



Self-Compassion and Social Connectedness Buffering Racial Discrimination on Depression Among Asian Americans

Shuyi Liu¹ · Chun-I Li² · Cixin Wang³ · Meifen Wei¹ · Stacy Ko¹

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Abstract

Objective This study aimed to examine the personal (i.e., self-compassion) and social (i.e., social connectedness) resources that can buffer individuals' psychological distress in the face of difficulty based on previous literature on self-compassion and social connectedness.

Method We used a cross-sectional online survey to examine whether there was a three-way interaction of racial discrimination, three self-compassion components (i.e., self-kindness, mindfulness, and common humanity), and social connectedness on depression among Asian American college students. Participants were 205 Asian Americans from a West Coast public university.

Results Results supported the moderation hypothesis with social connectedness and self-kindness as moderators. Specifically, at higher social connectedness and higher self-kindness, the association between racial discrimination and depression was not significant. Conversely, at higher social connectedness and lower self-kindness, the association between racial discrimination and depression was significantly positive. Furthermore, at lower social connectedness and higher self-kindness, the association between racial discrimination and depression was significantly positive. However, at lower social connectedness and lower self-kindness, the association between racial discrimination and depression was not significant. The same results applied to the second (i.e., social connectedness and mindfulness as moderators), but not the third (i.e., social connectedness and common humanity as moderators) moderation hypothesis.

Conclusion Both personal (i.e., self-compassion) and social (i.e., social connectedness) factors work together to buffer the impact of racial discrimination on depression among Asian American college students.

Keywords Racial discrimination · Self-compassion · Social connectedness · Depression · Asian American

Results from meta-analyses have found consistent evidence for significant positive associations between racial discrimination and negative mental health outcomes among racial/ethnic minorities in the USA (e.g., Carter et al. 2017; Pascoe and Smart Richman 2009). Asian Americans are not an exception when it comes to the negative impact of racial discrimination, as previous studies have also demonstrated

a positive association between racial discrimination and depression among Asian Americans (e.g., Chen et al. 2014; Wei et al. 2010). More importantly, these meta-analyses have suggested that it is important to advance the discrimination literature by examining moderation effects to determine for whom and under what situation a specific moderator might buffer this negative impact (e.g., Carter et al. 2017; Pascoe and Smart Richman 2009). For the past decade, a limited but growing number of studies have focused on moderating factors in the association between perceived racial discrimination and depression among individuals of Asian heritage (e.g., Liang and Fassinger 2008; Wei et al. 2008; Yoo and Lee 2005, 2008).

Self-compassion, or the ability to have compassion toward the self in times of perceived inadequacy, failure, or general suffering (Neff 2003), has received much attention in the field of counseling psychology for the past decade. As defined by Neff, self-compassion has three dimensions: self-kindness

✉ Shuyi Liu
shuyil@iastate.edu

¹ Department of Psychology, Iowa State University, W112 Lagomarcino Hall, Ames, IA 50011-3180, USA

² Independent Practice in Honolulu, Honolulu, HI, USA

³ Department of Counseling, Higher Education, and Special Education, University of Maryland, College Park, MD, USA

versus self-judgment, mindfulness versus over-identification, and common humanity versus isolation (2003). Self-kindness refers to being warm and loving rather than harshly judgmental toward oneself when encountering difficult times. Mindfulness entails being aware of negative thoughts and feelings without ruminating about personal struggles. Common humanity refers to recognizing that one's suffering or difficulties are part of a shared human experience rather than an isolating personal failure (Neff 2003). As Neff defined self-compassion by drawing from Eastern philosophical thought, self-compassion might be in line with Asian cultural practices. For example, as one of the core components of self-compassion, mindfulness originated from "Eastern concepts of self and other awareness, centering, balance, and meditation" (Hwang 2011, p. 239). For those from Asian cultural backgrounds, mindfulness is an emotion regulation tool that involves being aware of in-the-moment experiences in a non-judgmental manner (Kahn et al. 2017). Therefore, self-compassion may be a culturally relevant strategy for dealing with difficult times for Asian individuals.

Previous research findings have shown that self-compassion was positively associated with less depression, posttraumatic growth, and less physical symptoms among Asian populations (e.g., Neff et al. 2008; Wong and Mak 2016; Wong and Yeung 2017). Thus, self-compassion can be a culturally relevant and beneficial psychological construct for individuals of Asian heritage. However, as self-compassion is still a relatively new psychological construct in the literature on Asian Americans, it is still unknown how self-compassion might buffer the relationship between racial discrimination and depression among Asian Americans. Examining the mechanism by which self-compassion works to buffer against negative psychological outcomes can greatly enhance our understanding of the role of self-compassion in this population.

Consistent empirical findings among a variety of student and community samples suggest that self-compassion can buffer individuals' psychological distress in the face of difficulty (e.g., Ferrari et al. 2018; MacBeth and Gumley 2012; Podina et al. 2015). Moreover, the positive aspects of self-compassion (i.e., self-kindness, mindfulness, and common humanity) were found to be negatively associated with depressive symptoms (Ying 2009). That is, those who had a higher level of self-compassion were more likely to experience lower levels of depressive symptoms in the face of difficulties. Racial discrimination, as one of the challenges faced by Asian Americans, is often associated with depression and other mental health difficulties. Because self-compassion is proposed to be helpful when encountering painful life situations (Neff and Tirsch 2013), we expected that self-compassion would serve as an important personal resource and strength (Wong and Mak 2013) that weakens depressive symptoms associated with perceived racial discrimination. Specifically,

in the face of racial discrimination, self-kindness may help Asian Americans give themselves the caring and tenderness they need, which might prevent them from feeling inadequate or depressed. Mindfulness may allow Asian Americans to have a more balanced way of understanding their present-moment experience so that these individuals do not ruminate on incidents of racial discrimination (Yarnell and Neff 2013). Similarly, in the face of racial discrimination, common humanity may remind individuals that there are a lot of people feeling like they do when encountering these unfair incidents, which might prevent them from feeling overly isolated in their suffering.

Empirically, researchers have begun to examine the moderating role of self-compassion as a whole construct for different stressors (e.g., academic burn-out and cyberbullying victimization) and negative mental health outcomes among Asian populations (e.g., Chu et al. 2018; Kyeong 2013; Wei et al. *in press*; Wong et al. 2016). For example, Wong et al. (2016) found that self-compassion moderated the association between affiliate stigma and psychological distress among a group of Chinese parents of children with autism spectrum disorders. Recently, Wei et al. (*in press*) found that self-compassion moderated the association between impostor feelings and interpersonal shame among Asian American college students. Thus far, to our knowledge, the moderating role of the three components of self-compassion has not been directly examined in the association between racial discrimination and depression among Asian Americans. However, a few researchers have begun to explore the possible moderation effects of these three self-compassion components in other contexts (e.g., cognitive personality vulnerability and impostor feelings). For example, among Chinese individuals in Hong Kong, Wong and Mak (2013) found that each of the three components differentially moderated the relationship between cognitive personality vulnerability styles and depression. Among Asian Americans, Wei et al. *in press* found that common humanity moderated the relationship between impostor feelings and interpersonal shame. These previous findings provide some indirect evidence for our speculation that the three components of self-compassion could help buffer against depression in the face of racial discrimination.

However, self-compassion only addresses one's personal strength, which might have limited protective effects on depression in the face of racial discrimination. Prior studies have suggested that both personal resources and social resources are important in alleviating the negative impact of racial discrimination (e.g., Juang et al. 2016; Noh and Kaspar 2003). For example, Noh and Kaspar (2003) indicated that the moderating role of personal resources (e.g., coping strategies) on the association between perceived discrimination and depression would depend on the availability of social resources (e.g., ethnic social support: social support received from members of one's own ethnic community) for Korean immigrants.

Specifically, they found that frequent use of passive acceptance and emotional distraction (personal coping resources) significantly interacted with the effect of racial discrimination on depression when ethnic community social support (social resources) was lower or not available. These results suggest the importance of examining the moderation roles of both personal and social resources on the association between racial discrimination and depression (i.e., a three-way interaction). Thus, it is possible that the three components of self-compassion (i.e., personal resources) might buffer the impact of racial discrimination on depression together with other social resources (e.g., social connectedness). That is, the buffering effects of the three self-compassion components might vary depending on the level of social resources one has.

While self-compassion entails being compassionate toward oneself, social connectedness refers to a sense of interpersonal belongingness with one's social environment (e.g., friends, peers, society) (Lee and Robbins 1995). As proposed by Lee and Robbins (1995), belongingness includes the companionship, affiliation, and connectedness stages. Companionship occurs during infancy; affiliation happens from childhood to adolescence; and social connectedness occurs from adolescence to adult life. As college students are currently navigating through the final stage of connectedness, we only focused on the social connectedness construct. Lee and Robbins (1995) suggested that individuals who fail to feel connected with others might experience isolation and have difficulty functioning effectively in life.

Previous researchers suggested that for people who are from collectivistic cultures (e.g., Asian Americans), social connectedness serves a critical role in their self-concept (Yeh and Inose 2003). In other words, how Asian Americans view themselves might be dependent on how they view their relationships with others (Markus and Kitayama 1991). Previous research findings have supported the positive link between social connectedness and psychological well-being in Asian Americans (e.g., Fu and Vong 2016; Yoon et al. 2012a). Thus, when encountering racial discrimination, Asian Americans who feel a stronger sense of togetherness with their social world may be more likely to seek comfort and support from their peers which can protect them from depression. Empirically, prior studies have examined social connectedness as a potential moderator. For example, ethnic social connectedness (i.e., social connectedness in the ethnic community) was found to buffer against posttraumatic stress symptoms in the face of racial discrimination among Chinese international students (Wei et al. 2012). Another study found that both ethnic social connectedness and mainstream social connectedness (i.e., social connectedness in mainstream society) served as moderators in the association between perceived language discrimination and depression among Chinese international students (Wei et al. 2015). These findings provide evidence that some individuals might experience greater depression in the face of discrimination, while others might not.

Thus, we proposed that there would be a three-way interaction of racial discrimination, each of the three self-compassion components (i.e., self-kindness, mindfulness, and common humanity), and social connectedness on depression among Asian American college students (see Fig. 1). Our study had four hypotheses. First, we anticipated that the association between racial discrimination and depression would not be significant for those who are self-compassionate and feel connected with others. Second, for those who feel connected with others but cannot provide self-compassion toward themselves, we hypothesized that the association between racial discrimination and depression would be significantly positive. Third, we hypothesized that the association between racial discrimination and depression would be significantly positive for those who can provide self-compassion toward themselves but do not feel a sense of connectedness. Fourth, we expected that the association of racial discrimination and depression would not be significant for those who are not self-compassionate and not connected with others in the face of racial discrimination.

Method

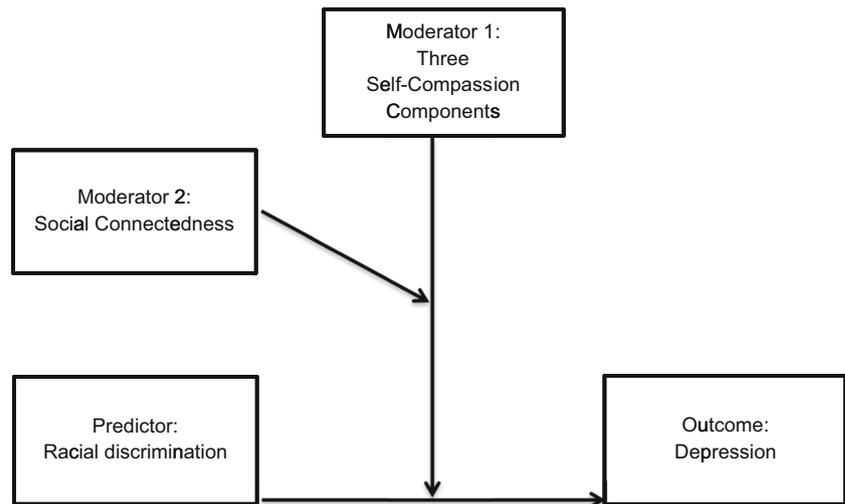
Participants

There were 205 Asian Americans (152 (74%) females and 53 (26%) males) who participated in this study from a public university in the West Coast. Participants' ages ranged from 18 to 40, with a mean of 21.20 (SD = 3.50). Asian ethnicities represented were 73 (36%) Chinese, 23 (11%) Filipino/a, 20 (10%) Korean, 16 (8%) Taiwanese, 16 (8%) Vietnamese, 16 (8%) biracial Asian, 7 (3%) Asian Indian, 4 (2%) Thai, 4 (2%) Japanese, 3 (2%) Bangladeshi, 2 (1%) Cambodian, 2 (1%) Indonesian, 2 (1%) Sri Lankan, 2 (1%) Nepalese, 1 (0.5%) Laotian, 1 (0.5%) Burmese, and 13 other Asian ethnicities (6%). With regard to generational status, 6 (2.9%) were first generation (i.e., foreign-born individuals who immigrated to the USA as an adult), 34 (16.6%) were 1.5 generation (i.e., foreign-born individuals who immigrated to the USA as a child or adolescent), 149 (72.7%) were second generation (i.e., US-born individuals with one or both parents foreign-born), 5 (2.5%) were third or above third generation (i.e., US-born individuals with parents of second or above generation in the USA), and 11 (5.4%) were either undocumented students or those with a temporary visa.

Procedure

Once IRB approval was obtained, the registrar's office at a large West Coast university sent an online link of the survey to all students at the university. Students were informed that they needed to be an Asian American over 18 years of age in order

Fig. 1 Conceptual model: social connectedness and three self-compassion components (i.e., self-kindness, mindfulness, and common humanity) moderating the association between racial discrimination and depression



to participate in this study. Participants were told that this study was related to Asian American adjustment, and that the survey would take about 15 min to complete. Two reminder emails were sent to these students. After completion, participants could enter a drawing to win one \$25 gift certificate (the chance of winning was 1 in 25).

Measures

Racial Discrimination The Discrimination Subscale (3 items) from the Riverside Acculturation Stress Inventory (Benet-Martínez and Haritatos 2005) was used to measure racial discrimination. A sample item is, “I have felt discriminated against by Americans because of my Asian background.” These items were rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). A higher score indicates a higher level of racial discrimination. The coefficient alpha ranged from .84 to .87 among Asian Americans (Miller et al. 2011), and was .83 in this study. Construct validity was supported by its significantly positive associations with depression, anxiety, and perceived general stress among Asian Americans (Miller et al. 2011).

Self-Compassion The three positive components of the Self-Compassion Scale (SCS; Neff 2003) were used to measure self-kindness, mindfulness, and common humanity. Similar to Wong and Mak’s (2013) study, our goal was to examine whether the self-compassion components served as protective factors against vulnerability for depression. Thus, only the positive components of self-compassion were analyzed in the present study. Self-kindness (5 items) measures emotional warmth and non-judgment toward the self in difficult times. Mindfulness (4 items) refers to one’s awareness of painful thoughts and feelings. Common humanity (4 items) refers to the recognition that life’s difficulties are part of a shared human experience. Participants are asked to rate how often they

behaved in the manner indicated by each of the items. The items are rated on a 5-point Likert-scale from (1) almost never to (5) almost always. Sample items are, “When I’m going through a very hard time, I give myself the caring and tenderness I need” (self-kindness), “When something upsets me I try to keep my emotions in balance” (mindfulness), and “When I’m down and out, I remind myself that there are lots of other people in the world feeling like I am” (common humanity). Although, previous studies have not looked at the specific subscales of self-compassion among Asian Americans, Neff et al. (2008) conducted a research study using a sample of Taiwanese college students. The coefficient alpha was .68, .68, and .69 among Taiwanese college students (Neff et al. 2008) and .79, .72, and .76 for self-kindness, mindfulness, and common humanity, respectively, among Asian American college students in the current study. Evidence of construct validity for self-kindness, mindfulness, and common humanity was provided by significant negative correlations with depression among Chinese individuals in Hong Kong (Wong and Mak 2013) and Taiwanese college students (Neff et al. 2008).

Social Connectedness The Social Connectedness Scale (SCS; Lee and Robbins 1995) was used to measure the degree of interpersonal connectedness that is experienced between an individual and his or her social world (e.g., friends, peers, society) as well as the degree of difficulty in maintaining this sense of closeness. The measure contains 8 items and uses a 6-point Likert scale ranging from (1) strongly disagree to (6) strongly agree, with higher scores indicating a stronger sense of belonging. Sample items are, “I have little sense of togetherness with my peers,” and “Even around people I know, I don’t feel that I really belong.” There is no reliability or validity information available for the short form version for Asian Americans. However, for the long form version, the coefficient alpha was .89 in a sample of Asian students

(Yoon et al. 2012b). In the present study, the coefficient alpha was .94 for the short form version among Asian American college students. Construct validity was supported by significantly positive associations with life satisfaction and positive affect and a significantly negative association with negative affect among Asian students (Yoon et al. 2012a, b).

Depression Depression was measured with the Center for Epidemiological Studies–Depression Scale–Short Form (CES-D; Andresen et al. 1994). The CES-D (10 items) was developed to assess current levels of depressive symptoms. Each item is rated on a 4-point Likert scale ranging from (0) rarely or none of the time to (3) most or all of the time, based on the frequency with which participants have experienced that item during the past week. A sample item is “I feel depressed.” Higher scores indicate higher levels of depressive symptoms. The coefficient alpha was .86 for a sample of Korean individuals (Shin et al. 2012). In the present sample, the coefficient alpha was .79 among Asian American college students. Evidence for the construct validity of the CES-D–short form has been provided by a positive association with body dissatisfaction among Filipino Americans (Cajunom 2017).

Data Analyses

PROCESS (Hayes 2013) was used to examine whether the three self-compassion components and social connectedness would moderate the association between racial discrimination and depression (see Fig. 1). Three parallel three-way interaction analyses were conducted for each of the three self-compassion components. First, we centered the predictor (i.e., racial discrimination) and moderators (i.e., each of the three self-compassion components and social connectedness) in PROCESS and used 1000 bootstrap samples to compute the 95% bias-corrected bootstrap confidence intervals (CI) for significance levels (Hayes 2013). Next, PROCESS automatically generated the conditional effect (i.e., a simple slope) of racial discrimination on depression at different levels of the moderators (e.g., at the mean and ± 1 SD from the mean of the two moderators). PROCESS also generated the data points for plotting the nature of the interaction effects. Finally, because there were three parallel three-way interactions for each of the three self-compassion components, a Bonferroni correction for the p value was used (i.e., $p = .05/3 = .017$).

Results

The means, standard deviations, and inter-correlations of the variables used in our main analyses are presented in Table 1. Racial discrimination was not significantly associated with any of the three components of self-compassion, but

significantly and negatively associated with social connectedness with a small effect size as well as significantly and positively associated with depression with small effect sizes. Self-kindness and mindfulness were significantly and positively associated with social connectedness with small effect sizes as well as significantly and negatively associated with depression with moderate effect sizes. Social connectedness was significantly and negatively associated with depression with a large effect size.

As seen in Table 2, the three-way interaction of racial discrimination, social connectedness, and self-kindness was significant ($B = -0.09$, $p = .004$, 95% CI = $(-0.15, -0.03)$). The incremental R^2 indicated that the three-way interaction added an additional 3% of variance in depression. Results from the conditional effects indicated that, at higher social connectedness, the association between racial discrimination and depression was not significant for those with higher self-kindness ($B = -0.02$, $p = .78$, 95% CI = $(-0.13, 0.10)$; see the bottom solid line in Panel A, Fig. 2). As seen in Panel A, for those with higher social connectedness and self-kindness, depression was relatively low regardless of the level of racial discrimination. Conversely, the significant pattern was different for those with lower self-kindness. At higher social connectedness, the associations between racial discrimination and depression were significantly positive for those with lower self-kindness ($B = 0.20$, $p = .006$, 95% CI = $(0.06, 0.35)$, see the dashed line in Panel A, Fig. 2). That is to say, those with higher social connectedness but lower self-kindness still reported more depression when they encountered more racial discrimination.

Furthermore, at lower social connectedness, the association between racial discrimination and depression was significantly positive for those with higher self-kindness ($B = 0.15$, $p = .02$, 95% CI = $(0.02, 0.28)$; see the solid line in Panel B, Fig. 2). In other words, those with higher self-kindness but lower social connectedness still reported more depression when they encountered more racial discrimination. However, this was not the case for those with lower self-kindness. At lower social connectedness, the association between racial discrimination and depression was not significant for those with lower self-kindness ($B = 0.02$, $p = .65$, $(-0.08, 0.13)$; see the dashed line in Panel B, Fig. 2). As we can see in Panel B, for those with lower social connectedness and lower self-kindness, depression remained high across all levels of racial discrimination.

The three-way interaction of racial discrimination, social connectedness, and mindfulness was also significant ($B = -0.09$, $p = .001$, 95% CI = $(-0.15, -0.04)$; see Table 2). The incremental R^2 also indicated that the three-way interaction added an additional 3% of variance in depression. The significant patterns for the conditional effects were the same as those found for self-kindness. That is, at higher social connectedness, the association between racial discrimination and

Table 1 Means, standard deviations, and correlations among racial discrimination, the three self-compassion components, social connectedness, and depression

Variable	1	2	3	4	5	6
1. Racial discrimination	–					
2. Self-kindness	–.11	–				
3. Mindfulness	–.11	.65***	–			
4. Common humanity	.01	.52***	.56***	–		
5. Social connectedness	–.18*	.27***	.22**	.08	–	
6. Depression	.23**	–.33***	–.29***	–.10	–.55***	–
Mean	3.51	3.00	3.31	3.23	3.87	1.27
SD	1.02	0.77	0.76	0.86	1.26	0.55

N = 205. **p* < .05, ***p* < .01, ****p* < .001

depression was not significant for those with higher mindfulness ($B = 0.02, p = .77, 95\% \text{ CI} = (-0.10, 0.13)$; see the bottom solid line in Panel A, Fig. 3). Conversely, the significant pattern was different for those with lower mindfulness. At

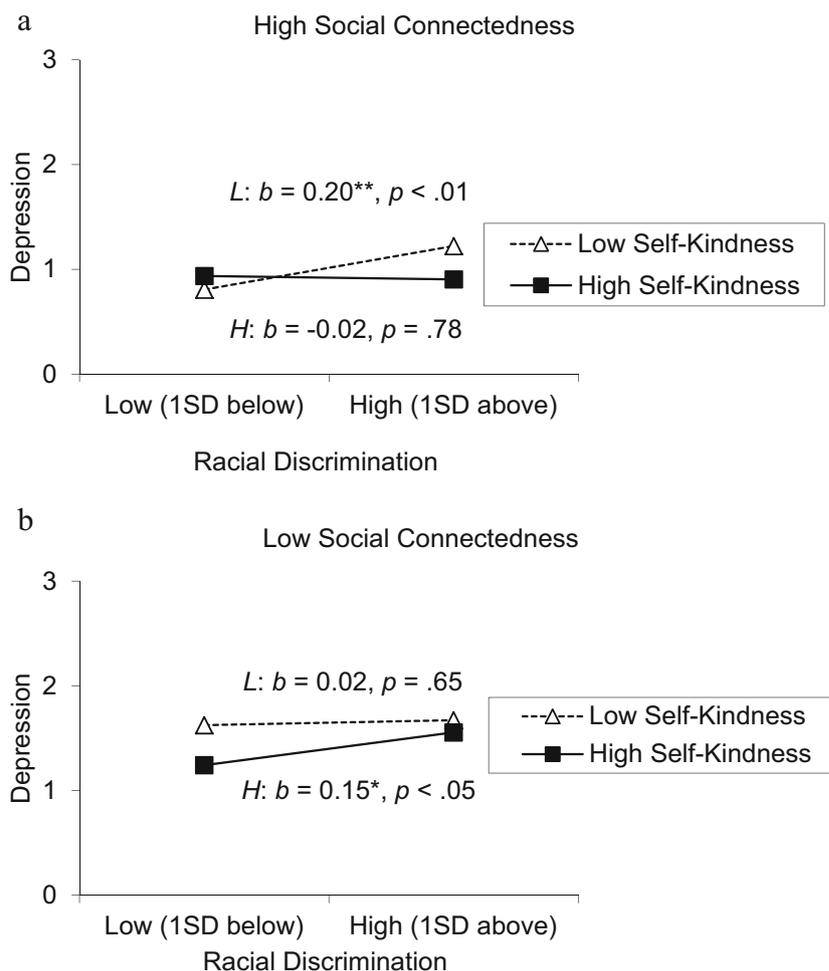
higher social connectedness, the associations between racial discrimination and depression were significantly positive for those with lower mindfulness ($B = 0.14, p = .048, 95\% \text{ CI} = (0.001, 0.28)$, see the dashed line in Panel A, Fig. 3).

Table 2 Three-way interactions of racial discrimination, social connectedness, and the three self-compassion components on depression

Variable	<i>b</i>	SE <i>b</i>	β	<i>t</i>	<i>p</i>	CI
Moderators: self-kindness and social connectedness						
$\Delta R^2 = .03, F(1, 197) = 8.33, p = .004$ (due to three-way interaction)						
Constant	1.25	.03		38.87	.000	[1.18,1.31]
Racial discrimination (Dis)	0.09	.03	.17	2.90	.004	[0.03,0.15]
Self-kindness	–0.11	.04	–.16	–2.62	.009	[–0.19,-0.03]
Social connectedness (SC)	–0.22	.03	–.51	–8.45	.000	[–0.27,-0.16]
Dis × self-kindness	–0.03	.04	–.04	–0.70	.488	[–0.11,0.05]
Dis × SC	0.002	.02	.01	0.09	.928	[–0.05,0.05]
Self-kindness × SC	0.04	.03	.07	1.28	.202	[–0.02,0.10]
Dis × self-kindness × SC	–0.09	.03	–.17	–2.89	.004	[–0.15,-0.03]
Moderators: mindfulness and social connectedness						
$\Delta R^2 = .03, F(1, 197) = 10.87, p = .001$ (due to three-way interaction)						
Constant	1.24	.03		39.70	.000	[1.18,1.31]
Racial discrimination (Dis)	0.11	.03	.20	3.29	.001	[0.04,0.17]
Mindfulness	–0.13	.04	–.19	–3.15	.002	[–0.22,-0.05]
Social connectedness (SC)	–0.22	.03	–.51	–8.56	.000	[–0.27,-0.17]
Dis × mindfulness	0.04	.04	.05	0.81	.418	[–0.05,0.12]
Dis × SC	–0.02	.03	–.05	–0.83	.406	[–0.07,0.03]
Mindfulness × SC	0.04	.03	.08	1.42	.157	[–0.02,0.10]
Dis × mindfulness × SC	–0.09	.03	–.20	–3.30	.001	[–0.15, –0.04]
Moderators: common humanity and social connectedness						
$\Delta R^2 = .01, F(1, 197) = 1.82, p = .179$ (due to three-way interaction)						
Constant	1.25	.03		39.11	.000	[1.19,1.31]
Racial discrimination (Dis)	0.10	.03	.18	3.02	.003	[0.03,0.16]
Common humanity	–0.04	.04	–.06	–1.10	.272	[–0.11,0.03]
Social connectedness (SC)	–0.21	.03	–.49	–8.32	.000	[–0.26,-0.16]
Dis × common humanity	0.04	.04	.16	1.00	.318	[–0.04,0.11]
Dis × SC	–0.01	.02	–.03	–0.56	.575	[–0.06,0.03]
Common Humanity × SC	0.08	.03	.16	2.74	.007	[0.02,0.13]
Dis × Common Humanity × SC	–0.04	.03	–.08	–1.35	.179	[–0.10,0.02]

N = 205. **p* < .05. ***p* < .01. ****p* < .001

Fig. 2 The interaction effects of racial discrimination and self-kindness on depression at higher (panel A) versus lower (panel B) levels of social connectedness



Furthermore, at lower social connectedness, the association between racial discrimination and depression was significantly positive for those with higher mindfulness ($B = 0.25$, $p < .001$, 95% CI = (0.10, 0.39); see the solid line in Panel B, Fig. 3). However, this was not the case for those with lower mindfulness. At lower social connectedness, the association between racial discrimination and depression was not significant for those with lower mindfulness ($B = 0.02$, $p = .72$, (-0.08, 0.11); see the dashed line in Panel B, Fig. 3).

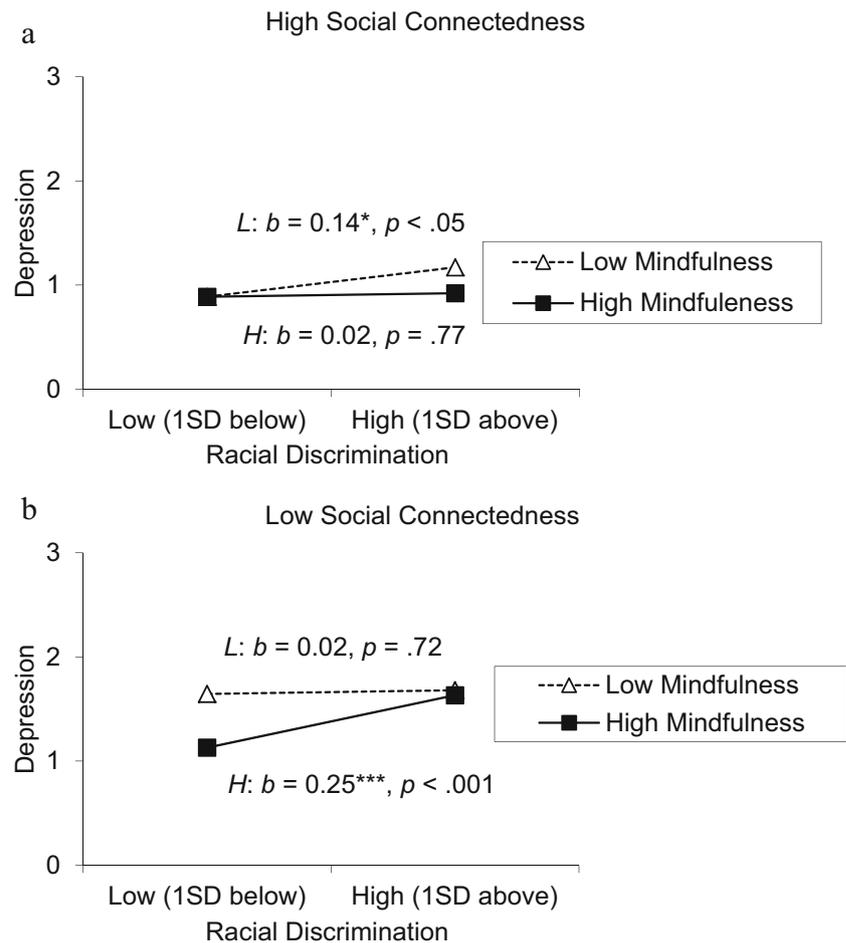
Unfortunately, results failed to support a significant three-way interaction of racial discrimination, social connectedness, and common humanity ($B = -0.04$, $p = .18$, 95% CI = (-0.10, 0.02)). Even though the overall model contributed to 36% of the variance in depression, the three-way interaction only added an additional 1% of variance in depression.

For a post hoc analysis, a more stringent alternative model was tested by examining whether one self-compassion component and social connectedness would moderate the association between racial discrimination and depression while controlling for the other two self-compassion components. These analyses were used to further verify the uniqueness of each

self-compassion component above and beyond the other two components. Significant three-way interactions were still found for social connectedness and self-kindness ($B = -0.09$, $p = .004$, 95% CI = (0.15, -0.03)) and for social connectedness and mindfulness ($B = -0.09$, $p = .002$, 95% CI = (-0.15, -0.03)), but not for social connectedness and common humanity ($B = -0.03$, $p = .25$, 95% CI = (-0.09, 0.02)). The significant patterns of the conditional effects for the alternative models while controlling for the two self-compassion components were also the same as those reported above without controlling for the other two self-compassion components.

Moreover, we examined whether overall self-compassion (i.e., the three self-compassion components averaged) would have the same results as did the three components separately. The result indicated that the three-way interaction of overall self-compassion, social connectedness and racial discrimination on depression was still significant ($B = -0.10$, $p = .006$, 95% CI = (-0.17, -0.03)). The nature of significant interaction patterns was similar to those reported for self-kindness and mindfulness in Figs. 2 and 3.

Fig. 3 The interaction effects of racial discrimination and mindfulness on depression at higher (panel A) versus lower (panel B) levels of social connectedness



Discussion

In the present study, we sought to examine whether the three components of self-compassion (i.e., self-kindness, mindfulness, and common humanity) and social connectedness moderated the association between racial discrimination and depression among Asian American college students. The results of the present study supported two self-compassion components (i.e., self-kindness and mindfulness) and social connectedness as significant moderators, together serving as buffers for the effect of racial discrimination on depression for Asian American college students. However, the third self-compassion component (i.e., common humanity) and social connectedness did not moderate the association between racial discrimination and depression.

These findings are in line with past research that highlights the role of self-compassion and social connectedness in mental health outcomes for Asian populations. For example, self-compassion has been found to be helpful in buffering Asian Americans' experience of interpersonal shame and psychological distress in the face of impostor feelings (Wei et al. *in press*). Furthermore, self-compassion and its three components were found to serve as moderators in the relationship between different stressors and mental health outcomes

among Asian individuals (e.g., Chu et al. 2018; Kyeong 2013; Wei et al. *in press*). With similar conceptual reasoning from the above previous studies, this study built from these studies to understand the moderating role of the three components of self-compassion in the relationship between racial discrimination and depression. Additionally, our findings are consistent with previous research findings that have shown a positive link between social connectedness and psychological well-being for Asian Americans (e.g., Fu and Vong 2016; Yoon et al. 2012a, b), as well as moderating roles for ethnic and mainstream social connectedness in the relationship between discrimination and negative mental health outcomes for Chinese international students (e.g., Wei et al. 2012, 2015).

Our findings provide a culturally appropriate perspective from which to understand the association between racial discrimination and depression among Asian American college students. Guided by this Eastern philosophy, being able to provide caring and warmth to oneself when encountering racial discrimination could be a personal resource that lessens the depressive feelings associated with racial discrimination. On the other hand, having a sense of social connectedness with others is highly valued in collectivistic cultures (Yoon and Lee 2010), which plays an important role in the mental

health of Asian Americans (e.g., Fu and Vong 2016; Yoon et al. 2012a, b). Therefore, our findings are consistent with Asian cultural practice. Importantly, our results also suggest that both the personal resource of practicing self-care and the social resource of maintaining connection with others can work together to prevent Asian American college students from experiencing depression in the face of discrimination. Although our study only focused on Asian American college students, it is likely that the same three-way interaction model can be applied to other non-Asian racial minority groups because of the shared experience of oppression and similar collectivist cultural values. Future studies are warranted to either confirm or disconfirm this speculation.

Moreover, the results of the present study advance the literature on the value of fostering self-kindness, putting things in perspective mindfully, and promoting social connectedness in the context of racial discrimination for Asian American college students. These findings further support existing evidence for the protective roles of self-compassion and social connectedness in fostering psychological well-being for Asian Americans (e.g., Fu and Vong 2016; Wei et al. *in press*; Yoon and Lee 2010). Many of the relatively new psychotherapy theories and treatments endorse the practice of self-compassion (e.g., Acceptance and Commitment Therapy, Compassion-Focused Therapy, and Mindful Self-Compassion Training) (e.g., Germer and Neff 2013; Karris and Caldwell 2015; Neff and Tirch 2013). Our findings indirectly support the notion of using self-compassion to help Asian American college students in the context of racial discrimination.

Our results indicated that common humanity was not a significant moderator. This finding is not consistent with Wei et al. (*in press*) finding that common humanity significantly moderated the association between impostor feelings and interpersonal shame. We speculated as to why this might be the case. Perhaps when Asian Americans experience impostor feelings, thinking about this is a shared experience that might help them to reduce interpersonal shame. However, racial discrimination is an incidence of injustice. Perceiving racial discrimination as part of a shared experience in society rather than a personal struggle (i.e., common humanity) may not help them to actually feel better, perhaps even making them feel angry, frustrated, or sad about its continued existence. As we can see in Table 1, the two other components of self-compassion (i.e., self-kindness and mindfulness) and social connectedness were significantly and negatively associated with depression, but common humanity was not. Therefore, common humanity may be a less relevant phenomenon in lessening depressive feelings in the context of racial discrimination.

Limitations and Future Research Directions

Several limitations of this study and directions for future research should be discussed. First, the findings of our study

should be generalized with caution. The sample used in this study consisted of Asian American college students at a West Coast university whose experiences might be different from Asian American college students in other regions, such as the Midwest. For example, there are fewer Asian Americans in the Midwest. This might mean that when facing racial discrimination, Asian Americans at a Midwest university might need to have even higher levels of both self-compassion and social connectedness to protect themselves from depression. Future studies can extend this study by examining this three-way interaction among different regions. Similarly, future studies can extend this study by examining within group differences among Asian Americans. Du and Wei (2015) found that Chinese international students with higher acculturation were likely to report higher positive affect and life satisfaction through a sense of social connectedness in the mainstream society. Conversely, those with higher enculturation were likely to report lower negative affect through a sense of social connectedness from their ethnic community. Therefore, it is likely that Asian Americans with higher levels of acculturation might feel particularly helped by social connectedness from the mainstream society. However, those with higher levels of enculturation might feel more helped by social connectedness in their ethnic community. Therefore, future studies need to continue to examine specific subgroups of Asian American populations, such as those in different regions (e.g., Midwest) and those with within-group differences (e.g., levels of acculturation and enculturation).

Second, another limitation is that we only focused on the positive aspects of self-compassion in this study. Due to our intention to investigate protective factors, we did not examine the impact of the three negative aspects of self-compassion (i.e., self-judgment, over-identification, and isolation) on the association between racial discrimination and depression. In a recent study, Wei et al. (*in press*) found that self-judgment (e.g., being critical toward oneself) and over-identification (e.g., being completely absorbed by difficult feelings) significantly moderated the positive association between impostor feelings and interpersonal shame. Specifically, self-judgment and over-identification intensified the negative impact of impostor feelings on interpersonal shame. Therefore, future studies can extend our study by investigating these negative aspects of self-compassion with different outcome variables in different contexts related to minority stressors. Third, the use of self-report scales is a limitation. For example, participants were asked to report on their perceived experiences for multiple constructs in the same survey, which may have led to results being confounded by report biases (e.g., response style and/or social desirability) rather than reflecting true associations (Podsakoff et al. 2003). Additionally, participants may have felt pressure to appear socially desirable and report that they are socially connected due to stigma about loneliness or not having friends. Using multimethod and observational

datasets in future studies can minimize these biases. Fourth, the current study uses a cross-sectional design, and causality cannot be determined as a result. It is possible that other alternative models could possibly fit the data to provide different explanations for the associations among the variables. For example, it is likely that in the face of racial discrimination, higher levels of depression can negatively affect interest in building social connections and the ability to provide care to oneself. Future studies can use a longitudinal design to further confirm causal relationships between the variables.

Data Availability Statement All data are available at the Open Science Framework (<https://osf.io/2hvkn>).

Author Contributions SL: conducted literature search, assisted with data analyses, wrote the paper, and revised the manuscript. CL: designed and executed the study, collaborated with the writing of the study, and collaborated in editing and revising the manuscript. CW: executed the study, collaborated with the writing of the study, and collaborated in editing and revising the manuscript. MW: designed the study, analyzed the data and wrote the results, collaborated with the writing of the study, and collaborated in editing and revising the manuscript. SK: collaborated with the writing of the study and collaborated in editing and revising the manuscript and editing the final manuscript. All authors approved the final version of the manuscript for submission.

Compliance with Ethical Standards

In accordance with APA ethical guidelines, we affirm that the above order of authorship reflects our relative contribution to this project. We have followed ethical principles of the American Psychological Association in conducting this study and in our treatment of research participants. None of the authors has any financial interest or other conflict of interest that influenced the conduct of this study or the reporting of results.

Conflict of Interest The authors declare that they have no conflict of interest.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the Institutional Review Board of University of California, Riverside and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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