

# Impostor Feelings and Psychological Distress Among Asian Americans: Interpersonal Shame and Self-Compassion

The Counseling Psychologist

2020, Vol. 48(3) 432–458

© The Author(s) 2020

Article reuse guidelines:

[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

DOI: 10.1177/0011000019891992

[journals.sagepub.com/home/tcp](https://journals.sagepub.com/home/tcp)

Meifen Wei<sup>1</sup>, Shuyi Liu<sup>1</sup> , Stacy Y. Ko<sup>1</sup> ,  
Cixin Wang<sup>2</sup>, and Yi Du<sup>3</sup>

## Abstract

We examined how the association between impostor feelings and psychological distress was mediated by interpersonal shame and moderated by self-compassion in a sample of 433 Asian American students at an East Coast public university. First, we found that the positive association between impostor feelings and psychological distress was partially mediated by interpersonal shame (i.e., shame related to others viewing them negatively or dishonoring their family due to their deficits). Second, self-compassion significantly moderated the positive association between impostor feelings and interpersonal shame. Specifically, this positive association was stronger for those with lower self-compassion than for those with higher self-compassion. Third, the index of moderated mediation further supported that self-compassion moderated the mediation through an indirect effect of impostor feelings on psychological distress through interpersonal shame. We found additional results which supported the moderation and moderated mediation hypotheses for the three specific components of self-compassion (i.e., common humanity, self-judgment, and over-identification).

<sup>1</sup>Iowa State University, Ames, IA, USA

<sup>2</sup>University of Maryland at College Park, College Park, MD, USA

<sup>3</sup>University of California, Berkeley, Berkeley, CA, USA

## Corresponding Author:

Meifen Wei, Department of Psychology, Iowa State University, W112 Lagomarcino Hall, Ames, IA 50011-3180, USA.

Email: [wei@iastate.edu](mailto:wei@iastate.edu)

**Significance of the Scholarship to the Public**

*We examined impostor feelings (i.e., the belief that one's accomplishments are a result of being lucky rather than one's ability) as experienced by Asian Americans. We found that impostor feelings are positively associated with psychological distress through interpersonal shame (i.e., shame arising from the worry that one will be evaluated negatively and bring dishonor to the family due to their own inadequacy). Furthermore, we suggest that higher self-compassion buffered against interpersonal shame in the face of experiencing impostor feelings for Asian Americans.*

**Keywords**

impostor feelings, interpersonal shame, self-compassion, psychological distress, Asian American

Recently, Cokley et al. (2017) suggested that “the impostor phenomenon is an area deserving of more attention than has been conducted so far” (p. 142), as the impostor phenomenon is prevalent on college campuses among racial/ethnic minority students (e.g., Cokley, McClain, Enciso, & Martinez, 2013; Cokley et al., 2017; McClain et al., 2016). The impostor phenomenon refers to “the psychological experiences of believing that one’s accomplishments came about not through genuine ability, but as a result of having been lucky . . . or having manipulated other people’s impressions” (Clance & Imes, 1978, p. 495). The impostor phenomenon was first observed in highly successful female college students and professionals who, although highly accomplished, were unable to internalize their success or see themselves as competent and talented individuals (Clance & Imes, 1978; Langford & Clance, 1993).

Researchers have operationalized the impostor phenomenon construct (Clance, 1985) and conducted studies to understand more about those who have impostor feelings (e.g., Langford & Clance, 1993). For example, those who have impostor feelings are constantly worried about not being able to maintain their success. They feel pressured to live up to their successful image and fear that others will discover their unworthiness and incompetence (Langford & Clance, 1993). In addition, those with impostor feelings might find it difficult to internalize their achievements and are reluctant to attribute their success to intrinsic ability due to a fear of not being able to repeat their success. They therefore tend to externally attribute their success to luck or error (Clance, 1985; Clance & Imes, 1978; Cokley et al., 2013).

At present, a small but growing number of researchers have begun to look at the associations between the impostor phenomenon and mental health outcomes among racial/ethnic minority college students, particularly for African Americans (e.g., Cokley et al., 2013; Cokley et al., 2017; McClain et al., 2016; Peteet, Brown, Lige, & Lanaway, 2015). However, the number of studies on the impostor phenomenon for Asian Americans remains very limited. To date, we were only able to locate two published articles written by Cokley et al. (2013, 2017) that included samples of African Americans, Latino/a Americans, and Asian Americans together. We therefore would like to address this gap by examining the associations between impostor feelings and mental health concerns and identify possible mediating variables (i.e., interpersonal shame) and moderating factors (i.e., self-compassion) among Asian Americans.

### **Impostor Phenomenon and Psychological Distress**

Remarkably, the only two available research studies on the impostor phenomenon examining the experiences of Asian Americans indicated this population of students actually experience greater impostor feelings than African American and Latino/a American students (Cokley et al., 2013; Cokley et al., 2017). These results are rather surprising. Due to the negative stereotype of lower intelligence which has come to be associated with African Americans and Latino/a Americans, there is an assumption that these two groups struggle with impostor feelings more than Asian Americans (Cokley et al., 2013). For example, African Americans or Latino/a Americans might be afraid that others will discover that they are not as capable as others thought they were. They might often compare their ability to that of those around them and thereby think that others are more intelligent than they are.

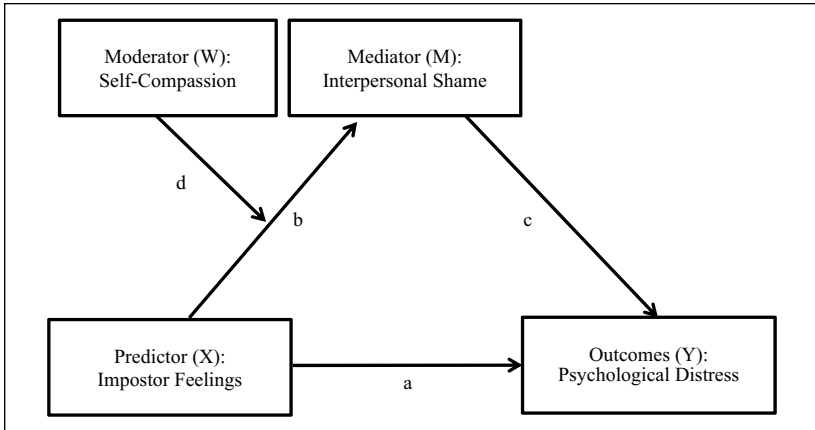
However, for Asian Americans, people tend to have positive model minority stereotypes. Unfortunately, internalizing model minority stereotypes might be one reason why Asian Americans report higher impostor feelings (Cokley et al., 2013). Model minority stereotypes tend to hold the assumption that all Asian American students are high academic achievers (Lee, 2009). For Asian Americans, failure to meet the educational expectations of this stereotype may result in feelings of inadequacy, self-doubt, psychological distress, and suicide (Kim & Park, 2008). Atkin, Yoo, Jager, and Yeh (2018) recently reported that Asian Americans who internalize model minority stereotypes might feel burdened due to the pressure they feel to live up to societal expectations of being successful, intelligent, and hardworking. As a result, when Asian Americans receive praise for something they have accomplished, they might be afraid of not living up to others' expectations of them

(i.e., impostor feelings). Empirically, Cokley et al. (2018) found that impostor feelings were positively associated with maladaptive perfectionism (i.e., the presence of a perceived discrepancy between performance and expectations) among college students, where Asian Americans represented 28% of the sample. In reality, not every Asian American fits the model minority stereotype. Asian Americans who do not fit the stereotype might fear that others will discover how much knowledge or ability they really lack. Thus, they might believe that their success in life or in their profession has been the result of “some kind of luck” (i.e., impostor feelings). For these reasons, we believe that Asian Americans might experience impostor feelings.

Conceptually, Clance and Imes (1978) argued that, because of their high expectations and continuous need to prove themselves, those who have impostor feelings can experience generalized anxiety, frustration, and depression. Empirically, Cokley et al. (2013, 2017) found that impostor feelings were significantly and positively associated with depression, anxiety, and psychological distress. Cokley et al. (2013) further showed that the strength of the association between impostor feelings and psychological distress ( $r = .54$ ) was much stronger than the strength of the association between minority status stress and psychological distress ( $r = .29$ ) for Asian Americans. This indicates that it is not only minority status itself that is associated with distress, but also a specific, experiential component of being a minority (i.e., the impostor phenomenon) that may be more powerful in predicting psychological distress. These results illustrate the importance of examining mental health outcomes for the impostor phenomenon among Asian Americans. From the above conceptual and empirical evidence, we expected that impostor feelings would be positively related to psychological distress for Asian Americans (see Path a in Figure 1). Furthermore, we also aimed to advance the literature by going beyond a linear prediction to examine how impostor feelings might be related to negative outcomes (i.e., the mediation hypothesis), and what variable might buffer this association (i.e., the moderation hypothesis). Thus, we proposed interpersonal shame as a mediator and self-compassion as a moderator.

## **Interpersonal Shame as a Mediator**

Recently, Wong, Kim, Nguyen, Cheng, and Saw (2014) proposed the construct of interpersonal shame and indicated that there are two dimensions of interpersonal shame: external shame and family shame. External shame refers to shame resulting from concerns that one may be negatively evaluated by others. Family shame taps the shame resulting from an individual's belief that he or she has brought shame to their family. As we know, because Asian



**Figure 1.** The hypothesized model showing the relations among the study's variables.

cultures value collectivism and interpersonal harmony, shame may result within a relational context. In this study, we proposed a mediation effect of interpersonal shame on the association between impostor feelings and psychological distress (see Path b and Path c in Figure 1).

Langford and Clance (1993) suggested that those who have impostor feelings might be vulnerable to feelings of shame and unworthiness, and speculated that impostors are people who invest heavily in trying to live up to an idealized self-image of being capable and intelligent in order to get the validation necessary to feel good about themselves. If validation from others is present, they may maintain a feeling of self-worth. However, if validation from others is absent, they may be concerned about others potentially viewing them as weak, incompetent, or inadequate (i.e., external shame) and their inadequacy causing their family to lose face or look bad (i.e., family shame). Empirically, impostor feelings (i.e., impostor tendency or phenomenon) were significantly and positively associated with shame (Cowman & Ferrari, 2002; White, 2001). For these reasons, we expected that impostor feelings would be positively related to interpersonal shame for Asian Americans (see Path b in Figure 1).

Furthermore, we expected that interpersonal shame would be positively associated with psychological distress among Asian Americans. Empirically, interpersonal shame has been found to be significantly and positively associated with depression (Carrera & Wei, 2017; Wong et al., 2014) and suicidal ideation (Wong et al., 2014) among Asian Americans. We therefore expected

that interpersonal shame would be positively related to psychological distress (Path c in Figure 1). Although no researcher has examined this mediation hypothesis, findings from previous research based on bivariate relationships (see paths b and c in Figure 1) have provided some conceptual and empirical support. As a result, it seems reasonable to hypothesize that interpersonal shame might be the mechanism connecting impostor feelings to psychological distress (see Path b and Path c in Figure 1).

## **Self-Compassion as a Moderator**

Self-compassion entails being caring and compassionate toward oneself during difficult times (Brach, 2003; Neff, 2003). Neff (2003) identified six components of self-compassion: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. Specifically, Neff (2003) indicated that self-compassion involves treating oneself with kindness instead of being self-critical, recognizing shared human experiences (i.e., common humanity) rather than viewing suffering as something that happens only to “me” (i.e., isolation), and being aware of one’s present moment experience of suffering or difficult feelings (i.e., mindfulness) as opposed to being completely absorbed by them (i.e., over-identification). Further, Neff (2016) suggested that these six components of self-compassion can be viewed as ways people emotionally should respond to their suffering (with more self-kindness or less self-judgment), cognitively understand their suffering (as part of the human experience rather than as experiencing isolation), and pay attention to their suffering (in a more mindful rather than over-identified manner).

Theoretically, self-compassion can be viewed as an emotion regulation strategy in which negative feelings (e.g., impostor feelings) are held simultaneously in awareness with kindness and a sense of shared common humanity (Neff, 2003, 2004). This implies that self-compassion may serve as a moderator to buffer any negative impact (e.g., interpersonal shame or psychological distress) that impostor feelings may have. We expected that the positive association between impostor feelings and interpersonal shame would be weaker for Asian Americans with more self-compassion than it would be for those with less self-compassion. Our rationale is that Asian Americans with more self-compassion might be better able to show themselves kindness instead of being critical of themselves, understand that they are not alone in having impostor feelings, and hold their impostor feelings in mindful awareness. In this way, self-compassion may act as a personal resource that regulates impostor feelings, helping to mitigate worry about being viewed negatively or concerns that one’s shortcomings may cause their family to lose face (i.e., interpersonal

shame). For these reasons, we hypothesized that self-compassion would moderate the positive association between impostor feelings and interpersonal shame. Specifically, we hypothesized that the positive association between impostor feelings and interpersonal shame would be significantly weaker for Asian Americans with more self-compassion than for Asian Americans with less self-compassion (see Path d in Figure 1).

Moreover, self-compassion as a moderator could be extended to the above mediation effects, that is, we expected that self-compassion would moderate the mediation (or indirect) effect of interpersonal shame on the relationship between impostor feelings and psychological distress (see Path b, Path c, and Path d, Figure 1). Similar to the above rationale, Asian Americans with more self-compassion might be less critical of themselves when they have impostor feelings, and they might be less preoccupied with their impostor feelings. Thus, they might be less worried about being negatively evaluated by others and bringing shame to their family due to their inadequacy (i.e., interpersonal shame), which in turn might result in less psychological distress. Empirically, Kyeong (2013) found that the effect of academic burden on depression was weaker for Koreans with more self-compassion than for Koreans with less self-compassion. In the same vein, Wong and Mak (2012) also showed that the associations between personality vulnerability styles and depression was weaker for Chinese with more self-compassion than for Chinese with less self-compassion. Based on the above theoretical reasoning and relevant empirical support, we hypothesized that the positive mediation effects from impostor feelings, through interpersonal shame, to psychological distress would be significantly weaker for Asian Americans with more self-compassion than for Asian Americans with less self-compassion.

## **Current Study**

We proposed three sets of hypotheses. First, we hypothesized that interpersonal shame would mediate the positive association between impostor feelings and psychological distress. Second, we hypothesized that self-compassion would moderate the positive association between impostor feelings and interpersonal shame. Specifically, we hypothesized that this positive association was weaker for those with greater self-compassion than for those with lesser self-compassion. Third, we hypothesized that self-compassion would moderate the mediation effect of impostor feelings, through interpersonal shame, to psychological distress. Similarly, the positive mediation effect was hypothesized to be weaker for those with higher self-compassion than for those with lower self-compassion. Furthermore, Neff et al. (2018) recently examined the factor structure of the Self-Compassion Scale in 20 different samples ( $N = 11,685$ ) and

recommended using the total score (i.e., representing overall self-compassion) and the six separate subscale scores (i.e., representing the six components of self-compassion). We therefore decided to also explore the six components of self-compassion as an additional exploratory analysis. In doing so, we hoped that the results would advance our knowledge about which specific components of self-compassion could lessen the strength of the positive association between impostor feelings and interpersonal shame.

As there are only two published studies to date on impostor feelings involving Asian American participants, we currently only have knowledge about the direct positive association between impostor feelings and psychological distress for Asian Americans (Cokley et al., 2013). However, if the mediation hypothesis we hoped to find was to be supported, our work would advance the literature by going beyond this direct association to uncover the more complex relationship between impostor feelings and psychological distress through interpersonal shame. Moreover, if the moderation hypothesis was to be supported, the results would indicate that promoting self-compassion could lessen interpersonal shame and, subsequently, psychological distress when Asian Americans experience impostor feelings. Practitioners or educators could pay attention to any possible vulnerability related to interpersonal shame and the protective buffer of self-compassion when Asian Americans present feeling as if they are an impostor.

## Method

### *Participants*

A total of 433 Asian American students from a large public university on the East Coast participated in this study. The sample consisted of 183 (42.3%) men, 245 (56.6%) women, and 5 (1.2%) individuals who identified as “non-binary”. The ages of the participants ranged from 18 to 50 years, with a mean of 20.26 ( $SD = 3.80$ ). Asian ethnicities included 140 (32.3%) Chinese, 89 (20.6%) Indian, 61 (14.1%) Korean, 44 (10.2%) Vietnamese, 34 (7.9%) Taiwanese, 22 (5.1%) Filipino/a, 3 (0.7%) Indonesian, 3 (0.7%) Japanese, 3 (0.7%) Thai, 1 (0.2%) Malaysian, 1 (0.2%) Cambodian, and 32 (7.4%) other Asian ethnicities. Among the participants, 26 (6.0%) were first-generation, 98 (22.6%) were 1.5-generation, 267 (61.7%) were second-generation, 12 (2.8%) were third-generation, and 30 (6.9%) were fourth-generation.

### *Measures*

*Impostor feelings.* We used the Clance Impostor Phenomenon Scale (CIPS; Clance, 1985) to assess impostor feelings. Sample items are, “At times, I feel

my success has been due to some kind of luck,” and “When people praise me for something I’ve accomplished, I’m afraid I won’t be able to live up to their expectations of me in the future.” The CIPS has 20 items and uses a 5-point Likert-type scale ranging from 1 (*not true at all*) to 5 (*very true*). A higher score indicates a higher level of impostor feelings. The coefficient alpha was .94 among Asian American college students (Cokley et al., 2017) and .90 for our participants. The construct validity of this scale was supported by its positive and significant associations with depression and anxiety among Asian American college students (Cokley et al., 2017).

**Psychological distress.** We used the Hopkins Symptom Checklist-21 item version (Green, Walkey, McCormick, & Taylor, 1988) to assess psychological distress. This measure includes three subscales: general distress, somatic distress, and performance distress. A sample item is, “Your feelings being easily hurt.” Items were rated on a 4-point Likert-type scale ranging from 1 (*not at all*) to 4 (*extremely*). A higher score indicates higher psychological distress. The coefficient alpha was .86 among Asian American students (Christopher & Skillman, 2009) and .90 for our participants. Construct validity of this scale was supported by a negative association with positive affect and a positive association with negative affect among Asian American college students (Lee, Su, & Yoshida, 2005).

**Interpersonal shame.** We used the Interpersonal Shame Inventory (ISI; Wong et al., 2014) to measure interpersonal shame. The ISI is a 10-item self-report measure that assesses two dimensions of interpersonal shame: *external shame* (five items) and *family shame* (five items). External shame measures the degree to which participants are concerned about others’ negative evaluations of them. Family shame examines the degree to which participants perceive that they have brought shame to their families. Sample items are, “These days, I wish I could shrink away because others might perceive me as incompetent” (external shame), and “These days, I wish I could disappear because my deficits might cause my family to lose face” (family shame). Participants rated items on a 6-point Likert-type scale from 1 (*strongly disagree*) to 6 (*strongly agree*). We used the total score. Higher scores reflect higher interpersonal shame. The coefficient alpha was .94 for external shame, .97 for family shame, and .96 for interpersonal shame among Asian and Asian American college students (Wong et al., 2014). For our participants, the coefficient alpha was .95 for external shame, .97 for family shame, and .97 for interpersonal shame. Concurrent validity was evidenced by positive relations between both external shame and family shame with generic state shame, thwarted belongingness, perceived burdensomeness, self-face concerns, depression, and suicidal ideation in a study with Asian American college students (Wong et al., 2014).

*Self-compassion.* We used the Self-Compassion Scale-Short Form (SCS-SF; Raes, Pommier, Neff, & Van Gucht, 2011) to assess self-compassion. The SCS-SF includes six subscales: self-kindness, common humanity, mindfulness, self-judgment, isolation, and over-identification. Sample items include: “When I’m going through a very hard time, I give myself the caring and tenderness I need” (self-kindness), “I try to see my failings as part of the human condition” (common humanity), “When something painful happens, I try to take a balanced view of the situation” (mindfulness), “I’m disapproving and judgmental about my own flaws and inadequacies” (self-judgment), “When I’m feeling down, I tend to feel like most other people are probably happier than I am” (isolation), and “When I fail at something important to me, I become consumed by feelings of inadequacy” (over-identification). The SCS-SF (12 items) is rated on a 5-point Likert-type scale ranging from 1 (*almost never*) to 5 (*almost always*). A higher score indicates a higher level of self-compassion, self-kindness, common humanity, mindfulness, self-judgment, isolation, and over-identification. It is important to note that we reversed the scores for the items of the three negative subscales (i.e., self-judgment, isolation, and over-identification) before calculating the total score for self-compassion. To our knowledge, the SCS-SF has never been used specifically with Asian American samples, but there are studies using the long form of the SCS with Asian samples. The coefficient alpha for the long form of the SCS was .86 for college students in Taiwan (Neff, Pisitsung-kagarn, & Hsieh, 2008) and .87 for college students in China (Kwan, Kuang, & Hui, 2009). The coefficient alpha for the SCS-SF was .83 among a sample of individuals in the United States (Zhang & Chen, 2016). For our participants, the coefficient alpha was .83 for self-compassion, .52 for self-kindness, .73 for self-judgment, .61 for common humanity, .64 for isolation, .61 for mindfulness, and .71 for over-identification. Construct validity of the SCS-SF was supported by a negative association with negative emotions and a positive association with self-esteem (Zhang & Chen, 2016).

## Procedure

We obtained our data through an online survey. After IRB approval was obtained, we sent out email invitations to lists of Asian American and Pacific Islander students. Instructors of Asian American Studies courses also sent emails to invite their students to participate in our study. All students were informed that they needed to be Asian American and be at least 18 years of age to participate in this study. Participants were told that our purpose was to examine factors that contribute to Asian Americans’ well-being in the United States. Participants were also told that the survey would take about

15-20 minutes to complete, and they were asked to rate their experience at the time of assessment. After survey completion, participants could enter a drawing to win one of two \$25 gift cards.

We sent one reminder email to participants. A total of 535 individuals responded, with 74 incomplete surveys (e.g., only completing some questions on the demographics or not answering any single question on the entire scale). Thus, we removed those participants from the sample. In addition, there were three survey validity check items on the online survey (e.g., "Please select '*Strongly Disagree*' for this item."). To achieve better accuracy, we only kept data from students who answered at least two survey validity check items correctly. Thus, we removed 28 participants who had two or three incorrect survey validity check items. We used the final set of 433 participants for data analysis.

## Results

### *Preliminary Results*

We first analyzed the missing data. At the item level, missing data ranged from 0.07% for interpersonal shame to 2.8% for self-compassion. We then conducted Little's MCAR test (missing completely at random) at the scale level of missing data. The nonsignificant results,  $\chi^2(12, N = 433) = 17.94$ ,  $p = .12$ , revealed that missing data was missing completely at random. We therefore used the Expectation Maximization algorithm (Schafer & Graham, 2002) in SPSS to impute missing data for the later analyses.

Next, we calculated means, standard deviations, and zero-order correlations for the main observed variables (Table 1). All the variables of interest were significantly correlated with each other (see Table 1). Specifically, impostor feelings, interpersonal shame, and psychological distress were positively related to each other with large effect sizes. Self-compassion was negatively related to impostor feelings, interpersonal shame, and psychological distress with large effect sizes. Impostor feelings, interpersonal shame, and psychological distress were negatively associated with three positive components of self-compassion (i.e., self-kindness, common humanity, and mindfulness), with between small and medium effect sizes. Conversely, impostor feelings, interpersonal shame, and psychological distress were positively associated with three negative components of self-compassion (i.e., self-judgment, isolation, over-identification), with between medium and large effect sizes (see Table 1).

Finally, as Asian Americans reported the highest mean score for impostor feelings compared with African Americans and Latino/a Americans in only

**Table 1.** Means, Standard Deviations, and Correlations Among Variables.

Variable	1	2	3	4	5	6	7	8	9	10
1. Impostor feelings	—									
2. Psychological distress	.61***	—								
3. Interpersonal shame	.59***	.68***	—							
4. Self-compassion	-.55***	-.51***	-.51***	—						
5. Self-kindness	-.29***	-.33***	-.37***	.76***	—					
6. Common humanity	-.17***	-.13**	-.21***	.63***	.60***	—				
7. Mindfulness	-.15**	-.25***	-.23***	.59***	.51***	.44***	—			
8. Self-judgment	.53***	.47***	.43***	-.75***	-.44***	-.22***	-.22***	—		
9. Isolation	.52***	.42***	.42***	-.71***	-.33***	-.19***	-.16***	.56***	—	
10. Over-identification	.59***	.50***	.43***	-.71***	-.30***	-.19***	-.15**	.63***	.65***	—
<i>M</i>	3.33	2.04	2.36	2.77	3.04	2.94	3.54	3.46	3.65	3.84
<i>SD</i>	0.68	0.52	1.40	0.67	0.91	1.00	0.90	1.00	1.00	0.99

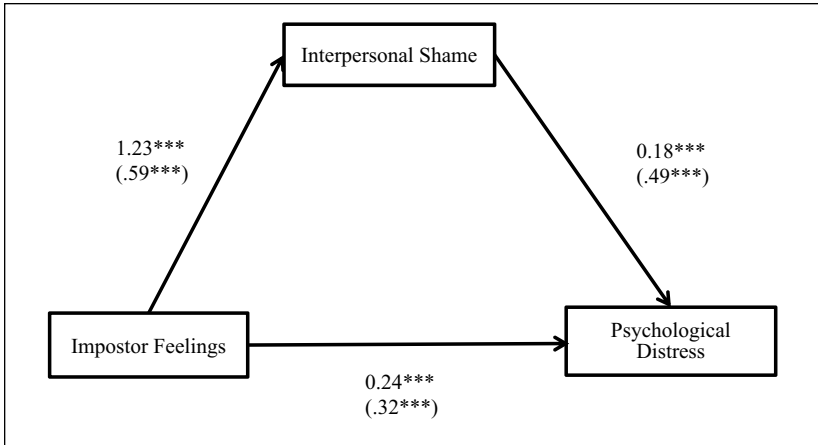
Note.  $N = 433$ .

\*\* $p < .01$  \*\*\* $p < .001$ .

two existing previous studies (Cokley et al., 2013; 2017), we conducted a mean comparison. The mean for impostor feelings for our Asian American participants ( $M = 3.33$ ,  $SD = 0.68$ ) was higher than those reported by Cokley et al. (2013) for African Americans ( $M = 2.56$ ,  $SD = 0.71$ ) and Latino/a Americans ( $M = 2.80$ ,  $SD = 0.72$ ), as well as for African Americans ( $M = 2.99$ ,  $SD = 0.77$ ) and Latino/a Americans ( $M = 3.00$ ,  $SD = 0.76$ ) in the more recent Cokley et al. (2017) study with a Cohen's  $d$  of 0.46 to 1.11, indicating a moderate to large effect size.

## Main Analyses

**Mediation Analysis.** We first examined the mediation effects through PROCESS, which is a computational tool for path analysis-based moderation and mediation analysis, as well as a combination of the two as a conditional process model (Hayes, 2013). We selected a total of 10,000 bootstrap samples (Mallinckrodt, Abraham, Wei, & Russell, 2006; Preacher & Hayes, 2008) and a 95% CI for these estimations. If the 95% CI for the average estimates of these 10,000 indirect effects does not include zero, we would conclude that the indirect effect was statistically significant at the .05 level (Shrout & Bolger, 2002). As we can see in Figure 2, all paths were significant for the associations among impostor feelings, interpersonal shame, and psychological distress. The indirect (mediation) effect was significant, that is, interpersonal shame significantly mediated the association between impostor feelings and psychological distress,  $B = .22$ ,  $SE = .02$ , 95% CI: [0.18, 0.28]. In addition,

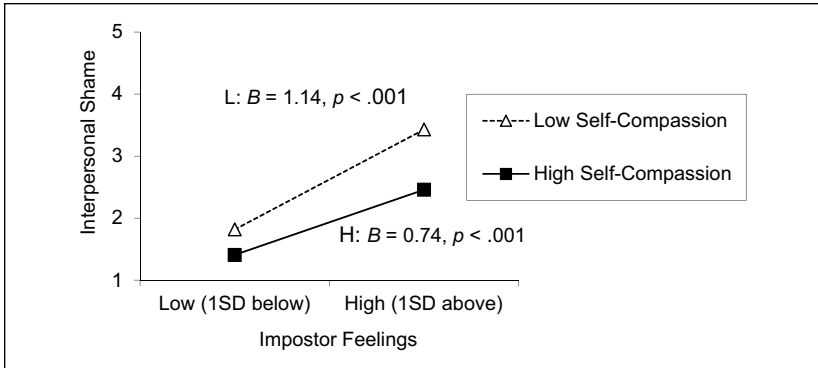


**Figure 2.** Unstandardized regression coefficients for interpersonal shame mediating the associations between impostor feelings and psychological distress. Standardized regression coefficients are provided in parentheses.

\*\*\* $p < .001$ .

the direct effect between impostor feelings and psychological distress was significant,  $B = .24$ ,  $SE = .03$ , 95% CI: [0.18, 0.31] when interpersonal shame (the mediator) was in the model. This result suggests that interpersonal shame only partially mediated the above direct association. It is important to note that about 53% of the variance in psychological distress was accounted for by impostor feelings and interpersonal shame.

**Moderation Analyses.** We next examined the moderation hypothesis through PROCESS (Hayes, 2013). Our moderation hypothesis was that self-compassion would moderate the positive association between impostor feelings (X) and interpersonal shame (M). Our results indicated that the moderation effect of self-compassion (W) on the association between impostor feelings (X) and interpersonal shame (M) was significant ( $B = -0.30$ , 95% CI: [-0.51, -0.10]). In order to understand the nature of the interaction, PROCESS automatically generates the conditional effects at different levels of the moderator (e.g.,  $\pm 1 SD$  from the mean of the moderator). The simple effects (i.e., conditional effects) analyses from PROCESS indicated that the association between impostor feelings (X) and interpersonal shame (M) was significantly positive for those with lower and higher levels of self-compassion. However, this positive association was significantly stronger for those with lower ( $B = 1.14$ ) than those with higher ( $B = 0.74$ ) levels of self-compassion (see Figure 3).



**Figure 3.** The effect of impostor feelings on interpersonal shame at higher versus lower levels of self-compassion.

Moreover, PROCESS also automatically generated the index of moderated mediation. A significant index implies that the conditional indirect effects at different levels of the moderator (e.g.,  $\pm 1$  *SD* from the mean of the moderator) are significantly different from each other (Hayes, 2015). As Table 2 shows, the index of moderated mediation was significantly negative ( $B = -0.06$ ), implying that the mediation (indirect) effect was a negative linear function of self-compassion. Specifically, the positive mediation (indirect) effect of impostor feelings on psychological distress through interpersonal shame was  $B = 0.21$  at lower self-compassion, and then dropped to  $B = 0.13$  at higher self-compassion (see Conditional Indirect Effect, Table 2).

### Additional Exploratory Analyses

As described earlier, we conducted additional analyses to examine the moderation effects of impostor feelings on interpersonal shame using six components of self-compassion (i.e., self-kindness, common humanity, mindfulness, self-judgment, isolation, and over-identification). However, some of the scores on the subscales for self-compassion had lower coefficient alphas due to a small number of items (i.e., two items) in the subscales. A coefficient alpha of .70 is often used as a criterion for reasonable reliability. Nevertheless, Loewenthal (2001) indicated that, “if you have a scale with a small number of items, you are not likely to get reliability coefficients as high as this [i.e., .70], and you may consider using a slightly lower criteria (of about .60)” (p. 60). Thus, having only two items for each self-compassion subscale likely resulted

**Table 2.** Conditional Indirect Effects of Impostor Feelings on Psychological Distress: Interpersonal Shame as a Mediator and Self-Compassion and its Six Components as Moderators.

Predictor (X)	Moderator (W)	Mediator (M)	Outcome (Y)	Index of Moderated Mediation			Conditional Indirect Effect		
				Index	SE	95% CI	Effect	SE	95% CI
Impostor Feelings	Self-compassion	Interpersonal Shame	Psychological Distress	Main Hypotheses: Self-Compassion as a Moderator					
				-0.06	.02	[-0.09, -0.02] <sup>a</sup>	Low: 0.21 High: 0.13	.03 .02	[0.16, 0.27] [0.09, 0.19]
Additional Analyses: Self-Compassion Subscales as Moderators									
Impostor Feelings	Common-humanity	Interpersonal Shame	Psychological Distress	-0.03	.01	[-0.06, -0.001] <sup>a</sup>	Low: 0.25 High: 0.19	.03 .03	[0.20, 0.30] [0.14, 0.25]
				Impostor Feelings	Mindfulness	Interpersonal Shame	Psychological Distress	-0.01	.02
Impostor Feelings	Self-judgment	Interpersonal Shame	Psychological Distress					0.05	.01
				Impostor Feelings	Isolation	Interpersonal Shame	Psychological Distress	0.02	.01
Impostor Feelings	Over-identification	Interpersonal Shame	Psychological Distress					0.05	.02

Note: N = 433.

<sup>a</sup>Significant moderated mediation effects.

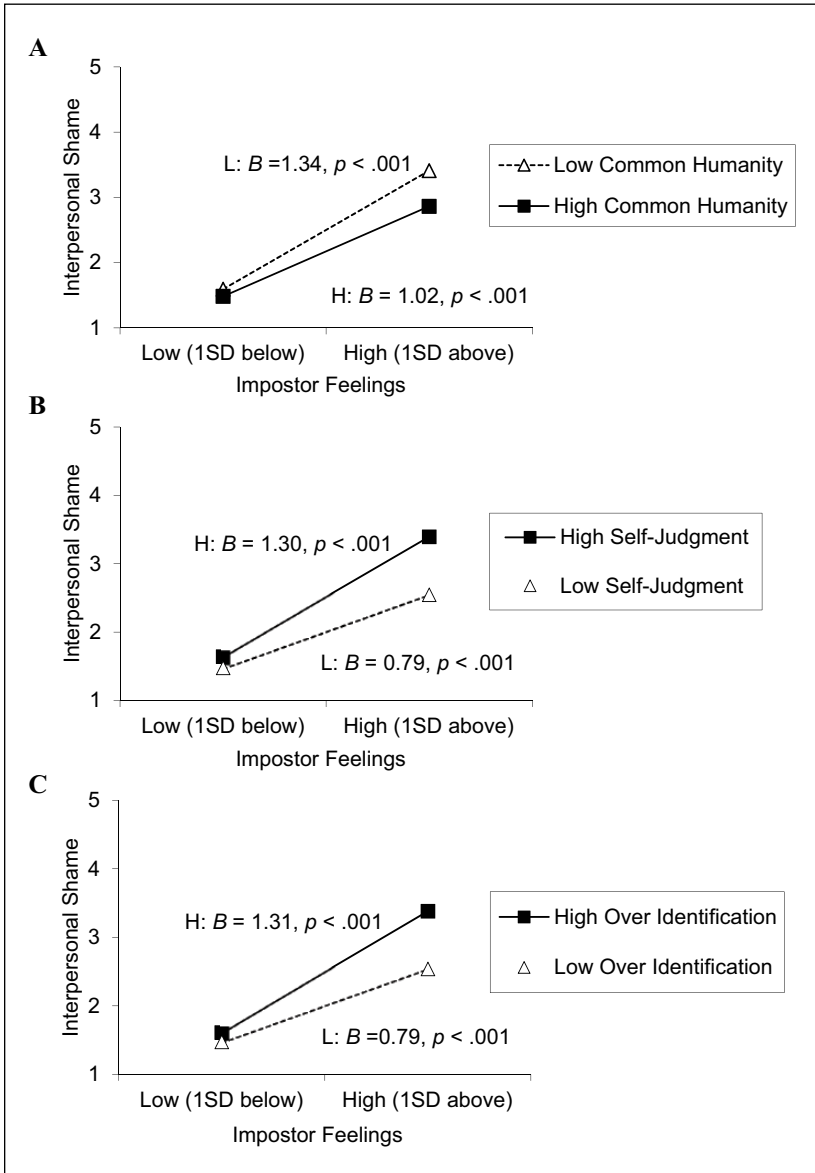
in lower coefficient alphas. Yet, the reliability coefficient for self-kindness was .52, which is very poor (below .60). We therefore used only the other five components of self-compassion in our additional analyses.

Our results indicated significant moderation effects for common humanity ( $B = -0.16$ , 95% CI: [-0.31, -0.01]), but not mindfulness ( $B = -0.06$ , 95% CI: [-0.22, 0.11]). The interaction pattern was similar to what we found when using the self-compassion total score, that is, the positive association was significantly stronger at lower common humanity ( $B = 1.34$ ) than at higher common humanity ( $B = 1.02$ ; see Panel A in Figure 4). In addition, similar to the results obtained for overall self-compassion, the index of moderated mediation was significantly negative for common humanity ( $B = -0.03$ ). Specifically, the positive mediation (indirect) effect dropped from  $B = 0.25$  at lower common humanity to  $B = 0.19$  at higher common humanity (see Conditional Indirect Effect, Table 2).

Moreover, the results indicated significant moderation effects for self-judgment ( $B = 0.25$ , 95% CI: [0.11, 0.40]) and over-identification ( $B = 0.26$ , 95% CI: [0.11, 0.42]), but not isolation ( $B = -0.11$ , 95% CI: [-0.27, 0.04]). The interaction pattern was opposite from what we found when using the self-compassion total score due to these components representing negative aspects of the construct. Specifically, the positive association between impostor feelings and interpersonal shame was significantly weaker at lower self-judgment ( $B = 0.79$ ) than at higher self-judgment ( $B = 1.30$ ; see Panel B in Figure 4). Similarly, this positive association was significantly weaker at lower over-identification ( $B = 0.79$ ) than at higher over-identification ( $B = 1.31$ ; see Panel C in Figure 4). Additionally, the index of moderated mediation was significantly positive for self-judgment ( $B = 0.05$ ) and for over-identification ( $B = 0.05$ ); specifically, the positive mediation (indirect) effect dropped from  $B = 0.24$  at higher self-judgment to  $B = 0.14$  at lower self-judgment and dropped from  $B = 0.24$  at higher over-identification to  $B = 0.14$  at lower over-identification (see Conditional Indirect Effect, Table 2).

## Discussion

As addressed earlier, Cokley et al. (2013; 2017) found that Asian American students reported higher impostor feelings than African American and Latino/a American students. We therefore addressed this important topic by examining the mediating role of interpersonal shame between impostor feelings and psychological outcomes, as well as self-compassion as a moderator between impostor feelings and interpersonal shame. Our first mediation hypothesis was supported. We found that Asian Americans who have impostor feelings experienced a higher level of interpersonal shame, which in turn



**Figure 4.** The effect of impostor feelings on interpersonal shame at higher versus lower levels of common humanity (Panel A), self-judgment (Panel B), and over-identification (Panel C).

was associated with greater psychological distress. Asian Americans who do not conform to the model minority stereotype may be more vulnerable to impostor feelings (Cokley et al., 2013), which may then activate the shame of letting others down and subsequent psychological distress. These findings confirm the theoretical argument that people with an impostor syndrome are vulnerable to feelings of shame (Langford & Clance, 1993) and that shame experiences are interpersonal in nature among Asian Americans (Wong et al., 2014). These results also align with previous research showing that impostor feelings were significantly and positively associated with shame (Cowman & Ferrari, 2002; White, 2001), and that interpersonal shame was significantly and positively associated with depression (Carrera & Wei, 2017; Wong et al., 2014) and suicidal ideation (Wong et al., 2014) among Asian Americans.

Our second and third moderation hypotheses were also supported. We hypothesized that self-compassion would be a significant moderator between impostor feelings and interpersonal shame. Specifically, self-compassion appeared to serve as a personal resource that buffers against interpersonal shame for Asian Americans who experience impostor feelings, that is, greater self-compassion weakened the positive association between impostor feelings and interpersonal shame. Similarly, greater self-compassion also weakened the positive mediation effect of impostor feelings, through interpersonal shame, to psychological distress. Perhaps those with more self-compassion are more likely to be kind to themselves rather than self-critical, are more able to remind themselves of the shared experience of impostor feelings, and resist being consumed by their impostor feelings. These results are in line with previous studies indicating that higher self-compassion weakened the positive link between academic burden and depression for Koreans (Kyeong, 2013) and the positive associations between personality vulnerability styles and depression among Chinese individuals (Wong & Mak, 2012).

Importantly, additional exploratory analyses indicated that the significant moderators encompassed emotionally responding to suffering with less self-judgment, cognitively understanding suffering as a part of the human experience, and paying attention to one's suffering in a less over-identified manner. These results are particularly relevant for Asian Americans. As we know, people from Asian cultures tend to use self-criticism or overly focus on their own inadequacies in order to motivate personal growth (e.g., Heine et al., 2001; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). Even though being self-critical and emphasizing one's deficiencies might serve as a tool for motivation, this tool might make individuals more vulnerable to interpersonal shame and psychological distress. Thus, it is equally important to encourage Asian Americans to be less critical of their impostor feelings and to discourage becoming excessively consumed by their impostor feelings. In

other words, they can be helped to be less critical of themselves or less preoccupied with their impostor feelings in order to alleviate their interpersonal shame and psychological distress.

### *Contributions*

Our work contributes to the literature in several significant ways. First, Asian Americans in our sample continued to report a significantly higher level of impostor feelings than that reported in the previous two studies for African Americans and Latino/a Americans when we compared their mean scores (Cokley et al., 2013; Cokley et al., 2017). Once again, this result provides additional empirical evidence that we cannot ignore the impostor phenomenon among Asian Americans and that the impostor phenomenon is an important psychological construct which must be examined in Asian Americans. More studies on the impostor phenomenon for Asian Americans are needed.

Second, our results contribute to the impostor phenomenon literature by going beyond a linear relationship between impostor feelings and psychological distress. We identified interpersonal shame as one underlying mechanism to understand how impostor feelings come to be associated with psychological distress. These mediation effects are culturally relevant for Asian Americans. As we know, Asian cultures value collectivism and the avoidance of bringing shame to one's family (Kim, Atkinson, & Yang, 1999). Impostor feelings are likely to activate interpersonal aspects of shame for Asian Americans (Bedford, 2004), which we confirmed.

Third, as we mentioned earlier, Neff et al. (2018) recently conducted a comprehensive study to examine the factor structure of the Self-Compassion Scale by using 20 different samples, suggesting that scholars use the total score to represent overall self-compassion and the six subscale scores to represent the constituent components of self-compassion. We showed that self-compassion as an overall construct served as a moderator to weaken the positive association between impostor feelings and interpersonal shame and weaken the positive mediation effect between impostor feelings and psychological distress through interpersonal shame. Three out of six specific components also served as moderators to weaken the above positive association and positive mediation effect.

### *Limitations*

Although our results comprise several important contributions to the literature, there are some limitations. First, we utilized a cross-sectional design. Thus, causal inferences cannot be made, and longitudinal studies are needed in the

future. However, our work still has its own merit, particularly in developing a new research area. It is important to note that researchers have just begun to create a research line that looks at the role of impostor phenomenon in racial/ethnic minority well-being, and there were only two published studies related to impostor feelings involving Asian Americans. The results of our cross-sectional study can help encourage future researchers to pay attention to the impostor phenomenon in Asian American populations. In particular, due to model minority myths and stereotypes, we would not intuitively think that Asian Americans would have the highest score on impostor feelings when compared with African Americans and Latino/a Americans (Cokley et al., 2013; Cokley et al., 2017). However, we further confirm this somewhat surprising phenomenon.

Second, consistent with the results reported by Cokley et al. (2013; 2017), we also confirmed that Asian Americans reported a higher level of impostor feelings than African Americans and Latino/a Americans. However, it is worth noting that we conducted a mean comparison test but did not investigate measurement invariance for impostor feelings across these groups. Thus, the observed mean differences could be a result of the items having different meanings across the three groups. For example, being humble is a core value in Asian culture (Kim, Li, & Ng, 2005). Perhaps, being reluctant to attribute their success to ability might be interpreted as being humble for Asian Americans, whereas it may be interpreted as having impostor feelings by non-Asian Americans (e.g., European Americans). Thus, it is important for future researchers to collect data from different ethnic groups to examine measurement invariance for the measure of impostor feelings.

Third, our research is limited because there was not a clear theoretical framework to build our proposed hypotheses. However, our work serves an important function as the first exploratory effort to understand impostor feelings for an Asian American sample alone. Once more of a knowledge base is built with regard to impostor feelings for Asian Americans, the accumulation of future reports on the impostor phenomenon can help build a theoretical framework from which we can base our hypotheses.

Fourth, as we addressed earlier, some of the self-compassion subscales had lower coefficient alphas due to a small number of items (i.e., 2 items). It is therefore important for future researchers to use the long version of the self-compassion scale (i.e., 26 items) to confirm or disconfirm our results.

### ***Implications for Practice, Advocacy, Education/Training, and Research***

Our results can inform several potential practice implications when working with Asian Americans. First, we confirmed that Asian Americans do indeed experience impostor feelings. Practitioners can help Asian Americans to

increase their awareness of impostor feelings. They can ask their Asian American clients whether they tend to discount the importance of what they have done due to their fear of not being able to replicate their past success (i.e., impostor feelings). If this is the case, they can help their Asian American clients work on how to own their ability rather than minimize their contributions due to their fear of failure. In addition, practitioners can also ask clients whether they fear being found out that they are not as good as others think they are (i.e., impostor feelings). If that is the case, it might be important to explore what areas they perceive as weak, how they can work on their weaknesses in order to develop a stronger sense of self, and how to accept their limitations if they are difficult to change.

Second, the significant mediating role of interpersonal shame informs us that Asian Americans who have impostor feelings are actually vulnerable to feeling ashamed that others might view them negatively or that they might dishonor their family due to their own deficits. This vulnerability might actually create a burden for them, which may lead to feelings of distress. Thus, practitioners need to consider that these Asian Americans may be sensitive to criticism and vulnerable to feelings of shame (Langford & Clance, 1993). Practitioners can provide an accepting and supportive atmosphere that allows Asian Americans who experience impostor feelings to explore their impostor feelings and shameful experiences through the trust of the therapeutic alliance. The mediating role of interpersonal shame also provides implications for working with Asian Americans with regard to their psychological distress. When working with an Asian American who is struggling with psychological distress, practitioners could explore whether those issues are linked to their impostor feelings. If this is the case, working through interpersonal shame could help alleviate their struggles.

Third, the significant moderating role of self-compassion also informs potential ways of working with Asian Americans who experience impostor feelings. Usually, when we think about applying self-compassion to counseling, we tend to only think about encouraging clients to be compassionate to themselves. However, our results also indicate the importance of encouraging clients to be less judgmental and not overly consumed by their impostor feelings. To help Asian Americans who experience impostor feelings, we can encourage them to not only understand their impostor feelings as a part of the human experience, but also help them to reduce their self-critical tendencies, and become less preoccupied by their impostor feelings.

With regard to advocacy, our results suggested that impostor feelings are positively correlated with psychological distress and interpersonal shame and negatively associated with self-compassion with large effect sizes. These results are deserving of attention by administrators in higher education settings in order to advocate for and support Asian American students.

In particular, due to stereotypes of Asian Americans as being a model minority, educators tend to hold the assumption that Asian Americans do not need help (e.g., Kiang, Huynh, Cheah, Wang, & Yoshikawa, 2017). As this assumption can also influence policies in universities, administrators in higher education need to have more knowledge to understand that Asian American students might struggle with impostor feelings and psychological distress. Moreover, some Asian American students might feel more comfortable working with those from similar cultural backgrounds who can understand the nuances of their impostor phenomenon experiences. Thus, it is important to ensure that sufficient numbers of Asian Americans are working as mental health/health providers, multicultural liaison officers, instructors, and other staff members within the university setting.

For education and training, it might be important to discuss a broader-based need, perhaps at the institutional level, to help reduce impostor feelings felt by Asian American college students. One suggestion is to facilitate classroom and university dialogues to educate those who work with Asian Americans students (e.g., faculty or staff members) about model minority myths, microaggressions, pressures, and impostor feelings. For example, if Asian Americans are constantly reminded that they are not viewed as a leader, due to stereotypes about being passive and thus in some sense not visible, this microaggression of being overlooked is likely to contribute to the impostor feelings experienced by Asian Americans. Instructors and staff members could be educated to be sensitive to Asian Americans' impostor feelings. In addition, universities might also have outreach programs, lecture series, or courses in Asian American studies to help all students understand the stereotypes and pressures that Asian Americans may face as they make their way through higher education and beyond.

Finally, given that ours is one of very few reports on impostor feelings for Asian Americans, several potential research directions can be further developed. First, future researchers can examine the predictors (e.g., microaggressions, racism, etc.) of impostor feelings to understand more about why Asian Americans may have a higher level of impostor feelings. For example, if Asian Americans are constantly reminded that they are second-class citizens (i.e., a microaggression; Sue & Sue, 2016) or foreigners (i.e., perpetual foreigner racism; Liang, Li, & Kim, 2004), this is likely to make them feel inferior to others or that they do not belong in the United States. These types of microaggressions and racism are likely to contribute to the impostor feelings (i.e., feeling pressure to live up to their successful image to earn their status in the United States) experienced by Asian Americans. Thus, future researchers could explore if and how racism and/or microaggressions might contribute to impostor feelings.

Second, future researchers might compare Asian Americans' impostor feelings based on their geographical location (e.g., East Coast, Midwest, South, and West Coast) and with Asians whose country-of-residence has differing majority-minority ratio. This exploration could clarify the internal and external factors related to the level of impostor feelings that Asians and Asian Americans experience. For example, if impostor feelings are caused by an external factor such as others' treatment based on their social and racial status, the degree of impostor feelings could be different for Asians in Asian countries (e.g., racial majority in their own country), Asian Americans in California (e.g. not as much a racial minority in the state of California), and Asian Americans in Ohio (e.g. racial minority in the state of Ohio).

Third, for our participants, interpersonal shame only partially mediated the association between impostor feelings and psychological distress. This means that interpersonal shame is only one possible mediator, and there can be other underlying mediators that help us understand how impostor feelings are positively associated with negative psychological outcomes. In the impostor phenomenon literature, Langford and Clance (1993) indicated that people who experience impostor feelings might be those who try to gain support in an unsupportive environment by working excessively hard to please others. When validation of the self is lacking, they may compensate by trying to live up to an idealized image in order to win the affirmation of others that is necessary for self-esteem. For this conceptual reason, other potential mediators might include an excessive need for validation from others or fear of failure.

### **Authors' Note**

This study was presented at the 126th Annual Convention of the American Psychological Association, San Francisco, CA, August 2018.

### **Declaration of Conflicting Interests**


The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The authors received no financial support for the research, authorship, and/or publication of this article.

### **ORCID iDs**

Shuyi Liu  <https://orcid.org/0000-0001-9850-6162>

Stacy Y. Ko  <https://orcid.org/0000-0001-5083-3404>

## References

- Atkin, A. L., Yoo, H. C., Jager, J., & Yeh, C. J. (2018). Internalization of the model minority myth, school racial composition, and psychological distress among Asian American adolescents. *Asian American Journal of Psychology, 9*, 108–116. doi:10.1037/aap0000096
- Bedford, O. A. (2004). The individual experience of guilt and shame in Chinese culture. *Culture & Psychology, 10*, 29–52. doi:10.1177/1354067X04040929
- Brach, T. (2003) *Radical Acceptance: Embracing your life with the heart of a Buddha*. New York: Bantam Books.
- Carrera, S. G., & Wei, M. (2017). Thwarted belongingness, perceived burdensomeness, and depression among Asian Americans: A longitudinal study of interpersonal shame as a mediator and perfectionistic family discrepancy as a moderator. *Journal of Counseling Psychology, 64*, 280–291. doi:10.1037/cou0000199
- Christopher, M. S., & Skillman, G. D. (2009). Exploring the link between self-construal and distress among African American and Asian American college students. *Journal of College Counseling, 12*, 44–56. doi:10.1002/j.2161-1882.2009.tb00039.x
- Clance, P. R. (1985). *The impostor phenomenon: Overcoming the fear that haunts your success*. Atlanta, GA: Peachtree.
- Clance, P. R., & Imes, S. A. (1978). The impostor phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice, 15*, 241–247. doi:10.1037/h0086006
- Cokley, K., McClain, S., Enciso, A., & Martinez, M. (2013). An examination of the impact of minority status stress and impostor feelings on the mental health of diverse ethnic minority college students. *Journal of Multicultural Counseling and Development, 41*, 82–95. doi:10.1002/j.2161-1912.2013.00029.x
- Cokley, K., Smith, L., Bernard, D., Hurst, A., Jackson, S., Stone, S., . . . Roberts, D. (2017). Impostor feelings as a moderator and mediator of the relationship between perceived discrimination and mental health among racial/ethnic minority college students. *Journal of Counseling Psychology, 64*, 141–154. doi:10.1037/cou0000198
- Cokley, K., Stone, S., Krueger, N., Bailey, M., Garba, R., & Hurst, A. (2018). Self-esteem as a mediator of the link between perfectionism and the impostor phenomenon. *Personality and Individual Differences, 135*, 292–297. doi:10.1016/j.paid.2018.07.032
- Cowman, S. E., & Ferrari, J. R. (2002). “Am I for real?” Predicting impostor tendencies from self-handicapping and affective components. *Social Behavior and Personality, 30*, 119–126. doi:10.2224/sbp.2002.30.2.119
- Green, D. E., Walkey, F. H., McCormick, I. A., & Taylor, A. J. (1988). Development and evaluation of a 21-item version of the Hopkins Symptom Checklist with New Zealand and United States respondents. *Australian Journal of Psychology, 40*, 61–70. doi:10.1080/00049538808259070
- Hayes, A. F. (2013). *An introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.

- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research, 50*, 1–22. doi:10.1080/00273171.2014.962683
- Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C., & Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81*, 599–615. doi:10.1037/0022-3514.81.4.599
- Kiang, L., Huynh, V. W., Cheah, C. S. L., Wang, Y., & Yoshikawa, H. (2017). Moving beyond the model minority. *Asian American Journal of Psychology, 8*, 1–6. doi:10.1037/aap0000070
- Kim, B. S. K., Atkinson, D. R., & Yang, P. H. (1999). The Asian values scale: Development, factor analysis, validation, and reliability. *Journal of Counseling Psychology, 46*, 342–352. doi:10.1037/0022-0167.46.3.342
- Kim, B. S. K., Li, L. C., & Ng, G. F. (2005). Asian American Values Scale – Multidimensional: Development, reliability, and validity. *Cultural Diversity and Ethnic Minority Psychology, 11*, 187–201. doi:10.1037/1099-9809.11.3.187
- Kim, B. S. K., & Park, Y. S. (2008). East and Southeast Asian Americans. In G. Mcauliffe (Ed.), *Cultural alert counseling: A comprehensive introduction* (pp. 189–219). Thousand Oaks, CA: Sage.
- Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology, 72*, 1245–1267. doi:10.1037/0022-3514.72.6.1245
- Kwan, V. S. Y., Kuang, L. L., & Hui, N. H. H. (2009). Identifying the sources of self-esteem: The mixed medley of benevolence, merit, and bias. *Self and Identity, 8*, 176–195. doi:10.1080/15298860802504874
- Kyeong, L. W. (2013). Self-compassion as a moderator of the relationship between academic burn-out and psychological health in Korean cyber university students. *Personality and Individual Differences, 54*, 899–902. doi:10.1016/j.paid.2013.01.001
- Langford, J., & Clance, P. R. (1993). The impostor phenomenon: Recent research findings regarding dynamic, personality and family patterns and their implications for treatment. *Psychotherapy, 30*, 495–501. doi:10.1037/0033-3204.30.3.495
- Lee, S. J. (2009). *Unraveling the “model minority” stereotype: Listening to the Asian American Youth*. New York, NY: Teacher College Press.
- Lee, R. M., Su, J., & Yoshida, E. (2005). Coping with intergenerational family conflict among Asian American college students. *Journal of Counseling Psychology, 52*, 389–399. doi:10.1037/0022-0167.52.3.389
- Liang, C. T. H., Li, L. C., & Kim, B. S. K. (2004). The Asian American Racism-Related Stress Inventory: Development, factor analysis, reliability, and validity. *Journal of Counseling Psychology, 51*, 103–114. doi:10.1037/0022-0167.51.1.103
- Loewenthal, K. M. (2001). *An introduction to psychological tests and scales* (2nd ed.). Hove, UK: Psychology Press.
- Mallinckrodt, B., Abraham, W. T., Wei, M., & Russell, D. W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology, 53*, 372–378. doi:10.1037/0022-0167.53.3.372

- McClain, S., Beasley, S. T., Jones, B., Awosogba, O., Jackson, S., & Cokley, K. (2016). An examination of the impact of racial and ethnic identity, impostor feelings, and minority status stress on the mental health of Black college students. *Journal of Multicultural Counseling and Development, 44*, 101–117. doi:10.1002/jmcd.12040
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223–250. doi:10.1080/15298860309027
- Neff, K. D. (2004). Self-compassion and psychological well-being. *Constructivism in the Human Sciences, 9*, 27–37. doi:10.1016/j.paid.2016.06.011
- Neff, K. D. (2016). The Self-Compassion Scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness, 7*, 264–274. doi:10.1007/s12671-015-0479-3
- Neff, K. D., Tóth-Király, I., Yarnell, L. M., Arimitsu, K., Castilho, P., Ghorbani, N., . . . Mantzios, M. (2018). Examining the factor structure of the Self-Compassion Scale in 20 diverse samples: Support for use of a total score and six subscale scores. *Psychological Assessment*. Advance online publication.
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology, 39*, 267–285. doi:10.1177/0022022108314544
- Peteet, B. J., Brown, C. M., Lige, Q. M., & Lanaway, D. A. (2015). Impostorism is associated with greater psychological distress and lower self-esteem for African American students. *Current Psychology, 34*, 154–163. doi:10.1007/s12144-014-9248-z
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879–891. doi:10.3758/BRM.40.3.879
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical Psychology & Psychotherapy, 18*, 250–255. doi:10.1002/cpp.702
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods, 7*, 147–177. doi:10.1037/1082-989X.7.2.147
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422–445. doi:10.1037/1082-989X.7.4.422
- Sue, D. W., & Sue, D. (2016). *Counseling the Culturally Diverse: Theory and Practice* (6th Edition). New York: John Wiley & Sons.
- White, S. F. (2001). The impostor phenomenon and self experiences: The role of shame and self-cohesion in perceived fraudulence. *ProQuest Information & Learning*, Oct 2001. AAI3012351.
- Wong, C. C. Y., & Mak, W. W. S. (2012). Differentiating the role of three self-compassion components in buffering cognitive-personality vulnerability to depression among Chinese in Hong Kong. *Journal of Counseling Psychology, 1*, 162–169. doi:10.1037/a0030451
- Wong, Y. J., Kim, B. S. K., Nguyen, C. P., Cheng, J. K. Y., & Saw, A. (2014). The interpersonal shame inventory for Asian Americans: Scale development

and psychometric properties. *Journal of Counseling Psychology*, 61, 119–132. doi:10.1037/a0034681

Zhang, J. W., & Chen, S. (2016). Self-compassion promotes personal improvement from regret experiences via acceptance. *Personality and Social Psychology Bulletin*, 42, 244–258. doi:10.1177/0146167215623271

### Author Biographies

**Meifen Wei**, PhD, is a professor of psychology in the counseling psychology program at Iowa State University. She received her doctorate from the University of Missouri. Her research focuses on risk and protective factors of coping with minority stress, culture and emotion regulation, counselor training and multicultural competence, and attachment.

**Shuyi Liu**, MEd, is a doctoral student in the counseling psychology program at Iowa State University. She earned her Master's degree in psychological counseling at Teachers College, Columbia University. Her research interests center around minority stress and the supervisory relationship in counseling.

**Stacy Y. Ko**, MSW, is a doctoral candidate in Counseling Psychology at Iowa State University. She received her Master's degree in Social Work from UCLA. Her research interests are in perfectionism, body image concerns, and minority stress/adjustment among Asians and Asian Americans.

**Cixin Wang**, PhD, is an assistant professor of School Psychology in the Department of Counseling, Higher Education, and Special Education at the University of Maryland, College Park. She received her PhD in School Psychology from the University of Nebraska-Lincoln. Her research interests focus on bullying prevention and mental health promotion among children and adolescents, especially among culturally and linguistically diverse students.

**Yi Du**, PhD, is a licensed psychologist currently practicing in California. She works full time as a counseling psychologist at Counseling and Psychological Services, University of California, Berkeley. She received her doctorate degree from Iowa State University. Her research interests include psychosocial adjustment of international students, discrimination and its impact on mental health, body image and disordered eating, counselor training, and the emotional healing process.