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Examining Coping and Acculturative Stress as Mediators Between Perceived Discrimination and Internalizing Symptoms Among African Immigrants

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Conflict of Interest

We have no known conflict of interest to disclose.

Ethics

The study was conducted in accordance with ethical guidelines for human subjects approved by Brigham Young University's Institutional Review Board

Data Availability Statement

Data available on request from the authors.

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Abstract

This study examined whether avoidant coping behaviors and acculturative stress functioned as mechanisms linking perceived discrimination to internalizing mental health symptoms among African immigrants living in the United States. We used cross-sectional data collected between December 2019 and January 2020 from US-based first and second-generation African immigrants (N = 599, 50% first-generation, 82% Black, 71% female, mean age = 30). Path modeling was performed to examine the mediating role of avoidant coping and acculturative stress on the relationship between perceived discrimination and internalizing symptoms. Results showed that perceived discrimination was related to internalizing symptoms via avoidant coping and acculturative stress (specifically social and environmental stress). These results provide support that coping strategies and acculturative stress are likely important micro-level

mechanisms by which the discrimination-mental health association persists. Implications and recommendations for prevention and intervention to reduce negative impacts of perceived discrimination on immigrant mental health are discussed.

Keywords: Coping, discrimination, acculturative stress, mental health, internalizing symptoms, African immigrants

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Research evidence denotes that ethnic minorities and immigrants in the United States frequently face increased discrimination and social exclusion with negative implications for health and wellbeing (Saasa et al., 2021; Carter et al., 2017; Davis et al., 2016; Schmitt et al., 2014). Discrimination among minority groups has been linked to disproportionate rates of psychosomatic symptoms and negative mental health outcomes including depression, anxiety, and insomnia (Saasa et al., 2021; Cheng et al., 2020; Davis et al., 2016; Kauff et al., 2017) and adverse physical health outcomes such as chronic diseases and accelerated aging (Simmons et al., 2021; Priest & William, 2018). Conversely, the past few decades have seen increased research attention toward examining factors associating discrimination with negative health outcomes among historically disenfranchised US populations and other minority groups (Chen et al., 2021; Chen & Yang, 2014; Williams et al., 2019). For instance, recent studies have shown that acculturative stress and coping strategies utilized in the face of discrimination can facilitate or mitigate adverse health consequences among immigrant groups (Chang et al., 2019; Choi et al., 2019; Li et al., 2019; Silva et al., 2017; Torres et al., 2012).

Limited research examines discrimination as it pertains to sub-Saharan African immigrants, a growing immigrant population with about 2.2 million residing in the United States in 2018 (Budiman, 2020). This highlights an important gap in the literature given that Black African immigrants occupy disadvantaged social identities, such as being black and foreign, alongside stereotypical perceptions of the African continent that makes them particularly susceptible to increased rates of discrimination (Thomas, 2014). Additionally, non-black African immigrants, including Arab populations, are also at risk of discrimination due to the intersecting

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identities of religion, skin tone, ethnic centrality, and residence in the ethnic enclave (Abdulrahim et al., 2012). The intersectionality perspective would suggest that African immigrants' occupation of multiple intersecting social identities that are historically oppressed and marginalized such as race, ethnicity, and immigrant status facilitate adverse effects (Crenshaw, 1990). For instance, emerging evidence suggests that compared to other immigrant groups, African immigrants have an increased likelihood for marginalization, stereotyping and discrimination in the workplace, housing market, and other social settings (Akinsulure-Smith, 2017; Batalova et al., 2016; Showers, 2015; Tesfai, 2016). Consequently, mental health has been identified to be one of the prominent health concerns among this population, with discrimination as a significant determinant of psychological distress (Saasa et al., 2021; Berg et al., 2011; Venters, 2011). Understanding factors that might explain the link between discrimination and mental health is an important public health issue given that mental illness increases risk for physical health problems and adverse socioeconomic outcomes (De Hert et al., 2011). However, research to further expound these associations among African immigrants is limited. Therefore, this study aimed to address this knowledge gap by examining coping behaviors and acculturative stress as potential mechanisms linking perceived discrimination to internalizing mental health symptoms among African immigrants.

Discrimination, Acculturative Stress and Coping Among African Immigrants

Over the past 20 years, more has become known about how discrimination impacts the well-being of African immigrants. For instance, perceived discrimination among black African immigrants has been shown to correlate with poor physical health (Ryan et al., 2006), low self-esteem (Bourguignon et al., 2006), material deprivation (Saasa & Allen, 2021), substance use (Tran et al., 2010), intimate partner violence (Mose & Gillum, 2016), lower school engagement

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among youth (Coutinho & Koinis-Mitchell, 2014) and negative mental health outcomes such as depression and anxiety (Berg et al., 2011; Saasa & Miller, 2021). These findings highlight a stress proliferation effect of discrimination as a contributor to greater levels of other stressors including health, interpersonal, and socioeconomic strain highlighted above. While the negative effects of discrimination on African immigrant mental health are evident, the role of stress perceptions, including cultural strain, and coping strategies on psychological health have not yet been explored among this group.

Faced with different living conditions and cultural norms, African immigrants encounter various stressors associated with acculturation or new country adaptation including loss of pre-migration social networks and status, racial discrimination, socio-economic strain, gender and role reversal, parenting problems, and language barriers (Akinsulure-Smith, 2017; Betancourt et al., 2015; Saasa & Allen, 2021). Scholars propose that perceived discrimination and acculturative stress are related but distinct constructs (Araujo Dawson & Panchanadeswaran, 2010; Torres et al., 2012). Discrimination is typically associated with one's ethnic or social standing and entails prejudice-in-action from external sources (i.e. biased and unjust actions toward members of certain groups) (Rogers, 2016; Torres et al., 2012). However, acculturative stress relates to the adaptation process and refers to the psychological stress reactions that occur alongside and in response to acculturation --the process of changing one's attitudes, beliefs, values, behaviors, practices, and identification as a result of sustained contact with two or more different cultural systems or groups (Berry, 2006; Sam & Berry, 2010). Difficulties successfully navigating acculturative strain can lead to psychological distress. As such, acculturative stress has been linked to negative mental health outcomes among various immigrant groups of Asian and Hispanic descent (Chung et al., 2014; Silva et al., 2017). Scholars further suggest that

heightened stress responses mediate the relationship between discrimination and mental health (Pascoe & Smart Richman, 2009). For example, Torres and colleagues (2012) found that acculturative stress mediated the relationship between discrimination and psychological distress among a sample of Latino adults. While studies examining these relationships among African migrants are lacking, qualitative evidence points to emotional health implications of various stressors related to immigrant adaptation (Akinsulure-Smith, 2017; Boise et al., 2013). Additionally, Orjiako & So (2014) found that English proficiency was associated with lower depression symptoms among a sample of African immigrants. These findings support evidence of a relationship between acculturative stress factors and psychological health among African immigrants.

Coping strategies refer to an individual's cognitive and behavioral efforts to manage internal and externally stressful situations (Folkman & Moskowitz, 2004). Adaptive coping strategies, such as seeking social support and problem solving, have been linked to better psychological health while maladaptive coping strategies (such as self-blame, denial, and disengagement) have been associated with poorer health outcomes and higher levels of psychopathological symptoms (Folkman & Moskowitz, 2004; Hagan et al., 2017; Compas et al., 2017; Stoeber, & Janssen, 2011). Avoidant coping strategies, which are considered maladaptive, refer to efforts to delay an emotional response by avoiding thinking, feeling, or doing something about a stressor and often exacerbating stress. These include coping strategies such as substance use, denial and emotional disengagement (Lazarus & Folkman, 1984; Folkman & Moskowitz, 2004; Puskar et al., 2003). The few studies that explore coping behaviors among African immigrants identify important coping strategies utilized among this population including the use of social networks for social and instrumental support, religious practices, and internal resources

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in dealing with stressors (Akinsulure-Smith, 2017; Saasa, 2019; Ikafa et al., 2021). These adaptive ways of dealing with stressors have been found to facilitate positive outcomes among African immigrants. For example, Saasa (2019) found that problem solving and social support coping moderated the negative effects of discrimination on social exclusion among African immigrants. Other notable literature on the subject found that group affiliation with other immigrants had a buffering effect on diminished self-esteem due to discrimination (Bourguignon et al., 2006) and that American identity among African immigrant youth buffered the effect of perceived ethnic discrimination on engagement in school (Coutinho & Koinis-Mitchell, 2014).

In reference to maladaptive coping strategies, a qualitative study identified substance misuse as a coping strategy of concern among some African immigrant communities (Akinsulure-Smith, 2017). While some studies exist on African immigrant coping strategies, studies on maladaptive coping strategies and their impacts on wellbeing among African immigrants are limited. However, studies among diverse ethno-racial groups in the U.S. have shown negative coping behaviors as mediators between discrimination and health. For example, Chen & Yang (2014) found that racial discrimination was associated with increased smoking that in turn led to worsening mental health symptoms and subsequent poorer self-rated health, while higher levels of social support facilitated better mental health (Chen & Yang, 2014; Chen et al., 2021). Additionally, a study among Latinx youth found that experiences of racial microaggressions were associated with increased utilization of detachment coping which led to higher levels of psychological distress, with adaptive coping buffering the discrimination-health relationship (Ayala, 2019). These findings highlight that the different ways immigrants cope with stressful situations can facilitate positive or negative well-being outcomes.

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Theoretical Framework

Social stress theories have been utilized to elucidate the relationship between discrimination, coping and internalizing mental health symptoms in the context of immigrant adaptation to new societies. These theories elucidate negative intercultural contacts with majority populations in socio-political and economic contexts that increase risk for poor mental health among immigrants (Idemudia & Boehnke, 2020; Mossakowski, 2008). For instance, the minority stress model posits that stigma, prejudice, and discrimination associated with minority status create a stressful social environment that in turn leads to negative outcomes (Meyer, 1995, 2003). Additionally, stress-coping frameworks suggest that adjustments in response to these negative contacts between majority and minority groups precipitate stress requiring affective, behavioral, and cognitive coping responses with implications on outcomes. Thus, perceived discrimination is viewed as a psychosocial stressor that can activate affective reactions and cognitive appraisals in ways that illuminate experiences of stress exposure and increase risk for maladaptive coping strategies including risky health behaviors that can facilitate adverse health outcomes (Lazarus & Folkman, 1984; Ward et al., 2003). A recent study, for example, found that self-reported discrimination among African immigrants was associated with higher rates of non-medical use of prescription drugs and using alcohol as a means to cope with stressors (Sandberg, et al, 2022). Another study found coping with substances as a significant predictor of depression and anxiety symptoms among first-generation black African immigrants (Saasa & Miller, 2021). These findings suggest that individual responses in the face of discrimination can serve as potential pathways through which discrimination impacts mental health. Highlighting the effects of stress perceptions on health outcomes can be especially important in expanding our understanding of

health vulnerabilities for immigrant populations at increased risk for experiencing cumulative and chronic stressors (Thomas, 2014).

Even though emerging studies have examined risk factors for adverse health outcomes among African immigrants, no studies to the authors' knowledge explore pathways through which contextual risk factors impact health among this population. Therefore, this study examined whether acculturative stress and avoidant coping mediate the relationship between discrimination and internalizing mental health symptoms among African immigrants. Drawing from existing literature and assumptions of social stress models, we hypothesized that increased avoidant coping behaviors and increased acculturative stress will mediate the impact of discrimination on mental health symptoms.

Method

Participants and Procedure

This study utilized a cross-sectional research design which entailed completion of a self-administered online questionnaire from December 2019 to January 2020. Ethical approval for study protocols and consent procedures was obtained from Brigham Young University's Institutional Review Board. Participants were recruited via Qualtrics research panels and had to be age 18+, reside in the US either permanently or temporarily and be African-born or a US-born child of African immigrant parents in order to participate. Temporary residents entailed those authorized to stay in the country for certain amounts of time for various purposes such as study, business, visitor, and employment among others. Through social media invitations and contact with community organizations serving the African diaspora, participants were invited to sign-up for research participation where they provided basic demographic information to determine eligibility and their contact information through which the online questionnaire and consent

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forms were sent to eligible participants. To ensure quality of online data, attention filters, careless response pattern identification, survey length minimums, and guards against multiple submissions were incorporated in the survey (Baker et al., 2010).

The final sample consisted of 599 participants from 25 African countries and residing in 42 U.S. states at the time of data collection. About 50% of the sample identified as first-generation (African-born) immigrants, and the other as second-generation immigrants (US-born with at least one African-born parent). On average, participants were 30 years old (SD = 12.36), had household incomes between $45-55,000, with 50% having a bachelor's degree or higher. Most participants (82.5%) identified as Black and were single (73.4%). The majority of participants (65.5%) met the cutoff for probable major depressive symptoms. Descriptive statistics of our analytic sample can be found in Table 1.

[INSERT TABLE 1 ABOUT HERE]

Measures

Internalizing Symptoms

Internalizing symptoms were measured using the 25-item Hopkins Symptom Checklist (HSCL; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). Participants rated how much each symptom had bothered them in the past month (1=*not at all*, 2=*a little*, 3=*quite a bit*, 4=*extremely*). The 25 items were averaged, where higher scores indicated greater internalizing symptoms. Example items include "feeling fearful," "blaming yourself for things," and "feeling blue." The scale demonstrated good internal consistency in our sample ($\alpha = .96$).

Discrimination

Perceived discrimination was measured using the 5-item Revised Everyday Discrimination Scale (EDS; Williams, Yu, Jackson & Anderson, 1997). Participants reported the

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frequency in which they experience discrimination (0=*not at all,* 1=*a little bit*, 2=*quite a bit*, 3=*a lot*). Items were averaged, such that higher scores denoted greater perceived discrimination. Example items include "you are treated with less courtesy or respect than other people," and "you are threatened or harassed." The EDS demonstrated good internal consistency in our sample (α = .82).

Avoidant Coping

Avoidant coping was measured using the 10-item avoidant coping subscale of the brief cope scale (BCS; Carver, 1997; Baumstarck et al., 2017). Participants were asked to indicate the frequency with which they have used avoidant forms of coping including self-distraction, denial, behavioral disengagement, self-blame, and substance use (0=*not at all,* 1=*a little bit*, 2=*quite a bit*, 3=*a lot*). The 10 items were averaged, such that higher scores indicate greater avoidant coping. The subscale demonstrated good internal consistency in our sample (α = .88).

Acculturative Stress

Acculturative stress was measured with the Social, Attitudinal, Familial, and Environmental (SAFE) Acculturation Stress Scale (Mena et al., 1987). The scale measures four different types of stress, with items measured on a scale from 0 (*not at all stressful*) to 3 (*extremely stressful*). The social subscale had five items and had good internal consistency (α = .84); sample items include "I have trouble understanding others when they speak," "People think I am unsociable when in fact I have trouble communicating in English," and "I don't have any close friends." The attitudinal subscale had four items and had good internal consistency (α = .79); sample items include, "It bothers me that I cannot be with my family," "Loosening the ties with my country is difficult," and "It is hard to express to my friends how I really feel." The familial subscale had four items and had good internal consistency (α = .82); sample items

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include, “My family does not want me to move away but I would like to,” “Close family members and I have conflicting expectations about my future,” and “It bothers me that family members I am close to do not understand my new values.” The environmental subscale had 10 items and had good internal consistency (α = .90); sample items include, “Because I am different, I do not get enough credit for the work I do,” “Because of my ethnic background, I feel that others often exclude me from participating in their activities,” and “It bothers me when people pressure me to assimilate.” The subscales were created by averaging the items for each subscale.

Control Variables

Control variables in this study included age in years, sex (0=*male*, 1=*female*), race (0=Other, 1=Black), household income (1=< *$15,000*, 2=*$15,001-$25,000*, 3=*$25,001-$35,000*, 4=*$35,001-$45,000*, 5=$*45,001-$55,000*, 6=*$55,001-$65,000*, 7=*$65,001-$75,000*, 8=*$75,001-$85,000*, 9=*$85,001-$95,000*, 10=*$95,001 or more*), education (0=*less than high school*, 1=*high school graduate*, 2=*technical or vocational training*, 3=*Bachelor’s degree*, 4=*Master’s degree*, 5=*PhD*) relationship status (0=*single*, 1=*married or in a partnership*), and nativity status (0=*African-born*, 1=*U.S.-born*). Because most participants identified as Black (82.5%), race was categorized as 0=*non-Black* (i.e., White, Middle Eastern, Asian, or Other) 1=*Black*).

Analysis Plan

Data were cleaned in Stata version 15.1 and analyzed in Mplus version 8 (Muthén & Muthén, 2017). Data were scanned for outliers and multicollinearity, neither of which was found. Missing data were extremely few on all variables (<2%); therefore, missing data were handled using full-information maximum likelihood estimation, which uses all available data. Mediation analysis was conducted using path modeling with 500 bootstraps and the Mplus “Model

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Indirect" command. Because our model used only observed measures, all models were fully identified (i.e., CFI and TLI of 1.00, RMSEA and SRMR of 0.00).

Results

Mediation Analyses

Results from the mediation analyses can be found in Table 2 and Figure 1. Perceived discrimination was associated with higher levels of avoidant coping (B = .46, $p < .001$), and avoidant coping was related to higher levels of internalizing symptoms (B = .40, $p < .001$). Further, perceived discrimination was directly associated with higher levels of internalizing symptoms (B = .14, $p = .003$). The indirect effect suggested that perceived discrimination was related to internalizing symptoms via avoidant coping ($b = .18$, SE = .03, $p < .001$).

Perceived discrimination was related to higher levels of all types of acculturative stress: social stress (B = .42, $p < .001$), attitudinal stress (B = .43, $p < .001$), familial stress (B = .39, $p < .001$), and environmental stress (B = .51, $p < .001$). However, only environmental stress (B = .14, $p = .008$) and social stress (B = .17, $p < .001$) were related to internalizing symptoms. Indirect effects suggest perceived discrimination was related to internalizing symptoms via environmental stress ($b = .07$, SE = .03, $p = .010$) and social stress ($b = .07$, SE = .02, $p = .001$). Our model explained 58.2% of the variability in internalizing symptoms. Additionally, the three significant indirect effects accounted for 70.8% of the total effects that consisted of the direct effect of perceived discrimination and the total mediating effect. Further exploration of pathways predicting the anxiety and depression subscales separately instead of the HSCL internalizing total score showed that significant relationships stayed the same ($p < .01$). There was no differential predictive and mediating relationship for anxiety and depression symptoms. Therefore, we chose to use the HSCL internalizing total score results for model parsimony.

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[INSERT TABLE 2 & FIGURE 1 ABOUT HERE]

Discussion

The present study aimed to explore the mechanisms by which perceived discrimination impacts mental health among African immigrants. We hypothesized that avoidant coping strategies and acculturative stress would function as mediators facilitating the association between perceived discrimination and mental health. In support of the hypothesized mediation model, results showed that the link between discrimination perceptions and internalizing mental health symptoms was mediated by avoidant coping strategies and acculturative stress– specifically social and environmental stress. Utilizing the lens of the minority stress model (Meyer, 2003), findings support the theoretical assumption that minority stressors, such as discrimination, positively predict mental health distress, and that coping strategies can help explain this relationship. Our results showed that higher levels of perceived discrimination were predictive of high levels of avoidant coping, which in turn predicted increased mental health distress. These findings are consistent with previous research on minority stress (Fox et al., 2020; Li et al., 2019; Valentín Cortés et al., 2020), and provide empirical evidence that avoidant coping strategies such as substance use and self-distraction function as mediators between perceived discrimination and mental health (Ayala, 2019; Chen & Yang, 2014; Pascoe & Smart Richman, 2009).

Additionally, scholars on stress and coping conceptualize discrimination as a psychosocial stressor influencing cognitive and affective reactions that can reinforce heightened stress perceptions with implications on psychological wellbeing (Lazarus & Folkman, 1984; Pascoe & Smart Richman, 2009; Ward et al., 2003). In this light, results showed that increased perceptions of discrimination predicted increased acculturative stress which led to increased

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mental health problems. Immigrants with higher levels of perceived discrimination scores reported higher social acculturative stress (related to immediate interpersonal relationships) and environmental acculturative stress responses (related to subtle and overt acts of racism), which in turn facilitated worse internalizing symptoms. These findings are consistent with previous studies that indicate that acculturative stress processes play an important role in facilitating adverse mental health outcomes among immigrant populations (Chung et al., 2014; Silva et al., 2017; Torres et al., 2012).

It should be noted that the significant mediation effects of the social and environmental domain of acculturative stress, and not the attitudinal and familial acculturative stress, echo other studies that have shown interpersonal and structural exclusionary processes to have stronger impacts on immigrant wellbeing outcomes (Saasa et al., 2021; Pascoe & Smart Richman, 2009). To help explain this, some scholars have found cultural-based variations in consequences of interpersonal rejection between collectivist and individualistic cultures. Specifically, individuals from collectivist cultures have been found to manifest increased sensitivity to interpersonal rejection from host communities leading to more emotional distress (Garris et al., 2011). Further research is needed to shed greater light on cultural nuances and mechanisms through which acculturative stress impacts African immigrant mental health. Additionally, the significance of environmental stress on mental health may be explained by research that suggests that feelings of powerlessness, fueled by racism and structural discrimination, create barriers to individual problem-solving capacities that can lead to an increased sense of helplessness, low-self efficacy and emotional distress (Thomas & Gonzalez-Prendes, 2009). Future research can elucidate buffers and pathways through which environmental stressors impact mental health, especially after the onset of the COVID-19 pandemic.

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Implications

Findings to this study not only address the lack of understanding in mechanisms through which perceived discrimination impacts health in this understudied population, but also provides insight on potential points of interventions to buffer the negative impacts of discrimination on mental health. Thus, several implications can be drawn from this study. First, the direct and indirect associations of perceived discrimination on mental health indicates the need for continued efforts to challenge and eliminate discriminatory practices. Second, the large proportion of the indirect effects implied that intervention may be better targeted at the three mediators, particularly avoidant coping whose mediating effect was more than the sum of the two dimensions of acculturative stress. The mediating effect of avoidant coping on the relationship between perceived discrimination and mental health suggests that clinical efforts aimed to decrease the use of this maladaptive coping strategy and increase the use of adaptive coping can facilitate better mental health outcomes in the face of discrimination. Third, the mediating effect of acculturative stress on the relationship between perceived discrimination and mental health points to the importance of clinical efforts that help clients navigate and reframe stress experiences in empowering ways. For example, Pascoe & Smart Richman (2009) suggest that perceptions of chronic exposure to discrimination frequently activate stress responses that can lead to a consistent negative emotional state. In response to this, research also shows that having friends or family to talk to after exposure to discrimination negates development of mental health symptoms potentially through validating an individual's experience and helping rebuild or enhance their feelings of self-worth (Chen et al., 2021; Pascoe & Smart Richman, 2009; Smart Richman et al., 2008).

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Therefore, to promote better mental health, clinicians can help African immigrant clients not only build a social support network, but also provide a therapeutic environment that is culturally sensitive and open to the client's exploration of discriminatory experiences, reactions to these experiences, and strategies that empower and maintain client's values in marginalizing environments where regular experiences of discrimination are the norm (Helms & Cook, 1999). It is also important that micro-level interventions to mitigate discrimination impacts do not solely place the burden of addressing discrimination on oppressed individuals and groups and distract practitioners from systemic factors in society that produce and maintain discriminatory social environments. Assessment of mezzo and macro level mechanisms facilitating African immigrant experiences with discrimination, connecting immigrant clients to needed resources, and advocating for equity and inclusion is vital. This is especially important for an immigrant population that manifests greater disadvantage with systemic discrimination manifested in job and housing markets and other social settings despite individual efforts to mitigate these negative outcomes (Akinsulure-Smith, 2017; Batalova et al., 2016; Showers, 2015; Tesfai, 2016).

Limitations

This study had a number of limitations that are important to note including: (1) selection bias could not be ruled out, such as an underrepresentation of males within the current study (29%), though studies suggest that an overrepresentation of female participants in online surveys and in internalizing mental health symptoms is common (Batterham, 2014), (2) data were cross-sectional and atemporal in nature, meaning that mediation results should be interpreted with caution due to violation of the causal ordering assumption. This has potential consequences of an overestimation of the atemporal indirect effects in our study (Maxwell et al., 2011; Winer et al., 2016). Further, it is possible that a transactional and bidirectional relationship exists in how

avoidant coping strategies and internalizing symptoms influence one another (Johnson et al., 2013), as well as acculturative stress exposure and mental health (Alba & Calvete, 2019; American Psychological Association, APA Working Group on Stress and Health Disparities [APA], 2017). Hence, these findings provide value for future work which should conduct longitudinal mediation analyses to establish temporal precedence and distinguish more accurate pathways and effects between these constructs over time, (3) the simplified and exploratory nature of several measures including the acculturation stress scale, which for example does not include dynamics of immigrants geographic location and other acculturative stress domains such as culture shock, language conflicts or legal residence status that may have varied implications on the outcomes, (4) the perceived discrimination scale does not include more severe types of discrimination, microaggressions or other aspects of the discrimination that might not even be perceived by immigrants as discriminatory such as some immigration policies or processes (5) the focus on the specific dimension of avoidant coping, potentially neglecting other important coping mechanisms (e.g., active-emotional coping, problem-focused coping), (6) heterogeneity in the sample (especially as relates to origin countries, cultural variation and immigrant generation) entails that influences of unique cultural and migratory experience of varied groups are not explored. Future work should replicate the current study among specific African immigrant generations and cultural groups, (7) the use of a convenient internet sample limits generalizability. Thus, findings should be interpreted within these study limitations. Nevertheless, these findings support existing literature, contribute to the sparse literature on this population and highlight the significant role of stress and coping on the relationship between discrimination and mental health.

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Conclusion

This study is the first to examine acculturative stress and coping strategies as potential pathways through which perceived discrimination negatively impacts mental health among African immigrants in the United States. This study adds to the emerging literature on psychological distress among Black immigrants in environmental contexts characterized by chronic experiences of discrimination and marginalization. Overall findings point to increased mental health difficulties when individual perceptions of social and environmental acculturative stress are high, and when utilizing avoidant coping strategies in the face of discrimination. Results highlight the importance of targeting cognitive appraisals of stress and coping responses as potential points of intervention in the promotion of micro-level efforts of managing psychological health among African immigrants.

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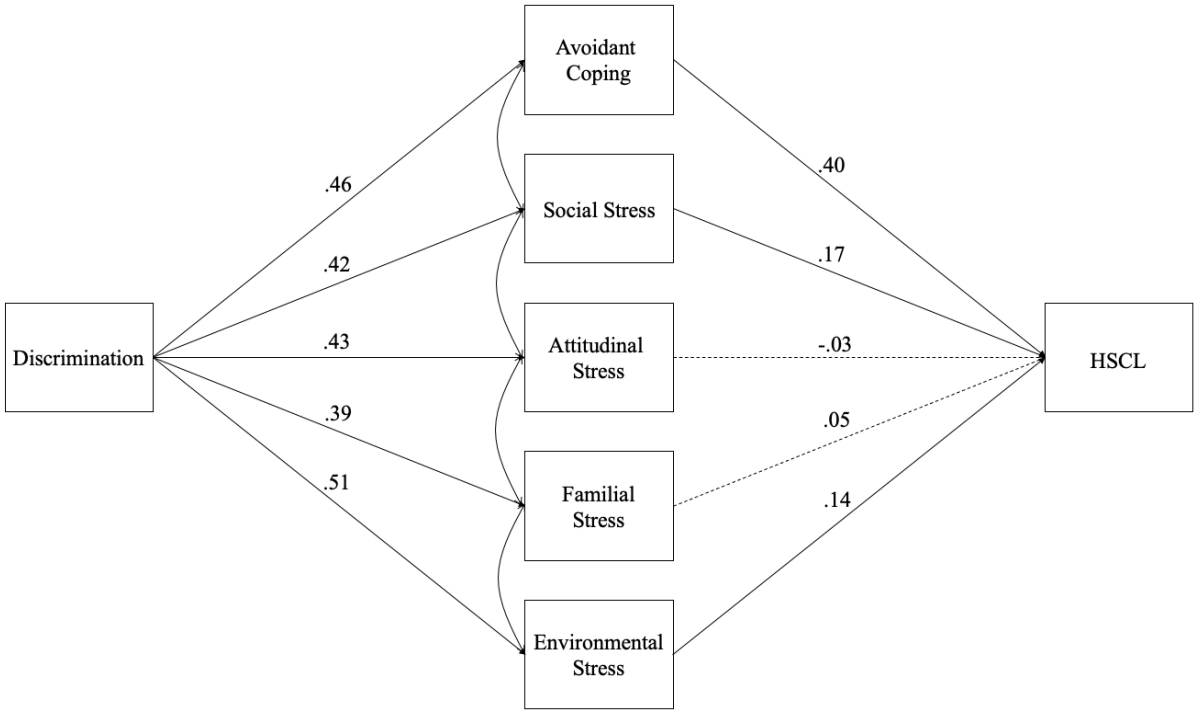


Figure 1. Mediation Analysis of Discrimination Predicting HSCL via Avoidant Coping and Acculturation Stress (N = 599).
Note: Coefficients are standardized. Dotted lines represent p-values > .05. Control variables included age, sex, race, household income, education, relationship status, and nativity status. Direct effect from Discrimination to HSCL not shown (B = .14, p = .003).

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Table 1. *Descriptive Statistics of Study Variables (N = 599).*

	M	SD	Min	Max	N	%
HSCL	2.13	0.78	1	4		
Avoidant Coping	2.12	0.71	1	4		
Social Stress	2.06	0.83	1	4		
Attitude Stress	2.30	0.84	1	4		
Familial Stress	2.07	0.84	1	4		
Environmental Stress	2.27	0.75	1	4		
Discrimination	1.19	0.78	0	3		
Age	29.87	12.36	18	88		
Household income	4.86	3.14	1	10		
Education	2.34	2.34	0	5		
Male					174	29.00
Female					425	70.95
Single					438	73.37
Married/partnership					159	26.63
African-born					299	50.00
U.S.-born					299	50.00

Note: HSCL = Hopkins Symptom Checklist. Household income categories: 1=< *$15,000*, 2=*$15,001-$25,000*, 3=*$25,001-$35,000*, 4=*$35,001-$45,000*, 5=$*45,001-$55,000*, 6=*$55,001-$65,000*, 7=*$65,001-$75,000*, 8=*$75,001-$85,000*, 9=*$85,001-$95,000*, 10=*$95,001 or more.* Education categories: 0=*less than high school*, 1=*high school graduate*, 2=*technical or vocational training*, 3=*Bachelor's degree*, 4=*Master's degree*, 5=*PhD*.

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Table 2. *Path Model Results (N = 599).*

	B	p-value
Discrimination → Avoidant Coping	.46	<.001
Discrimination → Social Stress	.42	<.001
Discrimination → Attitudinal Stress	.43	<.001
Discrimination → Familial Stress	.39	<.001
Discrimination → Environmental Stress	.51	<.001
Discrimination → Internalizing Symptoms	.14	.003
Avoidant Coping → Internalizing Symptoms	.40	<.001
Social Stress → Internalizing Symptoms	.17	<.001
Attitudinal Stress → Internalizing Symptoms	-.03	.583
Familial Stress → Internalizing Symptoms	.05	.333
Environmental Stress → Internalizing Symptoms	.14	.008

Note: Coefficients are standardized. Model controlled for sex, age, education, household income, marital status, nativity status, and race.

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