhood experiences are partly to blame for my current situation”); (b) Notions of entitlement (“When I want something, I expect people to deliver”); (c) Negative attitudes toward authority (“People in positions of authority generally take advantage of others”); (d) Short-term orientation (“The future is unpredictable and there is no point planning for it”); and (e) Insensitivity to impact of crime (“A theft is all right as long as the victim is not physically injured”).

Self-control: The Brief Self-Control Scale (BSC; Tangney, Baumeister & Boone, 2004) is a 13 item measure shown to be valid and reliable in college samples (Holtfreter, et al., 2010; Tangney et al, 2004) with good reliability in the current incarcerated sample ($\alpha = .85$).

Criminal history was coded using information from the National Crime Information Center (NCIC) reports. Two variables were created for this report. *Criminal history total* was the total number of charges that showed up in their records (range from 1 to 176). *Criminal history violent* was the total number violent charges (includes crimes such as physical and sexual assault, carjacking, kidnapping) (range from 0 to 24). Due to high levels of skewness, both variables were also log transformed and analyses were run using transformed and non-transformed variables. Other information about criminal history and risk classification was obtained from official jail records. At booking, deputies completed an actuarial-derived initial custody assessment classifying: (1) *severity of current charge* and (2) *serious offense history* as “none or low”=0 (e.g., trespassing, misdemeanors), “moderate”=1 (e.g., breaking and entering, drug possession), “high”=2 (e.g. robbery, murder), and “highest”=3 (e.g., multiple serious charges); whether or not the inmate had (3) *prior jail experience* coded as “none”=0, “time as juvenile/weekender/less than 6 months”=1, “local time 6–12 months”=2, “13–20 months state or local time”=3, “20 or more months”=4; and (4) *prior felony convictions* where “none”=0, “one”=1, and “two or more”=2. Two total risk classification variables were collected using the jail’s initial custody assessment form; both used the above variables (weighted according to the jail’s actuarial instrument) along with other risk factors including escape history, disciplinary history, substance abuse, detainers, and other demographic variable. The first was *custody level* classified as “minimum”=1, “medium”=2, and “maximum”=3. The second, *comprehensive custody score* ranged from –1 to 25 out of a possible range of –2 to 37.

Demographics, IQ, and Validity Scales—Participants’ self-reported gender, age, and race as part of the initial interview. IQ was estimated using the Wonderlic (1999) Personnel Test & Scholastic Level Exam. Four validity scales -- Inconsistency, Infrequency, Negative Impression Management (NIM), and Positive Impression Management (PIM) – were drawn from the PAI (Morey, 1991) described above. T-scores based on the census standardization sample were used.

Results

The first aim was to determine if there is meaningful variance in assessments of shame-and guilt-proneness in an inmate population using the TOSCA-SD. Specifically, (a) are there individual differences in proneness to shame and guilt among serious offenders of a magnitude worth consideration? (b) Is this reliable variance? And (c) is this valid variance?

Variance in and Reliability of Jail Inmates' Shame- and Guilt-Proneness

Table 1 shows that jail inmates, as a group, do not lack the capacity to experience shame or guilt. In this large sample of "general population" jail inmates, there was substantial variance in the capacity for both shame and guilt. As in college samples, the mean score for guilt was higher than for shame, reflecting the fact that relative to guilt, shame is, on balance, more painful and – owing to defensive maneuvers -- somewhat less apt to be recognized, remembered, and reported. Nonetheless, substantial variance was observed on both moral emotional dispositions, and it appears to be reasonably reliable variance. Estimates of reliability using Cronbach's alpha were good for both shame and guilt scales, based on the total 13 scenarios.

Next, we examined whether it is necessary to assess offender shame with only the subset of items tapping negative self appraisals (Hanson, 1996), instead of the total scale that uses both negative self-appraisals and behavioral avoidance items. In our initial analyses of data from the current study (Dearing, et al., 2005; Stuewig, et al., 2009; Stuewig, et al., 2010; Tangney, Mashek & Stuewig, 2007) we used only the negative self-appraisal items, based on Hanson's preliminary work indicating this is the most valid index of shame-proneness among offenders. The results in Table 1, however, argue in favor of using the entire set of shame items when assessing offenders. Shame-Hiding and Shame-Negative-Self-Appraisal scales were reasonably correlated ($r=.35$) (whereas in the preliminary study of 35 sex offenders, the shame subscales were uncorrelated). In the current sample of 549 general population offenders, the total shame scale demonstrated acceptable reliability, higher than the separate subscales (in contrast to the preliminary study). As in the preliminary study, the two shame subscales were differentially related to guilt -- the Negative Self-Appraisal subscale was positively correlated with guilt; Behavioral Avoidance was negatively correlated with guilt. But subscales correlated similarly with IQ and the PAI Positive Impression Management (PIM) and Negative Impression Management (NIM) scales. Taken together, the data from this larger, more heterogeneous sample does not argue for a sharp departure from traditional methods of assessing shame- and guilt-proneness in diverse community samples. To be consistent with the existing literature, we present both bivariate and part (semi-partial) correlations. The latter are represented by correlations with shame and guilt residuals, where shame was partialled out from guilt and vice versa, yielding indices of "shame-free" guilt, and "guilt-free" shame. In this case, bivariate and part correlations are similar, owing to the low correlation between shame- and guilt-proneness.

Validity of the TOSCA-SD Shame- and Guilt-proneness Scales

Regarding discriminant validity, Table 1 shows that the TOSCA-SD shame and guilt scales are not merely assessing negative affect. Proneness to these two negative emotions was correlated $-.10$. Neither do these scales assessing moral affective style represent essentially positive impression management. Guilt-proneness was modestly positively related to Positive Impression Management (PIM) and negatively related to Negative Impression Management (NIM); the reverse was true for shame, again with correlations modest enough to support discriminant validity. As further evidence of discriminant validity, guilt was unrelated to estimated intelligence; shame, the less cognitively sophisticated emotion, was modestly negatively correlated with IQ (also observed by Hosser, et al., 2008). Table 2 shows that shame-proneness assessed by the TOSCA-SD, is related to, but distinct from global self-esteem (see Tangney & Dearing, 2002b, for discussion of the distinction between shame and self-esteem).

Regarding construct validity, Table 2 shows that TOSCA-SD shame- and guilt-proneness scales correlate with measures in a manner remarkably parallel to that observed in community samples. Proneness to guilt (about specific behaviors) was strongly positively

correlated with both affective (empathic concern) and cognitive (perspective-taking) components of empathy, but unrelated to more problematic self-focused personal distress. In contrast, proneness to shame (about the self) was negligibly related to the affective and cognitive indices of other-oriented empathy, but positively related to problematic personal distress responses to others. In the domain of externalization of blame (vs. accepting responsibility for one's failures and transgressions), inmates' proneness to guilt strongly negatively correlated with externalization of blame; proneness to shame was strongly positively correlated with externalization of blame. Similarly, guilt-proneness was negatively correlated with aggressive attitudes (hostility), whereas shame-proneness was marginally positively correlated with aggressive attitudes. In the domain of psychological symptoms, inmates' proneness to shame was associated with all manner of psychological symptoms and inversely related to self-esteem as in community samples. As in college samples (Dearing, Stuewig & Tangney, 2005), shame-proneness was positively related to alcohol and drug problems (as assessed by the PAI, and including DSM-defined symptoms of alcohol and marijuana dependence in reference to the year prior to incarceration). Guilt-proneness was negatively or negligibly related to alcohol and drug problems and dependency symptoms. Taken together, these findings support the validity of the TOSCA-SD as a measure of proneness to shame and proneness to guilt, mirroring several decades of findings in community samples.

Relationship of Shame and Guilt to Criminological Constructs

A second aim of this paper is to extend the empirical literature by considering the relation of shame- and guilt-proneness to psychological and behavioral factors known by criminologists to be important in predicting crime. Table 3 shows that the propensity to experience guilt increased with age and was negatively correlated with PCL:SV psychopathy, and two instruments developed to predict violent re-offense – the PAI Violence Potential Index (VPI) and the widely used clinician-rated Violence Risk Appraisal Guide (VRAG). Guilt-proneness was substantially negatively correlated with PAI Antisocial Personality Total Scale and each of its subscales as well as a measure of criminogenic cognitions. Guilt was positively correlated with self-control. The propensity to experience guilt was not related to the extent of criminal history (general and violent) controlling for age. But guilt-proneness, assessed shortly after incarceration, was negatively correlated with severity of current charges, prior jail experience, prior felony convictions, custody level at the jail, and the jail's actuarially-derived custody score (the latter two scores are calculated in part based on the former three variables at booking).

Whereas proneness to guilt appears to be a protective factor vis-à-vis severity of crime, involvement in the criminal justice system, and known predictors of recidivism, the propensity to experience shame was positively correlated with the PAI Violence Potential Index, the PAI Antisocial Personality Disorder Total scale and its subscales, and criminogenic cognitions. Shame-proneness was also negatively correlated with self control. Shame-proneness was unrelated to age, clinician-rated psychopathy and violence risk, most aspects of criminal history, and custody level. In other words, shame-proneness was generally not protective, but, in fact, often positively related to these known risk variables.

Gender and Race: Mean Differences and Moderator Effects

A third aim of this paper was to examine the implications of gender and race. As in community samples (Tangney & Dearing, 2002a), female inmates ($n=171$) scored higher on both shame and guilt (shame $M=2.20$, $SD=.61$; guilt $M=4.39$, $SD=.51$) than male ($n=379$) inmates (shame $M=2.06$, $SD=.56$, $F(1, 547)=7.38$, $p=.007$, $\eta^2=.01$; guilt $M=4.22$, $SD=.56$, $F(1, 548)=11.89$, $p=.001$, $\eta^2=.02$). Regarding race, we ran an ANOVA examining mean differences between whites ($n=197$) and blacks ($n=243$) on shame and guilt. For proneness

to shame, whites ($M=2.15$, $SD=.57$) scored slightly higher than blacks ($M=2.02$, $SD=.57$) ($F(1, 437)=6.04$, $p=.014$, $\eta^2 = .01$). For proneness to guilt, there was no significant difference between whites ($M=4.29$, $SD=.49$) and blacks ($M=4.29$, $SD=.58$) ($F(1, 438)=.02$, $p=.11$, $\eta^2 = .00$). Additionally, the sex by race interaction was non-significant for both shame- and guilt-proneness.

We next examined whether the correlations presented in Tables 1, 2 and 3 generalized across gender and race. To control for the number of comparisons we used a Bonferroni correction for each table and each group. For example, for Table 2 there were 21 part correlations for guilt-proneness and 21 part correlations for shame-proneness, thus, when examining the z-test for independent correlations for males versus females we adjusted for 42 comparisons. For the variables in Table 1 we compared the correlation between guilt and shame as well as the part correlations of shame and guilt to positive impression management, negative impression management, and IQ (7 comparisons in all), for males versus females. One correlation was significant at the adjusted p-value. The shame residual had a stronger correlation with positive impression management for females ($r = -.396$, $p < .001$) than males ($r = -.146$, $p < .001$). No correlations were significantly different for blacks versus whites.

For the variables in Table 2 there were no significant differences for sex, but for race there was a stronger relationship between the guilt residual and frequency of cocaine use for whites ($r = -.230$, $p < .01$) than blacks ($r = .088$, $p = .17$). There were 22 variables listed in Table 3, thus we corrected for 44 comparisons for each grouping variable. There was only one significant difference using the adjusted p-value for the comparisons by sex and no differences by race. The shame residual had a stronger relationship to self-control for women ($r = -.374$, $p < .001$) than men ($r = -.055$, $p = .28$). Altogether, the correlates of shame- and guilt-proneness generalize across gender and race extremely well. (For correlations presented separately by gender and race, contact author).

Effect of Social Desirability

Finally, we examined the degree to which the findings in Tables 2 and 3 were robust with respect to social desirability. We recalculated the bivariate and part correlations, dropping participants who scored above 1.5 standard deviations (obtained a T-score greater than 65) on the PAI Positive Impression Management (PIM), a measure of social desirability. Results were remarkably similar to those presented here. (For correlations of participants with PIM T-scores at or below 65, contact author).

Discussion

The findings support the validity of the TOSCA-SD as a measure of jail inmates' proneness to shame and guilt and significantly extend the empirical literature on the implications of moral emotions among criminal offenders. First, we found substantial, reliable individual differences in proneness to shame and guilt among offenders. Felony offenders, as a whole, are not simply absent the capacity for moral emotions, as some might believe. Rather, there is considerable variance in felony offenders' propensity to experience shame and guilt. Further, the full shame scale, employing "negative self-appraisal items" and "behavioral avoidance" items forms a coherent, reliable index of offenders' proneness to shame, paralleling Wolf, et al.'s (2009) recent analysis of the TOSCA-3 with college students.

The variance among inmates in TOSCA-SD measures of shame-proneness and guiltproneness appears valid -- as indicated by discriminant validity (e.g., vis-à-vis self-esteem, negative affect, social desirability/impression management), and by convergent correlations with empathy, externalization of blame, anger, psychological symptoms, and

substance use problems, parallel to those observed in community samples. More generally, these findings say something substantive about the nature of individual differences in inmates' propensity to experience these moral emotions. Shame and guilt appear to serve the same functions among offenders as in community samples. That is, variance in proneness to shame and guilt among offenders apparently have the same psychological meaning as in community samples. And as in community samples, this variance is important across both interpersonal and intrapersonal domains. Shame-prone inmates have more psychological symptoms, are more likely to blame others, and have more alcohol and drug problems, relative to their non-shame-prone peers. Guilt-prone inmates exhibit more empathy and lower levels of externalization of blame and hostility, relative to those less guilt-prone. Overall, when considering community samples as well as incarcerated offenders, guilt appears to be the more adaptive "moral emotion," whereas if anything, shame carries a heavy cost (Tangney, Stuewig & Mashek, 2007).

A second aim of this paper was to extend the empirical literature on shame and guilt by examining the relation of these moral emotional styles to psychological and behavioral factors known by criminologists to be important in predicting crime. In brief, proneness to shame and proneness to guilt were importantly – and differentially – related to key constructs in the field of criminal justice. Age, one of the most consistent correlates of crime, was positively correlated with guilt-proneness but unrelated to shame-proneness in this sample of inmates ranging from 18 to 69 years old. Consistent with the age-crime curve, older inmates evidenced a greater propensity to experience guilt than younger inmates. Additionally, self-control was positively correlated with inmates' propensity to experience guilt and negatively correlated with inmates' proneness to shame.

Furthermore, inmates' proneness to guilt was significantly negatively correlated with risk assessment measures and psychological factors known to predict violent and non-violent criminal recidivism including the clinician-rated PCL:SV measure of psychopathy and the Violence Risk Assessment Guide (VRAG). Individuals higher in guilt-proneness also self-reported lower levels of Antisocial Personality, criminogenic cognitions, and scored lower on the PAI Violence Potential Index (VPI). In contrast, inmates' shame-proneness was unrelated to clinician ratings of psychopathy and violent risk, and positively correlated with self-reported Antisocial Personality and criminogenic cognitions.

Finally, inmates' proneness to guilt, assessed shortly after incarceration, was negatively correlated with severity of current charges, prior jail experience, prior felony convictions, and custody level at the jail. In contrast, proneness to shame was unrelated to severity of current charges, prior jail experience, and custody level at the jail. Proneness to "guilt-free" shame (residualized shame scores only) were modestly, but significantly negatively correlated with serious offense history and prior felony convictions.

In short, guilt-proneness appears to be a protective factor vis-à-vis severity of crime, involvement in the criminal justice system, and known predictors of recidivism. In contrast, we found little evidence that the propensity to experience shame serves an inhibitory function. The largely null results for shame-proneness and criminal history variables may be due to heterogeneity in this broad sample of "general population" jail inmates coupled with proneness to shame's complex relationship to known risk factors. Proneness to shame was associated with substance abuse, impulsivity, and criminogenic patterns of thinking, but notably not with psychopathy. Psychopathy, a personality constellation that accounts for considerable variance in prior criminal justice variables, may have attenuated any link between shame-proneness and criminal behavior in this heterogeneous sample.

It is important to bear in mind that the findings presented here deal mostly with concurrent (and, in the case of criminal history and substance abuse, post-dictive) relationships. While it is necessary to document the reliability and validity of a measure of proneness to shame and guilt, and important to describe the relationship of shame and guilt to these different constructs that have not often been examined, the next step will be for researchers to investigate more complex questions dealing with the moral emotions and criminal behavior. These relationships need to be examined longitudinally, and further work is needed to investigate what mediational or moderational processes may be at work between proneness to shame, proneness to guilt and the crime-relevant constructs examined here (Stuewig & Tangney, 2007).

The third set of questions concern the relevance of race and gender. We first examined whether there are race and/or gender differences in *levels* of shame and guilt. Regarding race, white inmates scored slightly higher on shame-proneness than black inmates; there were no race differences in guilt-proneness. Regarding gender, female inmates scored higher on both shame-and guilt-proneness relative to male inmates, paralleling findings with community samples (Tangney & Dearing 2002a). The differences were fairly modest in magnitude, and it is important to note that females report more of all types of emotions. Whether biologically-based or due to socialization factors, females consistently report more frequent and intense emotions than men (e.g., Diener, Sandvik & Larsen, 1985; Grossman & Wood, 1993). Alternatively, the gender difference may reflect women's greater willingness to acknowledge affective experiences in general (Fabes & Martin, 1991). In any event, researchers and practitioners may wish to take these differences into account when interpreting male vs. female scores on the TOSCA-SD.

More important, from our perspective, is the possibility of race and/or gender differences in the *correlates* of proneness to shame and guilt. To what extent does the psychological *meaning* of shame- and guilt-proneness differ for men and women, or for individuals from different racial backgrounds? Tests of the difference between independent correlations using a Bonferroni correction separately for race and for gender within Tables 1, 2, and 3 indicated few differences as a function of race or gender. Of a total of 186 comparisons, only three significant differences in correlations were observed. Regarding race, the negative correlation between the unique variance in guilt (guilt residuals) and pre-incarceration cocaine use was observed for white inmates but not black inmates. Regarding gender, the negative correlation between the unique variance in shame (shame residuals) and both positive impression management and self control was stronger for females compared to males, although the direction of the correlations were the same. Taken together, the findings generalize well across race and gender.

Limitations

The current study is not without its limitations. First, the results reported here are based on a sample of "general population" jail inmates charged with felonies, and thus may not generalize to less serious (e.g., misdemeanor) offenders, offenders in forensic facilities, or offenders in state or federal prisons. For several reasons, however, we believe that the likelihood of finding different results for less serious offenders and for prison inmates is remote. Regarding less serious offenders, the findings in Table 2 closely mirror results observed in non-offender, community samples diverse in terms of age, socio-economic status, and life circumstance (for a review, see Tangney, Stuewig & Mashek, 2007). To the extent that less serious (misdemeanor) offenders more closely resemble community samples, the results reported in Tables 1 and 2 should generalize. Less certain is the generalizability of findings regarding some of the criminal justice-related variables in Table 3. Among less serious offenders, a restriction of range in such variables as psychopathy and violence risk may attenuate relationships observed here. Regarding the applicability of the current

findings to prison inmates (as opposed to jail inmates), it is important to note that participants in the current study were recruited shortly upon incarceration. Thus, many of the participants were being held pre-trial and/or pre-sentencing. In the United States, local jails serve as the gateway for all offenders entering the criminal justice system. Those who are eventually sentenced to longer terms (typically 1 year or more) are subsequently transferred to state or federal prisons. Roughly half of the current sample was eventually released from the jail facility back into the community; the remainder were eventually transferred to other correctional facilities – typically state prison – then released into the community. Thus, it seems likely that the findings would generalize to prison populations as well. Future research on prison inmates should be conducted to verify this assumption.

A second limitation concerns the TOSCA-SD itself. Although modeled after the widely used TOSCA (Tangney, Wagner & Gramzow, 1989) for adult community populations, TOSCA-SD guilt items focused more directly on actual reparative behaviors whereas the TOSCA guilt items sampled more broadly from the affective and cognitive features associated with guilt, as indicated by theory, clinical case studies, and phenomenological empirical research. Recent research (Wolf, et al., 2009) indicates that guilt-proneness can be validly assessed with both “negative behavior evaluation” (e.g., remorse, regret) and “approach behavior” (e.g., reparative action). Nonetheless, we feel there is value in distinguishing between guilt as an affective-motivational state vs. reparative action as a motivated outcome of guilt. Accordingly, we have developed a revised version of the TOSCA-SD – the Test of Self-Conscious Affect for Special Populations (TOSCA-SP), currently undergoing psychometric refinement to make this distinction.

Practical Implications

Limitations notwithstanding, the current study indicates that the TOSCA-SD is a reliable and valid measure of individual differences in shame-proneness and guilt-proneness among serious offenders. The measure can be easily administered via paper-and-pencil to offenders with moderate reading ability; face-to-face interviews or touch screen computerized administration can accommodate offenders with limited reading ability. Thus, the TOSCA-SD is a resource for researchers interested in further studying these moral emotional styles.

The importance of expanding the extant empirical literature on shame and guilt in criminal justice contexts is underscored by the findings in Table 3 linking shame and guilt proneness to a range of established predictors of violent and non-violent recidivism. The results clearly indicate that the propensity to experience guilt (about behaviors) is a protective factor, consistently negatively relating to all manner of indicators of risk for violent and non-violent crime. In contrast, shame-proneness appears to serve no protective function. Rather, it is positively related to a number of poor outcomes such as low self-control, high stimulus seeking, and a host of psychological problems.

These findings have clear implications for criminal sentencing practices, arguing strongly against “shaming” sentences designed to shame and humiliate offenders. The findings also have clear implications for intervention with offenders already involved in our criminal justice system. Unlike many predictors of recidivism emphasized in the criminology literature, proneness to shame and guilt are “here-and-now” psychological variables amenable to a range of interventions. For example, Dearing and Tangney’s (in press) *Shame in the Therapy Hour* draws on the experience of “master clinicians” working from a broad range of theoretical perspectives to describe innovative techniques for managing and treating client shame. Reducing offender propensity to experience shame is one goal. Perhaps more important is enhancing offenders’ capacity to experience “shame-free” guilt about harmful actions past, present, and anticipated. To this end, restorative justice approaches (e.g., Victim Impact Training programs) seem especially promising. Although not always

explicitly addressed, the philosophy inherent in restorative justice interventions seems to us fundamentally “guilt-inducing, shame-reducing.” Similarly, Braithwaite’s notions of *reintegrative shame* and *disintegrative shame* map closely to *guilt* and *shame*, respectively, as conceptualized here. Thus, treatment evaluation researchers may find the TOSCA-SD useful in testing the efficacy of interventions rooted in Reintegrative Shaming Theory and/or restorative justice. Also of interest is the degree to which the propensity to experience shame (or guilt) might moderate the impact of reintegrative shaming practices and interventions inspired by the principles of restorative justice. Future research could examine whether proneness to shame represents a liability in terms of treatment response, owing to the difficulties that shame-prone individuals have tolerating shame and owning responsibility for harmful actions. Alternatively, highly shame-prone individuals may be especially responsive to reintegrative, restorative, shame-reducing messages that are so different from the stigmatization inherent in more conventional criminal justice approaches.

Acknowledgments

This research was supported by Grant #R01 DA14694 from the National Institute on Drug Abuse to June P. Tangney. We thank Robert Hare and Adele Forth for training materials for the PCL-R and PCL:SV. Many thanks to Amy Drapalski, Emi Furukawa, Caron Heigel, Stephanie Kendall, Alison Smith, Parin Zaveri, and other members of the Human Emotions Research Lab for their invaluable assistance. We are grateful for the assistance of inmates who participated in our study.

Biographies

June Price Tangney is a professor of psychology and University Professor at George Mason University. Her research interests include the development and implications of moral emotions and cognitions; jail inmates’ mental health and post-release substance abuse, HIV risk, and recidivism; and the development of treatments for jail inmates.

Jeff Stuewig is research associate professor in psychology at George Mason University. His research interests include shame, guilt, substance abuse, violence, and risky behavior over the life course.

Debra Mashek is assistant professor in psychology at Harvey Mudd College. Her research extends close relationship theory to the community domain and seeks to understand incarcerated offenders’ sense of connection to both the criminal community and the community at large.

Mark Hastings is a research assistant professor in psychology at George Mason University and a forensic psychologist at the Loudoun County Mental Health Center and in private practice. His research interests include psychopathy, risk for violence and recidivism, assessment and treatment of sexual offenders, and forensic evaluation.

References

- Ahmed, E.; Harris, N.; Braithwaite, J.; Braithwaite, V. Shame management through reintegration. New York: Cambridge University Press; 2001.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4. Washington, DC: American Psychiatric Association; 1994.
- Andrews B, Brewin CR, Rose S, Kirk M. Predicting PTSD symptoms in victims of violent crime: The role of shame, anger, and childhood abuse. *Journal of Abnormal Psychology*. 2000; 109:69–73. [PubMed: 10740937]
- Baumeister RF, Stillwell AM, Heatherton TF. Guilt: An interpersonal approach. *Psychological Bulletin*. 1994; 115:243–267. [PubMed: 8165271]

- Bennett DS, Sullivan MW, Lewis M. Young children's adjustment as a function of maltreatment, shame, and anger. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children*. 2005; 10:311–323.
- Botchkovar EV, Tittle CR. Crime, shame and reintegration in Russia. *Theoretical Criminology*. 2005; 9:401–442.
- Braithwaite, J. *Crime Shame and Reintegration*. Melbourne: Cambridge University Press; 1989.
- Braithwaite J, Mugford S. Conditions of successful reintegration ceremonies: Dealing with juvenile offenders. *British Journal of Criminology*. 1994; 34:139–171.
- Bybee J, Zigler E, Berliner D, Merisca R. Guilt, guilt-evoking events, depression, and eating disorders. *Current Psychology*. 1996; 16:113–127.
- Cripps, JE. Unpublished Masters Thesis. Carleton University; Ottawa, Ontario: 1997. The association between the neutralization of self-punishment, guilt, and psychopathy among extrafamilial child molesters.
- Crossley D, Rockett K. The experience of shame in older psychiatric patients: A preliminary enquiry. *Aging & Mental Health*. 2005; 9:368–73. [PubMed: 16019294]
- Davis MH. Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*. 1983; 44:113–126.
- Davis MH, Oathout HA. Maintenance of satisfaction in romantic relationships: Empathy and relational competence. *Journal of Personality and Social Psychology*. 1987; 53:397–410.
- Dearing RL, Stuewig J, Tangney JP. On the importance of distinguishing shame from guilt: Relations to problematic alcohol and drug use. *Addictive Behaviors*. 2005; 30:1392–1404. [PubMed: 16022935]
- Dearing, RL.; Tangney, JP., editors. *Shame in the Therapy Hour*. Washington DC: APA Books; (under contract, in final editing stage)
- de Hoo IE, Zeelenberg M, Breugelmans SM. Moral sentiments and cooperation: Differential influences of shame and guilt. *Cognition and Emotion*. 2007; 21:1025–1042.
- Dickerson SS, Gruenewald TL, Kemeny ME. When the social self is threatened: Shame, physiology, and health. *Journal of Personality*. 2004; 72:1191–1216. [PubMed: 15509281]
- Diener E, Sandvik E, Larsen RJ. Age and sex effects for emotional intensity. *Developmental Psychology*. 1985; 21:542–546.
- Edens, JF.; Ruiz, MA. *PAI Interpretative Report for Correctional Settings (PAI-CS)*. Lutz, FL: Psychological Assessment Resources; 2005.
- Elis LA, Simpson SS. Informal sanction threats and corporate crime: Additive vs. multiplicative models. *Journal of Research in Crime and Delinquency*. 1995; 32:399–424.
- Fabes RA, Martin CL. Gender and age stereotypes of emotionality. *Personality and Social Psychology Bulletin*. 1991; 17:532–540.
- Feiring C, Taska L, Lewis M. Adjustment following sexual abuse discovery: The role of shame and attributional style. *Developmental Psychology*. 2002; 38:79–92. [PubMed: 11806704]
- Ferguson TJ, Stegge H, Miller ER, Olsen ME. Guilt, shame, and symptoms in children. *Developmental Psychology*. 1999; 35:347–357. [PubMed: 10082006]
- Fontaine JRJ, Luyten P, de Boeck P, Corveleyn J, Fernandez M, Herrera D, et al. Untying the Gordian Knot of guilt and shame. *Journal of Cross-Cultural Psychology*. 2006; 37:273–292.
- Gramzow R, Tangney JP. Proneness to shame and the narcissistic personality. *Personality and Social Psychology Bulletin*. 1992; 18:369–376.
- Grasmick HG, Bursik RJ. Conscience, significant others, and rational choice: Extending the deterrence model. *Law & Society Review*. 1990; 24:837–861.
- Grossman M, Wood W. Sex differences in intensity of emotional experience: A social role interpretation. *Journal of Personality and Social Psychology*. 1993; 65:1010–1022. [PubMed: 8246109]
- Hanson, RK. *Coping with Culpability*. Paper presented at the meeting of the Association for the Treatment of Sexual Abusers; Chicago. 1996 November.

- Hanson, RK.; Tangney, JP. The Test of Self-Conscious Affect—Socially Deviant Populations (TOSCA-SD). Corrections Research, Department of the Solicitor General of Canada; Ottawa: 1996.
- Harder DW, Cutler L, Rockart L. Assessment of shame and guilt and their relationships to psychopathology. *Journal of Personality Assessment*. 1992; 59:584–604. [PubMed: 1487811]
- Harper FWK, Arias I. The role of shame in predicting adult anger and depressive symptoms among victims of child psychological maltreatment. *Journal of Family Violence*. 2004; 19:367–375.
- Harper FWK, Austin AG, Cercone JJ, Arias I. The role of shame, anger, and affect regulation in men's perpetration of psychological abuse in dating relationships. *Journal of Interpersonal Violence*. 2005; 20:1648–1662. [PubMed: 16246922]
- Harris N. Reassessing the dimensionality of the moral emotions. *British Journal of Psychology*. 2003; 94:457–473. [PubMed: 14687455]
- Harris N. Reintegrative shaming, shame, and criminal justice. *Journal of Social Issues*. 2006; 62:327–346.
- Harris GT, Rice ME, Quinsey VL. Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*. 1993; 20:315–335.
- Hart, SD.; Cox, DN.; Hare, RD. The Hare Psychopathy Checklist: Screening Version. Toronto: Multi-Health Systems; 1995.
- Hay C. An exploratory test of Braithwaite's reintegrative shaming theory. *Journal of Research in Crime and Delinquency*. 2001; 38:132–153.
- Henderson, L.; Zimbardo, P. Shyness as a clinical condition: The Stanford model. In: Crozier, WR.; Alden, LE., editors. *International handbook of social anxiety: Concepts, research and interventions relating to the self and shyness*. New York, NY: John Wiley & Sons; 2001. p. 431-447.
- Holtfreter K, Reisig MD, Leeper Piquero N, Piquero AR. Low self-control and fraud: Offending, victimization, and their overlap. *Criminal Justice and Behavior*. 2010; 37:188–203.
- Hosser D, Windzio M, Greve W. Guilt and shame as predictors of recidivism: A longitudinal study with young prisoners. *Criminal Justice and Behavior*. 2008; 35:138–152.
- Joireman J. Empathy and the self-absorption paradox II: Self-rumination and self-reflection as mediators between shame, guilt, and empathy. *Self and Identity*. 2004; 3:225–238.
- Ketelaar T, Au WT. The effects of feelings of guilt on the behavior of uncooperative individuals in repeated social bargaining games: An affect-as-information interpretation of the role of emotion in social interaction. *Cognition & Emotion*. 2003; 17:429–453.
- Leith KP, Baumeister RF. Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality*. 1998; 66:1–37.
- Leskela J, Dieperink M, Thuras P. Shame and posttraumatic stress disorder. *Journal of Traumatic Stress*. 2002; 15:223–226. [PubMed: 12092914]
- Lewis, HB. Shame and guilt in neurosis. New York, NY: International Universities Press; 1971.
- Lewis, HB., editor. *The role of shame in symptom formation*. Hillsdale, NJ: Erlbaum; 1987.
- Lindsay-Hartz J. Contrasting experiences of shame and guilt. *American Behavioral Scientist*. 1984; 27:689–704.
- Lutwak N, Panish JB, Ferrari JR, Razzino BE. Shame and guilt and their relationship to positive expectations and anger expressiveness. *Adolescence*. 2001; 36:641–653. [PubMed: 11928873]
- Luyten P, Fontaine JRJ, Corveleyn J. Does the Test of Self-Conscious Affect (TOSCA) measure maladaptive aspects of guilt and adaptive aspects of shame? An empirical investigation. *Personality and Individual Differences*. 2002; 33:1373–1387.
- Makkai T, Braithwaite J. The dialectics of corporate deterrence. *Journal of Research in Crime and Delinquency*. 1994; 31:347–373.
- Mills R. Possible antecedents and developmental implications of shame in young girls. *Infant & Child Development*. 2003; 12:29–349.
- Morey, LC. *The Personality Assessment Inventory Professional Manual*. Odessa, FL: Psychological Assessment Resources; 1991.

- Murphy K, Harris N. Shaming, shame and recidivism: A test of reintegrative shaming theory in the white-collar crime context. *British Journal of Criminology*. 2007; 47:900–917.
- Nagin DS, Paternoster R. Enduring individual differences and rational choice theories of crime. *Law & Society Review*. 1993; 27:467–496.
- Orsillo SM, Heimberg RG, Juster HR, Garret J. Social phobia and PTSD in Vietnam veterans. *Journal of Traumatic Stress*. 1996; 9:235–252. [PubMed: 8731545]
- Paulhus DL, Robins RW, Trzesniewski KH, Tracy JL. Two replicable suppressor situations in personality research. *Multivariate Behavioral Research*. 2004; 39:303–328.
- Quiles ZN, Bybee J. Chronic and dispositional guilt: Relations to mental health, prosocial behavior and religiosity. *Journal of Personality Assessment*. 1997; 69:104–126. [PubMed: 9306684]
- Quinsey, VL.; Harris, GT.; Rice, ME.; Cormier, CA. *Violent offenders: Appraising and managing risk*. Washington, DC: American Psychological Association; 1998.
- Robinson R, Roberts WL, Strayer J, Koopman R. Empathy and emotional responsiveness in delinquent and non-delinquent adolescents. *Social Development*. 2007; 16:555–579.
- Rosenberg, M. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press; 1965.
- Sabini J, Silver M. In defense of shame: Shame in the context of guilt and embarrassment. *Journal for the Theory of Social Behaviour*. 1997; 27:1–15.
- Sanftner JL, Barlow DH, Marschall DM, Tangney JP. The relation of shame and guilt to eating disorder symptomatology. *Journal of Social and Clinical Psychology*. 1995; 14:315–324.
- Simpson, DD.; Knight, K. *TCU data collection forms for correctional residential treatment*. Fort Worth, TX: Texas Christian University, Institute of Behavioral Research; 1998.
- Smith RH, Webster JM, Parrott WG, Eyre HL. The role of public exposure in moral and nonmoral shame and guilt. *Journal of Personality and Social Psychology*. 2002; 83:38–159.
- Stuewig J, Tangney JP, Mashek D, Forkner P, Dearing RL. The moral emotions, alcohol dependence, and HIV risk behavior in an incarcerated sample. *Substance Use and Misuse*. 2009; 44:449–471. [PubMed: 19242862]
- Stuewig J, McCloskey LA. The relation of child maltreatment to shame and guilt among adolescents: Psychological routes to depression and delinquency. *Child Maltreatment*. 2005; 10:324–336. [PubMed: 16204735]
- Stuewig, J.; Tangney, JP. Shame and guilt in antisocial and risky behaviors. In: Tracy, JL.; Robins, RW.; Tangney, JP., editors. *The self-conscious emotions: Theory and research*. New York, NY: Guilford Press; 2007. p. 371-388.
- Stuewig J, Tangney JP, Heigel C, Harty L, McCloskey L. Shaming, blaming, and maiming: Functional links among the moral emotions, externalization of blame, and aggression. *Journal of Research in Personality*. 2010; 44:91–102. [PubMed: 20369025]
- Tangney JP. Assessing individual differences in proneness to shame and guilt: Development of the Self-Conscious Affect and Attribution Inventory. *Journal of Personality and Social Psychology*. 1990; 59:102–111. [PubMed: 2213483]
- Tangney JP. Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology*. 1991; 61:598–607. [PubMed: 1960652]
- Tangney JP. Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin*. 1992; 18:199–206.
- Tangney, JP. Shame and guilt. In: Costello, CG., editor. *Symptoms of depression*. New York, NY: John Wiley; 1993. p. 161-180.
- Tangney, JP. The mixed legacy of the super-ego: Adaptive and maladaptive aspects of shame and guilt. In: Masling, JM.; Bornstein, RF., editors. *Empirical perspectives on object relations theory*. Washington, DC: American Psychological Association; 1994. p. 1-28.
- Tangney JP. Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research and Therapy*. 1996; 34:741–754. [PubMed: 8936757]
- Tangney, JP. The self-conscious emotions: Shame, guilt, embarrassment and pride. In: Dalglish, T.; Power, M., editors. *A handbook of cognition and emotion*. New York, NY: Wiley & Sons; 1999. p. 541-568.

- Tangney, JP.; Baumeister, RF.; Boone, AL. The Self Control Scale. George Mason University; Fairfax, VA: 2002.
- Tangney JP, Baumeister RF, Boone AL. High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*. 2004; 72:271–324. [PubMed: 15016066]
- Tangney, JP.; Dearing, R. Gender differences in morality. In: Masling, JM.; Bornstein, RF., editors. *Empirical perspectives on Psychoanalytic Theory*. Vol. 10. Washington DC: American Psychological Association; 2002a. p. 251-269.
- Tangney, JP.; Dearing, R. Shame and guilt. New York, NY: Guilford Press; 2002b.
- Tangney JP, Miller RS, Flicker L, Barlow DH. Are shame, guilt and embarrassment distinct emotions? *Journal of Personality and Social Psychology*. 1996; 70:1256–1269. [PubMed: 8667166]
- Tangney JP, Mashek D, Stuewig J. The social-clinical-community-criminology interface: The George Mason University inmate study. *Journal of Social and Clinical Psychology*. 2007; 26:1–21. [PubMed: 21572973]
- Tangney, JP.; Meyer, P.; Furukawa, E.; Cosby, B. Criminogenic Cognitions Scale (CCS). George Mason University; Fairfax, VA: 2002.
- Tangney JP, Stuewig J, Mashek DJ. Moral emotions and moral behavior. *Annual Review of Psychology*. 2007; 58:345–372.
- Tangney JP, Wagner PE, Fletcher C, Gramzow R. Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology*. 1992; 62:669–675. [PubMed: 1583590]
- Tangney, JP.; Wagner, PE.; Gramzow, R. The Test of Self-Conscious Affect (TOSCA). George Mason University; Fairfax VA: 1989.
- Tangney JP, Wagner PE, Hill-Barlow D, Marschall DE, Gramzow R. Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*. 1996; 70:797–809. [PubMed: 8636899]
- Tibbetts SG. Shame and rational choice in offending decisions. *Criminal Justice and Behavior*. 1997; 24:234–255.
- Tibbetts SG. Self-conscious emotions and criminal offending. *Psychological Reports*. 2003; 93:101–126. [PubMed: 14563037]
- Tooke WS, Ickes W. A measure of adherence to conventional morality. *Journal of Social and Clinical Psychology*. 1988; 6:310–334.
- Tracy JL, Robins RW. Appraisal antecedents of shame and guilt: Support for a theoretical model. *Personality and Social Psychology Bulletin*. 2006; 32:1339–1351. [PubMed: 16963605]
- Wallbott, HG.; Scherer, KR. Cultural determinants in experiencing shame and guilt. In: Tangney, JP.; Fischer, KW., editors. *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York, NY: Guilford Press; 1995. p. 465-487.
- Wicker FW, Payne GC, Morgan RD. Participant descriptions of guilt and shame. *Motivation and Emotion*. 1983; 7:25–39.
- Wolf ST, Cohen TR, Panter AT, Insko CA. Shame proneness and guilt proneness: Toward the further understanding of reactions to public and private transgressions. *Self & Identity*. 2009
- Wonderlic, Inc. Wonderlic Personnel Test & Scholastic Level Exam User's Manual. Libertyville, IL: Wonderlic; 1999.
- Wortley S. Justice for all? Race and perceptions of bias in the Ontario criminal justice system: A Toronto survey. *Canadian Journal of Criminology*. 1996; 38:439–467.
- Wright K, Gudjonsson GH. The development of a scale for measuring offence-related feelings of shame and guilt. *Journal of Forensic Psychiatry and Psychology*. 2007; 18:307–316.
- Xuereb S, Ireland JL, Davies M. Development and preliminary assessment of a measure of shame, guilt, and denial of offenders. *Journal of Forensic Psychiatry & Psychology*. 2009; 20:640–660.
- Zahn-Waxler, C.; Robinson, J. Empathy and guilt: Early origins of feelings of responsibility. In: Tangney, JP.; Fischer, KW., editors. *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York, NY: Guilford Press; 1995. p. 143-173.

Table 1
Shame-proneness and Guilt-proneness Descriptives, Intercorrelations and Discriminant Validity

	Guilt	Shame Total	Shame (Hiding)	Shame (NSA)	Guilt Residual	Shame Residual
Guilt	--	--	--	--	--	--
Shame-Total	-.10*	--	--	--	--	--
Shame Hiding	-.37**	.86**	--	--	--	--
Shame						
Neg Self-Appraisal(NSA)	.26**	.78**	.35**	--	--	--
Guilt Residual	.99**	.00	-.28**	.34**	--	--
Shame Residual	.00	.99**	.82**	.81**	.10*	--
PIM	.17**	-.25**	-.24**	-.16**	.15**	-.24**
NIM	-.23**	.35**	.34**	.22**	-.20**	.33**
IQ	.08	-.18**	-.18**	-.10*	.06	-.17**
Mean	4.28	2.10	1.86	2.49	.00	.00
SD	.55	.58	.62	.82	.55	.57
Possible Range	1.0–5.0	1.0–5.0	1.0–5.0	1.0–5.0	--	--
Actual Range	1.8–5.0	1.0–4.8	1.0–4.2	1.0–5.0	-2.6–.92	-1.1–2.0
Skewedness	-.89	.37	.73	.38	-.89	.37
Kurtosis	.71	-.28	.20	-.28	.81	-.19
# of Items	13	13	8	5	13	13
Alpha	.80	.71	.68	.59	--	--
N	550	549	549	550	549	549

Note: PIM=Positive Impression Management, NIM=Negative Impression Management. For PIM, NIM and IQ (n=509, 510, 485)

Table 2

Relations of Shame-Prone and Guilt-Prone to Empathy, Blame, Psychological Symptoms, and Substance Use Problems

Measure	Mean (SD)	Bivariate Correlations			Partial Correlations		
		Guilt	Shame	Shame	Guilt	Shame	Shame
Empathic Concern	3.13 (.40)	.45**	-.02		.45**		.03
Perspective Taking	3.05 (.41)	.40**	-.01		.41**		.03
Personal Distress	2.40 (.37)	-.05	.43**		-.01		.43**
Externalization of Blame	2.01 (.67)	-.38**	.47**		-.33**		.43**
Aggressive Attitudes	54.83 (12.96)	-.29**	.10*		-.28**		.07
Anxiety	55.34 (11.30)	-.13**	.42**		-.09		.41**
Traumatic Stress	63.45 (15.22)	-.05	.24**		-.03		.24**
Obsessive Compulsive	53.68 (10.76)	.14**	.12**		.15**		.13**
Depression	58.04 (12.90)	-.16**	.40**		-.12**		.39**
Self-esteem	3.84 (.69)	.23**	-.43**		.18**		-.41**
Alcohol							
PAI Alcohol Problems	59.92 (17.33)	-.09*	.14**		-.08		.13**
TCU-CRTE- Freq of Use	3.21 (2.36)	-.04	-.05		-.05		-.06
TCU-CRTE- Dependence	.72 (1.02)	-.07	.16**		-.05		.16**
Drug							
PAI Drug Problems	71.48 (20.48)	-.07	.14**		-.06		.13**
TCU-CRTE- Freq of Use							
Marijuana	2.12 (2.73)	-.19**	-.01		-.19**		-.03
Cocaine	1.91 (2.73)	-.01	.05		-.01		.05
Opiates	1.18 (2.49)	.00	.03		.00		.03
Polydrug	1.91 (1.98)	-.13**	.07		-.13**		.05
TCU-CRTE- Dependence							
Marijuana	.53 (.97)	-.17**	.16**		-.15**		.14**
Cocaine	.99 (1.47)	-.01	.08		-.00		.08
Opiates	.50 (1.21)	.01	.06		.02		.06

Note. $N = 507$ – 550 . PAI = Personality Assessment Inventory; TCU-CRTF = Texas Christian University Correctional: Residential Treatment Form, Initial Assessment.

* $p < .05$,

** $p < .01$.

Table 3
Relations of Shame-Proneness and Guilt-Proneness to Predictors of Recidivism

Measure	Mean (SD)	Bivariate Correlations			Part Correlations		
		Guilt	Shame		Guilt	Shame	
Age at time of intake		.21**	-.03		.21**	-.01	
Psychopathy Total	12.18 (4.88)	-.17**	-.00		-.17**	-.02	
Psychopathy Part 1	5.81 (2.90)	-.09*	-.02		-.09*	-.03	
Psychopathy Part 2	6.37 (2.81)	-.19**	.02		-.19**	-.00	
VRAG	7.12 (7.82)	-.20**	.01		-.20**	-.01	
VPI	5.59 (3.97)	-.26**	.21**		-.24**	.18**	
ASPD Total	64.35 (12.04)	-.37**	.19**		-.36**	.16**	
Antisocial Behaviors	68.34 (10.41)	-.27**	.10*		-.26**	.07	
Egocentricity	55.89 (12.68)	-.41**	.19**		-.39**	.16**	
Stimulus Seeking	58.85 (13.10)	-.28**	.19**		.26**	.16**	
Criminogenic Cognitions	2.24 (.35)	-.39**	.23**		-.37**	.19**	
Self-Control	3.00 (.69)	.29**	-.20**		.27**	-.17**	
Criminal History Total ^a	17.50 (18.15)	-.05	-.02		-.05	-.03	
Log Transformed ^a	1.04 (.44)	-.08	-.02		-.09*	-.03	
Criminal History Violent ^a	1.89 (2.68)	-.01	-.06		-.02	-.06	
Log Transformed ^a	.33 (.32)	-.04	-.05		-.05	-.06	
Severity Current Charges	1.36 (.67)	-.11*	.04		-.11*	.03	
Serious Offense History ^a	.99 (.84)	-.06	-.08		-.07	-.09*	
Prior Jail Experience ^a	2.13 (1.58)	-.17**	-.04		-.17**	-.06	
Prior Felony Convictions ^a	.88 (.89)	-.10*	-.08		-.11*	-.10*	
Custody Level ^a	1.88 (.85)	-.12**	-.05		-.13**	-.06	
Comp. Custody Score ^a	8.88 (5.49)	-.15**	-.06		-.16**	-.07	

Note. *N* = 482–550

^aTo take into account age these variables were residualized so that the effect of age was taken out before correlations were run. Means and SD are from non-residualized scores

* $p < .05$,

** $p < .01$.