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The Interpersonal Shame Inventory for Asian Americans: Scale Development and Psychometric Properties

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Abstract

This article reports the development and psychometric properties of the Interpersonal Shame Inventory (ISI), a culturally salient and clinically relevant measure of interpersonal shame for Asian Americans. Across 4 studies involving Asian American college students, the authors provided evidence for this new measure's validity and reliability. Exploratory factor analyses and confirmatory factor analyses provided support for a model with 2 correlated factors: external shame (arising from concerns about others' negative evaluations) and family shame (arising from perceptions that one has brought shame to one's family), corresponding to 2 subscales: ISI-E and ISI-F, respectively. Evidence for criterion-related, concurrent, discriminant, and incremental validity was demonstrated by testing the associations between external shame and family shame and immigration/international status, generic state shame, face concerns, thwarted belongingness, perceived burdensomeness, self-esteem, depressive symptoms, and suicide ideation. External shame and family shame also exhibited differential relations with other variables. Mediation findings were consistent with a model in which family shame mediated the effects of thwarted belongingness on suicide ideation. Further, the ISI subscales demonstrated high alpha coefficients and test-retest reliability. These findings are discussed in light of the conceptual, methodological, and clinical contributions of the ISI.

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Keywords

shame; Asian Americans; scale development; suicide ideation

As a child of Chinese immigrant parents, Kim Wong Keltner, author of the book *Tiger Babies Strike Back*, disclosed that growing up, she experienced an overwhelming sense of shame imposed by her parents—“making her feel like she’s letting them down, letting the family down, not thin enough, not smart enough, not good enough” (J. Yang, 2013, para. 19). She observed that in her culture, she could shame an entire village because of what she did and said (Keltner, 2013). Although Keltner went on to achieve academic and professional successes, her experience of shame exacted a cost in psychological well-being (J. Yang, 2013). Keltner’s experience poignantly highlights the salience of shame in the lives of many Asian Americans.

How do Asian Americans experience shame, and what are the correlates of these shame experiences? In this project, we addressed these culturally salient concerns by developing the Interpersonal Shame Inventory (ISI), a new measure of interpersonal shame for Asian Americans. We begin with a brief overview of the construct of shame and its relevance to Asians and Asian Americans, followed by a discussion of its potential clinical significance, particularly with regard to understanding Asian Americans’ suicide-related outcomes.

Shame: Conceptualization and Empirical Findings

Shame has been described as a debilitating, painful experience that involves the negative evaluation of the self (Lewis, 1971; Tangney, 1996). Phenomenologically, shame often includes feelings of inadequacy and a core motivational desire to hide or escape (Blum, 2008; Tangney & Dearing, 2002). For instance, a series of studies found that experimentally induced shame resulted in social withdrawal and a tendency toward passive avoidance (Chao, Cheng, & Chiou, 2011). Although shame and guilt are related affective experiences, several scholars (Lewis, 1971; Tangney, 1996; Teroni & Deonna, 2008) have argued that a key difference between the two is that guilt focuses on the negative evaluation of one’s behavior (e.g., “What I did was wrong”), whereas the entire self is the focus of negative evaluation when shame is experienced (e.g., “I’m a loser”). This conceptual difference has been validated by an accumulating body of research (see Tangney & Tracy, 2012, for a summary). For example, in one study (Niedenthal, Tangney, & Gavanski, 1994), participants who reflected on shame and guilt situations exhibited different coping styles—participants rectified shame experiences by changing qualities of the self, whereas they addressed guilt experiences by rectifying specific behaviors.

Given that shame involves a negative evaluation of the self, it is not surprising that shame has been shown to be associated with negative mental health outcomes. A recent meta-analysis of 108 studies (S. Kim, Thibodeau, & Jorgensen, 2011) demonstrated that shame was moderately related to depressive symptoms ($r = .43$). In addition to its association with depression, shame may also contribute to suicide-related outcomes. To the extent that the desire to escape is a core motivational component of shame, self-annihilation may be the ultimate expression of escape from the pain resulting from shame (Blum, 2008; Shreve &

Kunkel, 1991). Indeed, a few suicidology theories and models explicitly include shame as an antecedent of suicide (Baechler, 1979; Lester, 1997; Shneidman, 1968). Consistent with these theories and models, several studies have documented the link between shame and increased suicide-related outcomes (e.g., Fullagar, 2003; Hastings, Northman, & Tangney, 2002).

Asians and Asian Americans' Experiences of Shame

Our new measure applies this body of literature on shame to Asian Americans in several new directions.¹ Our measure and its underlying constructs potentially contribute to a deeper conceptual understanding of Asian Americans' experiences of shame and mental health. Several scholars have characterized many Asian cultures as being shame based (Benedict, 1946; Fung, 1999). Evidence for the saliency of shame in Asian cultures include (a) a much richer lexicon of shame-related words in several Asian languages relative to the English language (e.g., Bengkulu, Chinese, Japanese, and Korean; Bedford, 2004; Fessler, 2007; Ha, 1995; Li, Wang, & Fischer, 2004), (b) the widespread use of shaming techniques in parenting among Chinese and Chinese American parents (Fung, 1999; Fung, Lieber, & Leung, 2003; S. Y. Kim, Wang, Orozco-Lapray, Shen, & Murtuza, 2013), (c) higher levels of shame experiences among Asian Americans relative to White Americans (Lutwak, Razzino, & Ferrari, 1998; Miller, 2002), and (d) Asian Indian undergraduates reporting shame experiences that were longer and more intense than those of Italian undergraduates (Anolli & Pascucci, 2005).

Although shame can be experienced internally (one's negative evaluation of the self) or interpersonally (Tangney & Dearing, 2002), the interpersonal aspect of shame may be culturally more salient to Asians and Asian Americans, given the emphasis on collectivism in Asian cultures (Wong & Tsai, 2007). One key aspect of interpersonal shame is the notion of external shame, or the perceived negative evaluation of the self through others' eyes (S. Kim et al., 2011). For example, many Chinese concepts of shame are inherently rooted in meanings associated with loss of standing in the eyes of others (Li et al., 2004). Supporting the importance of external shame in Asian cultures, Crystal, Parrott, Okazaki, and Watanabe (2001) found that Japanese undergraduates reported greater levels of external shame experiences (e.g., being ridiculed by one's classmates for snoring in class), whereas American undergraduates' highest shame ratings were for internal shame experiences (e.g., running from a difficult situation).

Another culturally salient dimension of shame in Asian cultures is the shame resulting from perceptions that one has brought shame to one's family (Bedford, 2004; S. Yang & Rosenblatt, 2001). Such experiences of family shame stem from a combination of two cultural phenomena. First, the experience of vicarious shame (arising from perceiving the failures of in-group members, especially family members) may be relatively salient in Asian cultures (Li et al., 2004; Wong & Tsai, 2007) because of the Asian collectivist notion that one's sense of self is strongly defined by one's group membership (especially one's family).

¹Note that our literature review includes research on Asians from non-American countries, given that only a few studies have examined Asian Americans' experiences of shame.

Therefore, the failure of an individual reflects the failure of the entire family (Bedford, 2004). The findings from several studies suggest that Chinese and Asian Americans were more likely to experience vicarious shame, especially as it relates to family members, than Americans and European Americans, respectively (Liem, 1997; Stipek, 1998; Tsai, as cited in Wong & Tsai, 2007). Second, several scholars have observed that one of the central responsibilities in Asian cultures is to avoid bringing shame to one's family and that doing so is in itself a source of shame (B. S. Kim, Atkinson, & Umemoto, 2001; Lee, 1999). For example, a qualitative study found that the fear of bringing shame to one's family played a much more prominent role than the experience of personal shame in the lives of a group of South Asian women living in the United Kingdom (Gilbert, Gilbert, & Sanghera, 2004).

On the basis of the above review of the literature of shame in Asian cultures, we propose the construct of *interpersonal shame* to conceptualize Asian and Asian Americans' culturally salient experiences of shame. Interpersonal shame is defined as the experience of shame arising from interpersonal concerns and consists of at least two dimensions: external shame (resulting from concerns about others' negative evaluations of the self) and family shame (resulting from perceptions that one has brought shame to one's family). Although external shame and family shame both share an interpersonal focus, they are also conceptually different. External shame has a relatively stronger intrapersonal focus in that the consequences of one's defects in the eyes of others weigh on the individual, whereas for family shame, shaming the family may have negative consequences for multiple people (Bedford, 2004; Liem, 1997). Conceptually, this distinction also maps onto the differences between two Chinese terms for shame. Bedford (2004) observed that *can kui* (similar to external shame) is an experience of shame that often involves one's failure to meet other people's standards, whereas *xiu kui* (which includes family shame) extends beyond the shaming of oneself to an acknowledgment that one has harmed others, especially when one has brought shame to others. Given these differences, we expected that external shame and family shame might be differentially related to other variables. We therefore developed a measure that would assess these two dimensions of interpersonal shame.

In addition to elucidating culturally salient features of Asian Americans' shame experiences, the construct of interpersonal shame may contribute to a more complex understanding of Asian Americans' suicide-related outcomes. Scholars have argued that given the collectivistic nature of many Asian cultures, suicide is best conceptualized as an expression of interpersonal challenges (Shiang, 2000; Wong & Poon, 2010). Accordingly, recent research on Asian American suicidology has sought to apply Joiner's (2005) interpersonal theory of suicide, which posits that negative interpersonal states—particularly perceived burdensomeness (feeling like a burden to others) and thwarted belongingness (feeling disconnected from others)—are proximal antecedents of suicidal desire. Specifically, studies have found that a combination of high levels of perceived burdensomeness and thwarted belongingness was associated with increased suicide ideation among Asian international and Asian American college students (K. T. Wang, Wong, & Fu, 2013; Wong, Koo, Tran, Chiu, & Mok, 2011). Given the prominence of shame in Asian cultures, it is possible that interpersonal shame might be an additional culturally salient antecedent of Asian Americans' suicide ideation. Because interpersonal shame, thwarted belongingness, and

perceived burdensomeness all share a focus on interpersonal problems, it would be interesting to investigate the structural relationships among these variables and suicide ideation. One possibility is that thwarted belongingness and perceived burdensomeness might exert indirect influences on suicide ideation via interpersonal shame. Alternatively, interpersonal shame might be indirectly related to suicide ideation through its associations with thwarted belongingness and perceived burdensomeness. Therefore, the development of a measure of interpersonal shame facilitates hypothesis testing regarding the pathways through which Asian Americans' interpersonal shame impacts suicide ideation.

Overview of Goals and Methods in Studies 1 and 2

Against this backdrop, the goal of this project was to develop and test the psychometric properties of the ISI. The procedures for Studies 1 and 2 are described collectively given their similarities. In Studies 1 and 2, we tested the factor structure of the ISI. Following the procedures in recent scale development studies (e.g., Wei, Alvarez, Ku, Russell, & Bonett, 2010), we randomly split the sample into two. The first half of the sample ($n = 237$) was used for exploratory factor analyses in Study 1 (three participants did not provide any data and were excluded). The remaining sample ($n = 239$) was used for confirmatory factor analyses in Study 2.

Participants and Procedures

Participants were part of an undergraduate psychology subject pool in a large West Coast university. The criterion for participation was a minimum age of 18 years and identification as Asian American (i.e., individuals of East, Southeast, and/or South Asian descent). Approximately 43% of psychology subject pool participants were Asian Americans compared to about 41% of the university's student population. Participants received course credit for their participation. The entire study was conducted through online surveys that could be completed from any computer. (See Study 3 for participants' demographic information.)

Scale Development

We used several steps in the development of the ISI. On the basis of the psychological literature on shame, particularly Asian and Asian Americans' shame experiences (e.g., Bedford, 2004; Tangney & Dearing, 2002), the first and third authors (an Asian American counseling psychology faculty member and an Asian American counseling psychology doctoral student, respectively) developed 34 preliminary items that reflected external shame and family shame as well as the distinctive motivational component of shame—a desire to escape or hide (Blum, 2008). The second author (an Asian American faculty member with expertise in Asian American mental health and scale development) and two other counseling psychology doctoral students (with expertise in Asian American mental health) provided feedback on the appropriateness and wording of the items, the scale instructions, and the Likert-type range of options. On the basis of this feedback, modifications were made to the wording of some items and the instructions, and 18 items were selected, with nine items each representing external shame (e.g., “These days, I feel like hiding because people might view me as flawed”) and family shame (e.g., “These days, I wish I could run away because

my inadequacies might cause my family to look bad”). The 18-item preliminary measure was sent to eight research psychologists with expertise in Asian American mental health and/or shame. With the feedback of these eight experts, further modifications were made to the wording and instructions of the measure. For example, on the basis of one expert’s feedback, we improved the face validity of the measure by being explicit in the instructions that the items in the ISI focus on shame.

Nevertheless, given previous research that even well-educated adults struggled with articulating the meaning of shame (Tangney & Dearing, 2002), Tangney (1996) recommended that shame measures should describe the experience of shame rather than simply include the word *shame* or other shame-related words without further explanation. Hence, instead of using the word *shame* throughout the items, we describe the experience of shame in each item. Drawing upon the conceptual distinction between shame and guilt (Tangney, 1996), we used words that describe negative aspects of the self (e.g., *regard me as defective*) rather than negative behavior. Our goal was to develop a state-based (rather than a trait-based) measure of shame. However, we were concerned that focusing on immediate experiences (e.g., *How you feel right now*) or specifying a very narrow and specific duration could result in undue range restriction of scores. We posited that individuals may not always be able to pinpoint the number of days they have had a particular experience of shame, but they can usually tell whether or not the experience is recent. Hence, we adapted the instructions and wording of the Interpersonal Needs Questionnaire (INQ; Van Orden, Witte, Gordon, Bender, & Joiner, 2008), a state-based measure of negative interpersonal experiences. Following the INQ, each item in our measure begins with the words *These days*, and the instructions emphasize that respondents should focus on recent experiences. Additionally, given that our measure captures both the cognitive (e.g., *people might view me as weak*) and the motivational aspects of shame (e.g., *I feel like running away*), we followed the instructions of other measures with items containing two components (e.g., the Ambivalence Over Emotional Expressiveness Questionnaire; King & Emmons, 1990). That is, our instructions explicitly state that respondents should consider both parts of the statement in deciding on their ratings. The instructions for the final version of the ISI are as follows:

The following statements are about experiences of *shame*. Please indicate the extent to which you agree with these statements as they relate to your life recently. Each statement has two parts separated by the word “because.” In deciding on your rating, consider the extent to which *both* parts of the statement apply to you. You should focus on your *recent* experiences, not how you think or feel in general.

Items in the ISI are scored on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

Study 1

In Study 1, we tested the factor structure of the ISI using principal axis factoring exploratory factor analyses (EFA) with both varimax and promax rotation. Bartlett’s test of sphericity was $\chi^2(45) = 2874.51, p < .001$, and the Kaiser–Meyer–Olkin measure of sampling adequacy was .93, indicating that the data were appropriate for factor analysis. Parallel

analysis and scree plots were used to determine the number of factors to retain. Using parallel analysis, factors from the data were retained if their eigenvalues were greater than those obtained from simulating random data (O'Connor, 2000). Based on 1,000 random data sets, the results indicated that only the first and second eigenvalues from the actual data (12.97 and 1.25) were larger than the first and second eigenvalues in the parallel analysis (.72 and .58), respectively. These findings suggest a two-factor solution. Similarly, an examination of the number of factors preceding the “bend of the elbow” in the scree plot suggested two factors. The factor solution with promax rotation was found to be more interpretable than the factor solution with varimax rotation, which included cross-loadings exceeding .40. By examining the pattern matrix of the factor solution with promax rotation, we found that all items loaded on the hypothesized factors (nine items corresponding to external shame and nine items related to family shame). Additionally, all factor loadings on the hypothesized factors exceeded .70, and there were no cross-loadings exceeding .20.

Given our goal of developing a brief measure with no more than five items per factor (Tabachnick & Fidell, 2007), we conducted the EFA with promax rotation a second time, selecting the five items from each factor with the highest factor loadings, resulting in a scale with 10 items. Similar to those of the first EFA, all items loaded on the hypothesized factors above .70, and no cross-loadings exceeded .20 (see Table 1). The first and second factors (with five items per factor) accounted for 74.77% and 10.30% of the variance, respectively. Consistent with our theorizing of the ISI, the first factor was labeled “external shame” (corresponding to the subscale ISI-E), and the second factor was labeled “family shame” (corresponding to the subscale ISI-F).

Study 2

The goal of Study 2 was to investigate the adequacy of the ISI's two-factor structure identified in Study 1 using confirmatory factor analyses (CFA). Our hypothesized model was an oblique (correlated) two-factor model. We also compared this model with two alternative models: a one-factor model and an orthogonal (uncorrelated) two-factor model.

Our CFA was conducted in Mplus 7.11 on the 10 items selected in our EFA. An omnibus test (Small, 1980) revealed that the multivariate data were not normal, $\chi^2(20) = 198.03, p < .001$. Therefore, we used a maximum likelihood estimation method with standard errors and a chi-square test statistic that are robust to nonnormality. We specified a model with two correlated factors. As recommended by Hu and Bentler (1999), we used several fit indices to assess the adequacy of model fit: the comparative fit index (CFI; a value close to or at least .95), the root-mean-square error of approximation (RMSEA; a value close to or less than .06), and the standardized root-mean-square residual (SRMR; a value close to or not exceeding .08). However, Marsh, Hau, and Wen (2004) have cautioned against a rigid adherence to these cutoff guidelines. Byrne (2008) suggested that CFI values within the range of .92–.94 and RMSEA values of less than or equal to .08 would also indicate adequate fit. As shown in Table 2, the oblique two-factor model had a good fit to the data. All item loadings on the latent variables for this model were significant ($p < .001$; see Table 1).

With regard to model comparisons, we examined the (a) scaled chi-square difference test and (b) Bayesian information criterion (BIC) values, with smaller BIC values reflecting a better model. Kass and Raftery (1995) suggested that a BIC value difference exceeding 10 provides very strong evidence of superior model fit. The orthogonal two-factor model and the one-factor model were nested within the oblique two-factor model. Both alternative models reflected poor fit to the data (see Table 2). Additionally, the scaled chi-square difference test indicated that the oblique two-factor model had smaller BIC values (differences greater than a BIC value of 10) and was a significantly better fit to the data than the orthogonal model, scaled $\chi^2(1) = 282.701, p < .001$, and the one-factor model, scaled $\chi^2(1) = 83.02, p < .001$.

Given the recent growth of interest in the use of bifactor modeling to conceptualize and measure psychological constructs (e.g., Reise, 2012), we also compared the oblique two-factor model with a bifactor model in a post hoc analysis. In this bifactor model, item responses were modeled as influenced by both the two correlated specific factors (external shame and family shame) and a global factor of interpersonal shame. The general factor was specified as orthogonal to the specific factors. Additionally, the specific factors were modeled as orthogonal to each other because correlated specific factors signify the existence of an extra, unmodeled general factor (Reise, 2012). As shown in Table 2, the results of the fit indices for the bifactor model were mixed: Although the CFI indicated adequate fit and the RMSEA value of .08 was close to the recommended cutoff value of .06, the SRMR value of .13 suggested a poor fit to the data. Moreover, the BIC value of the bifactor model was lower than that of the oblique two-factor model by more than 10. Overall, these results suggest that among the various models considered, the oblique two-factor model had the best fit to the data.

Study 3

In Study 3, we sought to provide initial evidence for the reliability and construct validity of the ISI subscales. With regard to construct validity, we had five sets of hypotheses. First, to test for criterion-related validity, we hypothesized that immigrant and international participants would score higher on the ISI subscales than U.S.-born participants, given prior research suggesting that immigrant Asian Americans may be more susceptible to interpersonal shame than U.S.-born Asian Americans (Liem, 1997). Second, we examined evidence for concurrent and incremental validity. With regard to concurrent validity, we hypothesized that external shame and family shame would be significantly and positively related to generic state shame, given our conceptualization of the ISI as a measure of state shame. We also expected that external shame and family shame would be significantly and negatively related to self-esteem, given scholarly observations of the conceptual linkages between shame and self-esteem (Tangney, & Dearing, 2002). We further anticipated significant, positive correlations between external shame and family shame and other negative interpersonal states (thwarted belongingness and perceived burdensomeness), given the interpersonal focus of all these variables. Following previous research on the link between shame, depression, and suicide-related outcomes (Hastings et al., 2002; S. Kim et al., 2011), we predicted that external shame and family shame would be significantly and positively related to depressive symptoms and suicide ideation. With regard to incremental

validity, we hypothesized that external shame and family shame would remain significantly and uniquely related to suicide ideation, even after including thwarted belongingness and perceived burdensomeness as predictors of suicide ideation.

We also explored the link between interpersonal shame and face concerns, given previous theorizing on the connection between shame and the Asian cultural value of face concerns (i.e., concerns about losing face; Ho, Fu, & Ng, 2004). Importantly, Bedford (2004) identified losing face as one of several expressions of shame in Chinese culture. Nonetheless, Mak, Chen, Lam, and Yiu (2009) observed that face concerns consist of at least two dimensions: self-face (concerns about one's own face) and other-face (concerns about other people's face). Research has shown that relative to other-face concerns, self-face concerns were more strongly associated with indicators of psychological distress (Cheng, 2013; Mak et al., 2009). In interpreting these findings, Mak et al. posited that self-face concerns involve fears about threats to one's social worth based on others' evaluations, whereas other-face concerns were less relevant to one's social worth and more about maintaining group harmony and attending to others' needs. Because shame involves a negative evaluation of the self, it is conceptually closer to self-face concerns than to other-face concerns; therefore, we hypothesized that external shame and family shame would be positively and significantly related to self-face concerns. In contrast, in our third set of hypotheses on discriminant validity, we predicted that external shame and family shame would be weakly related to other-face concerns.

Fourth, in light of our earlier discussion on the differences between external shame and family shame (e.g., Liem, 1997), we also examined whether they exhibited differential relations with other variables. Because external shame has a greater intrapersonal focus relative to family shame, we hypothesized that external shame (compared to family shame) would be more negatively associated with self-esteem, which involves an evaluation of one's personal worth. In contrast, we expected a stronger positive relationship between family shame and suicide ideation than between external shame and suicide ideation. Underscoring the interpersonal nature of suicide in Asian cultures, several studies have identified family-related problems as a salient antecedent for Asian and American college students' suicide ideation (K. T. Wang et al., 2013; Wong, Brownson, & Schwing, 2011; Wong, Koo, et al., 2011). Family shame might have a more pernicious impact on Asian Americans' suicide ideation than external shame because family shame has perceived negative consequences that extend beyond the self to one's family (Liem, 1997). Therefore, family shame might be more likely to trigger a desire for self-harm as an expression of self-punishment for the perceived harm caused to one's family.

Fifth, given our earlier review of the literature on the relationship between Asian Americans' negative interpersonal states and suicide ideation (e.g., Wong, Koo, et al., 2011), we tested two competing mediation hypotheses: a model in which external shame and family shame mediate the effects of thwarted belongingness and perceived burdensomeness on suicide ideation, and an alternative model in which thwarted belongingness and perceived burdensomeness mediate the effects of external shame and family shame on suicide ideation.

Participants and Procedures

Study 3 involved the full sample, combining participants from Studies 1 and 2. The original sample consisted of 479 participants, but data from three participants were deleted because they did not provide any data beyond their contact particulars and the ISI administered for test–retest reliability. The final sample consisted of 476 students (65.8% female; average age = 20.02 years, $SD = 1.76$; range: 18–31). Most participants were U.S. born (63.1% second generation and 5.3% third generation); 31.6% were immigrant or international students. In terms of ethnic background, almost half were Chinese (46.1%); the rest were Filipino (8.2%), Japanese (2.9%), Koreans (10.7%), Asian Indians (7.4%), Vietnamese (15.4%) and from other Asian American ethnic backgrounds (9.1%).

Because the Suicide Ideation Scale (SIS; Rudd, 1989) includes items about suicide ideation, the institutional review board required the researchers to immediately call participants on the phone to conduct a suicide assessment if they endorsed *frequently* or *always* on any six of the 10 items in the SIS that explicitly addresses suicide ideation (e.g., “I have been thinking of ways to kill myself”). Given the time- and labor-consuming nature of these suicide assessments, we decided to discontinue data collection on the SIS after obtaining a sample size that met the statistical power needed for our analyses (see Preliminary Results section). Hence, only 79 participants completed the SIS.

Measures

Overall scores for all measures were determined by averaging scores across all items.

Interpersonal Shame Inventory—We used our new five-item ISI-E and the five-item ISI-F to assess external shame and family shame, respectively. As seen in Table 3, participants’ mean scores on the ISI subscales range from 2.08 to 2.26, which is below the midpoint of 3 on a 6-point scale. These relatively low mean scores are not surprising, given that the ISI focuses only on recent experiences of shame and was administered to a nonclinical sample.

State Shame Scale (SSS; Marschall, Sanftner, & Tangney, 1994)—The five-item SSS is a subscale of the 15-item State Shame and Guilt Scale. It is designed to measure state shame (hereafter known as “generic state shame”). Items are rated on a 5-point Likert scale from 1 (*not feeling this way at all*) to 5 (*feeling this way very strongly*). A sample item is “I feel humiliated, disgraced.” Platt and Freyd (2012) showed that among college students, the SSS was strongly and positively related to ratings on the extent to which various drawings of shame postures reflected how they felt. For this study, the alpha coefficient was .86.

Loss of Face Scale (LOF; Zane & Yeh, 2002)—The LOF assesses apprehension about and desire to avoid face-threatening behavior. Previous factor-analytic studies on the LOF using Chinese samples (Mak et al., 2009) and an Asian American sample (Cheng, 2013) have identified two factors corresponding to two types of face concerns. Self-face concerns (LOF-SF; 11 items) refer to individuals’ motivation to maintain their own face, whereas other-face concerns (LOF-OF; six items) refer to the motivation to maintain others’ face (Cheng, 2013). A sample item in the LOF-SF is “During a discussion, I try not to ask

questions because I may appear ignorant to others.” An example of an item in the LOF-OF is “When discussing a problem, I make an effort to let the person know that I am not blaming him or her.” Items are rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Supporting the distinction between the LOF-SF and LOF-OF, Cheng (2013) found that the LOF-SF, but not the LOF-OF, was positively and significantly associated with perceived burdensomeness, thwarted belongingness, suicidal behavior, and psychological distress among Asian American college students. For this study, the alpha coefficients were .83 for the LOF-SF and .76 for the LOF-OF.

Interpersonal Needs Questionnaire (Van Orden et al., 2008)—The 18-item INQ assesses negative interpersonal states and has two subscales: Thwarted Belongingness (INQ-TB), which measures the extent to which respondents feel disconnected from others recently (e.g., “These days other people care about me”; reverse scored; nine items), and Perceived Burdensomeness (INQ-PB), which measures the degree to which respondents feel like a burden to others recently (e.g., “These days I feel like a burden on the people in my life”; nine items). Items are scored on a 7-point scale that ranges from 1 (*not at all true for me*) to 7 (*very true for me*). High scores indicate greater thwarted belongingness and perceived burdensomeness. Wong, Koo, et al. (2011) found that among Asian American college students, a combination of high INQ-TB and INQ-PB scores was associated with elevated suicide ideation scores. In this study, the coefficient alphas for INQ-TB and INQ-PB were both .91.

Rosenberg Self-Esteem Scale (SES; Rosenberg, 1965)—The 10-item SES provides a global assessment of self-esteem. An example of an item is “On the whole, I am satisfied with myself.” Responses on each item range from 1 (*strongly disagree*) to 4 (*strongly agree*). High scores reflect greater self-esteem. Kao, Nagata, and Peterson (1997) found that a cognitive style that involved global explanations for bad events was associated with lower self-esteem for both Asian American and European American college students. In the present study, the coefficient alpha was .90.

Center for Epidemiologic Studies Depression Scale (CES-D; J. C. Cole, Rabin, Smith, & Kaufman, 2004)—The 10-item version of the CES-D measures depressive symptoms in the past week on a scale from 0 (*less than one day*) to 3 (*5–7 days*). Higher scores indicate greater frequency of depressive symptoms during the past week. A sample item is “I was bothered by things that usually don’t bother me.” Ayers et al. (2009) showed that among Korean American immigrants, immigrant stress and social support were negatively and positively related to the 10-item CES-D, respectively. In this study, the alpha coefficient was .79.

Suicide Ideation Scale (Rudd, 1989)—The SIS measures the intensity and severity of suicide ideation during the past week on a 5-point scale ranging from 1 (*never*) to 5 (*always*). High scores indicate increased frequency of suicidal ideation. A sample item is “I believe my life will end in suicide.” Wong, Koo, et al. (2011) showed that the SIS was related to a measure of depressive symptoms among Asian American college students. For the current study, the alpha coefficient was .96.

Preliminary Results

Power analysis—Given that we had to discontinue data collection on the SIS earlier than data for the other measures, we assessed the minimum sample size needed for our analyses involving the SIS based on power = .80. We found that a sample size of 67 was sufficient to detect a medium effect size of $r = .30$ (StatsToDo, 2013); therefore our sample of 79 was sufficient for our test of bivariate relationships involving the SIS.

Transformation of SIS scores—Because suicide ideation tends to be relatively rare, we investigated the distribution of the SIS for evidence of nonnormality. There was evidence that the SIS was not normally distributed (skewness = 3.99, kurtosis = 19.46). Using simulation studies, Bishara and Hittner (2012) found that among various transformation methods for addressing nonnormal data involving the Pearson r , the Rankit transformation (a rank-based inverse normal transformation) had the best results in minimizing Type I and Type II error rates. Hence, we used the Rankit transformation, which reduced skewness (.65) and kurtosis (–.48). The Rankit-transformed SIS scores were used for all subsequent analyses.

Main Results

In terms of our new measure's internal reliability, the coefficient alphas for ISI-E and ISI-F were .94 and .97, respectively.

Criterion-related validity—To examine our first set of hypotheses, we used analysis of variance to examine whether immigrant/international participants differed from U.S.-born participants in ISI-E and ISI-F scores. Although not originally hypothesized, we also explored whether there were gender differences in ISI-E and ISI-F scores. Therefore, the independent variables were gender (male vs. female) and immigration status (immigrant/international vs. U.S. born). Second- and third-generation Asian Americans were both included in the category of U.S.-born participants. Demographic information on five participants was missing and therefore dropped from the analyses. Across the ISI-E and ISI-F, there were no significant gender or Gender \times Immigration/International Status interaction effects ($p > .05$). However, in support of criterion-related validity, immigrant/international participants reported significantly higher ISI-F scores ($M = 2.29$, $SD = 1.28$) than U.S.-born participants ($M = 1.98$, $SD = 1.21$), $F(1, 467) = 6.18$, $p = .013$, $\eta_p^2 = .01$. Immigrant/international participants ($M = 2.39$, $SD = 1.26$) did not differ significantly from U.S.-born participants ($M = 2.20$, $SD = 1.27$) in their ISI-E scores, $F(1, 467) = 3.30$, $p = .070$, $\eta_p^2 = .01$. The relationships among immigration/international status, gender, and the main measures in this study are reported in Table 3.

Bivariate correlations—Bivariate correlations between the ISI subscales and the other measures were used to test our second and third sets of hypotheses on concurrent and discriminant validity, respectively (see Table 3). We used J. Cohen's (1988) guidelines to evaluate the magnitude of correlations: $r = .50$, $r = .30$, and $r = .10$ represent strong, moderate, and weak effects, respectively. The ISI-E and ISI-F exhibited significant and moderate to strong correlations with the SSS, INQ-TB, INQ-PB, SIS, SES and CES-D in the

hypothesized directions. The ISI-E was significantly and moderately associated with the LOF-SF, whereas the ISI-F exhibited a significant but small correlation with the LOF-SF. In terms of discriminant validity, the ISI-E was weakly, albeit significantly, related to the LOF-OF, whereas the ISI-F was nonsignificantly related to the LOF-OF.

Structural equation modeling analyses—In addition to testing the bivariate relationships between ISI-E and ISI-F scores and other measures, we used structural equation modeling (SEM) to assess our second, third, fourth, and fifth sets of hypotheses. We applied a maximum likelihood estimation method with standard errors and a chi-square test statistic that are robust to nonnormality. SEM enabled us to (a) examine the relationships among latent variables by addressing the effects of measurement error, (b) investigate the differential relationships between external shame and family shame and other variables within a single model, and (c) account for missing data in the SIS using the full information maximum likelihood method. The missing data in the SIS were missing by design (since we discontinued data collection) and therefore likely to be missing completely at random (Little & Rubin, 2002). Little's missing completely at random test confirmed that missing data were missing completely at random, $\chi^2(222) = 244.63, p = .142$. Hence, the full information maximum likelihood method was appropriate for handling missing data in the SIS.

We examined several alternative models (Models 1A–1D and Model 2), all of which specified the same direct paths from external shame and family shame to depressive symptoms, generic state shame, self-esteem, self-face concerns, and other-face concerns, but with different direct and indirect relations among thwarted belongingness, perceived burdensomeness, external shame, family shame, and suicide ideation. In Models 1A–1D, external shame and family shame were specified as mediators of the paths from thwarted belongingness and perceived burdensomeness to suicide ideation. Models 1A–1C were partial mediation models. Model 1A included direct paths from thwarted belongingness and perceived burdensomeness to suicide ideation. Model 1B had one direct path from perceived burdensomeness (but not thwarted belongingness) to suicide ideation. Model 1C included one direct path from thwarted belongingness (but not perceived burdensomeness) to suicide ideation. Model 1D was a full mediation model with the direct paths from thwarted belongingness and perceived burdensomeness to suicide ideation constrained to 0. (Model 2, an alternative mediation model, is described below in the report of our mediation findings.) External shame and family shame as well as thwarted belongingness and perceived burdensomeness were specified as correlated latent variables in all models.

External shame and family shame were indicated by the same items used in the CFA in Study 2 because they were our key variables of interest in this project. However, given our desire to minimize the number of parameters, we did not use individual scale items as indicators for the remaining latent variables, which would have resulted in a violation of the SEM sample size guideline of at least five cases per free parameter (Bentler & Chou, 1987). Instead, for the remaining latent variables, we used an error-correction strategy (D. A. Cole & Preacher, in press; Hayduk, 1987) in which each latent variable was indicated by one indicator variable based on its corresponding scale measure (e.g., self-esteem was indicated by the SES). This error-correction strategy was done by fixing the factor loading of the

indicator variable to 1.0 and the unique variance to a value based on the formula $(1 - \text{reliability}) \times \text{sample variance}$, thus rendering the latent variable free from error (Hayduk, 1987). Alpha coefficients of scale measures were used to assess reliability in the above formula (J. Wang & Wang, 2012).

The measurement model had a good fit to the data (see Table 2), and all indicator variables loaded significantly on the latent variables in the measurement model ($p < .001$). Next, we tested a series of competing full structural models (Models 1A, 1B, 1C, and 1D). We used the same fit indices and guidelines for determining model fit employed in our CFAs in Study 2 (Byrne, 2008; Hu & Bentler, 1999). As shown in Table 2, Models 1A, 1B, 1C, and 1D had adequate fit to the data. Although the CFI value of .94 and the RMSEA value of .08 are slightly outside Hu and Bentler's (1999) cutoff values of .95 and .06, respectively, they fall within the acceptable range suggested by Byrne (2008).

Models 1B and 1C were nested within Model 1A, whereas Model 1D was nested within Models 1A, 1B, and 1C. Model 1A did not fit the data significantly better than Model 1B, scaled $\chi^2(1) = 2.03, p > .05$, and Model 1C, scaled $\chi^2(1) = 0.47, p > .05$. Models 1B and 1C did not have a nested relationship with each other. However, Model 1B had a lower BIC value than Model 1C. Model 1B also had a significantly better fit to the data than Model 1D, scaled $\chi^2(1) = 6.18, p < .05$. Therefore, we chose Model 1B as the model that best represented the data (see Figure 1). Unless otherwise stated, our SEM findings were based on this model.

With regard to concurrent validity, the relationships between external shame and family shame and other variables are reported in Table 4 and Figure 1. We also examined effect sizes based on the proportion of variance explained in endogenous variables using J. Cohen's (1988) guidelines in which f^2 values greater than or equal to 0.02, 0.15, and 0.35 represent small, moderate, and large effect sizes, respectively. Thwarted belongingness and perceived burdensomeness explained large proportions of the variance in external shame ($R^2 = .58, p < .001, f^2 = 1.38$) and family shame ($R^2 = .44, p < .001, f^2 = 0.79$). External shame and family shame accounted for large proportions of the variance in depressive symptoms, generic state shame, and self-esteem, as well as a moderate proportion of the variance in self-face concerns (see Table 4). Because our model (i.e., Model 1B) included a direct path from perceived burdensomeness to suicide ideation, the R^2 in suicide ideation was based on the collective effects of perceived burdensomeness, external shame, and family shame. Hence, in order to focus exclusively on the effects from external shame and family shame, the direct path from perceived burdensomeness to suicide ideation was constrained to 0; external shame and family shame explained a large proportion of the variance in suicide ideation ($R^2 = .30, p < .001, f^2 = 0.43$).

Providing partial support for incremental validity, family shame, but not external shame, was significantly and positively related to suicide ideation beyond the effect of perceived burdensomeness on suicide ideation (see Figure 1). We found similar results when direct paths from thwarted belongingness and perceived burdensomeness to suicide ideation were both included in the model (i.e., as specified in Model 1A).

With regard to discriminant validity (our third set of hypotheses), we focused not just on whether there were significant effects, but also on the relative magnitude of the effects. Family shame was weakly and nonsignificantly related to other-face concerns (see Table 4). Although the relationship between external shame and other-face concerns was significant, the magnitude of this relationship was significantly smaller than that between external shame and self-face concerns (Wald test of parameter constraints = 5.71, $df = 1$, $p = .017$), as was consistent with the conceptual differences between other-face concerns and self-face concerns (Mak et al., 2009). Moreover, external shame and family shame collectively accounted for only 4% of the variance in other-face concerns (see Table 4). This constitutes a small effect size ($f^2 = 0.04$) in contrast to the moderate to large effects found in our test of concurrent validity. Overall, these findings provide some support for the discriminant validity of external shame and family shame.

Collectively, our SEM findings also provide support for our fourth set of hypotheses on the differential relationships between external shame and family shame and other variables. As hypothesized, external shame, but not family shame, was significantly and negatively related to self-esteem; in contrast, family shame, but not external shame, was significantly and positively related to suicide ideation (see Table 4 and Figure 1). Although not originally hypothesized, our SEM findings also revealed additional differential relationships as demonstrated by significant effects of external shame on depressive symptoms, generic state shame, self-face concerns, and other-face concerns versus nonsignificant effects of family shame on these variables.

For our fifth set of hypotheses, we tested the prediction that external shame and family shame would mediate the effects of thwarted belongingness and perceived burdensomeness on suicide ideation. As earlier described, the model that best fit the data was one that included a direct path from perceived burdensomeness to suicide ideation, which was significant (see Figure 1). Thwarted belongingness, but not perceived burdensomeness, was significantly and positively associated with both external shame and family shame. To assess the significance of our hypothesized mediation effects, we used bias-corrected bootstrapping. The means of 1,000 estimated indirect effects were computed by generating 1,000 bootstrap samples using random sampling with replacement. Significant mediation effects were identified if the 95% confidence intervals (CIs) of the indirect effects did not contain 0. The mediation effect from thwarted belongingness to family shame to suicide ideation was significant (mean indirect effect, $B = 0.18$; $CI = [0.05, 0.35]$), whereas the mediation effect from thwarted belongingness to external shame to suicide ideation was not (mean indirect effect, $B = -0.02$; $CI = [-0.20, 0.20]$). Neither the mediation effect from perceived burdensomeness to family shame to suicide ideation (mean indirect effect, $B = 0.01$; $CI = [-0.02, 0.05]$) nor the mediation effect from perceived burdensomeness to external shame to suicide ideation (mean indirect effect, $B = -0.001$; $CI = [-0.03, 0.02]$) was significant.

To test our alternative mediation hypothesis, we examined Model 2. In this model, thwarted belongingness and perceived burdensomeness were specified as mediators of the effects of external shame and family shame on suicide ideation. We added a direct path from family shame to suicide ideation in Model 2, since the findings from Model 1B revealed that family

shame, but not external shame, was significantly and directly related to suicide ideation. Model 2 had an adequate fit to the data (see Table 2). We could not use the scaled chi-square difference test to compare Model 2 with Model 1B because they were not nested within each other; also their BIC values were almost identical. However, all four mediation effects from external shame and family shame to suicide ideation through thwarted belongingness and perceived burdensomeness were not significant in Model 2 (95% CIs included 0 for all indirect effects). Hence, our mediation findings were more consistent with a model in which family shame mediated the relations between thwarted belongingness and suicide ideation (Model 1B) than with a model with thwarted belongingness and perceived burdensomeness as mediators.

Study 4

The goal of Study 4 was to assess the ISI subscales' test-retest stability across a 2-week period as well as their internal consistencies. Given the short time frame, we anticipated significant and strong test-retest correlations. We also examined whether participants would report significantly different ISI-F and ISI-E scores across the 2-week period.

Method

In Study 4, we explored the test-retest reliability of the ISI. The first 50 students who completed the survey in Study 3 (Time 1) were asked to complete a shorter online survey consisting only of the ISI 2 weeks later (Time 2). The response rate was 84%. Forty-two participants (61.9% female; average age = 19.76 years, $SD = 1.44$; range: 18–23) completed the ISI in both the initial survey and the second survey. Most participants were U.S. born (76.2% second generation), whereas 23.8% were immigrant or international students. In terms of ethnicity, 26.2% were Chinese, 14.3% were Filipino, 11.9% were Koreans, 7.1% were Asian Indian, 23.8% were Vietnamese, and 16.7% were from other Asian American ethnic backgrounds.

Results

The correlations between the Time 1 and Time 2 measures were .72 and .69 for the ISI-E and ISI-F, respectively, providing evidence for the relative 2-week stability of the ISI subscales. At Time 2, the coefficient alphas were .94 for the ISI-E and .98 for the ISI-F. The ISI-F and ISI-E also demonstrated small effect size reductions in scores over time (see Table 5).

Discussion

In this article, we described the development and psychometric properties of the ISI, a culturally salient and clinically relevant measure of Asian Americans' interpersonal shame, comprising two subscales: External Shame (resulting from concerns about others' negative judgment of the self) and Family Shame (arising from perceptions that one has brought shame to one's family). Our EFAs (Study 1) provided support for an oblique two-factor model, while our CFAs (Study 2) demonstrated that this model provided superior fit to the data than a one-factor model, orthogonal two-factor model, and bifactor model. These findings present support for the use of the ISI's two subscale scores.

In Study 3, we tested the construct validity of the ISI. First, in line with previous research (Liem, 1997), immigrant and international students reported significantly higher ISI-F scores than their U.S.-born counterparts, although these two groups did not differ significantly in ISI-E scores. Second, we found support for the concurrent validity of the ISI-E and ISI-F. Consistent with our conceptualization of the ISI as an interpersonally focused state-based measure, the ISI subscales demonstrated significant and positive correlations with generic state shame, thwarted belongingness, and perceived burdensomeness. Supporting prior theorizing on the conceptual linkages among shame, self-esteem, and loss of face (Ho et al. 2004; Tangney, & Dearing, 2002), the ISI-E and ISI-F were significantly and positively associated with self-face concerns and were significantly and negatively related to self-esteem. The two ISI subscales were also significantly and positively related to depressive symptoms and suicide ideation, findings that dovetail with prior research on the links between shame and depression and suicide-related outcomes (Hastings et al., 2002; S. Kim et al., 2011). Similarly, our SEM analysis showed that external shame and family shame collectively accounted for moderate to large proportions of the variance in depressive symptoms, self-esteem, generic state shame, suicide ideation, and self-face concerns, whereas thwarted belongingness and perceived burdensomeness explained large proportions of the variance in external shame and family shame. Providing partial support for incremental validity, our SEM analysis demonstrated that after including thwarted belongingness and perceived burdensomeness as predictors of suicide ideation, family shame, but not external shame, remained significantly and positively related to suicide ideation.

Third, with regard to discriminant validity, family shame was weakly and nonsignificantly related to other-face concerns. Although external shame was significantly related to other-face concerns, the size of this relation was significantly smaller than the relation between external shame and self-face concerns, as was consistent with the conceptual distinction between self-face and other-face concerns (Mak et al., 2009). Also, external shame and family shame collectively accounted for only a small proportion of the variance in other-face concerns. These findings provide support for the discriminant validity of external shame and family shame.

Fourth, despite the strong correlation between external shame and family shame, we found consistent evidence showing that these two shame dimensions were differentially associated with other variables. Our SEM analysis demonstrated that external shame, but not family shame, was significantly associated with depressive symptoms, generic state shame, self-esteem, self-face concerns, and other-face concerns. In contrast, family shame, but not external shame, was significantly related to suicide ideation. This latter finding is congruent with research identifying family-related problems as a salient antecedent for suicide ideation among Asian and Asian American college students (e.g., Wong, Koo, et al., 2011). Put differently, the shame experienced by Asian Americans as a result of shaming their families may be a more pernicious antecedent of suicide ideation than the shame arising from perceptions of others' negative judgments. Given the central relevance of family to one's identity in Asian cultures (Wong & Poon, 2010), Asian Americans' perceptions that they have brought shame to their families might more likely trigger a desire for suicide as an expression of self-punishment for the perceived harm caused to their families. Overall, these

findings highlight the clinical relevance of addressing family shame in the prevention of suicide-related outcomes among Asian Americans.

Fifth, we tested a model in which external shame and family shame mediate the effects of thwarted belongingness and perceived burdensomeness on suicide ideation. The only significant mediation effect was the path from thwarted belongingness to family shame to suicide ideation. In contrast to thwarted belongingness, family shame appears to be a more specific type of negative interpersonal state. Perhaps Asian Americans' general experience of social alienation (arising from thwarted belongingness) might trigger a more specific negative interpersonal state (perceiving that one has brought shame to one's family), which in turn precipitates thoughts of suicide. An alternative model in which thwarted belongingness and perceived burdensomeness were specified as mediators of the effects of external shame and family shame on suicide ideation did not yield any significant mediation findings. These results suggest that for Asian Americans, family shame might be a more proximal antecedent of suicide ideation than thwarted belongingness and perceived burdensomeness. Collectively, these findings contribute to a more nuanced understanding of Asian American suicidology by identifying the structural relationships among empirically and culturally relevant antecedents of suicide ideation.

Finally, in both Studies 3 and 4, we found strong evidence of internal consistency, with the two ISI subscales exhibiting alpha coefficients in the .90s range. In Study 4, we found relatively high 2-week test–retest reliabilities for the two ISI subscales, suggesting that they were moderately stable across a short period. We also found that participants reported modest reductions in ISI-E and ISI-F scores across the 2-week period. These findings dovetail with those of a study showing that the Beck Depression Inventory–II, a state-based measure, demonstrated strong test–retest correlations but also a small effect size decrease in scores over a 2-week period among undergraduate students (Huprich & Roberts, 2012).

Strengths, Limitations, and Implications for Research and Practice

The present article offers a new measure with a number of strengths. First and foremost, it is worth reiterating that the ISI is the first measure of interpersonal shame based on salient cultural characteristics of Asians and Asian Americans. Existing measures of shame do not fully capture the culturally salient features of shame relevant to Asians and Asian Americans. For instance, we are not aware of any other measure that assesses family shame. Second, given that the ISI focuses on recent experiences of shame, it might be better at assessing clinically relevant shame experiences than trait-based measures of shame (e.g., T. R. Cohen, Wolf, Panter, & Insko, 2011; Goss, Gilbert, & Allan, 1994). Moreover, current measures of state shame, such as the State Shame Scale (Marschall et al. 1994), use brief descriptions of shame (e.g., “I feel humiliated, disgraced”), most of which do not include the desire to hide or escape, an important motivational component of shame (Blum, 2008). Yet this desire to hide or escape may be one of the most clinically salient features of shame that could be related to social withdrawal and other interpersonal challenges in psychotherapy (Dearing & Tangney, 2011). Accordingly, because the ISI was conceptualized as a measure of interpersonal state shame that explicitly includes the desire to hide or escape, it might be particularly useful for assessing Asian Americans' clinically relevant shame experiences.

Third, with a total of 10 items, the ISI is a short measure that requires a minimal amount of time for completion. For clinicians and researchers, the availability of this brief measure could allow them to utilize it efficiently in their practice or research. Fourth, as shown across the four studies, ISI scores have evidence of satisfactory reliability (both internal and over time) and construct validity. It is hoped that the ISI will aid both clinicians and researchers who are interested in learning more about Asian Americans' experiences with interpersonal shame.

Notwithstanding the strengths, the present study has limitations. Although we theorized that interpersonal shame is culturally salient to Asian Americans, we did not directly assess whether Asian Americans' acculturation status was related to interpersonal shame and whether individuals from other cultural groups (e.g., European Americans) vary in their levels of interpersonal shame. Additionally, the ISI assesses only two dimensions of interpersonal shame. We focused on external shame and family shame in the development of the ISI because we theorized that these two dimensions of interpersonal shame are most relevant to mental health outcomes. However, our new measure does not assess vicarious shame, which arises from perceiving the failures of in-group members. Vicarious shame might be another dimension of interpersonal shame that is culturally salient for Asians and Asian Americans (Li et al., 2004). Also, as is typical with studies that employ college student participants, the results of the present study may not generalize to non-college-age populations. Experiences with shame evolve over time as people mature and learn to handle shame-causing situations differently; therefore, the experiences of interpersonal shame may be different for people who are in later stages of their lives. However, college students may be especially prone to experiencing interpersonal shame, given that they are in a formative stage of life in which they face the challenges of achieving academic success. Thus, the use of a college-age sample also could be seen as a strength because interpersonal shame is a particularly salient issue for this age group.

In terms of implications for research, we found support for a model in which family shame served as a mediator of the relations between thwarted belongingness and suicide ideation. However, it would be useful to conduct longitudinal studies to delineate the temporal relations among these variables, which could have important implications for designing interventions to deter suicide ideation. Another possible idea for research is to examine the relations among interpersonal shame, loneliness, and attitudes toward seeking professional psychological help, given previous research evidence showing that shame results in social withdrawal (Chao et al., 2011). For instance, if it is found that Asian Americans' interpersonal shame is associated with a negative attitude toward help seeking, it could have significant implications for how clinicians might work toward reducing this negative attitude. Future research could also examine the psychometric properties of the ISI items using item response theory. It would be interesting to investigate whether the ISI items represent the full ranges of person trait level and item difficulty level. Knowing how each item functions in terms of its item characteristic curve could be helpful in further improving the measure of interpersonal shame. Finally, although the ISI was developed for use with Asian Americans, it might be interesting to examine its potential applicability to non-Asian Americans. For groups that have collectivistic cultural norms (e.g., Latinos), it could be that the ISI well represents the experiences of interpersonal shame held by them. Furthermore,

future research can test the factorial invariance and construct validity of the ISI across diverse cultural groups, including those from more individualistic backgrounds (e.g., European Americans). Finally, although we conceptualized the ISI as a state-based measure, we did not provide direct evidence that the ISI measured shame as a state rather than as a trait. To address this issue, future research can assess ISI-E and ISI-F scores over multiple time points. We might expect that as a state-based measure, ISI-E and ISI-F scores would fluctuate, but that the overall mean change across multiple time points would be 0.

The present study also has implications for clinical practice with Asian Americans. Given the observed relations between interpersonal shame and depressive symptoms and suicide ideation, clinicians are encouraged to discuss the possible experiences with interpersonal shame that their clients might be experiencing. However, the highly sensitive nature of this topic could cause further shame if this topic is raised without the client being ready; therefore, it is recommended that clinicians broach this subject carefully and only when there is a sufficient level of therapeutic alliance to ensure that therapeutic rupture will not be risked. It was well pointed out by Dearing and Tangney (2011) that many clients may not fully understand the meaning of *shame* when this word is used and as a result may not be able to articulate their experiences of shame to their therapists. Hence, when Asian American clients are willing to discuss their experiences with interpersonal shame, it could be helpful for clinicians to articulate them using the items in the ISI as exemplars of how shame is experienced.

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References

- Anolli L, Pascucci P. Guilt and guilt-proneness, shame and shame-proneness in Indian and Italian young adults. *Personality and Individual Differences*. 2005; 39:763–773.10.1016/j.paid.2005.03.004
- Ayers JW, Hofstetter CR, Usita P, Irvin VL, Kang S, Hovell MF. Sorting out the competing effects of acculturation, immigrant stress, and social support on depression: A report on Korean women in California. *Journal of Nervous and Mental Disease*. 2009; 197:742–747.10.1097/NMD.0b013e3181b96e9e [PubMed: 19829202]
- Baechler, J. *Suicides*. New York, NY: Basic Books; 1979.
- Bedford OA. The individual experience of guilt and shame in Chinese culture. *Culture & Psychology*. 2004; 10:29–52.10.1177/1354067X04040929
- Benedict, R. *The chrysanthemum and the sword: Patterns of Japanese culture*. Boston, MA: Houghton Mifflin; 1946.
- Bentler PM, Chou CP. Practical issues in structural modeling. *Sociological Methods & Research*. 1987; 16:78–117.10.1177/0049124187016001004
- Bishara AJ, Hittner JB. Testing the significance of a correlation with nonnormal data: Comparison of Pearson, Spearman, transformation, and resampling approaches. *Psychological Methods*. 2012; 17:399–417.10.1037/a0028087 [PubMed: 22563845]
- Blum A. Shame and guilt, misconceptions and controversies: A critical review of the literature. *Traumatology*. 2008; 14:91–102.10.1177/1534765608321070

- Byrne BM. Testing for multigroup equivalence of a measuring instrument: A walk through the process. *Psicothema*. 2008; 20:872–882. [PubMed: 18940097]
- Chao YH, Cheng YY, Chiou WB. The psychological consequence of experiencing shame: Self-sufficiency and mood-repair. *Motivation and Emotion*. 2011; 35:202–210.10.1007/s11031-011-9208-y
- Cheng, JKY. Unpublished doctoral dissertation. University of California; Davis: 2013. The role of interpersonal factors in suicidality among Asian Americans and non-Hispanic Whites.
- Cohen, J. *Statistical power analysis for the behavioral sciences*. 2. Hillsdale, NJ: Erlbaum; 1988.
- Cohen TR, Wolf ST, Panter AT, Insko CA. Introducing the GASP scale: A new measure of guilt and shame proneness. *Journal of Personality and Social Psychology*. 2011; 100:947–966.10.1037/a0022641 [PubMed: 21517196]
- Cole DA, Preacher KJ. Manifest variable path analysis: Potentially serious and misleading consequences due to uncorrected measurement error. *Psychological Methods*. in press.
- Cole JC, Rabin AS, Smith TL, Kaufman AS. Development and validation of a Rasch-derived CES-D short form. *Psychological Assessment*. 2004; 16:360–372.10.1037/1040-3590.16.4.360 [PubMed: 15584795]
- Crystal DS, Parrott WG, Okazaki Y, Watanabe H. Examining relations between shame and personality among university students in the United States and Japan: A developmental perspective. *International Journal of Behavioral Development*. 2001; 25:113–123.10.1080/01650250042000177
- Dearing, RL.; Tangney, JP., editors. *Shame in the therapy hour*. Washington, DC: American Psychological Association; 2011.
- Fessler, DMT. From appeasement to conformity: Evolutionary and cultural perspectives on shame, competition, and cooperation. In: Tracy, JL.; Robbins, RW.; Tangney, JP., editors. *The self-conscious emotions: Theory and research*. New York, NY: Guilford Press; 2007. p. 174–193.
- Fullagar S. Wasted lives: The social dynamics of shame and youth suicide. *Journal of Sociology*. 2003; 39:291–307.10.1177/0004869003035076
- Fung H. Becoming a moral child: The socialization of shame among young Chinese children. *Ethos*. 1999; 27:180–209.10.1525/eth.1999.27.2.180
- Fung, H.; Lieber, E.; Leung, PWL. Parental beliefs about shame and moral socialization in Taiwan, Hong Kong, and the United States. In: Yang, K-S.; Hwang, K-K.; Pedersen, PB.; Daibo, I., editors. *Progress in Asian social psychology: Conceptual and empirical contributions*. Westport, CT: Praeger; 2003. p. 83–109.
- Gilbert P, Gilbert J, Sanghera J. A focus group exploration of the impact of izzat, shame, subordination and entrapment on mental health and service use in South Asian women living in Derby. *Mental Health, Religion & Culture*. 2004; 7:109–130.10.1080/13674670310001602418
- Goss K, Gilbert P, Allan S. An exploration of shame measures—I: The Other as Shamer Scale. *Personality and Individual Differences*. 1994; 17:713–717.10.1016/0191-8869(94)90149-X
- Ha FI. Shame in Asian and Western cultures. *American Behavioral Scientist*. 1995; 38:1114–1131.10.1177/0002764295038008007
- Hastings, ME.; Northman, LM.; Tangney, JP. Shame, guilt, and suicide. In: Joiner, T.; Rudd, MD., editors. *Suicide science*. New York, NY: Kluwer Academic; 2002. p. 67–79.
- Hayduk, LA. *Structural equation modeling with LISREL: Essentials and advances*. Baltimore, MD: Johns Hopkins University Press; 1987.
- Ho DYF, Fu W, Ng SM. Guilt, shame and embarrassment: Revelations of face and self. *Culture & Psychology*. 2004; 10:64–84.10.1177/1354067X04044166
- Hu LT, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*. 1999; 6:1–55.10.1080/10705519909540118
- Huprich SK, Roberts CR. The two-week and five-week dependability and stability of the Depressive Personality Disorder Inventory and its association with current depressive symptoms. *Journal of Personality Assessment*. 2012; 94:205–209.10.1080/00223891.2011.645930 [PubMed: 22339313]
- Joiner, T. *Why people die by suicide*. Cambridge, MA: Harvard University Press; 2005.

- Kao EM, Nagata DK, Peterson C. Explanatory style, family expressiveness, and self-esteem among Asian American and European American college students. *Journal of Social Psychology*. 1997; 137:435–444.10.1080/00224549709595459 [PubMed: 9248358]
- Kass RE, Raftery AE. Bayes factors. *Journal of the American Statistical Association*. 1995; 90:773–795.10.1080/01621459.1995.10476572
- Keltner, KW. Kim Wong Keltner on “Tiger Babies Strike Back”. Blog post. 2013 May 13. Retrieved from http://dripler.com/amazon/kindle_dx#!810477
- Kim BS, Atkinson DR, Umemoto D. Asian cultural values and the counseling process current knowledge and directions for future research. *Counseling Psychologist*. 2001; 29:570–603.10.1177/0011000001294006
- Kim S, Thibodeau R, Jorgensen RS. Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*. 2011; 137:68–96.10.1037/a0021466 [PubMed: 21219057]
- Kim SY, Wang Y, Orozco-Lapray D, Shen Y, Murtuza M. Does “tiger parenting” exist? Parenting profiles of Chinese Americans and adolescent developmental outcomes. *Asian American Journal of Psychology*. 2013; 4:7–18.10.1037/a0030612 [PubMed: 23646228]
- King LA, Emmons RA. Conflict over emotional expression: psychological and physical correlates. *Journal of Personality and Social Psychology*. 1990; 58:864–877.10.1037/0022-3514.58.5.864 [PubMed: 2348373]
- Lee ZN. Korean culture and sense of shame. *Transcultural Psychiatry*. 1999; 36:181–194.10.1177/136346159903600202
- Lester D. The role of shame in suicide. *Suicide and Life-Threatening Behavior*. 1997; 27:352–361. [PubMed: 9444730]
- Lewis, HB. Shame and guilt in neurosis. New York, NY: International Universities Press; 1971.
- Li J, Wang L, Fischer K. The organisation of Chinese shame concepts? *Cognition & Emotion*. 2004; 18:767–797.10.1080/02699930341000202
- Liem R. Shame and guilt among first-and second-generation Asian Americans and European Americans. *Journal of Cross-Cultural Psychology*. 1997; 28:365–392.10.1177/0022022197284001
- Little, RJA.; Rubin, DB. Statistical analysis with missing data. 2. New York, NY: Wiley; 2002.
- Lutwak N, Razzino BE, Ferrari JR. Self-perceptions and moral affect: An exploratory analysis of subcultural diversity in guilt and shame emotions. *Journal of Social Behavior & Personality*. 1998; 13:333–348.
- Mak WWS, Chen SX, Lam AG, Yiu VFL. Understanding distress: The role of face concern among Chinese Americans, European Americans, Hong Kong Chinese, and mainland Chinese. *Counseling Psychologist*. 2009; 37:219–248.10.1177/0011000008316378
- Marschall, D.; Sanftner, J.; Tangney, J. The State Shame and Guilt Scale. Fairfax, VA: George Mason University; 1994.
- Marsh HW, Hau KT, Wen Z. In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler’s (1999) findings. *Structural Equation Modeling*. 2004; 11:320–341.10.1207/s15328007sem1103_2
- Miller TR. Culture, gender, and moral emotions: The role of interdependent self-construal. *Dissertation Abstracts International: Section B Sciences and Engineering*. 2002; 63(3):1569.
- Niedenthal PM, Tangney JP, Gavanski I. “If only I weren’t” versus “If only I hadn’t”: Distinguishing shame and guilt in counterfactual thinking. *Journal of Personality and Social Psychology*. 1994; 67:585–595.10.1037/0022-3514.67.4.585 [PubMed: 7965606]
- O’Connor BP. SPSS and SAS programs for determining the number of components using parallel analysis and Velicer’s MAP test. *Behavior Research Methods, Instruments, & Computers*. 2000; 32:396–402.10.3758/BF03200807
- Platt M, Freyd JJ. Trauma and negative underlying assumptions in feelings of shame: An exploratory study. *Psychological Trauma: Theory, Research, Practice, and Policy*. 2012; 4:370–378.10.1037/a0024253
- Reise SP. The rediscovery of bifactor measurement models. *Multivariate Behavioral Research*. 2012; 47:667–696.10.1080/00273171.2012.715555 [PubMed: 24049214]
- Rosenberg, M. Society and the adolescent self-image. Princeton, NJ: Princeton University Press; 1965.

- Rudd MD. The prevalence of suicidal ideation among college students. *Suicide and Life-Threatening Behavior*. 1989; 19:173–183. [PubMed: 2749860]
- Shiang, J. Considering cultural beliefs and behaviors in the study of suicide. In: Maris, R.; Canetto, S.; McIntosh, J.; Silverman, M., editors. *Review of suicidology*. New York, NY: Guilford Press; 2000. p. 226-241.
- Shneidman ES. Classifications of suicidal phenomena. *Bulletin of Suicidology*. 1968; 1:1–9.
- Shreve BW, Kunkel MA. Self-psychology, shame, and adolescent suicide: Theoretical and practical considerations. *Journal of Counseling & Development*. 1991; 69:305–311.10.1002/j.1556-6676.1991.tb01511.x
- Small NJH. Marginal skewness and kurtosis in testing multivariate normality. *Applied Statistics*. 1980; 29:85–87.10.2307/2346414
- StatsToDo. Sample size for correlation program. 2013. Retrieved from http://www.statstodo.com/SSizCorr_Pgm.php
- Stipek D. Differences between Americans and Chinese in the circumstances evoking pride, shame, and guilt. *Journal of Cross-Cultural Psychology*. 1998; 29:616–629.10.1177/0022022198295002
- Tabachnick, BG.; Fidell, LS. *Using multivariate statistics*. 5. New York, NY: Allyn & Bacon; 2007.
- Tangney JP. Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Research and Therapy*. 1996; 34:741–754.10.1016/0005-7967(96)00034-4 [PubMed: 8936757]
- Tangney, JP.; Dearing, RL. *Shame and guilt*. New York, NY: Guilford Press; 2002.
- Tangney, JP.; Tracy, JL. Self-conscious emotions. In: Leary, MR.; Tangney, JP., editors. *Handbook of self and identity*. 2. New York, NY: Guilford Press; 2012. p. 446-478.
- Teroni F, Deonna JA. Differentiating shame from guilt. *Consciousness and Cognition*. 2008; 17:725–740.10.1016/j.concog.2008.02.002 [PubMed: 18445530]
- Van Orden KA, Witte TK, Gordon KH, Bender TW, Joiner TE. Suicidal desire and the capability for suicide: Tests of the interpersonal-psychological theory of suicidal behavior among adults. *Journal of Consulting and Clinical Psychology*. 2008; 76:72–83.10.1037/0022-006X.76.1.72 [PubMed: 18229985]
- Wang, J.; Wang, X. *Structural equation modeling: Applications using Mplus*. Chichester, England: Wiley; 2012.
- Wang KT, Wong YJ, Fu CC. Moderation effects of perfectionism and discrimination on interpersonal factors and suicide ideation. *Journal of Counseling Psychology*. 2013; 60:367–378.10.1037/a0032551 [PubMed: 23566062]
- Wei M, Alvarez AN, Ku TY, Russell DW, Bonett DG. Development and validation of a Coping With Discrimination Scale: Factor structure, reliability, and validity. *Journal of Counseling Psychology*. 2010; 57:328–344.10.1037/a0019969 [PubMed: 21133583]
- Wong YJ, Brownson C, Schwing AE. Risk and protective factors associated with Asian American students' suicidal ideation: A multi-campus, national study. *Journal of College Student Development*. 2011; 52:396–408.10.1353/csd.2011.0057
- Wong YJ, Koo K, Tran KK, Chiu YC, Mok Y. Asian American college students suicide ideation: A mixed-methods study. *Journal of Counseling Psychology*. 2011; 58:197–209.10.1037/a0023040 [PubMed: 21463030]
- Wong, YJ.; Poon, M-L. Counseling Asian American men who demonstrate suicidal behavior. In: Liu, WM.; Iwamoto, DK.; Chae, MH., editors. *Culturally responsive counseling with Asian American men*. New York, NY: Routledge; 2010. p. 279-298.
- Wong, Y.; Tsai, JL. Cultural models of shame and guilt. In: Tracy, JL.; Robins, RW.; Tangney, JP., editors. *The self-conscious emotions: Theory and research*. New York, NY: Guilford Press; 2007. p. 209-223.
- Yang, J. Tiger babies bite back. *The Wall Street Journal*. 2013 May 14. Retrieved from <http://blogs.wsj.com/speakeasy/2013/05/14/tiger-babies-bite-back/>
- Yang S, Rosenblatt PC. Shame in Korean families. *Journal of Comparative Family Studies*. 2001; 32:361–376.

Zane, N.; Yeh, M. The use of culturally-based variables in assessment: Studies on loss of face. In: Kurasaki, K.S.; Okazaki, S.; Sue, S., editors. *Asian American mental health: Assessment theories and methods*. New York, NY: Kluwer Academic/Plenum; 2002. p. 123-138.

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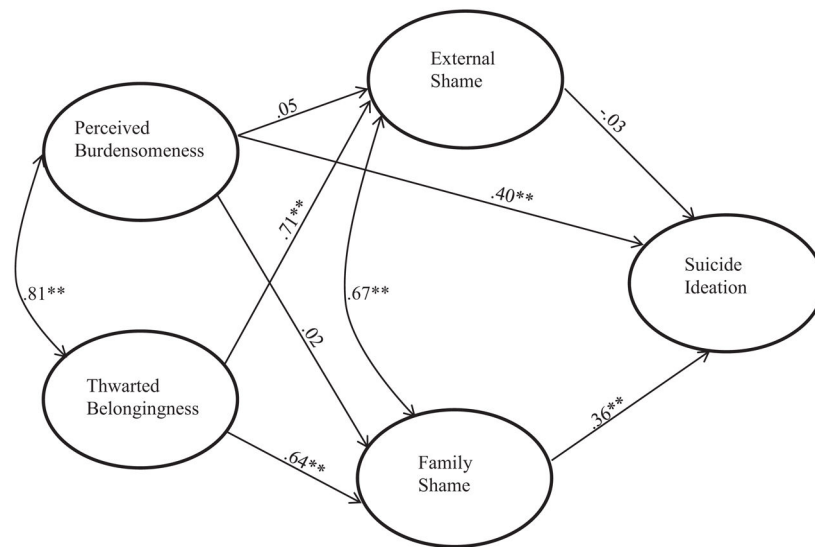


Figure 1. Mediation model depicting the relationships among external shame, family shame, thwarted belongingness, perceived burdensomeness, and suicide ideation ($N = 476$). Standardized path coefficients were reported. R^2 for suicide ideation = $.41^{**}$ ($f^2 = 0.69$). The measurement model and latent variables not relevant to the mediation hypotheses are omitted from this figure. $^{**} p < .01$.

Table 1 Item Factor Loadings, Communality Estimates, Item Means, and Standard Deviations for the Interpersonal Shame Inventory

Item	EFA		CFA	M	SD
	1	2			
3. These days, I feel like hiding because people might view me as flawed.	.18	.73	.84**	2.32	1.39
7. These days, I feel like escaping because others might think something is wrong with me.	.06	.87	.90**	2.30	1.48
8. These days, I feel like crawling into a hole because others might regard me as defective.	.17	.77	.88**	2.01	1.33
14. These days, I feel like avoiding others because people might view me as weak.	-.02	.82	.82**	2.36	1.45
15. These days, I wish I could shrink away because others might perceive me as incompetent.	-.05	.94	.88**	2.32	1.41
5. These days, I wish I could disappear because my deficits might cause my family to lose face.	.85	.02	.89**	2.12	1.35
10. These days, I feel like escaping because my defects might disgrace my family.	.93	.01	.90**	2.02	1.29
11. These days, I feel like crawling into a hole because my deficiencies might dishonor my family.	.95	.00	.94**	2.04	1.37
12. These days, I wish I could run away because my inadequacies might cause my family to look bad.	.90	.05	.92**	2.12	1.36
16. These days, I wish I could become invisible because my shortcomings might bring disrepute to my family.	.81	.15	.91**	2.07	1.31

Note. In the exploratory factor analysis (EFA) with promax rotation ($n = 237$) and the confirmatory factor analysis (CFA) for the oblique two-factor model ($n = 239$), correlation between external shame and family shame equals .75 and .85 ($p < .001$), respectively. Means and standard deviations are based on the total sample ($N = 476$).

** $p < .01$.

Table 2

Goodness-of-Fit Indicators for Structural Equation Modeling Analyses

Model	df	χ^2	RMSEA	90% CI	CFI	SRMR	BIC
Study 2 analyses							
Oblique two-factor model	34	53.78*	.05	[.02, .07]	.98	.03	5903.02
Orthogonal two-factor model	35	151.74**	.12	[.10, .14]	.87	.42	6149.88
One-factor model	35	132.55**	.11	[.09, .13]	.89	.06	6146.43
Bifactor model	27	69.83**	.08	[.06, .11]	.95	.13	5993.98
Study 3 analyses							
Measurement model	98	192.81**	.05	[.04, .05]	.98	.02	17889.62
Model 1A	108	400.93**	.08	[.07, .08]	.94	.05	18119.92
Model 1B	109	402.30**	.08	[.07, .08]	.94	.05	18114.15
Model 1C	109	402.29**	.08	[.07, .08]	.94	.05	18116.73
Model 1D	110	409.07**	.08	[.07, .08]	.94	.05	18116.73
Model 2	109	402.97**	.08	[.07, .08]	.94	.05	18113.93

Note. Study 2, $n = 239$; Study 3, $N = 476$. In Models 1A–1D, mediators were external shame and family shame. Model 1A = model with direct paths from thwarted belongingness and perceived burdensomeness to suicide ideation; Model 1B = model with a direct path from perceived burdensomeness to suicide ideation; Model 1C = model with a direct path from thwarted belongingness to suicide ideation; Model 1D = full mediation model; Model 2 = model with thwarted belongingness and perceived burdensomeness as mediators and a direct path from family shame to suicide ideation. RMSEA = root-mean-square error of approximation; CI = confidence interval for RMSEA; CFI = comparative fit index; SRMR = standardized root-mean-square residual; BIC = Bayesian information criterion.

* $p < .05$.

** $p < .01$.

Table 3
Descriptive Statistics and Intercorrelations Between the Interpersonal Shame Inventory and Other Measures

Measure	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. ISI-E	2.26	1.26	—	.78**	.63**	.67**	.56**	-.62**	.63**	.46**	.38**	.17**	.07	.03
2. ISI-F	2.08	1.24	—	.58**	.62**	.62**	.51**	-.54**	.55**	.52**	.28**	.09	.12**	-.03
3. SSS	1.85	0.88	—	.77**	.64**	.77**	.64**	-.66**	.71**	.54**	.25**	.07	.13**	-.03
4. INQ-TB	2.28	1.12	—	.73**	.73**	.73**	.73**	-.70**	.68**	.57**	.23**	.001	.07	-.04
5. INQ-PB	2.77	1.21	—	.63**	.63**	.63**	.63**	-.64**	.63**	.57**	.28**	.01	.09*	-.05
6. SES	2.86	0.57	—	-.68**	-.68**	-.68**	-.68**	-.50**	-.68**	-.50**	-.39**	-.16**	-.06	-.04
7. CES-D	1.00	0.51	—	.53**	.53**	.53**	.53**	.38**	.53**	.38**	.16**	.16**	.05	.01
8. SIS	0.05 ^a	0.88	—	.22	.22	.22	.22	.13	.22	.13	.07	.07	-.03	-.03
9. LOF-SF	4.47	0.97	—	.59**	.59**	.59**	.59**	-.003	.59**	-.003	-.003	-.003	.06	.06
10. LOF-OF	4.81	0.96	—	.03	.03	.03	.03	-.08	.03	-.08	-.08	-.08	-.08	-.08
11. Immigrant ^b	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12. Gender ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note. N = 476, except for the Suicide Ideation Scale (SIS; n = 79). ISI-E = Interpersonal Shame Inventory-External; ISI-F = Interpersonal Shame Inventory-Family; SSS = State Shame Scale; INQ = Interpersonal Needs Questionnaire; TB = Thwarted Belongingness; PB = Perceived Burdensomeness; SES = Self-Esteem Scale; CES-D = 10-item Center for Epidemiologic Studies Depression Scale; LOF = Loss of Face Scale; SF = Self-Face; OF = Other-Face.

^aBased on Rankit transformed scores (range: = 0.81 to 2.49).

^b1 = immigrant/international, 0 = U.S. born.

^c1 = female, 0 = male.

* p < .05.

** p < .01.

Structural Equation Modeling Path Coefficients From External Shame and Family Shame to Other Latent Variables

Table 4

Variable	External/family shame	B	SE	β	R ²	f ²
Depressive symptoms	External shame	.28	.04	.74**	.57**	1.30
	Family shame	.01	.04	.01		
Generic state shame	External shame	.44	.07	.65**	.55**	1.23
	Family shame	.08	.07	.11		
Self-esteem	External shame	-.31	.04	-.69**	.49**	0.95
	Family shame	-.002	.04	-.004		
Self-face concerns	External shame	.41	.07	.55**	.19**	0.23
	Family shame	-.11	.07	-.14		
Other-face concerns	External shame	.23	.07	.31**	.04**	0.04
	Family shame	-.12	.08	-.16		

Note. N = 476. Coefficients for paths from thwarted belongingness and perceived burdensomeness and for paths to suicide ideation are reported in Figure 1. R² = proportion of variance in the latent variable accounted for by external shame and family shame.

** p < .01.

Table 5

Time 1 and Time 2 Interpersonal Shame Inventory Scores

Measure	Time 1		Time 2		<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
External	2.16	1.30	1.90	1.03	-.0187	-.029
Family	2.06	1.21	1.70	1.07	-2.56	-.014

Note. *n* < 42.