

Introducing the GASP Scale: A New Measure of Guilt and Shame Proneness

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Although scholars agree that moral emotions are critical for deterring unethical and antisocial behavior, there is disagreement about how 2 prototypical moral emotions—guilt and shame—should be defined, differentiated, and measured. We addressed these issues by developing a new assessment—the Guilt and Shame Proneness scale (GASP)—that measures individual differences in the propensity to experience guilt and shame across a range of personal transgressions. The GASP contains 2 guilt subscales that assess negative behavior-evaluations and repair action tendencies following private transgressions and 2 shame subscales that assess negative self-evaluations (NSEs) and withdrawal action tendencies following publically exposed transgressions. Both guilt subscales were highly correlated with one another and negatively correlated with unethical decision making. Although both shame subscales were associated with relatively poor psychological functioning (e.g., neuroticism, personal distress, low self-esteem), they were only weakly correlated with one another, and their relationships with unethical decision making diverged. Whereas shame–NSE constrained unethical decision making, shame–withdraw did not. Our findings suggest that differentiating the tendency to make NSEs following publically exposed transgressions from the tendency to hide or withdraw from public view is critically important for understanding and measuring dispositional shame proneness. The GASP’s ability to distinguish these 2 classes of responses represents an important advantage of the scale over existing assessments. Although further validation research is required, the present studies are promising in that they suggest the GASP has the potential to be an important measurement tool for detecting individuals susceptible to corruption and unethical behavior.

Keywords: guilt, shame, moral emotions, scale development, unethical decision making

Moral emotions motivate ethical behavior; they encourage people to act in accordance with accepted standards of right and wrong. As described by Tangney (2003, p. 386), “moral emotions provide the motivational force—the power and energy—to do good and to avoid doing bad.” For example, people who are prone to feeling guilty after committing transgressions behave less aggressively when angered (Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010; Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996), are less likely to commit delinquent offenses as adolescents (Stuewig & McCloskey, 2005), and express more disapproval of lying in business negotiations (Cohen, 2010). Likewise, inducing people to feel guilty by having them recall past misdeeds causes them to behave more cooperatively in interper-

sonal interactions (de Hooge, Zeelenberg, & Breugelmans, 2007; Ketelaar & Au, 2003). Indeed, the biggest difference between individuals with antisocial personality disorder and well-adjusted individuals is the former’s “inability to feel sympathy, shame, guilt, or other emotions that make the rest of us *care* about the fates of others and the things we do to hurt or help them” (Haidt & Kesebir, 2010, p. 804).

Although scholars agree that moral emotions are critical for deterring unethical and antisocial behavior (e.g., Eisenberg, 2000; Haidt, 2003; Haidt & Kesebir, 2010; Tangney & Dearing, 2002; Tangney, Stuewig, & Mashek 2007), there is disagreement about how two prototypical moral emotions—guilt and shame—should be defined, differentiated, and measured (cf. Smith, Webster, Parrott, & Eyre, 2002; Tangney, 1996; Tangney & Dearing, 2002; Wolf, Cohen, Panter, & Insko, 2010). In this research, we tackled these issues by developing a new assessment—the Guilt and Shame Proneness scale (GASP)—that measures individual differences in the propensity to experience guilt and shame across a range of personal transgressions. We propose that measuring guilt proneness and shame proneness with the GASP can aid in the detection of individuals susceptible to unethical decision making and delinquent behavior. Moreover, refining the measurement of guilt and shame proneness has important theoretical implications for understanding the nature of the similarities and differences

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between guilt and shame, how guilt proneness and shame proneness relate to other dimensions of personality, and how moral emotions affect behavior.

What Are Guilt and Shame, and How Do They Differ?

Historically, there has been confusion as to whether guilt and shame are distinct emotions. Both are characterized by feelings of distress arising in response to personal transgressions (Baumeister, Stillwell, & Heatherton, 1994; Smith et al., 2002; Tangney & Dearing, 2002; Tangney et al., 2007; Wolf et al., 2010). Accordingly, many people use the terms interchangeably. In addition, both guilt and shame are self-conscious emotions evoked by self-reflection and self-evaluation, and they both aid in self-regulation (Tracy & Robins, 2004, 2007; Tangney, 2003). Yet, despite the similarities, there are important differences between these two emotions. The nature of these differences, however, is a source of scholarly debate. Currently, there are two schools of thought regarding the key differences between guilt and shame: the *self-behavior distinction* and the *public-private distinction*.

Self-Behavior Distinction

One school of thought proposes that guilt and shame can be differentiated via a self-behavior distinction (Lewis, 1971; Tangney, 1996; Tangney & Dearing, 2002; Tracy & Robins, 2004). With guilt, the focus is on one's behavior ("I did a bad thing"), whereas, with shame, the focus is on one's self ("I'm a bad person"). According to this view, guilt arises when one makes internal, unstable, specific attributions about one's actions, which lead to negative feelings about specific behaviors that one has committed (Tracy & Robins, 2004). Shame, on the other hand, arises when one makes internal, stable, global attributions about one's self, which lead to negative feelings about the global self (Tracy & Robins, 2004).

The Test of Self-Conscious Affect-3 (TOSCA-3; Tangney, Dearing, Wagner, & Gramzow, 2000), the most widely used guilt-and shame-proneness assessment, relies on the self-behavior distinction. In the TOSCA-3, guilt responses are characterized by regret and negative behavior-evaluations (NBEs; e.g., thinking "I made a mistake"), as well as repair action tendencies (e.g., apologizing). Shame responses are characterized by negative self-evaluations (NSEs; e.g., thinking "I am a terrible person") and withdrawal action tendencies (e.g., hiding). Research with the TOSCA-3 has revealed that guilt proneness is healthier and more adaptive than shame proneness because guilt motivates people to right their wrongs and apologize for their mistakes, whereas shame makes people want to withdraw and avoid dealing with the consequences of their transgressions (Tangney & Dearing, 2002).

One limitation of the TOSCA-3 is that emotional and behavioral responses to transgressions are confounded. That is, NBEs and repair action tendencies are not differentiated, and neither are NSEs and withdrawal action tendencies. In previous research, we demonstrated that evaluative or emotional responses can be differentiated theoretically and empirically from behavioral responses (Wolf et al., 2010). Theoretically, the difference can be conceptualized as the distinction between attitudes and intentions (cf. Fishbein & Ajzen, 1975). Empirically, we found that individuals are

much more likely to respond to transgressions with NSEs than with withdrawal action tendencies, even though both types of responses are considered aspects of shame proneness (Wolf et al., 2010). Moreover, in an earlier study, Schmader and Lickel (2006) found that shame can elicit repair behaviors as well as withdrawal behaviors, and likewise for guilt. Their findings indicate that shame and guilt emotional responses are distinct from withdrawal and repair behaviors and support our proposal that these types of responses should be differentiated when measuring responses to personal transgressions.

In the medical domain, Harris and Darby (2009) investigated shame in physician-patient relationships and found that shame-inducing situations can have both positive and negative consequences for patients' health behaviors. Although approximately one third of patients whose physicians made them feel ashamed avoided or stopped seeing their doctor, another one third of patients said that the shame caused them to improve their health-related behaviors. These results highlight the importance of differentiating moral emotions from approach and avoidance action tendencies. Clearly, shame can and often does lead to avoidance behaviors, but shame can also lead to more positive approach-oriented actions as well.

Public-Private Distinction

A second school of thought proposes that guilt and shame can be differentiated via a public-private distinction. According to this distinction, which has its roots in anthropology (Benedict, 1946), transgressions or failures that have not been publically exposed (i.e., private misdeeds) are likely to elicit feelings of guilt, whereas transgressions or failures that have been publically exposed are likely to elicit feelings of shame (Ausubel, 1955; Combs, Campbell, Jackson, & Smith, 2010; Smith et al., 2002). From this perspective, guilt is associated with a private sense of having done something wrong or having behaved in a way that violates one's conscience. Shame, on the other hand, is the negative feeling that arises when one's failures and shortcomings are put on public display. To illustrate the public-private perspective, Smith et al. (2002) pointed to classic literary examples from *The Scarlet Letter* (Hawthorne, 1850/1962). In this novel, Hester Prynne and Reverend Dimmesdale commit adultery, and Prynne becomes pregnant. Prynne is forced to wear a scarlet letter A on her gown and is publically castigated for the transgression. The ensuing emotion is an intense feeling of shame. Dimmesdale's role in the transgression, however, is not exposed—he keeps his paternity concealed. Consequently, throughout the novel, Dimmesdale suffers from an intense private feeling of guilt that damages his physical and mental health.

The Dimensions of Conscience Questionnaire (DCQ; Johnson et al., 1987) relies on the public-private distinction. In the DCQ, the guilt items ask respondents to indicate how badly they would feel after committing private transgressions (e.g., "secretly taking office supplies home for personal use"), and the shame items ask respondents to indicate how badly they would feel after committing public transgressions (e.g., "getting drunk and making a fool of yourself in public"). Surprisingly, in a prior study (Wolf et al., 2010, Study 1), we found that the TOSCA-3 and the DCQ were correlated .62 for guilt and .38 for shame—very high considering

the formats and theoretical frameworks for the DCQ and TOSCA-3 are completely different.

Although Tangney has discounted the public–private distinction (Tangney, 1996, 2003; Tangney & Dearing, 2002; Tangney et al., 2007), Smith et al. (2002) found that transgressions that were publically exposed were associated more with shame than with guilt in people’s memories and in famous literary works. In addition, Comb et al. (2010, Study 1) manipulated the publicity of a wrongful act in a vignette study and found that reports of shame and negative self-attributions increased when the transgression was publicized compared to when the transgression was not exposed.

In a previous study (Wolf et al., 2010, Study 2), we experimentally manipulated both the public–private and self–behavior distinctions and found that both had merit. For example, low self-esteem is a construct that is theoretically more closely linked to shame proneness than guilt proneness (Tangney & Dearing, 2002). Accordingly, we found that items describing NSEs following private transgressions were not correlated as strongly with low self-esteem as items describing NSEs following public transgressions. Likewise, empathic concern is a construct that is theoretically more closely linked to guilt proneness than shame proneness (Stuewig et al., 2010; Tangney & Dearing, 2002). We found that items describing NBEs following public transgressions were not correlated as strongly with empathic concern as items describing NBEs following private transgressions (Wolf et al., 2010). On the basis of these and related findings, we concluded that it is better to assess shame proneness with item scenarios that are public rather than private and guilt proneness with item scenarios that are private rather than public.

How Should Guilt Proneness and Shame Proneness Be Measured?

No existing scale measures guilt proneness and shame proneness using both the self–behavior and public–private distinctions, nor does any existing measure differentiate emotional and behavioral responses to transgressions. This is problematic because both distinctions have received empirical support and emotional and behavioral responses to transgressions are conceptually and empirically distinct (Wolf et al., 2010). Therefore, the current research was designed to develop a new scale that incorporates both the self–behavior and public–private distinctions and that distinguishes emotional responses from action orientations. This scale, the GASP, is shown in the Appendix.

The GASP assesses emotional traits (i.e., guilt proneness and shame proneness) rather than emotional states (i.e., feelings of guilt and shame in the moment). It is a scenario-based measure in which respondents read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As respondents read each scenario, they are asked to imagine themselves in that situation and indicate the likelihood that they would react in the way described.

The GASP contains two guilt-proneness subscales that assess NBEs and repair responses to private transgressions or failures and two shame-proneness subscales that assess NSEs and withdrawal responses to publically exposed transgressions or failures. Guilt–NBE items describe feeling bad about how one acted (e.g., “you would feel that the way you acted was pathetic”). Guilt–repair

items describe action tendencies (i.e., behavior or behavioral intentions) focused on correcting or compensating for the transgression (e.g., “you would try to act more considerately toward your friends”). Shame–NSE items describe feeling bad about oneself (e.g., “you would feel like a bad person”). Shame–withdraw items describe action tendencies focused on hiding or withdrawing from public (e.g., “you would avoid the guests until they leave”).

One might wonder why we chose not to fully cross the self–behavior and public–private dimensions, which would have resulted in eight subscales rather than four. That is, the GASP does not contain items describing NBEs or repair responses to public transgressions, nor does it contain NSEs or withdrawal responses to private transgressions. Although it is certainly possible for people to experience shame following private transgressions and guilt following public transgressions, we found that, from a measurement standpoint, the private–shame and public–guilt hybrids were just that—hybrids (Wolf et al., 2010). When we experimentally crossed the public–private dimension with the self–behavior dimension, the private–shame and public–guilt items did not differentiate shame and guilt as well as the public–shame and private–guilt items (Wolf et al., 2010). We do not see the utility in assessing the hybrid combinations of public–guilt and private–shame given the ambiguity regarding what those subscales would measure and the time costs associated with having respondents complete additional items.

To clarify our previous findings, we draw an analogy to a microscope. Just because one cannot see an object when a microscope is on low power does not mean that the object being viewed does not exist. In our case, the microscope—or measurement tool—is the GASP. Measuring guilt and shame optimally requires calibrating the items so they focus on guilt and shame in their purest forms rather than on hybrid combinations of the two emotions. By measuring NBEs and repair responses to private transgressions and NSEs and withdrawal responses to public transgressions, we can more accurately detect individuals’ propensity to experience guilt and shame in their everyday lives. The current research shows how these emotional dispositions and behavioral tendencies relate to common dimensions of personality and explores their differential effects on unethical decision making, delinquency, and psychological functioning.

Research Overview

Study 1 describes the scale-development process, which involved conducting exploratory factor analyses (EFAs) to select items for the scale and confirmatory factor analyses (CFAs) to test its factor structure. In addition, as part of the scale-development process, we tested the internal reliability and construct validity of the GASP with a wide array of criterion variables.

In Study 2, we tested the reliability and predictive validity of the GASP with a large nationwide sample of American adults. Given that guilt is considered the “quintessential moral emotion” (Eisenberg, 2000, p. 666) and that research on moral emotions consistently reveals that guilt is more moral than shame (Tangney & Dearing, 2002; Tangney et al., 2007), we hypothesized that the guilt subscales of the GASP would be particularly well suited to predicting unethical decision making and antisocial behavior. To test this hypothesis, we investigated whether adults high in guilt proneness (a) had more moral personality profiles, (b) made fewer

unethical business decisions, (c) engaged in less delinquent behavior, and (d) were less likely to lie for monetary gain. Study 2 also investigated how guilt and shame proneness relate to psychological functioning, specifically, rumination and depressive symptoms. Prior research has indicated that proneness to shame (but not guilt) is related to more negative psychological symptoms (Stuewig & McCloskey, 2005; Tangney & Dearing, 2002; Tangney et al., 2007). Accordingly, Study 2 tested whether the shame subscales of the GASP were associated with greater rumination and depressive symptoms.

Study 3 focused on the utility of the guilt–NBE scale for predicting future unethical behavior. This study tested whether master's of business administration (MBA) students with high guilt–NBE scores were more honest and ethical negotiators as judged by negotiation counterparties.

Study 1

Constructing Items for the GASP

Each item in the GASP describes a personal transgression. We created an initial pool of 47 private transgressions and 51 public transgressions by reviewing the transgressions included in the five existing guilt- and shame-proneness inventories: TOSCA-3 (Tangney et al., 2000), DCQ (Johnson et al., 1987), Anxiety Attitude Survey (Perlman, 1958), Beall Shame-Guilt Test (Beall, 1972), and Measure of Susceptibility to Guilt and Shame (Cheek & Hogan, 1983). We compiled transgressions from these extant measures to construct a comprehensive pool of personal transgressions to be used as scenarios in the new measure.¹

In a preliminary study, we had 291 undergraduate students rate the severity (1 = *not at all severe*, 7 = *very severe*) of the transgressions to match the private and public scenarios on severity and ensure that the final pool of items contained transgressions that were low, medium, and high on severity. After matching the public and private stems on severity, we factor analyzed the severity ratings to identify and exclude items that functioned differently from the rest of the pool. The result of this process was a set of 30 private transgressions and 30 public transgressions matched on severity. These transgressions represent the public–private dimension of the GASP.

We created a pool of items by writing responses to each of the 60 transgressions (one response for each transgression). There were two types of guilt responses (NBEs and repair action tendencies) randomly assigned to the private transgressions, and two types of shame responses (NSEs and withdrawal action tendencies) randomly assigned to the public transgressions. The result of this process was 60 potential GASP items (15 for each subscale).

Hypotheses

Factor structure. As the GASP includes four subscales, we expected it to have an oblique four-factor structure. We hypothesized correlations among the four factors for both theoretical and empirical reasons. We expected guilt–NBE and guilt–repair to be correlated because prior research has found that NBEs and repair action tendencies are both indicative of dispositional guilt proneness (Tangney & Dearing, 2002; Wolf et al., 2010), and both were assessed with private transgressions. Likewise, we expected

shame–NSE and shame–withdraw to be correlated because prior research has suggested that NSEs and withdrawal action tendencies are both indicative of dispositional shame proneness (Tangney & Dearing, 2002; Wolf et al., 2010), and both were assessed with public transgressions. In addition, we also expected a correlation between guilt–NBE and shame–NSE because both are negative self-conscious emotions and feelings of guilt and shame often occur in tandem. When individuals commit transgressions, they often feel bad both about their behavior and about themselves. In extant guilt- and shame-proneness inventories, guilt and shame subscales tend to show substantial correlations (e.g., $r_s = .39-.75$), even though they are often differentially correlated with other measures, such as empathy and self-esteem (e.g., Tangney & Dearing, 2002; Wolf et al., 2010).

Reliability. Alpha coefficients tend to show lower reliability in scenario-based measures because each item contains unique variance for the scenario (e.g., transgression) as well as common variance for the psychological construct underlying the response (Tangney, 1996; Tangney & Dearing, 2002). For example, reliability coefficients for the TOSCA-3 (which has 16 items in each subscale) tend to range from .60 to .80 (Tangney & Dearing, 2002; Wolf et al., 2010). Because the GASP is a scenario-based measure with only four items in each subscale, we set a benchmark of .60 for evaluating the internal reliability of the subscales. Setting a benchmark of .60 is consistent with recommendations offered by Schmitt (1996) and John and Benet-Martinez (2000) that researchers should determine appropriate levels of alpha according to the measurement context. Alpha coefficients of .60 or higher would ensure that the reliability of the GASP is similar to the reliability of other guilt- and shame-proneness scales.

Construct validity. On the basis of previous studies of guilt and shame proneness (e.g., Cohen, 2010; Tangney & Dearing, 2002; Wolf et al., 2010), we hypothesized that the guilt subscales would be significantly correlated with empathic concern, perspective taking, conventional morality, and promotion orientation and negatively correlated with measures of unethical and antisocial behavior (e.g., lying in negotiation, aggression). Conversely, we hypothesized that the shame subscales would be significantly correlated with personal distress, neuroticism, hostility, low self-esteem, and low self-compassion. If the hypothesized correlations were significant, it would provide evidence of construct validity for the GASP. Moreover, if we found that the guilt subscales were correlated with greater disapproval of unethical negotiation behavior (e.g., lies, bribes), it would provide initial evidence of the utility of the GASP for detecting individuals susceptible to unethical behavior.

In addition to the variables for which we had clear hypotheses, we also included a variety of other measures for exploratory purposes (e.g., religiosity, moral identity, social desirability). The purpose of including a wide array of criterion variables was to be thorough in our development and validation of the GASP and to

¹ We modified scenarios that were long, confusing, outdated, or redundant. Transgressions that were ambiguous with regard to whether they were public or private were modified to be explicitly public or private, and some were changed from public to private or private to public to ensure that the public and private scenarios included similar content areas (e.g., deception, rudeness, selfishness, incompetence).

offer potential users of the GASP some insight into the relationships they might expect to find should they choose to include the scale in their own research.

In the tests of construct validity, we focused on the bivariate (zero-order) correlations between the GASP and theoretically related measures. Our choice to analyze each GASP subscale separately is at odds with Tangney and colleagues' (2000) recommended scoring for the TOSCA-3, which utilizes semipartial correlations or standardized residuals computed from regression equations (e.g., Stuewig et al., 2010; Tangney & Dearing, 2002). With the TOSCA-3, instead of examining the raw scale scores, the common variance shared by guilt and shame is removed so researchers can investigate the effects of shame-free guilt and guilt-free shame. The statistical rationale underlying this decision is that guilt and shame are cooperative suppressors (Paulhus, Robins, Trzeesniowski, & Tracy, 2004), such that each of their regression weights increase when they are both included in a regression analysis.

With the TOSCA-3, there is necessarily some statistical dependence between the guilt and shame items because they are assessed with identical transgression scenarios. Utilizing semipartial correlations or standardized residuals, then, might be desirable for removing this shared error variance. In the GASP, however, each item contains a different transgression scenario, so there is less systematic overlap in the unique variances for the guilt and shame items. Yet we still expected the subscales to be correlated (i.e., have shared variance) because, at their core, guilt and shame are fundamentally similar—they are both negative self-conscious emotions evoked by awareness that one has failed or done something wrong (Tracy & Robins, 2004). While it is possible to statistically compute measures of shame-free guilt and guilt-free shame, we are skeptical of the utility of such computations given that, phenomenologically, people are unlikely to experience guilt without a hint of shame or shame without a tinge of guilt. What is the value in examining the unique effects of guilt and shame if the emotions are unlikely to be experienced uniquely? We contend that removing the shared variance—"the generalized negative self-consciousness" (Paulhus et al., 2004, p. 315)—obscures the assessment of guilt proneness and shame proneness because negative self-consciousness is a fundamental component of both emotions. Thus, throughout the article, we focus primarily on bivariate correlations rather than semipartial correlations (Lynam, Hoyle, & Newman, 2006). Nevertheless, to facilitate comparisons with prior research on guilt and shame proneness, we present both bivariate and semipartial correlations for Studies 1 and 2. We computed the semipartial correlations separately for the emotional and behavioral subscales. That is, for guilt–NBE, we controlled for shame–NSE, and for shame–NSE, we controlled for guilt–NBE. For guilt–repair, we controlled for shame–withdraw, and for shame–withdraw, we controlled for guilt–repair.

Method

Participants and procedure. A total of 450 undergraduate students (53% women) at the University of North Carolina at Chapel Hill completed an hour-long online survey on personality assessment to fulfill a research requirement. The survey included 60 guilt- and shame-proneness items, as well as a number of other individual-difference measures. The guilt and shame items were presented in a randomized block prior to the administration of

other measures. For these items, participants read a description of a personal transgression and indicated the likelihood that they would respond in the way described (1 = *very unlikely*, 2 = *unlikely*, 3 = *slightly unlikely*, 4 = *about 50% likely*, 5 = *slightly likely*, 6 = *likely*, 7 = *very likely*). The Appendix contains the complete instructions.

After completing the guilt and shame items, participants responded to various questionnaires that assessed theoretically related and exploratory criterion variables. These questionnaires were administered in a randomized block following the administration of the guilt and shame items. The order of the inventories and the order of the items within each inventory were randomized for each participant.

The following questionnaires were included in the survey: Interpersonal Reactivity Index (Davis, 1980), Conventional Morality scale (Tooke & Ickes, 1988), Big Five-44 inventory (John, Donahue, & Kentle, 1991), Self-Importance of Moral Identity Scale (Aquino & Reed, 2002), New Indices of Religious Orientation inventory (Francis, 2007), Aggression Questionnaire (AQ; Buss & Perry, 1992), Rosenberg Self-Esteem scale (Rosenberg, 1965), Self-Compassion scale (Neff, 2003), Self-Monitoring scale (Snyder & Gangestad, 1986), Regulatory Focus scale (Lockwood, Jordan, & Kunda, 2002), Social Desirability subscale from the Balanced Inventory of Desirable Responding (Paulhus, 1991), and the Self-Reported Inappropriate Negotiation Strategies II scale (SINS II; Lewicki, Saunders, & Barry, 2007). All scales (and subscales) were scored by averaging the items, except the Self-Monitoring scale (Snyder & Gangestad, 1986) and the Social Desirability subscale (Paulhus, 1991), which were computed as sum scores.

One goal of this research was to develop a measure that could be used to predict unethical decision making and behavior. Thus, we were particularly interested in the relationship between the guilt subscales of the GASP and the endorsement of unethical bargaining, as assessed with the SINS II (Lewicki et al., 2007). The SINS II contains seven subscales: competitive bargaining (e.g., extreme opening offers), attack opponent's network (e.g., attempting to get one's opponent fired), false promises (e.g., promising concessions that one will not provide), misrepresentation (e.g., misrepresenting information to one's opponent), inappropriate information gathering (e.g., bribing people to get information about one's opponent), strategic manipulation of positive emotion (e.g., feigning liking), and strategic manipulation of negative emotions (e.g., feigning anger). Respondents indicated the extent to which they found each tactic appropriate or inappropriate (1 = *very inappropriate*, 2 = *inappropriate*, 3 = *slightly inappropriate*, 4 = *neutral*, 5 = *slightly appropriate*, 6 = *appropriate*, 7 = *very appropriate*). Of the seven SINS II subscales, attack opponent's network, false promises, misrepresentation, and inappropriate information gathering are generally regarded as unethical, whereas competitive bargaining and strategic manipulation of positive and negative emotions tend to be judged as neutral or slightly appropriate (Cohen, 2010; Lewicki et al., 2007).

Data analysis.

Item selection. The data analysis proceeded in stages. We began by splitting the data-set into random halves of 225 observations each. First, using Half 1 of the data-set, we examined endorsement rates and variances and deleted problematic items. Problematic items included those with means near the top or bottom ends of the scale, a restricted range, or strong skew or

kurtosis. Then, we conducted EFAs on the remaining items, separately for each of the four subscales. The EFAs were done separately for each factor so as to maximize the internal consistency within each GASP subscale. That is, we were less concerned with the overall factor structure of the GASP and more concerned with developing four internally reliable subscales. In a sense, each subscale is actually its own independent scale, and that is how we treated the factors in the scale-development process.

In accordance with current recommendations on item-level factor analysis (Stucky, Gottfredson, & Panter, in press; Wirth & Edwards, 2007), all the factor analyses that we report were computed with WLSMV estimation (mean- and variance-adjusted weighted least squares) in Mplus 5.1 (Muthén & Muthén, 1998–2007). Initially, we examined one-factor, two-factor, and three-factor solutions. We chose items with statistically significant factor loadings and then those that were .4 or above. Items that did not load highly were excluded because a low loading indicates that the item functions differently than the rest of the items in the pool. Next, we computed additional EFAs on the remaining items to identify the four best items. We used an iterative process in which we excluded items with low loadings and computed subsequent EFAs until we found four items for each subscale.

After selecting items, we computed CFAs with Half 2 of the data-set to test the factor structure of the GASP. Factor variances were fixed at 1 to set the scale of the latent variables; all other parameters were estimated. We tested the hypothesized four-factor model, as well as eight plausible alternative models (MacCallum, 2003; Preacher, 2006). We compared each alternative model to the hypothesized model with chi-square difference tests, using the DIFFTEST option of Mplus (Muthén & Muthén, 1998–2007). A significant chi-square difference indicates that the alternative model does not fit as well as the hypothesized model.

We assessed model fit with chi-square, root-mean-square error of approximation (RMSEA), comparative fit index (CFI), and Tucker-Lewis index (TLI). Well-fitting models meet some or all of the following criteria: nonsignificant chi-square, $RMSEA < .06$, $CFI > .95$, and $TLI > .95$ (Hu & Bentler, 1999; Yu, 2002). Degrees of freedom vary for the chi-square tests because they are calculated differently with WLSMV estimation than traditional estimation methods (Muthén & Muthén, 1998–2007). Because of the variation in the degrees of freedom, we report the number of estimated (i.e., free) parameters in each model.

Reliability and validity. Following the factor analyses, we recombined the data and tested the internal reliability and construct validity of the GASP. We examined reliability with coefficient alpha (Cronbach, 1951; John & Benet-Martinez, 2000; Schmitt, 1996). We investigated construct validity by examining correlations between the GASP subscales and theoretically related variables—variables that have been linked to guilt and shame in previous research (cf. Cronbach & Meehl, 1955; John & Benet-Martinez, 2000; Wolf et al., 2010).

Results

Item selection. We selected items using the first half of the data-set. EFAs of each subscale yielded significant factor loadings ($\lambda_s > .46$, $ps < .05$) and good model fit (see Table 1). These results indicate that each subscale has a unidimensional structure.

Table 1
Study 1: Exploratory Factor Analyses of Each of the GASP Subscales

Factor	Eigenvalues	χ^2	p	RMSEA	CFI	TLI
Guilt–NBE	2.22, .68, .58, .53	0.56	.76	.000	1.00	1.01
Guilt–repair	2.04, .80, .62, .54	4.53	.10	.075	0.98	0.96
Shame–NSE	2.08, .77, .58, .56	1.78	.41	.000	1.00	1.00
Shame–withdraw	1.93, .74, .73, .59	0.65	.72	.000	1.00	1.02

Note. $N = 225$ (Half 1 of the data-set). Exploratory factor analyses calculated with weighted least squares mean and variance estimation. All models had four estimated parameters and two degrees of freedom. GASP = Guilt and Shame Proneness scale; RMSEA = root-mean-square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; NBE = negative behavior-evaluation; NSE = negative self-evaluation.

Factor structure. We tested the factor structure of the GASP with the second half of the data-set. As shown in Table 2, the hypothesized four-factor oblique model fit well, and all factor loadings were significant ($\lambda_s > .48$, $ps < .05$). Moreover, as indicated by the significant chi-square difference tests, none of the eight alternative models fit as well as the hypothesized four-factor model.²

Reliabilities, descriptive statistics, and subscale correlations. Next, we recombined the data and tested the internal reliability and construct validity of the scale using the full sample. We scored the GASP by averaging the four items in each subscale. Table 3 presents alpha coefficients, means, standard deviations, and correlations among the subscales. The reliabilities all exceeded our benchmark of .60—clear evidence of reliability given that the GASP is a scenario-based measure with only four items in each subscale. The means indicate that, on average, NBEs, repair responses, and NSEs were rated as slightly likely responses to transgressions, whereas withdraw responses were rated as unlikely.

As shown in Table 3, with the exception of shame–withdraw, the GASP subscales were significantly correlated with one another. The correlation between guilt–NBE and guilt–repair suggests that individuals who are prone to making NBEs following private transgressions are also prone to enacting repair-oriented behaviors following private transgressions. The correlation between shame–NSE and shame–withdraw was significant but small in magnitude, indicating that while NSEs and withdrawal behaviors following public transgressions share some similarity, they are unique types of responses to transgressions that should not be confounded. The correlations between shame–NSE and the two guilt subscales were also significant (and moderately high in magnitude), indicating that people who are prone to feeling bad about themselves after committing public transgressions are also prone to feeling bad about their behavior and taking repair-oriented actions after committing private transgressions.

² In addition to the alternative models reported in Table 2, we also attempted to test a hierarchical factor model with a second-order guilt factor and a second-order shame factor (and each of the four GASP subscales as first-order factors). This model would not estimate properly because it was underidentified with only two first-order factors for each second-order factor.

Table 2
Study 1: Confirmatory Factor Analyses of the GASP

Model	Estimated parameters	χ^2	RMSEA	CFI	TLI	χ^2_{diff} (df)
1. Four-factor oblique model: guilt–NBE, guilt–repair, shame–NSE, shame–withdraw	118	71.54*	.045	.97	.97	—
2. Three-factor oblique model A: guilt, shame–NSE, shame–withdraw	115	85.65*	.056	.95	.96	17.75 (3)*
3. Three-factor oblique model B: shame, guilt–NBE, guilt–repair	115	303.51*	.148	.64	.71	161.84 (3)*
4. Three-factor oblique model C: emotional response, guilt–repair, shame–withdraw	115	90.38*	.061	.94	.95	21.12 (3)*
5. Three-factor oblique model D: guilt–NBE, shame–NSE, behavioral response	115	297.76*	.148	.65	.71	197.13 (3)*
6. Two-factor oblique model A: guilt, shame	113	308.92*	.150	.64	.71	167.52 (4)*
7. Two-factor oblique model B: emotional response, behavioral response	113	310.40*	.152	.63	.70	184.16 (4)*
8. Two-factor oblique model C: shame–withdraw, other three subscales combined	113	180.79*	.06	.94	.93	35.60 (5)*
9. One-factor model	112	316.53*	.154	.63	.69	221.24 (5)*

Note. $N = 225$ (Half 2 of the data-set). Confirmatory factor analyses calculated with weighted least squares mean and variance (WLSMV) estimation. Degrees of freedom for the WLSMV estimator are not calculated in the usual way; thus, we show the number of estimated (free) parameters to denote increasing restrictions across models. The chi-square difference tests (χ^2_{diff}) compared each of the alternative models to Model 1 (the DIFFTEST option of Mplus was employed to conduct the chi-square difference tests). GASP = Guilt and Shame Proneness scale; RMSEA = root-mean-square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; NBE = negative behavior-evaluation; NSE = negative self-evaluation.

* $p < .05$.

Construct validity. Table 4 presents correlations of the four GASP subscales with other individual-difference measures. As predicted, the guilt subscales were both significantly positively correlated with empathic concern, perspective taking, conventional morality, and promotion focus. The guilt subscales also were significantly positively correlated with other measures related to ethics and prosociality (e.g., moral identity internalization, moral identity symbolization, intrinsic religiosity, agreeableness, and conscientiousness) and significantly negatively correlated with measures related to antisocial behavior (anger, hostility, physical aggression, and verbal aggression) and unethical behavior (attack opponent's network, false promises, misrepresentation, inappropriate information gathering, misrepresentation of positive emotions, and misrepresentation of negative emotions). Also as

predicted, both shame subscales were significantly correlated with personal distress, neuroticism, low self-esteem, and low self-compassion (see Table 4). The predicted correlation between shame–NSE and hostility was nonsignificant, but there was a significant positive correlation between shame–withdraw and hostility.

Interestingly, there was a divergent pattern of correlations for the two shame subscales and many of the other inventories. Shame–withdraw was positively correlated with several of the variables related to unethical and antisocial behavior (e.g., attack opponent's network, false promises, anger, and physical aggression), whereas shame–NSE was negatively correlated with these variables. In many cases, the shame–NSE correlations were nonsignificant once the shared variance with guilt–NBE was partialled out. The shame–withdraw correlations, however, remained significant when the shared variance with guilt–repair was partialled out (see Table 4).

GASP versus the TOSCA-3. As noted in the introduction, the TOSCA-3 (Tangney & Dearing, 2002; Tangney et al., 2000) is currently the most widely used guilt-proneness and shame-proneness scale, and much of what is known about these constructs comes from research with this measure. Therefore, we thought it would be informative to compare the SINS II correlations reported in Table 4 with correlations reported by Cohen (2010) for the TOSCA-3. The purpose of this comparison is to demonstrate that the GASP is just as effective as (if not more effective than) the TOSCA-3 at predicting disapproval of unethical behavior.

Cohen (2010, p. 575) reported significant bivariate correlations for TOSCA-3 guilt with false promises ($r = -.28$) and misrepresentation ($r = -.23$); the TOSCA-3 guilt correlations with the other SINS II subscales were nonsignificant, ranging from .01 (for competitive bargaining) to $-.15$ (for inappropriate information gathering). In comparison, the guilt subscales of the GASP yielded a stronger pattern of correlations. As shown in Table 4, the

Table 3
Descriptive Statistics, Reliabilities, and Correlations Among the GASP Subscales for Studies 1 and 2

Study	<i>M</i>	<i>SD</i>	1	2	3	4
Study 1 ($N = 450$)						
1. Guilt–NBE	5.10	1.23	(.69)			
2. Guilt–repair	5.50	0.96	.45*	(.61)		
3. Shame–NSE	5.47	1.03	.49*	.45*	(.63)	
4. Shame–withdraw	2.28	1.05	.04	–.03	.12*	(.66)
Study 2 ($N = 862$)						
1. Guilt–NBE	5.55	1.18	(.71)			
2. Guilt–repair	5.66	0.95	.54*	(.62)		
3. Shame–NSE	5.62	1.06	.54*	.43*	(.67)	
4. Shame–withdraw	3.03	1.18	–.06†	–.10*	.06†	(.63)

Note. Responses ranged from 1 (*very unlikely*) to 7 (*very likely*), with higher scores indicating more endorsement of the guilt or shame response. Zero-order correlations are presented with coefficient alphas on the diagonal. GASP = Guilt and Shame Proneness scale; NBE = negative behavior-evaluation; NSE = negative self-evaluation.

† $p < .10$. * $p < .05$.

Table 4

Study 1: Bivariate Correlations (With Semipartial Correlations in Parentheses) of the GASP With Other Individual-Difference Measures

Measure	Guilt–NBE	Shame–NSE	Guilt–repair	Shame–withdraw
Inventories related to ethical and/or prosocial behavior				
Empathic Concern (IRI)	.37* (.28*)	.26* (.09*)	.33* (.32*)	–.14* (–.12*)
Perspective Taking (IRI)	.29* (.28*)	.10* (–.05)	.29* (.28*)	–.12* (–.11*)
Conventional Morality	.57* (.46*)	.34* (.07†)	.43* (.42*)	–.11* (–.09*)
Moral Identity Internalization	.31* (.16*)	.36* (.24*)	.36* (.36*)	–.19* (–.18*)
Moral Identity Symbolization	.30* (.19*)	.28* (.15*)	.30* (.30*)	.06 (.07)
Intrinsic Religiosity (NIRO)	.36* (.32*)	.16* (–.02)	.19* (.20*)	.11* (.12*)
Extrinsic Religiosity (NIRO)	.05 (.00)	.11* (.09†)	.01 (.02)	.19* (.19*)
Inventories related to unethical and/or antisocial behavior				
Anger (AQ)	–.16* (–.14)	–.09* (–.01)	–.20* (–.19*)	.24* (.23*)
Hostility (AQ)	–.19* (–.20*)	–.02 (.08)	–.14* (–.14*)	.27* (.26*)
Physical Aggression (AQ)	–.31* (–.19*)	–.31* (–.19*)	–.26* (–.25*)	.12* (.11*)
Verbal Aggression (AQ)	–.22* (–.14*)	–.21* (–.12*)	–.21* (–.21*)	.03 (.03)
Competitive Bargaining (SINS)	–.19* (–.18*)	–.06 (.03)	–.09† (–.09*)	–.25* (–.25*)
Attack Opponent's Network (SINS)	–.31* (–.24*)	–.21* (–.07)	–.25* (–.24*)	.21* (.20*)
False Promises (SINS)	–.25* (–.19*)	–.17* (–.06)	–.18* (–.17*)	.20* (.20*)
Misrepresentation (SINS)	–.28* (–.23*)	–.17* (–.03)	–.20* (–.19*)	.09† (.09†)
Inappropriate Information Gathering (SINS)	–.26* (–.21*)	–.15* (–.03)	–.17* (–.17*)	.05 (.05)
Misrepresent Positive Emotion (SINS)	–.26* (–.25*)	–.08 (.06)	–.14* (–.14*)	–.04 (–.05)
Misrepresent Negative Emotion (SINS)	–.26* (–.23*)	–.10* (.03)	–.19* (–.19*)	–.11* (–.11*)
Self inventories				
Personal Distress (IRI)	.03 (–.04)	.13* (.14*)	.00 (.01)	.31* (.31*)
Self-Esteem	.05 (.10*)	–.08* (–.11*)	.10* (.09*)	–.27* (–.27*)
Self-Compassion	.03 (.12*)	–.15* (–.19*)	.03 (.03)	–.19* (–.19*)
Self-Monitoring	–.23* (–.21*)	–.10* (.01)	–.16* (–.15*)	.03 (.02)
Personality Inventories				
Neuroticism (Big Five)	.05 (–.05)	.18* (.18*)	.07 (.08†)	.23* (.23*)
Extraversion (Big Five)	–.01 (–.02)	.01 (.02)	–.01 (–.01)	–.05 (–.05)
Agreeableness (Big Five)	.33* (.25*)	.23* (.08†)	.27* (.26*)	–.19* (–.18*)
Conscientiousness (Big Five)	.24* (.20*)	.14* (.03)	.20* (.19*)	–.10* (–.09*)
Openness to Experience (Big Five)	.07 (.06)	.03 (.00)	.17* (.16*)	–.20* (–.19*)
Promotion Focus (RF)	.12* (.03)	.20* (.16*)	.28* (.28*)	–.13* (–.12*)
Prevention Focus (RF)	–.02 (–.08†)	.10* (.13*)	.05 (.06)	.23* (.23*)
Social Desirability (BIDR)	–.01 (.05)	–.11* (–.12*)	.08† (.07)	–.29* (–.29*)

Note. $N = 450$. The table presents zero-order correlations (with semipartial correlations in parentheses). The semipartial correlations were computed separately for the emotional and behavioral subscales. For guilt–NBE, we controlled for shame–NSE, and for shame–NSE, we controlled for guilt–NBE. For guilt–repair, we controlled for shame–withdraw, and for shame–withdraw, we controlled for guilt–repair. AQ = Aggression Questionnaire; BIDR = Balanced Inventory of Desirable Responding; GASP = Guilt and Shame Proneness scale; IRI = Interpersonal Reactivity Index; NBE = negative behavior-evaluation; NIRO = New Indices of Religious Orientation; NSE = negative self-evaluation; RF = Regulatory Focus scale; SINS = Self-Reported Inappropriate Negotiation Strategies II.

† $p < .10$. * $p < .05$.

guilt–NBE correlations were all statistically significant, ranging from $-.19$ (for competitive bargaining) to $-.31$ (for attack opponent's network). The guilt–repair correlations were similar; all were statistically significant except competitive bargaining, which was marginal. They ranged from $-.09$ (for competitive bargaining) to $-.25$ (for attack opponent's network). These results indicate that the guilt subscales of the GASP predict disapproval of unethical bargaining just as well as the TOSCA-3, if not better.

In regard to shame, Cohen (2010, p. 575) found that the TOSCA-3 shame subscale was largely uncorrelated with the SINS II subscales—none of the relationships were statistically significant, and all were close to zero. They ranged from $-.07$ (for competitive bargaining) to $.10$ (for misrepresentation). The shame subscales of the GASP yielded different results. We found dissociation in how the SINS II subscales correlated with shame–NSE versus shame–withdraw. Whereas shame–NSE

was significantly negatively correlated with five of the seven SINS II subscales (see Table 4), shame–withdraw was significantly positively correlated with attack opponent's network ($r = .21$) and false promises ($r = .20$) and marginally positively correlated with misrepresentation ($r = .09$). Although it is unclear why, shame–withdraw was also significantly negatively correlated with competitive bargaining ($r = -.25$) and misrepresentation of negative emotion ($r = -.11$). These comparisons suggest that confounding NSE and withdrawal responses to transgressions obfuscates the relationship between shame proneness and disapproval of unethical bargaining. Shame–NSE, like guilt–NBE, is associated with greater disapproval of unethical bargaining; shame–withdraw is not. These results underscore the importance of differentiating emotional dispositions from behavioral tendencies when measuring shame proneness. The GASP is able to make this distinction; the TOSCA-3 is not.

Discussion

Study 1 found that the GASP is a reliable measure of guilt proneness and shame proneness. Consistent with the notion that guilt is a moral emotion (Tangney & Dearing, 2002), students with high scores on the guilt subscales scored higher on inventories related to ethical and prosocial behavior and lower on inventories related to unethical and antisocial behavior. Consistent with the notion that shame proneness is a liability for psychological functioning, students with high scores on the shame subscales reported more neuroticism and personal distress and less self-esteem and self-compassion. These results support the conclusion that guilt proneness is healthier and more psychologically adaptive than shame proneness.

Measurement recommendations. The guilt subscales were highly correlated with one another, and they were similarly correlated with theoretically related measures. Despite these correlations, however, the CFAs revealed that the four-factor oblique model fit the data better than a model in which the guilt-proneness factors were collapsed. Therefore, our recommendation is to retain the guilt–NBE and guilt–repair subscales separately instead of combining them. Whereas guilt–NBE measures a moral emotional disposition, guilt–repair measures a moral action orientation. Both are associated with ethical responding, but, from our perspective, only the evaluative subscale—guilt–NBE—assesses an affective tendency.

In light of the moderate to high correlations among three of the four GASP subscales, we recommend that researchers examine the effects of each GASP subscale individually as opposed to including them all in a multiple regression analysis. Including all four subscales in the same analysis could result in multicollinearity problems that obscure statistical tests and lead to erroneous conclusions. As discussed earlier, our recommendations for scoring the GASP diverge from Tangney and colleagues' recommendations for scoring the TOSCA-3 (Tangney & Dearing, 2002; Tangney et al., 2000). Rather than examining shame-free guilt and guilt-free shame via semipartial correlations or standardized residuals, we suggest examining guilt proneness and shame proneness via zero-order correlations or separate regression analyses (cf. Lynam et al., 2006). The rationale is that the shared variance between guilt and shame is meaningful and should not be removed. Although some of the shared variance between the GASP subscales is likely attributable to measurement error, we suspect that a large portion of it reflects negative self-consciousness—a fundamental component of both guilt and shame. Removing negative self-consciousness from guilt and shame changes them from self-conscious emotions to different constructs entirely, and the meaning of those resulting constructs is unclear. Accordingly, we suggest the GASP subscales be examined separately in their raw rather than residualized form.

Shame–NSE versus shame–withdraw. Surprisingly, the shame–NSE and shame–withdraw subscales were not strongly correlated with one another, and they correlated differently with many of the criterion variables (e.g., the AQ, the SINS II). Whereas shame–NSE was negatively correlated with several of the measures of antisocial and unethical behavior, shame–withdraw was positively correlated with these measures. Moreover, shame–NSE was positively correlated with both guilt subscales, but shame–withdraw was not. This pattern of results suggests that the

shame–NSE and guilt–NBE subscales are similar in that they both measure negative self-consciousness, which deters unethical and aggressive behavior.

Study 1 extends prior theories of shame by showing that many of the maladaptive consequences of shame discussed in the extant literature—especially those relating to shame and destructive reactions to anger (Stuewig et al., 2010; Tangney et al., 2007)—stem from a withdrawal action orientation rather than a tendency to make NSEs. As prior research has not differentiated these two classes of responses, our findings represent an important theoretical and empirical contribution of the GASP. NSEs and withdrawal action tendencies are two distinct types of responses to publically exposed transgressions, and they should not be confounded. Whereas the NSE aspect of shame proneness is closely linked to guilt proneness, the withdrawal aspect is decidedly different. The tendency to hide following publically exposed transgressions is associated with greater reports of anger and physical aggression, as well as greater endorsement of unethical negotiation strategies. The tendency to make NSEs, on the other hand, is associated with fewer reports of anger and physical aggression and less endorsement of unethical negotiation strategies. These differences suggest that the shame–NSE subscale of the GASP assesses a moral personality trait but that the shame–withdraw subscale does not. In Study 2, we further explored the divergent consequences of shame–NSE and shame–withdraw for unethical decision making and antisocial behavior.

Study 2

Study 2 investigated the reliability and validity of the GASP in a large nationwide sample of American adults. Building on the findings from Study 1, we expected the two guilt subscales to be particularly well suited to predicting unethical decision making and delinquent behavior. Our reasoning was that feeling guilty about private transgressions indicates that one has internalized moral dictates (Smith et al., 2002) and therefore is unlikely to behave unethically even when public surveillance is absent. Furthermore, Tangney et al.'s (2007) review of the moral emotions literature concluded that “guilt but not shame is most effective in motivating people to choose the moral paths in life” (p. 355). Accordingly, we predicted that adults with high guilt-proneness scores would make fewer unethical decisions and commit less delinquent behavior. Given that guilt–NBE and guilt–repair exhibited a similar pattern of correlations in Study 1, we did not have any *a priori* hypotheses about which of the guilt subscales would be more sensitive to predicting unethicality and delinquency.

Our hypotheses about unethicality and delinquency primarily centered on guilt proneness, but we were also interested in exploring how the shame subscales related to these constructs. The results from Study 1 suggest that shame–withdraw measures the more antisocial or maladaptive aspect of shame proneness, whereas shame–NSE measures the more moral or prosocial aspect of shame proneness (the aspect of shame that is related more closely to guilt). Therefore, we predicted that adults with high shame–NSE scores would be less likely to make unethical decisions, whereas adults with high shame–withdraw scores would be more likely to make unethical decisions. Tangney et al. (2007) pointed out that “research has linked shame with a range of illegal, risky, and otherwise problematic behaviors” (p. 355). If we found

that the problematic effects of shame stemmed primarily from a withdrawal action orientation rather than from a tendency to make NSEs, it would shed light on why shame is often maladaptive. It would also provide support for our proposal that affective and behavioral responses should be differentiated rather than confounded when assessing dispositional shame proneness.

A second goal of Study 2 was to examine the link between shame proneness and psychological functioning. Prior research has indicated that proneness to shame is related to depression (Stuewig & McCloskey, 2005; Tangney & Dearing, 2002; Tangney et al., 2007), and in Study 1, we found that both shame subscales were correlated with neuroticism, personal distress, low self-compassion, and low self-esteem. In light of these relationships, we hypothesized that both shame subscales of the GASP would be correlated with rumination and depressive symptoms. We did not expect either of the guilt-proneness subscales to be correlated with rumination or depressive symptoms as previous research has generally found guilt proneness to be unrelated to psychological symptoms (Tangney & Dearing, 2002; Tangney et al., 2007).

Method

Participants. We recruited 862 adults from a nationwide online subject pool to participate in a 15-min survey on personality and decision making. The subject pool is administered by Northwestern University's Kellogg School of Management (Evanston, IL) and recruits participants via popular online forums and websites, such as Craigslist. In exchange for completing the survey, participants were entered in a raffle for nine \$50 gift certificates (the odds of winning were 1/100).

Participants lived in 45 U.S. states. Thirteen participants did not live in the United States (five lived in Canada, two lived Australia, one lived in England, one lived in Germany, one lived in Singapore, and one lived in Malaysia). The sample included 184 men (21%) and 678 women (79%).³ The mean age was 37 years ($SD = 13$, range = 18–85). The racial/ethnic composition of the sample was 75% White, 11% Asian, 4% Black, 3% Hispanic, and 7% other (the *other* category included respondents who did not self-identify with one of these categories, as well as respondents who reported multiple ethnicities).

Procedure. Participants completed an online survey that included the GASP (administered first) and demographic questions (administered last), along with a theoretically related measure or measures (administered second). To keep the survey short (i.e., less than 15 minutes), participants did not complete all the measures but rather were randomly assigned to complete only a subset. Participants either completed the HEXACO (Ashton & Lee, 2007, 2008), Unethical Business Decisions scale (UBD; Ashton & Lee, 2008), Delinquency Inventory (Ashton & Lee, 2008), Deception Game (Cohen, Gunia, Kim-Jun, & Murnighan, 2009), or Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) and Ruminative Response Scale (RRS; Treynor, Gonzalez, & Nolen-Hoeksema, 2003).⁴

Measures.

HEXACO. We examined personality with the 100-item HEXACO Personality Inventory—Revised (HEXACO-PI-R; Ashton & Lee, 2007, 2008). The HEXACO-PI-R is a comprehensive personality assessment that measures the six major dimensions of personality: (H) honesty–humility (i.e., sincerity, fairness,

greed avoidance, modesty), (E) emotionality (i.e., fearfulness, anxiety, dependence, sentimentality), (X) extraversion (i.e., social self-esteem, social boldness, sociability, liveliness), (A) agreeableness (i.e., forgiveness, gentleness, flexibility, patience), (C) conscientiousness (i.e., organization, diligence, perfectionism, prudence), and (O) openness to experience (i.e., aesthetic appreciation, inquisitiveness, creativity, unconventionality). In addition to these six factors, the HEXACO-PI-R also contains an altruism interstitial facet scale that measures the tendency to be sympathetic and generous toward those in need. The biggest conceptual difference between the HEXACO and Big Five (John et al., 1991) is the addition of the honesty–humility factor. People with high scores on the honesty–humility scale are less likely to make unethical business decisions and commit delinquent behaviors (Ashton & Lee, 2008).

A total of 170 participants completed the HEXACO-PI-R. Responses to the items ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). There were 16 items in each scale, except the altruism facet, which included only four items. We scored each scale by averaging the items: honesty–humility ($\alpha = .87$, $M = 3.46$, $SD = .67$), emotionality ($\alpha = .76$, $M = 3.39$, $SD = .52$), extraversion ($\alpha = .87$, $M = 3.28$, $SD = .63$), agreeableness ($\alpha = .85$, $M = 2.97$, $SD = .61$), conscientiousness ($\alpha = .83$, $M = 3.65$, $SD = .56$), openness to experience ($\alpha = .83$, $M = 3.53$, $SD = .61$), and altruism ($\alpha = .65$, $M = 3.93$, $SD = .70$).

Unethical business decisions. We used Ashton and Lee's (2008) UBD scale to investigate unethical decision making. The scale asks participants to make decisions in six dilemmas that pit financial interests against ethical concerns. For example, one question asks respondents to indicate whether they would vote for their company to begin a financially lucrative but environmentally hazardous mining operation for which they could receive a large bonus. A second question asks respondents to indicate whether they would market a profitable food product with known health hazards.

A total of 153 adults completed the UBD scale. After reading each dilemma, participants responded with a 4-point rating scale in which higher scores indicate greater unethicality. The order in which the dilemmas were presented was randomized for each participant. We averaged responses to the dilemmas to form a composite index of the tendency to make unethical business decisions ($\alpha = .74$, $M = 1.90$, $SD = .59$). In support of the validity of the UBD scale for measuring the tendency to make actual unethical decisions, Ersner-Hershfield, Cohen, and Thompson (2009) found that students with higher scores on the UBD scale were more likely to lie to another person in an economic decision-making task.

Delinquency. We used Ashton and Lee's (2008) Delinquency Inventory to investigate delinquency. We examined general delin-

³ It is typical for online studies to have more female participants than male participants (Dillman, Smyth, & Christian, 2009). We are uncertain as to the cause of this, as there were no gender restrictions on who was able to participate. It could be the case that women are generally more interested in online research or that fewer women work or work in lower paying jobs so they have more time and motivation to complete online studies.

⁴ The remaining 154 participants completed other measures not reported here.

quency (e.g., stealing, vandalizing), as well as workplace delinquency (e.g., stealing from work, vandalizing one's workplace). Unlike the other scales included in Studies 1 and 2, this assessment asks respondents to report the actual frequency of their past anti-social behaviors. Thus, negative correlations between the guilt subscales and delinquency would confirm our hypothesis that dispositional guilt proneness reduces delinquent behavior.

A total of 148 participants completed the Delinquency Inventory. There were 14 items: eight assessed workplace delinquency, and six assessed general delinquency. The workplace delinquency items asked participants to report (a) the percentage of work shifts they called in sick when not actually sick; (b) the percentage of work shifts they arrived late; (c) the percentage of work shifts they consumed alcohol when alcohol consumption was prohibited; (d) the percentage of work shifts they violated workplace safety standards; (e) the percentage of time at work they spent relaxing, hiding, and socializing instead of doing work; (f) the total dollar value of unauthorized cash or merchandise they took or consumed from their workplace; (g) the total dollar value of goods or services from their workplace that they gave to their friends; and (h) the total dollar value of damage they caused by deliberate vandalism, sabotage, or pranks.

The general delinquency items asked participants to report (a) the total dollar value of items they had purchased that they knew or suspected to have been stolen; (b) the total dollar value of items they had stolen, not including those taken from their workplace; (c) the total dollar value of items they smuggled into the country; (d) the number times they entered a theatre, concert, park, sports facility, et cetera without paying the entrance fee; (e) the total dollar value of property damage they caused by deliberate vandalism, sabotage, or pranks, not including damage done at their workplace; and (f) the percentage of exams they cheated on in high school and/or college.

Each item had eight response options, with higher scores indicative of more delinquency. We standardized and averaged the items to form composite indexes of workplace delinquency ($\alpha = .83$, $M = 0.00$, $SD = .69$) and general delinquency ($\alpha = .78$, $M = 0.00$, $SD = .69$). The workplace delinquency index was significantly correlated with the general delinquency index, $r(148) = .74$, $p < .001$.

Deception. In addition to collecting data with self-report measures, we also investigated actual unethical behavior with an economic decision-making task in which individuals could potentially gain money by deceiving another person. Participants had to decide whether to lie to another participant to potentially earn \$50 rather than \$25. Finding a relationship between the guilt subscales and honesty in this task would complement our other findings by demonstrating the predictive validity of the GASP with a behavioral criterion variable that does not rely on self-report.

A total of 79 participants completed an online version of the deception game (Cohen et al., 2009; Gneezy, 2005) in which participants had to decide whether to lie to another participant to potentially earn \$50 rather than \$25. The task was described to participants as a decision-making task in which they would interact with another individual who was also completing the task. They learned that for every 100 individuals who participated in the study, one would be selected at random to receive the money he or she earned in the task (and we paid participants accordingly). This

drawing was in addition to the drawing they were entered into for participating in the study.

Participants were presented with the following instructions for completing the task:

You have been assigned to play the role of the SENDER. You have been matched with one other individual in the study (the RECEIVER). You will never meet or learn the identity of the RECEIVER. During the interaction, the RECEIVER will have the opportunity to choose one of two payment options, Option A or Option B. The RECEIVER'S choice will determine the amount of money each of you could receive for the task.

Then, participants were shown a payment table with two options (A and B), along with these instructions:

If the other person chooses Option A, you (the SENDER) get \$25 and the other person (the RECEIVER) gets \$50. If the RECEIVER chooses Option B, you (the SENDER) get \$50 and the other person (the RECEIVER) gets \$25.

Important Information:

As the SENDER, you will not have the opportunity to choose Option A or Option B. Rather, the RECEIVER will choose one of these two payment options. However, the RECEIVER DOES NOT KNOW HOW MUCH MONEY IS ASSOCIATED WITH EACH OPTION. The RECEIVER only knows that one option allows the SENDER to get \$25 and the RECEIVER to get \$50, while another option allows the SENDER to get \$50 and the RECEIVER to get \$25. The RECEIVER will not see the monetary amounts you see in the table. The RECEIVER's payment table will be blank. The only information the RECEIVER will have about the payment options is information you (the SENDER) decide to send in a message.

You will have to make a decision about which message to send. You can choose to send either Message 1 or Message 2.

Message 1: Option A will earn the RECEIVER more money than Option B.

Message 2: Option B will earn the RECEIVER more money than Option A.

The procedure was then summarized on a new screen to ensure all participants understood the task. Following the summary, participants were provided with additional instructions informing them that their message was guaranteed to be followed (Cohen et al., 2009). This aspect of the procedure was explained to participants with these instructions:

In some conditions of this study, the SENDER sends a message before the RECEIVER makes a binding decision about whether to follow the recommendation provided in the message. In other conditions of this study, the SENDER sends a message after the RECEIVER makes a binding decision about whether to follow the recommendation provided in the message. You will be randomly assigned to either one of these conditions.

On the next screen, participants read:

You (the SENDER) have been randomly assigned to send a message AFTER the RECEIVER chooses whether to follow the recommendation you provide in your message. At this time, please click Next to find out whether the RECEIVER has decided to follow the recommendation you provide in your message.

Then, on the following screen, participants read:

The RECEIVER has decided to follow the recommendation you provide in your message. That is, the RECEIVER has decided to choose whichever payment option you identify as giving the RECEIVER more money. The RECEIVER's decision is final and binding. At this time, please think about which message you would like to send. After you have made your decision, select your choice.

After reading these instructions, participants selected either Message 1 (the true message) or Message 2 (the lie). After the message was ostensibly transmitted to the other party, participants responded to an open-ended question asking them to "explain why you chose this message."

Rumination and depressive symptoms. Study 2 also assessed psychological functioning. A total of 158 participants completed measures of rumination and depressive symptoms. We assessed rumination with the RSS (Treynor et al., 2003). The RSS contains two factors: brooding and reflection (Treynor et al., 2003). We focused on the brooding factor because it is the more maladaptive aspect of rumination—the facet that is associated with depressive symptoms concurrently and longitudinally (Treynor et al., 2003). The five items in the rumination–brooding scale "reflect a passive comparison of one's current situation with some unachieved standard" (Treynor et al., 2003, p. 256). For example, one item asks respondents how often they "think about a recent situation, wishing it had gone better." Respondents use a 4-point rating scale to indicate the frequency with which they ruminate (i.e., brood) when they are sad or depressed (1 = *never or almost never*, 4 = *always or almost always*). We scored the measure by averaging the items ($\alpha = .80$, $M = 2.30$, $SD = .71$).

We assessed depressive symptoms with the 20-item CES-D (Radloff, 1977). Respondents indicate on a 4-point frequency scale how many times in the past week they have experienced each of 20 statements. Responses range from 0 (*rarely or none of the time [less than one day]*) to 3 (*most or all of the time [5–7 days]*). The CES-D contains four categories of items: negative affect (blues, depressed, lonely, crying, sad), positive affect (hopeful, enjoy life, happy, as good as others), interpersonal problems (failure, fearful, disliked, people are unfriendly), and somatic symptoms (bothered, loss of appetite, can't concentrate, restless, talked less, everything takes effort, can't get going). The four items in the positive affect category were reverse scored, reflecting the lack of positive affect. Classical test theory indices of CES-D item responses consistently show high internal consistency for total scale scores. Accordingly, we scored the CES-D by creating a sum score for each respondent ($\alpha = .90$, $M = 18.08$, $SD = 11.04$, range = 2–51). Because the CES-D was computed as a sum score, we excluded participants who did not have complete data on all the items. This resulted in 145 observations for the CES-D (rather than 158).

Consistent with prior research on rumination and depressive symptoms (Treynor et al., 2003), the rumination–brooding and the CES-D scales were significantly correlated, $r(145) = .51$, $p < .001$. Greater rumination was associated with more depressive symptoms.

Results

Overall, the means, reliabilities, and correlations in this sample were similar to those obtained in the student sample (see Table 3).

All the reliability coefficients exceeded the .60 benchmark, indicating that the GASP is a reliable measure for adults as well as students. Having ensured the reliability of the GASP, we next tested its factor structure. Then, to capitalize on the large, diverse sample, we tested for gender, race, and age differences.

Factor structure. Figure 1 shows CFA results for the hypothesized four-factor oblique model. All factor loadings were significant ($\lambda_s > .51$, $p_s < .05$), and the fit indices were acceptable: χ^2 (estimated parameters = 118, $df = 55$, $N = 862$) = 257.29, $p < .001$, RMSEA = .065, CFI = .94, TLI = .96. As shown in the figure, the interfactor correlations for guilt–NBE, guilt–repair, and shame–NSE were strong and statistically significant. Despite the high correlations, however, the four-factor model fit the data better than an alternative three-factor model that collapsed the guilt–NBE and guilt–repair factors, $\chi^2_{diff}(3) = 68.45$, $p < .001$; χ^2 (estimated parameters = 115, $df = 57$, $N = 862$) = 310.58, $p < .001$, RMSEA = .073, CFI = .92, TLI = .95. The four-factor model also fit the data better than a two-factor model that collapsed the guilt–NBE, guilt–repair, and shame–NSE factors: $\chi^2_{diff}(4) = 151.59$, $p < .001$; χ^2 (estimated parameters = 113, $df = 57$, $N = 862$) = 434.22, $p < .001$, RMSEA = .088, CFI = .88, TLI = .93.

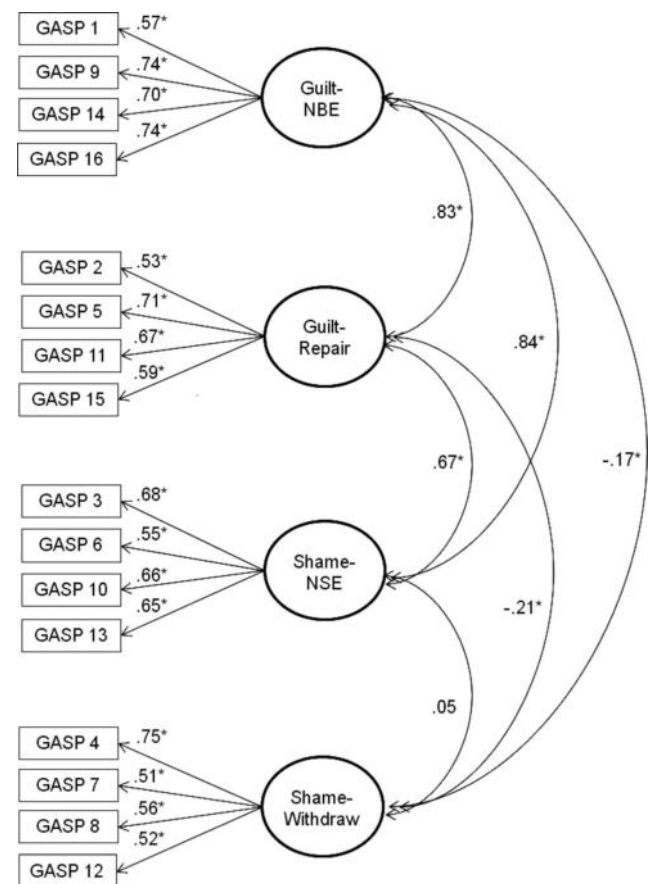


Figure 1. Study 2: Confirmatory factor analysis of the GASP in a sample of 862 adults (weighted least squares mean and variance estimation). Factor variances were fixed to 1; thresholds for each item were estimated but are not shown. GASP = Guilt and Shame Proneness scale; NBE = negative behavior-evaluation; NSE = negative self-evaluation. * $p < .05$.

These results confirm the oblique four-factor structure of the GASP. Despite the moderate to high correlations among the subscales, the factor analyses indicate that each of the four GASP subscales should be retained separately.

Gender, race, and age differences. We regressed each of the GASP subscales on gender (0 = male, 1 = female), race (0 = White, 1 = non-White), and age (in years) to test for mean differences due to these demographic variables. Table 5 shows the regression results. Women had significantly higher scores than men on guilt–NBE, guilt–repair, and shame–NSE (see Table 6). In addition, older respondents had significantly higher scores than younger respondents on guilt–NBE, guilt–repair, and shame–NSE. Compared to White respondents, non-White respondents had significantly higher scores on shame–withdraw. As shown in Table 5, the R^2 statistics for these models were fairly small ($R^2 = .06$ or less), with the exception of guilt–NBE, which was somewhat larger ($R^2 = .13$).

HEXACO. Table 7 shows the correlations of the GASP subscales with the 100-item HEXACO-PI-R subscales. The guilt subscales were both significantly positively correlated with the honesty–humility, extraversion, agreeableness, and conscientiousness factors, as well as the altruism facet. Shame–withdraw was significantly negatively correlated with these measures. Like the guilt subscales, shame–NSE was significantly positively correlated with honesty–humility, conscientiousness, and the altruism facet scale, but unlike the guilt subscales, shame–NSE was not significantly correlated with agreeableness or extraversion.

Unethical business decisions. In support of our hypothesis that guilt proneness reduces unethical decision making, participants with higher scores on the guilt subscales made fewer unethical business decisions. UBD scores were significantly negatively correlated with guilt–NBE and guilt–repair (see Table 7). In addition, UBD scores were also significantly correlated with shame–NSE and shame–withdraw, but in opposite directions (see Table 7). Whereas participants with higher scores on shame–NSE were less likely to make unethical business decisions, participants with higher scores on shame–withdraw were more likely to make unethical business decisions. These results support the conclusion that shame–withdraw assesses a more maladaptive dispositional tendency than shame–NSE.

Delinquency. Table 7 shows the correlations of the GASP subscales with workplace delinquency and general delinquency.

Table 5
Study 2: Multiple Regressions of the GASP Subscales on Gender, Race, and Age

Variable	Guilt–NBE	Shame–NSE	Guilt–repair	Shame–withdraw
Gender	.19*	.21*	.12*	–.05
Race	–.05	–.05	.03	.16*
Age	.28*	.10*	.22*	–.05
R^2	.13	.06	.06	.04

Note. $N = 862$. Standardized regression coefficients (β s) are presented. The variables were coded as follows: gender (0 = male, 1 = female), race (0 = White, 1 = non-White), and age (in years). GASP = Guilt and Shame Proneness scale; NBE = negative behavior-evaluation; NSE = negative self-evaluation.

* $p < .05$.

Table 6
Study 2: GASP Means (With Standard Deviations) by Gender

Gender	Guilt–NBE		Shame–NSE		Guilt–repair		Shame–withdraw	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Men	5.11	1.30	5.21	1.15	5.46	1.05	3.16	1.31
Women	5.67	1.11	5.73	1.00	5.71	0.92	2.99	1.14

Note. $N = 862$ (184 men, 678 women). Responses ranged from 1 (*very unlikely*) to 7 (*very likely*), with higher scores indicating more endorsement of the guilt or shame response. GASP = Guilt and Shame Proneness scale; NBE = negative behavior-evaluation; NSE = negative self-evaluation.

As predicted, adults with higher scores on the guilt subscales reported significantly less delinquency. Also as predicted, high shame–NSE scores were associated with significantly less delinquency, whereas high shame–withdraw scores were associated with significantly more delinquency. These findings support our hypotheses by showing that guilt proneness reduces delinquent behavior, whereas shame proneness has mixed effects on delinquency, with shame–NSE reducing delinquency and shame–withdraw increasing delinquency.

Deception. Because the procedure for the economic decision-making task was complex, we first read participants' responses to the open-ended question about their reasons for their message choice. We sought to verify that all participants understood the procedure and chose the message that they intended. Participants who selected the truth indicated that they were concerned with honesty or did not want to lie, as illustrated by these responses:

"Because it is the correct response and the right thing to do."

"Knowing that the sender made a binding selection, I felt it was important to be honest and select the true message."

"I figured I would tell him the truth. I didn't feel comfortable lying to him after he placed his trust in me."

"I felt that I should be honest about what the choices were. I would really feel bad about earning something if I had deceived someone to get it."

On the other hand, participants who lied indicated a self-interested desire to earn money, as illustrated by these responses:

"The outcome was more money personally."

"The receiver's response was binding, and he said he would trust whatever I told him. However, I personally would like to earn more money."

"I chose this because it benefits me, the SENDER. I will get twice the amount of money than the RECEIVER."

"I was told that the Receiver was definitely going to choose the option that I recommended. Message 2 gives me, the sender, more money in the end."

Responses from seven participants indicated confusion about the procedure (e.g., they did not understand that their counterpart had already made a binding decision to follow their message). We excluded the seven confused participants from the analyses be-

Table 7

Study 2: Bivariate Correlations (With Semipartial Correlations in Parentheses) of the GASP With Other Individual-Difference Measures

Measure	Guilt–NBE	Shame–NSE	Guilt–repair	Shame–withdraw
Honesty–humility	.51* (.46*)	.23* (–.05)	.40* (.38*)	–.24* (–.20*)
Emotionality	.18* (.04)	.27* (.21*)	.09 (.10)	.09 (.10)
Extraversion	.24* (.24*)	.07 (–.06)	.21* (.19*)	–.19* (–.17*)
Agreeableness	.30* (.36*)	–.02 (–.20*)	.26* (.24*)	–.16* (–.13†)
Conscientiousness	.37* (.25*)	.31* (.13†)	.47* (.45*)	–.21* (–.17*)
Openness to experience	.15† (.07)	.16* (.10)	.29* (.27*)	–.18* (–.15*)
Altruism facet	.50* (.42*)	.27* (.01)	.35* (.33*)	–.17* (–.14†)
Unethical business decisions	–.44* (–.30*)	–.34* (–.06)	–.34* (–.31*)	.22* (.19*)
Workplace delinquency	–.24* (–.18*)	–.16* (–.02)	–.19* (–.16*)	.29* (.28*)
General delinquency	–.28* (–.23*)	–.17* (.01)	–.31* (–.29*)	.27* (.24*)
Rumination–brooding	–.13 (–.23*)	.16* (.25*)	–.01 (.00)	.14† (.14†)
Depressive symptoms	–.17* (–.18*)	–.03 (.07)	–.08 (–.07)	.12 (.11)

Note. The table presents zero-order correlations (with semipartial correlations in parentheses). The semipartial correlations were computed separately for the emotional and behavioral subscales. For guilt–NBE, we controlled for shame–NSE, and for shame–NSE, we controlled for guilt–NBE. For guilt–repair, we controlled for shame–withdraw, and for shame–withdraw, we controlled for guilt–repair. GASP = Guilt and Shame Proneness scale; NBE = negative behavior-evaluation; NSE = negative self-evaluation.

† $p < .10$. * $p < .05$.

cause our interest was in predicting the deliberate choice to lie. This left us with a final sample of 72 adults who completed the deception game. Of these 72 participants, 23 lied (32%) and 49 were truthful (68%).

We tested whether the GASP subscales predicted the likelihood of lying with logistic regression. We examined each subscale separately. Adults high in guilt–NBE were significantly less likely to lie ($B = -0.44$, $SE = .20$, Wald $\chi^2 = 4.81$, $p = .03$, odds ratio = .64, 95% CI for odds ratio [.43, .95]), as were adults high in shame–NSE ($B = -0.53$, $SE = .24$, Wald $\chi^2 = 5.07$, $p = .02$, odds ratio = .59, 95% CI for odds ratio [.37, .93]). The relationship between guilt–repair and lying was marginal ($B = -0.52$, $SE = .29$, Wald $\chi^2 = 3.18$, $p = .07$, odds ratio = .60, 95% CI for odds ratio = [.34, 1.05]). The relationship between shame–withdraw and lying was nonsignificant ($B = 0.17$, $SE = .24$, Wald $\chi^2 = 0.51$, $p = .48$, odds ratio = 1.19, 95% CI for odds ratio = [.74, 1.91]). These results partially support our hypotheses by showing that adults with high scores on guilt–NBE and shame–NSE are less deceptive than those with low scores on guilt–NBE and shame–NSE. Although the results for guilt–repair and shame–withdraw were not statistically significant, the regression coefficients were in the predicted directions.

In a parallel fashion to the semipartial correlations reported in Tables 4 and 7, we also examined how shame-free guilt and guilt-free shame influenced lying. When lying was simultaneously regressed on both guilt–NBE and shame–NSE, the regression model was significant, $\chi^2(2) = 8.04$, $p = .02$, but neither guilt–NBE ($B = -0.34$, $SE = .21$, $p = .11$) nor shame–NSE ($B = -0.42$, $SE = .25$, $p = .09$) was significant. This indicates that the reduction in lying is due to the shared variance between guilt–NBE and shame–NSE, rather than to either of their unique effects. We interpret this result as showing that negative self-consciousness—an element of both guilt and shame—reduces lying. When lying was simultaneously regressed on both guilt–repair and shame–withdraw, the model was nonsignificant, $\chi^2(2) = 3.48$, $p = .18$, as were the unique effects of guilt–repair ($B = -0.50$, $SE = .29$, $p = .09$) and shame–withdraw ($B = 0.10$, $SE = .25$, $p = .71$).

Rumination and depressive symptoms. As shown in Table 7, only shame–NSE was significantly correlated with rumination; its relationship with shame–withdraw was marginal. Contrary to predictions, the relationships between the shame subscales and depressive symptoms were nonsignificant. Interestingly, however, we found evidence of a significant indirect effect of shame–NSE on depressive symptoms via rumination. A path analysis (computed in Mplus; Muthén & Muthén, 1998–2007) revealed that shame–NSE was associated with significantly higher levels of rumination ($\beta = .16$, $p = .04$) and that rumination, in turn, was associated with significantly more depressive symptoms ($\beta = .51$, $p < .001$). This indirect effect of shame–NSE on depressive symptoms via rumination was significant ($z = 2.00$, $p < .05$). A similar path analysis for shame–withdraw was marginal ($z = 1.77$, $p = .08$).⁵ Thus, although the direct effects of the shame subscales on depressive symptoms were nonsignificant, we did find a significant mediated effect of shame–NSE on depressive symptoms and a marginal mediated effect for shame–withdraw.⁶

As expected, neither guilt subscale was associated with rumination. However, guilt–NBE was associated with significantly lower levels of depressive symptoms. Although somewhat unexpected, this finding further supports the idea that guilt proneness is beneficial for psychological functioning.

Discussion

Study 2 tested the reliability, factor structure, and predictive validity of the GASP in a large, nationwide sample of American adults. The subscales were internally reliable, and the correlated

⁵ Controlling for gender (a known correlate of rumination and depression; Treynor et al., 2003) in the path analyses did not alter the results.

⁶ Although Baron and Kenny (1986) suggested that a significant direct effect is necessary for mediation, more recent studies of mediation have argued that only a significant indirect effect is required and that a significant direct effect is not (e.g., James, Mulaik, & Brett, 2006; Shrout & Bolger, 2002).

four-factor structure was confirmed. Analyses of demographic variables indicated that women and older respondents had higher scores on guilt–NBE, guilt–repair, and shame–NSE than men and younger respondents, respectively. Compared to White respondents, non-White respondents had higher scores on shame–withdraw.

Study 2 complemented Study 1 by providing evidence of the predictive validity of the GASP for detecting individuals susceptible to corruption and antisocial behavior. Adults with high scores on guilt–NBE and guilt–repair made fewer unethical business decisions and were less delinquent, both inside and outside the workplace. They reported stealing, smuggling, vandalizing, and cheating less than those with low guilt–proneness scores. These adults also had more moral personality profiles, as indicated by higher scores on honesty–humility and altruism. As in Study 1, the two guilt subscales exhibited similar correlations with the criterion variables. The fact that we did not find evidence of any consistent differential relationships for guilt–NBE and guilt–repair in either study surprised us somewhat because in prior work (Wolf et al., 2010), we did find evidence of differences, albeit small differences. Despite the similar pattern of correlations, however, we still recommend retaining guilt–NBE and guilt–repair separately because the factor analytic results suggest that the GASP is best represented as four factors rather than two or three. Moreover, as the findings from both Study 1 and 2 clearly indicate that the emotional and behavioral aspects of shame proneness should be distinguished, we think it is useful to do the same for guilt proneness.

Consistent with Study 1, we found a differential pattern of correlations for shame–NSE and shame–withdraw. Adults high in shame–NSE made fewer unethical decisions and engaged in less delinquent behavior than those with low scores on shame–NSE. They were also higher in honesty–humility, conscientiousness, and altruism. On the other hand, adults high in shame–withdraw made more unethical decisions, committed more delinquent behavior, and had lower scores on honesty–humility, agreeableness, conscientiousness, and altruism. These results provide further evidence of the antisocial nature of shame–withdraw and the relatively more prosocial nature of shame–NSE. The semipartial correlations reported in Table 7 indicate that the moral aspect of shame–NSE is largely attributable to the shared variance between guilt–NBE and shame–NSE. Whereas shame proneness (in its raw form) is associated with less delinquency and more ethical decision making, guilt-free shame is unrelated to these antisocial responses. The differences between the zero-order and semipartial correlations suggest that shame is a moral emotion to the extent that it co-occurs with guilt.

In addition to examining the predictive validity of the GASP with self-report measures, we also examined lying with an economic decision-making task. Adults with high scores on guilt–NBE and shame–NSE were significantly less likely to lie for the possibility of monetary gain. The lying results complement our other findings by demonstrating the predictive validity of the GASP with a behavioral criterion variable that did not rely on self-report. Shame–withdraw and guilt–repair did not significantly predict lying (although guilt–repair was marginal), suggesting that the GASP subscales that assess emotional dispositions (i.e., guilt–NBE and shame–NSE) might be relatively better at detecting

unethical individuals than the GASP subscales that assess action orientations (i.e., guilt–repair and shame–withdraw).

Finally, Study 2 also examined the relationship of the GASP subscales to rumination and depression. Contrary to our hypotheses, we did not find evidence of a direct effect of the shame subscales on depressive symptoms. However, we did find evidence of a significant indirect effect of shame–NSE on depressive symptoms via increased rumination (and a marginal indirect effect for shame–withdraw). Importantly, neither of the guilt subscales were correlated with rumination (and, descriptively, the correlations were negative). This differential pattern of correlations for shame–NSE and the guilt subscales complements the factor analytic results by showing shame–NSE is distinct from guilt proneness despite the moderately high correlations between shame–NSE, guilt–NBE, and guilt–repair.

Study 3

In Study 3, we sought to test the stability of guilt–NBE for predicting unethical behavior. We tested the hypothesis that negotiators high in guilt–NBE (as assessed 1 to 4 weeks prior to the negotiation) would commit fewer unethical bargaining behaviors than negotiators low in guilt–NBE and, consequently, would be judged as more honest by the counterparty. Due to limited timing for data collection, we were unable to administer the entire GASP scale. Instead, participants completed only the four guilt–NBE items. We chose to focus on guilt–NBE because Studies 1 and 2 suggested it is more predictive of unethical behavior than the other three GASP scales. Furthermore, because the guilt–NBE subscale focuses on emotional responses instead of behaviors, it maps more closely onto lay conceptions of guilt than the guilt–repair subscale.

Method

A total of 56 MBA students from negotiations classes at Northwestern University participated in the study. Participants completed the four-item guilt–NBE subscale of the GASP as part of an online survey.⁷ Half the participants completed the online survey during the first week of courses, and half completed it during Week 4. Because the timing of the administration had no effect on the results, we collapsed across this variable.

During Week 5 of the negotiations course, participants completed the Bullard houses negotiation as an in-class exercise (Karp et al., 2008; see also Kern & Chugh, 2009). Participants were randomly assigned to a buyer role or a seller role in a negotiation involving a real-estate transaction over the sale of family property—the Bullard houses ($N = 28$ negotiation dyads). Role materials were given to participants several days prior to the negotiation.

Participants assigned to the buyer role acted as real-estate agents working for Jones & Jones—a firm representing the Conrad Milton Hotel Group. Those assigned to the seller role acted as agents working for Downtown Realty—a firm representing the Bullard family. Unbeknownst to participants, the buyer and seller had incompatible interests. The buyer's agents were instructed to main-

⁷ The four guilt–NBE items were embedded in a larger survey. We did not want to overburden students with data collection, so the other 12 GASP items were not included in the survey.

tain their client's anonymity and not reveal the intended use of the property under any circumstances. The seller's agents, on the other hand, were instructed to only sell the property to a known buyer who fully disclosed the planned use of the property. Because of the seller's need for information regarding the identity of the buyer and the intended use of the property, there is considerable pressure on participants in the buyer role to act unethically during the negotiation, for example, by lying about who the buyer is or what the buyer intends to do with the property. Thus, following prior research with this negotiation (Kern & Chugh, 2009), our analyses focused on participants in the buyer role because only the buyer's role provides strong incentives to engage in unethical behavior.

Participants completed the negotiation in class, and they were aware that their negotiation behavior and outcomes would be discussed during the following class period. They were given one hour to negotiate. Immediately following the negotiation, they completed a yes–no checklist in which they reported whether their counterpart committed 13 unethical negotiation behaviors (cf. Kern & Chugh, 2009). These items were taken from the four subscales of the SINS II scale with means below the neutral midpoint (cf. Cohen, 2010; Lewicki et al., 2007): attack opponent's network, false promises, misrepresentation, and inappropriate information gathering. Participants were asked, "Which of these behaviors occurred (or do you suspect occurred) in your negotiation?" Participants circled either yes or no for each of the 13 behaviors. We calculated a sum score of *yes* responses ($M = 1.36$, $SD = 1.60$, range = 0–5). Higher scores indicate more unethical behavior. In addition to the checklist, participants were also asked, "How honest was the other party in the negotiation?" (1 = *not at all honest*, 7 = *very honest*; $M = 5.00$, $SD = 1.66$).

Results and Discussion

The guilt–NBE subscale was found to be reliable ($\alpha = .70$), so we proceeded to test whether it predicted buyers' unethical negotiation behavior, as judged by sellers. In support of our predictions, buyers high in guilt–NBE committed fewer unethical negotiation behaviors than buyers low in guilt–NBE, $r(28) = -.53$, $p = .004$. In addition, high guilt–NBE buyers were judged as more honest by the sellers, $r(28) = .43$, $p = .03$.

These results extend the findings from Studies 1 and 2 by providing additional behavioral evidence that the guilt–NBE subscale of the GASP predicts unethical behavior. Unlike the prior studies, Study 3 assessed guilt proneness 1 to 4 weeks prior to the outcome. That guilt–NBE predicted subsequent unethical behavior is compelling in that it suggests that guilt proneness is a temporally stable predictor of unethical behavior. We are well aware that this study did not examine the test–retest reliability of the GASP, so we cannot draw conclusions about the temporal stability of the measure overall. However, we are encouraged that guilt proneness can be assessed well before the focal outcome and still have a great deal of predictive power for forecasting dishonesty.

General Discussion

In this article, we introduced the GASP—a new guilt- and shame-proneness scale. The GASP contains two guilt subscales that assess NBEs and repair action tendencies following private transgressions and two shame subscales that assess NSEs and withdrawal action

tendencies following publically exposed transgressions. Each of the four subscales was found to be internally reliable among both undergraduate students and adults throughout the United States. CFAs supported the oblique four-factor structure of the GASP. Differentiating guilt proneness and shame proneness via the four GASP subscales addresses limitations inherent in all extant measures, most notably the failure of existing assessments to incorporate both the self–behavior and public–private distinctions and the failure to differentiate emotional and behavioral responses to transgressions.

Emotional Dispositions Versus Behavioral Tendencies

Whereas we did not find evidence of differential predictive abilities for the emotional and behavioral guilt subscales (both were similarly correlated with theoretically related criterion variables), we did find dissociation between the emotional and behavioral shame subscales. Shame–withdraw measures the darker, maladaptive aspect of shame proneness, while shame–NSE measures the more moral, prosocial aspect of shame proneness. In fact, it is unclear whether the shame–withdraw subscale actually measures shame at all given that it is largely unrelated to shame–NSE and is associated with more rather than less unethical decision making and antisocial behavior. In this sense, a withdrawal action orientation to publically exposed transgressions is not a moral emotion at all—it is neither moral nor an emotion. Instead, our results suggest that the items in the shame–withdraw subscale assess a maladaptive behavioral tendency that should be discouraged whenever possible. We have retained the label *shame* to link the GASP with extant literature on this construct. However, our use of the term shame should not be construed as implying that the shame–withdraw subscale measures an emotional disposition in the way that shame–NSE and guilt–NBE do.

Like shame–withdraw, the guilt–repair subscale also reflects a behavioral tendency rather than an emotional disposition. Unlike shame–withdraw, however, guilt–repair is a moral personality characteristic in that it inhibits unethical decision making and delinquency. As with shame–withdraw, we have retained the label *guilt* to be consistent with prior research on this construct even though the items assess an action orientation rather than an emotional disposition. In future work, it might be useful to drop the label *shame* from the withdrawal subscale and the label *guilt* from the repair subscale so as to clarify the distinction between emotional dispositions and behavioral tendencies.

Is Shame a Moral Emotion?

Although our findings support Tangney and colleagues' conclusion that guilt is more moral than shame (e.g., Tangney & Dearing, 2002; Tangney et al., 2007), our perspective diverges from theirs regarding the maladaptive nature of shame. Whereas the extant literature describes shame in an exceedingly negative light, our findings suggest qualifications of this view. Negative self-consciousness is captured by shame–NSE as well as guilt–NBE, and negative self-consciousness promotes ethical decision making and moral behavior. Shame is harmful when it leads to withdrawal behaviors, but our results suggest that the link between feelings of shame and withdrawal behaviors is much more tenuous than is implied by the extant literature.

Shame–NSE might assess the aspect of shame to which people refer when they disparagingly say that someone has no shame. Though anecdotal, this expression suggests that a modicum of shame

is considered a good thing, and our results support this conclusion if shame is defined as NSEs rather than withdrawal action tendencies. The moral aspect of shame proneness that is captured by the shame–NSE subscale is, in fact, captured in large part by the guilt–NBE subscale as well. In most cases, when both guilt–NBE and shame–NSE are included in a regression analysis predicting a variable indicative of moral decision making or behavior, only guilt–NBE retains its significance. This suggests that shame proneness is morally relevant to the extent that it contains an element of negative self-consciousness that is shared with guilt proneness.

Nonetheless, we view the significant bivariate (zero-order) relationship between shame–NSE and ethical decision making as important because it suggests that shame, like guilt, is a moral emotion. The fact that guilt–NBE and shame–NSE were both negatively correlated with measures of unethicity and delinquency lends credence to the notion that guilt and shame share much in common despite their differences.

Moral Emotions and Moral Behavior

We found that people who anticipate feeling guilty about private transgressions—those high in guilt–NBE—are less likely to lie, make unethical business decisions, and engage in antisocial behaviors such as cheating, theft, vandalism, and aggression. They are also more honest and ethical negotiators as judged by negotiation counterparties. In terms of personality, people with high guilt–NBE scores are more empathic, humble, conscientious, agreeable, and altruistic than those with low guilt–NBE scores. When thinking about how they would behave after committing transgressions that no one knows about, individuals high in guilt–NBE are more likely to indicate a desire to change or repair their behavior to prevent future mistakes. The fact that these individuals anticipate feeling guilty in response to private misdeeds is important because it suggests that public surveillance is not required to ensure their moral behavior. These results provide compelling evidence of the efficacy of guilt proneness for preventing unethical decision making and immoral behavior.

People who anticipate feeling ashamed of themselves after publicly exposed transgressions—those high in shame–NSE—share many of the positive qualities highlighted for individuals high in guilt–NBE. As with guilt–NBE, individuals with high shame–NSE scores are less likely to make unethical business decisions, commit delinquent behaviors, and lie for monetary gain. Thus, when shame proneness is defined as an affective disposition characterized by making NSEs following publicly exposed transgressions, it too is worthy of being labeled a moral emotional trait. However, the label of moral emotion does not apply when shame is defined as an action orientation characterized by hiding or withdrawing from public view following publicly exposed transgressions.

Directions for Future Research

Our findings indicate that the guilt–NBE subscale of the GASP is particularly useful for detecting individuals susceptible to corruption and unethical decision making. Although further validation research is required, the current findings suggest that managers could use the guilt–NBE subscale of the GASP to predict which employees are most likely to act dishonestly. This is an important direction for future research not only for practical reasons but also because few studies

have directly examined how emotions affect unethical behavior in the workplace. For instance, a recent meta-analytic review of unethical choices at work investigated how nine different individual characteristics affected unethical behavior but did not investigate emotions because “few behavioral ethics researchers have examined the relationship between affect and unethical choice” (Kish-Gephart, Harrison, & Treviño, 2010, p. 10). We hope that our introduction of the GASP facilitates research on moral emotions and organizational behavior. Such research could help bridge the gap between the more clinically focused literature on guilt and shame and the more organizationally focused literature on behavioral ethics.

The current work examined guilt proneness and shame proneness with American students and adults. Future research should investigate the reliability and factor structure of the GASP with samples from different populations. We mentioned organizational actors (e.g., managers and employees) as one interesting population to study. In addition, it could be illuminating to use the GASP in cross-cultural research—specifically, with Asian populations. Cross-cultural research suggests that Asians experience guilt and shame differently than Westerners (e.g., Benedict, 1946; Goetz & Keltner, 2007; Stipek, 1998; Tang, Wang, Qian, Gao, & Zhang, 2008; Wong & Tsai, 2007). Testing the functioning of the GASP with Asian respondents could help shed light on the similarities and differences between Asian and Western experiences of guilt and shame.

Thus far, our work with the GASP has focused on self-reported guilt proneness and shame proneness. An important direction for future research is to administer the GASP in a peer-report format. Examining the correspondence between self-reports and peer reports would be informative as it would allow researchers to test whether emotional traits can be accurately detected by observers. To our knowledge, this is as of yet an unexplored area of research.

It is important to keep in mind that the GASP measures emotional personality traits (i.e., guilt and shame proneness), not emotional states (i.e., feelings of guilt and shame). A high level of dispositional guilt proneness does not mean that one perpetually feels guilty. Likewise a high level of dispositional shame proneness does not mean that one constantly feels ashamed. In fact, our data suggest that there might be a negative relationship between state and trait guilt because guilt-prone individuals are less likely to enact unethical and antisocial behaviors that would presumably make them feel guilty. To our knowledge, no prior work has investigated the relationship between emotional traits and states. An interesting direction for future research, then, would be to ask people to report state levels of guilt and shame over the course of their daily lives and examine the correlations between these emotional states and dispositional guilt and shame proneness.

Conclusions

Overall, our findings indicate that differentiating the tendency to make NSEs from the tendency to engage in withdrawal behaviors following publicly exposed transgressions is critically important for understanding and measuring dispositional shame proneness. The GASP’s ability to distinguish NSEs from withdrawal action tendencies represents an important advantage of the scale over existing assessments. It is important to keep in mind, however, that though our results are clear in showing that the NSE side of shame is more moral than the withdrawal side (and that the withdrawal side might not actually be indicative of shame), our results are equally clear in

showing that guilt proneness is more adaptive than shame proneness in terms of psychological functioning. Unlike people high in guilt–NBE, people high in shame–NSE are more likely to be plagued by neuroticism, personal distress, low self-esteem, and low self-compassion. They are also more likely to ruminate when they are sad, which, in turn, is associated with increases in depressive symptoms. Shame proneness, then, appears to be somewhat of a mixed bag. It keeps people on the straight and narrow by inhibiting dishonesty and delinquency, but its moral status is superseded by guilt proneness, which, in addition to inhibiting dishonesty and delinquency, is relatively free from the psychological baggage associated with shame.

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Appendix

Guilt and Shame Proneness Scale (GASP)

Instructions: In this questionnaire you will read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

1	2	3	4	5	6	7
<i>Very Unlikely</i>	<i>Unlikely</i>	<i>Slightly Unlikely</i>	<i>About 50% Likely</i>	<i>Slightly Likely</i>	<i>Likely</i>	<i>Very Likely</i>
_____ 1. After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel uncomfortable about keeping the money?						
_____ 2. You are privately informed that you are the only one in your group that did not make the honor society because you skipped too many days of school. What is the likelihood that this would lead you to become more responsible about attending school?						
_____ 3. You rip an article out of a journal in the library and take it with you. Your teacher discovers what you did and tells the librarian and your entire class. What is the likelihood that this would make you would feel like a bad person?						
_____ 4. After making a big mistake on an important project at work in which people were depending on you, your boss criticizes you in front of your coworkers. What is the likelihood that you would feign sickness and leave work?						
_____ 5. You reveal a friend's secret, though your friend never finds out. What is the likelihood that your failure to keep the secret would lead you to exert extra effort to keep secrets in the future?						
_____ 6. You give a bad presentation at work. Afterwards your boss tells your coworkers it was your fault that your company lost the contract. What is the likelihood that you would feel incompetent?						
_____ 7. A friend tells you that you boast a great deal. What is the likelihood that you would stop spending time with that friend?						
_____ 8. Your home is very messy and unexpected guests knock on your door and invite themselves in. What is the likelihood that you would avoid the guests until they leave?						
_____ 9. You secretly commit a felony. What is the likelihood that you would feel remorse about breaking the law?						
_____ 10. You successfully exaggerate your damages in a lawsuit. Months later, your lies are discovered and you are charged with perjury. What is the likelihood that you would think you are a despicable human being?						
_____ 11. You strongly defend a point of view in a discussion, and though nobody was aware of it, you realize that you were wrong. What is the likelihood that this would make you think more carefully before you speak?						
_____ 12. You take office supplies home for personal use and are caught by your boss. What is the likelihood that this would lead you to quit your job?						
_____ 13. You make a mistake at work and find out a coworker is blamed for the error. Later, your coworker confronts you about your mistake. What is the likelihood that you would feel like a coward?						
_____ 14. At a coworker's housewarming party, you spill red wine on their new cream-colored carpet. You cover the stain with a chair so that nobody notices your mess. What is the likelihood that you would feel that the way you acted was pathetic?						
_____ 15. While discussing a heated subject with friends, you suddenly realize you are shouting though nobody seems to notice. What is the likelihood that you would try to act more considerately toward your friends?						
_____ 16. You lie to people but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?						

GASP SCORING: The GASP is scored by averaging the four items in each subscale.

Guilt–Negative–Behavior–Evaluation (NBE): 1, 9, 14, 16

Guilt–Repair: 2, 5, 11, 15

Shame–Negative–Self–Evaluation (NSE): 3, 6, 10, 13

Shame–Withdraw: 4, 7, 8, 12

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