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Ethnic Identity and Coping Strategies as Moderators of COVID-19 Racial Discrimination Experiences Among Chinese Americans

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ABSTRACT

A moderated mediation path analysis indicated COVID-19 racial discrimination was negatively associated with life satisfaction and positively related to depression in Chinese immigrants and Chinese Americans (CCA; $N = 187$). Strong ethnic identity moderated the relationship between COVID-19 discrimination and depression. Higher levels of coping moderated the relationship between depression and life satisfaction. Professional counselors are thus called to help CCA clients expand their coping skills to mitigate the effects of pandemic-related discrimination. Counselors can also help Chinese clients raise their critical consciousness and understand how oppressive systems and experiences of discrimination are linked to overall mental health and wellbeing.

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COVID-19 racial discrimination; depression; life satisfaction; ethnic identity; coping strategy; Chinese

In the United States, instances of harassment, hate speech proliferation, and brutal acts of violence have substantially increased toward Chinese migrants and Chinese Americans (CCA), who report higher rates of COVID-19 related racial discrimination compared to other Asian American and Pacific Islander subgroups (Jeung & Nham, 2020). These experiences of COVID-19 related racial discrimination likely have deleterious effects on the psychological wellbeing and life satisfaction of CCA. The current xenophobic rhetoric touted by media outlets and political leaders echo a long history of oppressive anti-Chinese sentiments in ways that may compound with intergenerational trauma and contribute to cultural mistrust and racial trauma (Litam, 2020). A paucity of research exists regarding a mechanism of path in which COVID-19 related racial discrimination impacts CCA's mental health and overall well-being. Additionally, little studies exist regarding possible protective factors that may buffer against the deleterious effects of pandemic related racial discrimination. Therefore, this study addresses the literature gap by examining the harmful process of COVID-19 racial discrimination on CCA's life-satisfaction via depression and examines the possible protective role of ethnic identity and coping strategy.

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Background and Theoretical Framework

Racial Discrimination, Depression, and Life Satisfaction

Extant research has linked the indirect effect of racial discrimination on life satisfaction via increased symptoms of depression in Asian American and Pacific Islanders (AAPI). When facing racial discrimination, higher levels of depressive symptomology among AAPI were observed compared to other racial or ethnic groups, which may lead to decreased overall wellbeing and life satisfaction (Lee & Ahn, 2011). Similarly, the relationship between racial discrimination, depression, and life satisfaction was much stronger for AAPI than for other racial or ethnic minority groups (Choi et al., 2016; Tummala-Narra et al., 2018). To the best of the researchers' knowledge, no studies have yet been conducted that have empirically explored the mechanism through which COVID-19 related racial discrimination may negatively impact the life satisfaction of CCA via increased depression.

Ethnic Identity as Protective Factors

According to Phinney (2003), ethnic identity refers to the quality of an individual's affiliation with their ethnic group. Endorsing a strong ethnic identity may be an important psychological resource that helps ethnic minorities (e.g., CCA) respond with resilience when racial discrimination occurs (Phinney, 2003). For example, existing theoretical research posits CCA individuals with strong ethnic identities tend to feel more connected to their ethnic communities, maintain a sense of positive wellbeing (e.g., low level of depression and greater life satisfaction) and self-esteem, and demonstrate resilience to life changes and stressors (Chae & Foley, 2010; Choi et al., 2016; Iwamoto & Liu, 2010). Social identity theory (Tajfel & Turner, 1979) suggests ethnic identity may serve as a protective factor that moderates the negative effects of race-related stress and discrimination on psychological wellbeing. Theoretically, ethnic identity produces protective effects by providing a sense of belonging to one's ethnic community and enhancing one's positive view on their ethnic identity in ways that serve as a psychological resource when facing racism-related stressors (Tajfel & Turner, 1979). Despite the theoretical relevance and appeal, little empirical studies exist regarding whether ethnic identity moderates the link between COVID-19 related racial discrimination and psychological wellbeing among CCAs. This lack of literature limits our empirical knowledge for how ethnic identity influences the effect of COVID-19 racial discrimination. Therefore, we examined ethnic identity as a moderator of the first path in our model (Figure 1).

Coping Strategy as Protective Factors

High susceptibility to the link between racial discrimination, depression, and life satisfaction can be problematic when CCA individuals struggle to cope in ways that are incongruent with their internalized collectivistic values. Coping strategies are categorized into two types: engagement and disengagement. Engagement coping strategies are active efforts to control and manage the effects of external or internal stressors through problem-solving behaviors, seeking emotional support, and cognitive reframing (Tobin et al.,

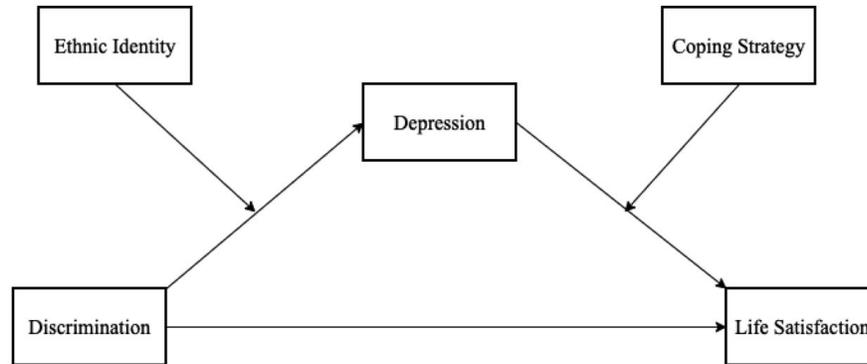
Conceptual Model

Figure 1. Conceptual moderated mediation model of direct and indirect relations among variables of interest predicting life satisfaction in Chinese and Chinese Americans.

1989). On the other hand, disengagement coping strategies refers to efforts to detach oneself mentally from stressful events through avoidance, social withdrawal, and self-criticism (Tobin et al., 1989). Coping strategy mediates the link between stressful events and stress by increasing one's sense of control and mobilizing effective strategies to mitigate the negative effect of depression on overall well-being (Lazarus & Folkman, 1984).

Empirical findings related to the role of coping strategies in the link between depression and overall well-being (e.g., life satisfaction) among CCAs are unclear. For example, it was reported that disengagement coping strategies (e.g., problem avoidance and social withdrawal) were positively related to reduced symptoms of depression or were not significantly related to lower levels of well-being among Asian Americans following instances of racial discrimination (Chang et al., 2014). Conversely, other studies indicated engagement coping strategies were associated with fewer mental health issues and increased levels of overall function in Asian American college students who had experienced racial discrimination (Liang et al., 2004; Sanchez et al., 2018).

The presence of these mixed findings elucidates the importance of further exploring the role of coping strategies in the relationship between racial discrimination, mental health outcomes, and overall well-being among CCA. Moreover, a paucity of research exists that examines the protective role of coping responses as a moderator in well-being via increased depression following COVID-19 related racial discrimination. Therefore, we tested coping strategy as a moderator of the second path in our model.

The Current Study

Based on the review of existing research, this study addresses the gap in literature by examining the following hypotheses: (1) Experiences of COVID-19 related racial discrimination will be (a) negatively related to life satisfaction and (b) positively related to depression, (2) Depression will mediate the relationships between CCA individuals COVID-19 related racial discrimination and their level of life satisfaction, (3) Ethnic identity will moderate the relationship between COVID-19 related racial discrimination and depression, such that the relationship between discrimination and depression will

be weaker for CCA individuals with higher levels of ethnic identity compared to CCA individuals with lower levels of ethnic identity,

(4) Coping strategy will moderate the relationship between depression and life satisfaction, such that the relationship between depression and life satisfaction will be weaker for CCA individuals with better coping strategies than those with poor coping strategy, and (5) For CCA individuals who have high level of ethnic identity and/or coping strategy, COVID-19 racial discrimination will have weaker indirect effects on life satisfaction via decreased level of depression.

Method

Inclusion/Exclusion Criteria

Participants were recruited from AAPI community listservs, professional networking sites (i.e., LinkedIn), and from Amazon MTurk. The inclusion criteria for the study were individuals who (a) self-identified as CCA or Chinese with multiracial backgrounds, (b) either experienced or witnessed COVID-19 related racism, and (c) resided in the U.S.

Participants

A total of 257 participants consented to complete the study (i.e., AAPI communities = 180; Amazon MTurk = 77). Seventy participants were excluded from the analysis because they did not satisfy the study criteria, completed less than 70% of the survey items, or demonstrated identifiable patterns of responses to all items; resulting in a final sample of 187 participants (72.8% useable response rate). The mean age of participants was 31.6 years ($SD = 9.6$, range = 16 to 63 years). Approximately 55% of the participants identified as female ($n = 103$), followed by male (44%, $n = 83$) and other (1%, $n = 1$). Most participants experienced and witnessed instances of COVID-19 related racism (59.4%, $n = 111$) or only witnessed anti-Chinese sentiments associated with the pandemic (36.4%, $n = 68$).

Sampling Procedures

University Institutional Review Board (IRB) approval was obtained prior to data collection. An electronic version of the assessment packet (i.e., demographic form and five instruments) was created using Qualtrics. Prospective participants were invited to complete an online study to better understand the effects of COVID-19 related racism on wellness. Prospective participants were informed that they could end the survey at any time, the research would not directly benefit them, and completing the survey was voluntary. Participants were also invited online through Amazon MTurk, an online platform that enables researchers to obtain geodemographically diverse samples. MTurk participants received a \$.5 incentive as monetary compensation. The MTurk survey included three screening questions that asked participants to choose certain response options as a strategy to monitor data quality. Twenty-four participants (31.2%) chose inappropriate responses and were excluded from the sample.

Measures

Demographics and Background Form

A demographic and background form was created to gather information regarding participants' age, gender, highest level of education, and race/ethnicity. Two additional questions were included to assess the occurrence and frequency of COVID-19 related racial discrimination toward themselves or directed toward others. Age, gender, and types of COVID-19 discrimination experience (e.g., witness or experience) were included as control variables as existing research indicated that they may be associated with depression, life satisfaction, and coping strategy (Stein et al., 2014).

Everyday Discrimination Scale (EDS)

The 9-item EDS (Williams et al., 2008) was utilized to measure CCA's experience of COVID-19 related discrimination. A specific prompt (e.g., since COVID-19 outbreak) was added to each item in order to measure discrimination in the context of COVID-19. Participants were asked to rate their experience with COVID-19 related racial discrimination on a 5-point Likert-type scale, ranging from *Never* (0%) to *Always* (100%). Examples of items included, "Since COVID-19, I have been treated with less respect than other people." The reliability of scores on the EDS total scale was .90 (Bernstein et al., 2011). Reliability for the EDS total score in the current study was $\alpha = .97$.

Satisfaction with Life Scale (SWLS)

The SWLS (Diener et al., 1985) is a unidimensional, five-item scale designed to measure global beliefs of one's life satisfaction. Five items are rated on a 7-point Likert-type scale, ranging from 7 (*Strongly Agree*) to 1 (*Strongly Disagree*), with higher scores indicating greater life satisfaction. Example items include, "In most ways my life is close to ideal." The reliability of the SWLS total score was found to be .87, with test-retest reliability of .82 (Diener et al., 1985). Reliability for the SWLS total score in the current study was $\alpha = .90$.

Center for Epidemiologic Studies Depression Scale Revised (CESD-R)

The CESD-R (Van Dam & Earleywine, 2011) is a 20-item scale designed to measure symptoms of depression in diverse populations. The CESD-R consists of two subscales that represents the underlying factors of depression: functional impairment (12 item) and negative mood (8 items). Each item is rated on a 5-point Likert-type scale with anchor of frequency response (1= *not at all or less than one day* to 5 = *nearly every day for 2 weeks*). The CESD-R was found to have $\alpha = 0.92$ and convergent validity with other measures of anxiety and positive and negative affect (Van Dam & Earleywine, 2011). Reliability of the CESD-R total score in the current study was $\alpha = .97$.

Multigroup Ethnic Identity Measure – Revised (MEIM-R)

The MEIM-R (Brown et al., 2014) is a revised version of the original Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). The MEIM-R consists of two subscales that represent essential factors of ethnic identity: identity exploration and identity commitment. The MEIM-R includes six items being rated on a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). Example item includes, “I think a lot about how my life will be affected by my ethnic group membership.” The overall reliability of the MEIM-R total score was found to be .70 (Brown et al., 2014). In the current study, reliability of the MEIM-R total scores was $\alpha = .56$.

Coping Strategies Inventory Short Form (CSI-SF)

The CSI-SF (Addison et al., 2007) is a 15-item measurement of coping responses on a 5-point Likert-type scale from 1 (*Never*) to 5 (*Almost Always*). The CSI-SF is developed within two dimensions (disengagement and engagement) that include four 4-item sub-dimensions: problem-focused engagement, problem-focused disengagement, emotion-focused engagement, and emotion-focused disengagement. The reliability of scores were 0.59 and .70 for the first-tier subscales, disengagement and engagement, respectively, and ranged from .58 to .72 across the four the second-tier subscales (Addison et al., 2007). Reliability in the current study was $\alpha = .83$ for the CSI-SF total scores and $\alpha = .76$ and .75 for disengagement and engagement scores.

Data Diagnostics

Three missing values were found on age, yielding less than the minimal proportion of missing data (i.e., < .5%; Tabachnick & Fidell, 2019) for the current analysis. A further visual review suggested no identifiable missing patterns, which supported the missing data at random (MAR). Therefore, we chose the listwise deletion as the best practice to deal with the minimal proportion and random pattern of the missing data (Tabachnick & Fidell, 2019). Normality and multicollinearity of the data were examined, resulting in an acceptable range of skewness (<±2) and kurtosis values (<±3) for all items (Garson, 2012). A visual inspection of Q-Q plots and histogram indicated moderately skewed data, which was further supported by the significant value ($p < .001$) of the Shapiro-Wilk test. Data were not normally distributed at the univariate level, suggesting that the data were not multivariate normal (Mvududu & Sink, 2013). The absence of multicollinearity in data was evidenced by the variance inflation factor (VIF) and tolerance values (VIF < 10 and tolerance >.10; Tabachnick & Fidell, 2019). The linearity assumption was supported by visual inspections of bivariate scatterplots that confirmed no clear patterns of nonlinear relationships between the variables. Therefore, despite the moderated violation of normality, our sample data was deemed appropriate for path analysis (Tabachnick & Fidell, 2019). Moreover, linear regression analysis is robust to the moderated violation of normality, generating inconsequential results with any estimation methods (Hayes, 2018a).

Analytic Strategy, Sample Size, Power, and Precision

Data analysis was performed using SPSS software version 25.0. To examine our moderated mediation hypotheses, we employed Hayes' (2018) PROCESS macro version 3.0 (model 21) using ordinary least squares (OLS) estimation and 10,000 bootstrapping method to generate 95% percentile confidence intervals (CIs) for the indirect effect, given the non-normality of indirect effects in general (Preacher et al., 2007). CIs were further utilized to test the conditional indirect effects at the three different values of moderators representing "low", "moderate," and "high" (i.e., the mean, plus and minus one standard deviation of the moderators) at their respective paths, as recommended by Hayes (2018) and Preacher et al. (2007). The conditional indirect effects were deemed significant if the CIs do not include zero (Hayes, 2018; Preacher et al., 2007). The predictors and moderators (i.e., discrimination, depression, ethnic identity, and coping strategy) were centered at the grand mean so that interpretation of the direct and conditional indirect effects would be more meaningful (Hayes, 2018). Age, gender, and the type of racism experience were controlled in the analysis.

Results

Preliminary Analyses

The mean EDS total scores were 19.45 ($SD = 9.83$) for female and 26.16 ($SD = 9.905$) for male, which represented a medium effect size ($d = 0.68$; Cohen, 1998). The mean EDS total scores were 25 ($SD = 11.48$) for CCA who only experienced COVID-19 related racism, 15.59 ($SD = 8.81$) for CCA who only witnessed pandemic-related racism, and 26.33 ($SD = 9.10$) for CCA who both experienced and witnessed COVID-19 related racial discrimination. Difference in the EDS scores represented a large effect size between (a) CCA who only experienced and who only witnessed ($d = .92$) and (b) CCA who only witnessed and who both experienced and witnessed ($d = 1.19$). The mean DS total scores were 40.77 ($SD = 18.36$) for CCA who only witnessed COVID-19 related racism and 55.29 ($SD = 21.15$) for CCA who both experienced and witnessed such racism. Difference in the DS scores represented a large effect size ($d = 0.73$) between CCA who only witnessed and who both experienced and witnessed.

Direct Effects and Indirect Effects of Everyday Discrimination Following COVID-19

The results from our moderated mediation path analysis are presented in Table 1. As expected in Hypothesis 1a and 1b, everyday discrimination following COVID-19 was negatively related to life satisfaction ($\beta = -.253$, $p < .001$) and positively related to depression ($\beta = 1.479$, $p < 0.001$), after controlling for gender, age, and type of racism experience. Therefore, Hypothesis 1a and 1b were supported, suggesting that CCA who encountered COVID-19 related racial discrimination more frequently experienced decreased levels of life satisfaction and increased levels of depression. Hypothesis 2 predicted that depression would mediate the relationship between CCA's experiences with COVID-19 related discrimination and their level of life satisfaction. A negative relationship occurred between depression and life satisfaction ($\beta = -0.077$, $p < 0.05$), with the 95% CI for the indirect effect of COVID-19 related discrimination on life satisfaction via depression excluding zero ($-.14$, $-.02$), supporting the Hypothesis 2.

Table 1. Results From Moderated Mediation Path Analysis.

Discrimination → Depression	β	SE	LLCI	ULCI
Discrimination	1.479***	.179	1.126	1.832
Ethnic Identity	-.123	.534	-1.178	.931
Discrimination × Ethnic Identity	-.122***	.029	-.179	.931
Age	-.325*	.103	-.527	-.122
Gender	-3.021	1.916	-6.802	.759
Type of Racism Experience	1.014	1.874	-2.685	4.713
Depression → Life Satisfaction	β	SE	LLCI	ULCI
Discrimination	-.253***	.060	-.371	-.134
Depression	-.077*	.030	-.135	-.019
Coping Strategy	.120*	.049	.025	.216
Depression × Coping Strategy	.004**	.002	.001	.007
Age	.041	.040	-.037	.119
Gender	.910	.723	-.514	2.334
Type of Racism Experience	.987	.676	-.347	2.321
Conditional Effect of Discrimination on Depression				
Condition	Estimate	SE	LLCI	ULCI
Low ethnic identity (M - 1 SD)	1.881***	.186	1.514	2.248
Moderate ethnic identity (M)	1.479***	.179	1.126	1.832
High ethnic identity (M + 1 SD)	1.076***	.217	.648	1.504
Conditional Effect of Depression on Life Satisfaction				
Condition	Estimate	SE	LLCI	ULCI
Low coping strategy (M - 1 SD)	-.115**	.033	-.180	-.049
Moderate coping strategy (M)	-.077*	.030	-.135	-.019
High coping strategy (M + 1 SD)	-.039	.032	-.102	.024

Note. LL = low limit, CI = confidence interval, UL = upper limit.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

Moderation Effects of Ethnic Identity and Coping Strategies

Ethnic Identity

Hypothesis 3 posited that ethnic identity would have a moderation effect on the link between discrimination following COVID-19 and depression. Ethnic identity was significantly negatively related to the effect of discrimination on depression ($\beta = -.122$, $p < .001$). With the conditional values of the moderator at ± 1 SD from the mean score, simple slope analyses further revealed the details of the moderation effect (Figure 2). As hypothesized, for CCA who possessed a more positive view of their ethnic identity, COVID-19 related discrimination had a less positive effect on their depression (+ 1 SD; b [effect of discrimination on depression] = 1.076, $p < 0.001$) than those who possessed a less positive view of ethnic identity (- 1 SD; $b = 1.881$, $p < 0.001$). Although discrimination was still significantly positively related to depression at all three points (i.e., - 1 SD, the mean score, +1 SD) along the scale of the moderator, the slopes became less positive as they moved from low to high levels of ethnic identity (Table 1). At unconditional value, ethnic identity accounted for about 4% of the variance ($\Delta R^2 = .0368$, 95% CI [-.179, -.066]) in the slope of discrimination predicting depression ($p < 0.001$), which corresponded to small effect size ($f^2 < 0.02$; Aiken & West, 1991). Further investigation of the CI indicated that ethnic identity at unconditional value could buffer the impact

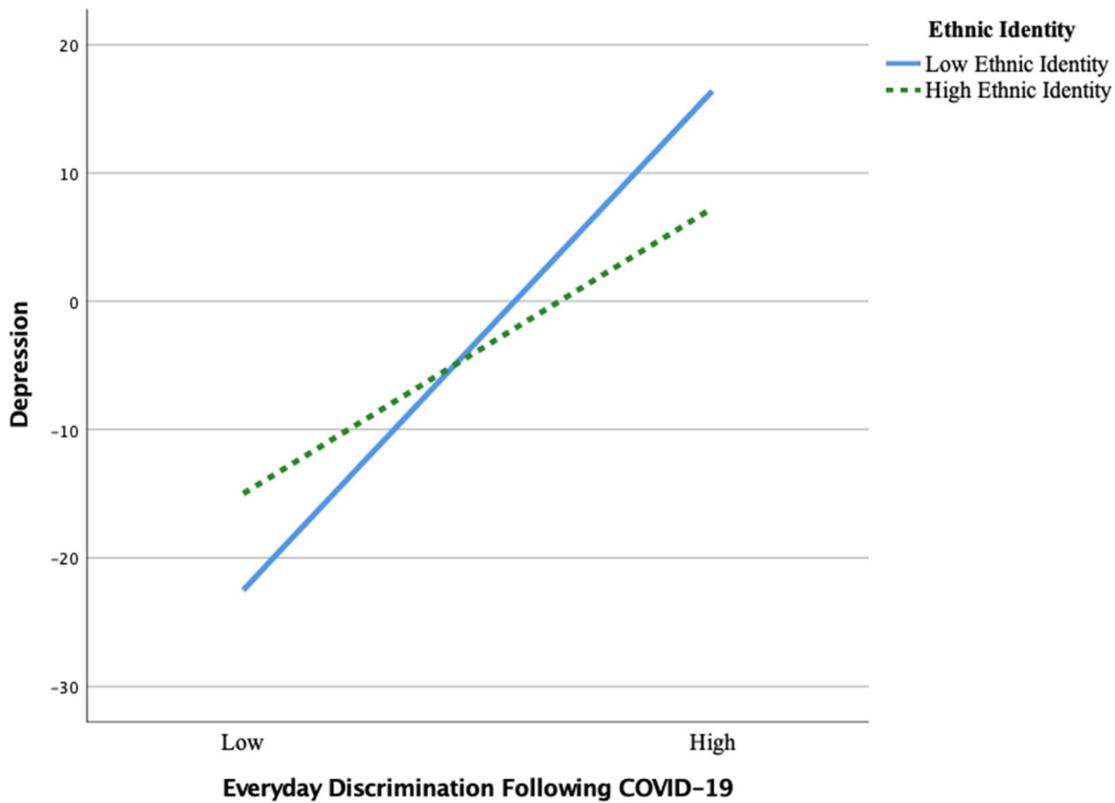


Figure 2. Ethnic identity moderates the effect of every discrimination on depression.

of discrimination on depression as small as -6.6% or as large as -17.9% of one standard deviation. Despite the small effect size, this estimate point can be practically meaningful as it is the first empirical evidence for theorized moderating role of ethnic identity (e.g., Tajfel & Turner, 1979) among Asian Americans as well as is inconsistent with and larger than a previous study finding non-significant effect of ethnic identity as a protective factor against depression among Asian American adolescents from an immigrant community (Stein et al., 2014).

Coping Strategies

Hypothesis 4 predicted that coping strategy would have a moderation effect on the link between depression and life satisfaction. Coping strategy was significantly positively related to the slope of depression on life satisfaction ($\beta = .005, p < .05$). The simple slope analyses revealed the nature of the moderation effect (Figure 3). As expected, CCA with poor coping strategies yielded a significant negative relation between depression and life satisfaction ($-1\text{ SD}; b = -.115, p < .001$), but CCA with better coping strategies did not ($+1\text{ SD}; b = -.04, p = .26$), supporting Hypothesis 4. At unconditional value, coping strategy explained about 2% of the variance ($\Delta R^2 = .0203, 95\% \text{ CI } [.0011, .0072]$) in the slope of depression predicting life satisfaction ($p < .005$), corresponding to small effect size ($f^2 < 0.02$; Aiken & West, 1991). Further inspection of the CI revealed that coping strategy at unconditional value could buffer the impact of depression on life satisfaction by amplifying the life satisfaction as small as .1% or as

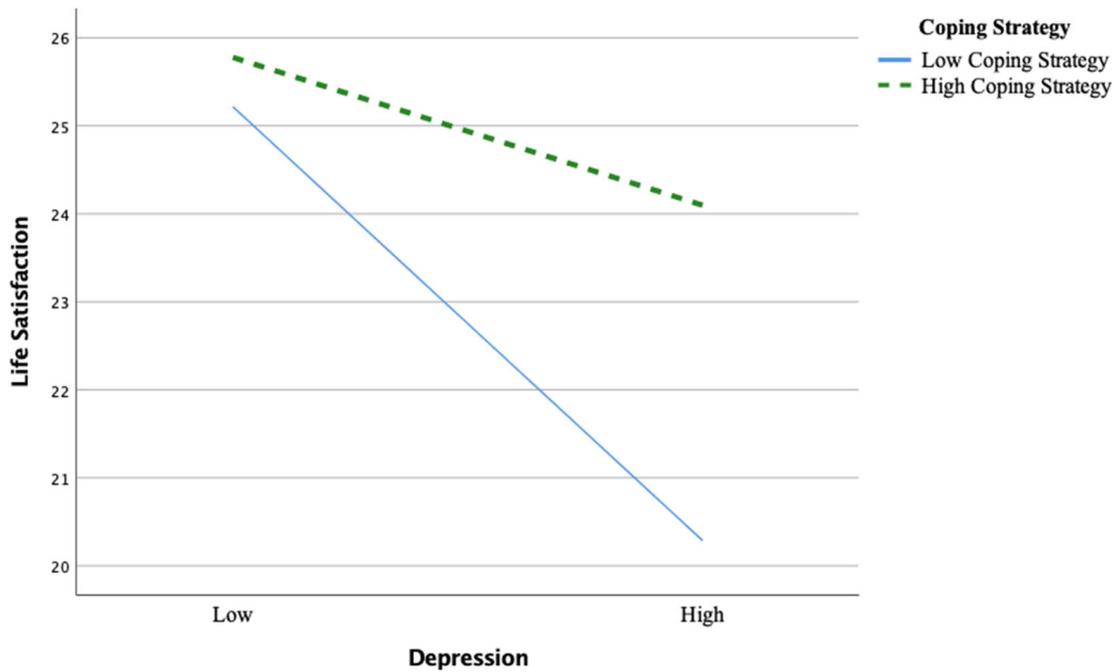


Figure 3. Coping strategy moderates the effect of depression on life satisfaction.

Table 2 . Conditional Indirect Effects of Discrimination on Life Satisfaction via Depression.

Condition	Estimate	SE	LLCI	ULCI
Low ethnic identity	-.1446	.058	-.260	-.032
High ethnic identity	-.083	.038	-.164	-.017
Low coping strategy	-.170	.054	-.283	-.068
High coping strategy	-.058	.048	-.154	.035
Low ethnic identity and low coping strategy	-.216	.066	-.350	-.088
High ethnic identity and high coping strategy	-.042	.036	-.119	.025

Indices of Conditional Moderated Mediation by Ethnic Identity				
Condition	Index	SE	LLCI	ULCI
Low coping strategy	.014	.005	.005	.024
High coping strategy	.005	.004	-.003	.012

Note. LL = low limit, CI = confidence interval, UL = upper limit.

large as .7% of one standard deviation. This estimate point is similar to a previous study of coping strategy as a mediator between racial microaggressions and depression among Asian American college students (Sanchez et al., 2018). Despite the small effect size, these findings provide the first and initial evidence for the moderator role of coping strategy in the link between depression and life satisfaction, which warrants further research.

Moderated Mediation Effect

The bootstrapping CIs for testing hypothesis 5 are presented in Table 2. Hypothesis 5 predicted that COVID-19 related discrimination would have weaker indirect effects on life satisfaction via depression at the high level of ethnic identity and coping strategy (+1 SD) as compared to the low levels of the moderators (-1 SD). The indirect effect of

COVID-19 related discrimination on life satisfaction (-.216) was significant under low ethnicity identity and low coping strategy, but not under high ethnic identity and high coping strategy (-.042). The difference between the two indirect effects (i.e., high vs low) was also significant (.174), further supporting hypothesis 5. In addition, further investigation indicated the indirect effect of COVID-19 related discrimination on life satisfaction was not significant if CCA possessed either a high level of ethnic identity or coping strategy (-.074 under low ethnic identity but high coping strategy; $-.123$ under high ethnic identity but low coping strategy). Lastly, the test of the indices of conditional moderated mediation indicated that ethnic identity moderated the indirect effect of COVID-19 related discrimination on life satisfaction under the low and middle coping strategy (0.014, 0.009, respectively) but not under the high coping strategy (.004).

Supplementary Analyses

One may argue for the different moderation effect of coping strategy (i.e., engagement-based coping versus disengagement-based coping) on life satisfaction. Thus, we re-tested the moderation effects of each coping strategy on the link between depression and life satisfaction. However, no significant and meaningful differences in the moderation effect between disengagement coping ($\beta = .006$, $p < .05$) and engagement coping ($\beta = .007$, $p < .05$) were found. Lastly, we explored if ethnic identity and coping strategy cross moderated both of the first- and second path in the moderated mediation model. However, there was no significant moderation effect on a path that was not hypothesized.

Discussion

The results of our moderated mediation analysis advance theoretical framework designed to mitigate the effects of COVID-19 related discrimination in CCA following the pandemic. This study reported that COVID-19 related racial discrimination exerts negative effects on life satisfaction via increased level of depression. Specifically, the more COVID-19 related racial discrimination CCAs experienced and/or witnessed, the less life satisfaction they experienced, in part due to increased levels of depression. Endorsement of strong ethnic identity and high levels of coping strategies reduced the strong negative effect of COVID-19 related racial discrimination on depression and life satisfaction in some CCA individuals. High levels of ethnic identity buffered the effect of discrimination on depression in some CCA individuals. Similarly, the effect of depression on life satisfaction was not significant for CCAs with high levels of coping strategies, compared to CCA with low levels of coping. Accordingly, the indirect effect of COVID-19 related racial discrimination on life satisfaction via increased depression was significant for those with low ethnic identity and low coping, but not significant for CCAs with high ethnic identity or high coping strategy. The moderation effect of ethnic identity on the indirect effect of the discrimination was at work until high levels of coping were achieved.

The results from the present study strengthen the limited body of literature that address the negative effects of COVID-19 related discrimination on depression and life

satisfaction in CCA. Specifically, our results for hypothesis 1 is consistent with the results of a previous study conducted with Asian Americans ($n > 2,000$), which indicated that participants who perceived racial discrimination had a 120% increased likelihood of receiving a depression diagnosis (Gee et al., 2007). Our results are thus consistent with extant research while contributing novel findings about the effects of COVID-19 related racial discrimination in CCA individuals.

Our results additionally indicate that depression mediated the negative effect of COVID-19 related discrimination on life satisfaction (hypothesis 2). This finding is consistent with existing studies with AAPI which indicated experiences of racial discrimination indirectly influenced life satisfaction by increasing levels of depression (Gee et al., 2007). The results from our study expound upon previous analyses which indicated that experiences of racial discrimination were positively associated with increased levels of depression and lower levels of overall well-being in Asian Americans (Choi et al., 2016; Lee & Ahn, 2011; Tummala-Narra et al., 2018). Our results add to the literature by suggesting a pathway in which COVID-19 related racial discrimination indirectly affects life satisfaction via depression.

The results from our study underscore the importance of ethnic identity as a buffer against the negative effects of COVID-19 related racial discrimination. Our findings indicated that higher levels of ethnic identity weakened the relationship between COVID-19 related racial discrimination and depression. Specifically, our findings are consistent with theoretical literature that identified the protective role of ethnic identity in AAPI (Chae & Foley, 2010) while contributing new knowledge about a mechanism where ethnic identity moderates the effect of COVID-19 related discrimination on depression for CCAs. The mitigating effect of ethnic identity on COVID-19 related racial discrimination supports the key theoretical principle of social identity theory (Tajfel & Turner, 1979), which posits that a strong sense of ethnic identity protects ethnic minorities from the negative effects of racial discrimination by allowing them focus on their positive group membership. Our results counter findings by Stein et al. (2014) which indicated ethnic identity was a non-significant moderator between racial discrimination and depression among AAPI adolescents. Our findings also support Phinney's (2003) model that asserts how ethnic identity may be an important psychological resource that promotes resilience in minoritized groups. Ethnic identity may promote a sense of belonging to one's ethnic group, resulting in strong feelings of solidarity and social support. Thus, findings from our study support the theoretical and empirical evidences.

Although previous research on the moderation effect of ethnic identity heavily focused on one mediation path, we examined the moderation effects of coping strategy on the second mediation path. Consequently, we found that the effect of depression on life satisfaction became non-significant for CCAs with high levels of coping strategy, regardless of ethnic identity. This finding supports the notion that high levels of coping may embolden CCA individuals to develop high self-efficacy in controlling external stresses (Lee & Ahn, 2011), which may offset the effects of depression on life satisfaction. Our study indicates both engagement and disengagement coping strategies are effective in moderating the relationship between depression and life satisfaction in CCA, which counters previous findings that better mental health outcomes in AAPI who employed engagement type coping responses following racial discrimination (Liang et al., 2004).

Implications for Counselors

This study represents an important contribution to emerging research at the intersection of COVID-19, mental health, and the experiences of CCA individuals in a post-pandemic reality. Our findings have several implications for professional counselors working with CCA clients. First, our findings established that both disengagement and engagement coping responses weakened the link between depression and life satisfaction. Professional counselors are therefore encouraged to support CCA individuals in identifying and amplifying their existing coping skills while empowering the development of supplemental coping responses (e.g., engaging in physical activity, seeking community and kinship, obtaining validation from like-minded individuals, and employing religious and/or spiritual practices).

Second, counselors should empower CCA clients to strengthen their ethnic identity as our findings supported the protective role of ethnic identity in weakening the impact of COVID-19 related discrimination on depression. Professional counselors can strengthen CCA ethnic identity by raising their critical consciousness. Critical consciousness has been identified as a prominent strategy for supporting clients combating the effects of oppression (Ratts & Greenleaf, 2017). Facilitating empowering conversations with CCA clients about the ways in which pandemic-related anti-Chinese sentiments represent forms of historical oppression can help individuals understand how systemic forces affect their mental health (Ratts & Greenleaf, 2017). Third, it is of critical importance that counselors understand how current anti-Asian discourse may activate intergenerational trauma in CCA clients. Counselors must recognize how current anti-Chinese racial remarks (e.g., Chinese flu, Wuhan Virus, Kung-flu) may reinforce cultural mistrust, echo centuries of oppression, and may contribute to racial trauma (Litam, 2020).

Limitations and Future Research

First, our results were based on data collected through cross-sectional surveys, so results may not be sufficient enough to infer stable causality. Variables of interest (e.g., moderators and mediators) were measured at the same time, which may obfuscate causality. Longitudinal studies are needed to assess the variables separately and further clarify the causal relationships between variables used in this study. A prompt to each the EDS items was added to adapt the EDS for measuring COVID-19 related discrimination. This prompt may have weakened content validity of the EDS. Future studies may investigate the content validity of the COVID-19 version of the EDS (e.g., EFA and CFA) to ensure validity. Third, the results may not be generalizable to other Asian Americans and CCA individuals as non-probability sampling and relatively small sample size was used. Further researcher could benefit from recruiting more diverse CCA participants and adding another mode of data collection (e.g., mailing the survey) to reduce administration bias. Lastly, future research may explore the potential role of other confounding or moderating factors (e.g., acculturation and socioeconomic status) in the link between racial discrimination and depression or depression and life satisfaction.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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References

- Addison, C. C., Campbell-Jenkins, B. W., Sarpong, D. F., Kibler, J., Singh, M., Dubbert, P., Wilson, G., Payne, T., & Taylor, H. (2007). Psychometric evaluation of a coping strategies inventory short-form (CSI-SF) in the Jackson Heart Study Cohort. *International Journal of Environmental Research and Public Health*, 4(4), 289–295. <https://doi.org/10.3390/ijerph200704040004><https://doi.org/>
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications.
- Bernstein, K. S., Park, S. Y., Shin, J., Cho, S., & Park, Y. (2011). Acculturation, discrimination and depressive symptoms among Korean immigrants in New York City. *Community Mental Health Journal*, 47, 24–34. <http://dx.doi.org/10.1007/s10597-009-9261-0>
- Brown, S. D., Unger Hu, K. A., Mevi, A. A., Hedderson, M. M., Shan, J., Quesenberry, C. P., & Ferrara, A. (2014). The Multigroup Ethnic Identity measure-revised: Measurement invariance across racial and ethnic groups. *Journal of Counseling Psychology*, 61(1), 154–161. <https://doi.org/10.1037/a0034749>
- Chae, M. H., & Foley, P. F. (2010). Relationship of ethnic identity, acculturation, and psychological well-being among Chinese, Japanese, and Korean Americans. *Journal of Counseling & Development*, 88(4), 466–476. <https://doi.org/10.1002/j.1556-6678.2010.tb00047.x>
- Chang, J., Chen, C.-N., & Alegria, M. (2014). Contextualizing social support: Pathways to help seeking in Latinos, Asian Americans, and Whites. *Journal of Social & Clinical Psychology*, 33(1), 1–24. <https://doi.org/10.1521/jscp.2014.33.1.1>
- Choi, S., Lewis, J. A., Harwood, S., Mendenhall, R., & Hunt, M. B. (2016). Is ethnic identity buffer? Exploring the relations between racial microaggressions and depressive symptoms among Asian-American individuals. *Journal of Ethnic & Cultural Diversity in Social Work*, 26, 18–29. <https://doi.org/10.1080/15313204.2016.1263815>
- Cohen, J. (1998). *Statistical power analyses for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Garson, G. D. (2012). *Testing statistical assumption*. Statistical Associates Publishing. <http://www.statisticalassociates.com/assumptions.pdf>
- Gee, G. C., Spencer, M. S., Chen, J., & Takeuchi, D. (2007). A nationwide study of discrimination and chronic health conditions among Asian Americans. *American Journal of Public Health*, 97(7), 1275–1282. <https://doi.org/10.2105/AJPH.2006.091827>

- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
- Iwamoto, D. K., & Liu, W. M. (2010). The impact of racial identity, ethnic identity, Asian values and race-related stress on Asian Americans and Asian international college students' psychological well-being. *Journal of Counseling Psychology, 57*(1), 79–91. <https://doi.org/10.1037/a0017393>
- Jeung, R., Nham, K. (2020). *Incidents of coronavirus-related discrimination*. Asian Pacific Policy & Planning Council. http://www.asianpacificpolicyandplanningcouncil.org/wp-content/uploads/STOP_AAAP_HATE_MONTHLY_REPORT_4_23_20.pdf
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Lee, D. L., & Ahn, S. (2011). Racial discrimination and Asian mental health: A meta-analysis. *The Counseling Psychologist, 39*(3), 463–489. <https://doi.org/10.1177/0011000010381791>
- 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*(1), 103–114. <https://doi.org/10.1037/0022-0167.51.1.103>
- Litam, S. D. A. (2020). “Take your Kung Flu back to Wuhan”: Counseling Asians, Asian Americans, and Pacific Islanders with race-based trauma related to COVID-19. *The Professional Counselor, 10*(2), 144–156. <https://doi.org/10.15241/sdal.10.2.144>
- Mvududu, N. H., & Sink, C. A. (2013). Factor analysis in counseling research and practice. *Counseling Outcome Research and Evaluation, 4*(2), 75–98. <https://doi.org/10.1177/2150137813494766>
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156–176. <https://doi.org/10.1177/074355489272003>
- Phinney, J. S. (2003). Ethnic identity and acculturation. In K. M. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement and applied research* (pp. 63–82). American Psychological Association.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypothesis: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*(1), 185–227. <https://doi.org/10.1080/00273170701341316>
- Ratts, M. J., & Greenleaf, A. T. (2017). Multicultural and social justice counseling competencies: A leadership framework for professional school counselors. *Professional School Counseling, 21*(1b), 2156759X1877358–2156759X1877359. <https://doi.org/10.1177/2156759X18773582>
- Sanchez, D., Adams, W. N., Arango, S. C., & Flannigan, A. E. (2018). Racial-ethnic microaggressions, coping strategies, and mental health in Asian American and Latinx American college students: A mediation model. *Journal of Counseling Psychology, 65*(2), 214–225. <https://doi.org/10.1037/cou0000249>
- Stein, G. L., Kiang, L., Supple, A. J., & Gonzalez, L. M. (2014). Ethnic identity as a protective factor in the lives of Asian American adolescents. *Asian American Journal of Psychology, 5*(3), 203–213. <https://doi.org/10.1037/a0034811>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Brooks/Cole.
- Tobin, D. L., Holroyd, K. A., Reynolds, R. V., & Wigal, J. K. (1989). The hierarchical factor structure of the coping strategies inventory. *Cognitive Therapy and Research, 13*(4), 343–361. <https://doi.org/10.1007/BF01173478>
- Tummala-Narra, P., Chang, J., Li, Z., Yang, E. J., Jiang, J., Sagherian, M., Phan, J., & Alfonso, A. (2018). Developmental and contextual correlates of mental health and help-seeking among Asian American college students. *The American Journal of Orthopsychiatry, 88*(6), 636–649. <https://doi.org/10.1037/ort0000317>
- Van Dam, N. T., & Earleywine, M. (2011). Validation of the Center for Epidemiologic Studies Depression Scale-Revised (CESD-R): Pragmatic depression assessment in the general population. *Psychiatry Research, 186*(1), 128–132. <https://doi.org/10.1016/j.psychres.2010.08.018>
- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2008). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health, 93*(2), 200–208. <https://doi.org/10.2105/ajph.93.2.200>