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Age-Varying Association Between Discrimination, Childhood Family Support, and Substance Use Disorders Among Latin American Immigrants in the United States

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Objectives: The cultural stress theory posits that immigrants experience a constellation of cultural stressors such as discrimination that could exacerbate alcohol- and other substance-related problems. Drawing on cultural stress theory, this study investigated the age-varying association between past-year discrimination and substance use disorders (SUDs) among Latin American immigrants aged 18–60 and whether childhood family support moderated the above association. ***Method:*** We used data from the National Epidemiologic Survey on Alcohol and Related Conditions–III (NESARC-III) among adults aged 18–60 who identified as a Latin American immigrant (N = 3,049; 48% female). ***Results:*** Time-varying effect models (TVEMs) revealed that experiencing past-year discrimination was associated with greater odds of having a SUD during young and middle adulthood for Latin American immigrants. Furthermore, for immigrants with lower childhood family support, discrimination was associated with SUD risk in young and middle adulthood. ***Conclusion:*** The present study documents that past-year discrimination was linked to greater SUD risk during young and middle adulthood. Childhood family support may serve as a protective factor in the association between discrimination and risk for SUD among Latin American immigrants.

Public Significance Statement
This study highlights the adverse consequences of recent discrimination on the risk for substance use disorders among Latin American immigrants during young and middle adulthood. Findings suggest that childhood family support in protective for reducing substance use disorder against discrimination for Latin American immigrants in young adulthood.

Keywords: cultural stress theory, family support, substance use disorder, discrimination, time-varying effect modeling

Nearly one in six individuals (16.5%) in the United States has experienced a substance use disorder (SUD; inclusive of both alcohol and illicit substance use disorders), a significant public health concern that represents a leading cause of mortality (Substance Abuse and Mental Health Services Administration, 2021, 2022). Latin American individuals have rates of past year substance use disorder (15.7%), cannabis use disorder (5.6% vs. 5.8%), alcohol use disorder (10.3% vs. 10.6%), and drug use disorder (8.4% vs. 8.6%) that are comparable to the national average (Villalobos & Bridges, 2018). Although U.S.-born Latin American individuals tend to have 3–4 times higher rates of lifetime substance use disorder relative to Latin American immigrants (18.9%–20.4% vs. 5.0%–7.0%;

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The study involved secondary data analysis of the National Epidemiologic Survey of Alcohol and Related Conditions–III (NESARC-III). All protocols and procedures of the NESARC-III were approved by institutional review boards at the National Institutes of Health and Westat. The data are available at https://www.niaaa.nih.gov/research/nesarc-iii/nesarc-iii-data-access

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Prado et al., 2009; Salas-Wright et al., 2016, 2018; Villalobos & Bridges, 2018), immigrants living in the United States overall have higher rates of SUDs relative to individuals living in their home countries (e.g., 1.9% vs. 0.6% for illicit SUD among immigrant Mexican individuals vs. Mexican individuals born in the United States; Borges et al., 2011).

Limited research has characterized the individual risk and protective factors for SUD risk—a debilitating condition—across adulthood among Latin American immigrants. Few studies account for how associations between cultural stressors such as discrimination and SUD risk—as well as the degree to which these associations can be buffered by family support—vary across development. Therefore, the present study examined age-varying associations between past-year discrimination and SUD across early, middle, and later adulthood among Latin American immigrants and explored whether childhood family support functions as a contextual factor that may reduce SUD risk.

Discrimination and SUD

Cultural stress theory proposes that cultural stressors such as discrimination is a multidimensional construct that can have adverse consequences for immigrants' behavioral health outcomes, most notably alcohol and other substance use (Salas-Wright & Schwartz, 2019; Schwartz et al., 2015). Many immigrants experience discrimination, racism, and xenophobia related to their appearance and language; these experiences can contribute to lower feelings of belonging, societal involvement, and ability to engage in a healthy lifestyle (Bellovary et al., 2020). Racial/ethnic discrimination involves being directly excluded, taunted, attacked, or negatively judged (e.g., suspicious) due to one's racial and ethnic background and has become increasingly prevalent among Latin American immigrants (Krieger, 1999; Salas-Wright et al., 2020; Williams et al., 2003). Over half of immigrants to the United States are from Latin America (53%, 29% from Mexico; U.S. Census Bureau, 2013), and understanding how postmigration cultural stressors including discrimination affect SUD risk among subgroups of immigrants is necessary to promote health equity across diverse populations.

Discrimination may be a proximal stressor that positions Latin American immigrants for greater SUD risk. Latin Americans immigrants who experience more frequent racial/ethnic discrimination tend to have poorer health (Cobb et al., 2019; Gassman-Pines, 2015; McClure et al., 2010; Ponting et al., 2018). Distress related to discrimination can also motivate Latin American individuals to use substances as a means of coping and increase risk of problematic drinking, thereby conferring greater risk for substance use disorders (e.g., Buckner et al., 2022). However, few studies have assessed yearly associations between discrimination and SUD among Latin American immigrants across adulthood.

The Moderating Role of Childhood Family Support

Cultural stress theory suggests that resources early in development, such as family support and close relationships, may be internalized and buffer the deleterious effects of cultural stress on health outcomes (Salas-Wright & Schwartz, 2019). Childhood family support refers to feeling loved and cared for, esteemed and valued, and part of a social network of mutual assistance prior to Age 18 (e.g., Taylor, 2011). In Latin American families, familism is a traditional cultural value that emphasizes the importance of familial unity, interdependence, and shared support (Campos et al., 2014). Strong family relationships have been found to scaffold psychological resources to promote resilience to stress in Latin American youth (Cardoso & Thompson, 2010; Parra-Cardona & Busby, 2006). Greater support could buffer the negative consequences of discrimination for well-being among Latin American immigrants (Cano et al., 2018; Cariello et al., 2022). However, limited research has examined the extent to which family support in childhood may be protective against SUD risk in this population.

Just as early life stress has well-documented negative consequences for long-term vulnerability and substance use in adulthood (Enoch, 2011), positive experiences including family support in childhood can confer long-term positive outcomes in adulthood (Chiang & Bai, 2022; Morris & Hays-Grudo, 2023). Specifically, a supportive family environment can provide developmental assets for Latin American immigrants such as a sense of belongingness and emotional security, protecting against health problems related to discrimination. Similar associations have emerged in developmental studies of Latin American youth (e.g., Nair et al., 2013; Wright & Wachs, 2019). In addition to contributing to SUD risk, cultural stress theory posits that stressors such as discrimination can undermine current family function (Salas-Wright & Schwartz, 2019). Therefore, childhood family support, as opposed to concurrent family support, may be particularly protective over the long term for immigrants. Given that childhood family support may instill internal developmental assets for reducing SUD risk, individuals with high childhood family support may be protected from the consequences of discrimination, such that yearly experiences of discrimination might be only related to higher SUD risk for individuals with lower childhood family support. It is necessary to investigate whether childhood family support serves as a distal resource that buffers the deleterious effects of recent discrimination on SUD risk in adulthood.

A Life Course Perspective

Tenets of cultural stress theory recognize that premigration factors (e.g., childhood experiences) can influence immigrants' experiences, and migration-related stressors occur beyond the initial period of migration (Salas-Wright & Schwartz, 2019). Therefore, a life course perspective is needed to understand how recent discrimination can impact SUD risk, as well as whether childhood family support would modify the effect of discrimination on SUD risk. Although prior studies have examined age of immigration (e.g., Alegría et al., 2007; Salas-Wright et al., 2018, 2020), immigrants continue to encounter cultural stressors including discrimination throughout their time in the United States. Cultural stress theory emphasizes a life course perspective for understanding the developmental implications of migration processes for health (Salas-Wright & Schwartz, 2019). Few studies have identified ages when discrimination is more consequential for SUD risk.

Associations between racial discrimination, childhood family support, and SUD risk may differ with development across periods of adulthood. SUD risk peaks during emerging adulthood and becomes less prevalent with age (Vasilenko et al., 2017). This difference in risk across age could suggest that risk factors for SUD changes across adulthood. Cultural stressors such as racial discrimination and protective factors such as family support may

differentially relate to SUD risk by age. Identification of age-relevant risk and protective factors may enable the development of interventions for reducing SUD risk that are targeted for different periods within adulthood (e.g., young vs. late adulthood).

Higher prevalence of SUD during emerging adulthood could suggest that this is a developmental period when individuals may particularly benefit from identification of assets that can buffer SUD risk (e.g., Andrews & Westling, 2016). Specifically, concurrent discrimination may disproportionately impact SUD risk for younger adults, while childhood family support may function as an age-related resilience factor in young adulthood. For example, adolescents and young adults are highly oriented toward social information and motivated to prioritize their social identity, which may cause young adults to be more sensitive to the social evaluation and exclusion that stem from discrimination (Blakemore & Mills, 2014; Foulkes & Blakemore, 2016). Thus, young adults who experienced discrimination may be at higher risk of experiencing an SUD. Moreover, past research has shown that family characteristics in childhood were closely linked to health outcomes across adulthood.

Young adults may benefit from family support which could foster psychological resilience and provide the need for independence, especially during this critical period of development of social identity and autonomy. Middle-aged adults often experience various challenges, responsibilities, and complex social roles that can increase stress level and substance use (Allemand et al., 2015; Hutteman et al., 2014; Windle & Windle, 2015). Thus, early family experiences may provide psychological resources that promote better health and well-being in middle adulthood (Gerhardt et al., 2021; Moran et al., 2018). Furthermore, later adulthood involves psychosocial transitions and stressors (e.g., retirement, death of the partner), and positive family characteristics in childhood could serve as a resilience factor for buffering the risk for health problems (Fomby & Bosick, 2013; Umberson & Thomeer, 2020; Weich et al., 2009). As young adulthood is a key developmental period characterized by rapid transitions in social contexts involving greater freedom and less social control (Stone et al., 2012), as well as heightened sensitivity to discrimination (Gibbons et al., 2018; Polanco-Roman et al., 2021), we hypothesize that the protective effect of childhood family support may be stronger during this period compared to middle and late adulthood. Specifically, family support may provide a sense of belongingness and emotional security for young adults when they experience discrimination, reducing the likelihood of substance use problems. In contrast, individuals in middle or late adulthood might possess extended psychosocial resources that they can utilize and cope with discrimination (e.g., Blieszner & Ogletree, 2018; Lee et al., 2022; Luong et al., 2011). Therefore, early family support may have lasting benefits from early to later adulthood, with this protective effect potentially being stronger in young adulthood compared to middle or late adulthood.

The Present Study

The present study aimed to test the age-varying associations between discrimination, childhood family support, and SUD risk in a sample of Latin American immigrants in the United States. We first examined the association between past-year discrimination and SUD across ages 18–60. Because cultural stress theory posits that cultural stressors such as discrimination could increase alcohol and drug use (Salas-Wright & Schwartz, 2019), we tested racial/ethnic discrimination as a proximal, cultural stressor that could exacerbate adult SUD risk. Drawing on the past literature (Gibbons et al., 2010; Lei et al., 2021; Otiniano Verissimo et al., 2014), we hypothesized that greater discrimination would be associated with greater odds of having a past-year SUD across ages 18–60, with strongest associations during young adulthood.

Next, we investigated the moderating role of childhood family support in the association between past-year discrimination and SUD risk. We hypothesized that childhood family support may function as a distal protective factor that may buffer the adverse consequences of the past-year discrimination on SUD risk. Toward these goals, we applied a life course perspective to cultural stress theory by using time-varying effect modeling (TVEM) to explore how associations differ across adulthood (e.g., Lanza & Linden-Carmichael, 2021; Vasilenko et al., 2017). TVEM has been increasingly used to investigate differences across age using cross-sectional data by modeling the association between main variables across age, allowing researchers to flexibly examine nonlinear patterns across different developmental periods (Lanza & Linden-Carmichael, 2021). A life course perspective is particularly helpful in understanding the etiology of SUD because SUD risk and individuals' social roles (e.g., transition to parenthood, beginning or changing careers, caring for family members) differ across developmental periods (Almeida & Horn, 2004; Eliason et al., 2015). We hypothesized that the association between past-year discrimination and SUD would vary across ages between 18 and 60, with stronger associations emerging during young adulthood compared to middle or late adulthood. Considering that young adulthood represents a pivotal stage of developmental transitions, childhood family support may offer crucial resources in mitigating SUD risk among young adults when they encounter discrimination. Thus, we hypothesize that the moderating influence of childhood family support would be more pronounced during young adulthood in comparison to middle or late adulthood.

Method

Sample

Data are from the National Epidemiologic Survey on Alcohol and Related Conditions–III (NESARC-III) collected between 2012 and 2013. The NESARC-III is a nationally representative survey of 36,309 civilian, noninstitutionalized adults ages 18 and older using a multistage cluster sampling design (see Grant et al., 2015). Data were collected via in-person interviews with the option to complete the interview in English or other languages (e.g., Spanish). Data were adjusted for oversampling and nonresponse and weighted to represent the U.S. population (Grant et al., 2016). The research protocol was approved by the institutional review boards of the National Institutes of Health and Westat; informed consent was oral and electronically recorded, and respondents received $90 for participating. In this study, the analytic sample included 3,092 participants aged 18–60 who were immigrants from Latin America (48% female; $M_{age} = 38.61$, $SD_{age} = 10.60$). Forty-three percent of participants reported their educational level as less than high school, 27% as high school or general education diploma, and 30% as attended some college or higher. Over half of participants were from

Mexico (58%), with other participants from El Salvador (5.9%) and Puerto Rico (5.6%).

Measures

The NESARC-III attempted to accommodate participants who were non-English speakers and provided the option to complete the interview in English or other languages (e.g., Spanish). Certified bilingual interviewers were invited to administrate translation during the interviews.

Substance Use Disorders

The diagnostic interview utilized the Alcohol Use Disorder and Associated Disabilities Interview Schedule–5 (AUDADIS-5; Grant et al., 2015) to assess whether individuals met criteria for past-year SUD (1 = any SUD, 0 = no SUD), including any of the following substances: alcohol, sedatives, cannabis, opioids, cocaine, stimulants, hallucinogens, inhalants/solvents, club drugs, heroin, and other drugs. The AUDADIS has been used for Latin American and Spanish-speaking immigrants (e.g., Grant et al., 2015; Salas-Wright et al., 2018).

Discrimination

Participants responded to questions about their experiences with racial/ethnic discrimination in the past year using the six-item Experiences of Discrimination scale (Krieger et al., 2005). The scale assessed racial/ethnic discrimination in six situations, such as obtaining health care; being called a racist name; and being made fun of, picked on, pushed, shoved, or threatened. Similar to previous studies (Salas-Wright et al., 2015, 2018), items were dichotomized such that participants who reported never or almost never experiencing any form of discrimination were coded as 0 (did not report discrimination in the past year) and those who reported sometimes, fairly often, and very often for any item as 1 (reported experiencing discrimination in the past year). This scale has been applied to Latin American immigrants (Hosler et al., 2019; Walsh et al., 2022).

Childhood Family Support

Using five items, participants were asked to report childhood family support before they reached Age 18. Sample items included: "I felt there was someone in my family who wanted me to be a success" and "My family was a source of strength and support." Items were rated on a 5-point scale (1 = *never true* to 5 = *very often true*) and the average score was calculated. Prior work using NESARC data has used this scale to examine childhood emotional support in the family (Bucich et al., 2024; Maclean et al., 2016) as well as among Hispanic immigrants (Perez Portillo et al., 2023). In the present study, the scale demonstrated high reliability ($\alpha = .92$).

Analytic Strategy

Analyses were conducted in Statistical Analysis System Version 9.4 using the %Weighted TVEM (Dziak et al., 2017; Lanza & Linden-Carmichael, 2021). Because TVEM estimates the coefficients along with 95% confidence intervals as a continuous function of age or time, results are presented as figures. We selected best-fitting models by evaluating Akaike information criterion (AIC) and Bayesian information criterion (BIC) with lower values indicating better fit, considering models with 1–5 knots, or splitting points (Lanza & Linden-Carmichael, 2021). We first examined the association between past-year discrimination and SUD across ages 18–60. Second, we examined the moderating role of childhood family support in the association between past-year discrimination and SUD across ages 18–60. Moreover, past studies have indicated that sex, income, education, years of immigration, and depressive symptoms were linked to SUD risks (Davis et al., 2008; McHugh et al., 2018; Patrick et al., 2012; Salas-Wright et al., 2014). Thus, all models included sociodemographic variables relevant to substance use behaviors including sex, personal income, education, number of years living in the United States, and past-year major depressive disorder assessed by AUDADIS-5 (Grant et al., 2015) as time-invariant covariates in the analyses. Prior to conducting analyses, data were inspected for missingness and significant outliers among key study variables; both are key assumptions for conducting TVEM analyses. There were no missing data and no outliers exceeding ±3 *SD*.

Results

Sample demographic characteristics were presented in Table 1. Past-year discrimination was positively correlated with past-year SUD, while childhood family support was negatively correlated with past-year discrimination and past-year SUD. To address our first research question, we examined the association between past-year discrimination and SUD from ages 18–60. As shown in Figure 1, individuals who experienced discrimination reported higher odds of having an SUD in the past year for individuals who were approximately ages 18–46 (*OR*s range from 1.90 to 4.29).

To address our second research question, we examined the moderating role of childhood family support in the association between past-year discrimination and SUD; however, childhood family support did not significantly moderate this association. Although the overall moderation effect was nonsignificant (*OR*s range from 0.06 to 0.18), we conducted exploratory follow-up TVEMs to examine the association between discrimination and the relative odds of experiencing a past-year SUD for individuals with higher (+1 *SD*) and lower (−1 *SD*) levels of childhood family support. Probing these associations for individuals with high versus low

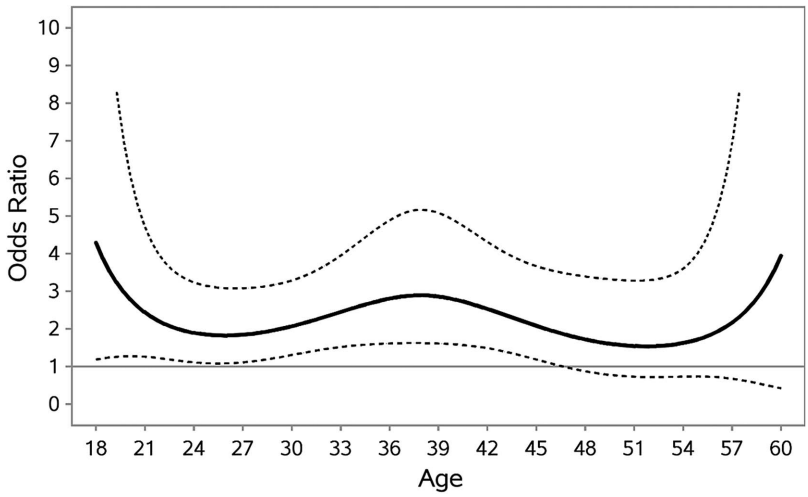
Table 1
Weighted Demographic and Descriptive Statistics (n = 3,049)

Variable	Value
Sex (% female)	48%
Age	*M* = 38.6 (*SD* = 10.6)
Education	
Less than high school	43%
High school or GED	26.7%
Attended college or higher	30.29%
Past-year SUDs	9.4%
Past-year discrimination	27.1%
Past-year major depressive disorder	8.5%
Number of years in the United States	*M* = 17.9 (*SD* = 10.6)

Note. SUD = substance use disorders; GED = general education diploma.

Figure 1

The Association Between Past-Year Discrimination and SUD Across Ages 18–60 (Dotted Lines Indicate 95% Confidence Intervals)

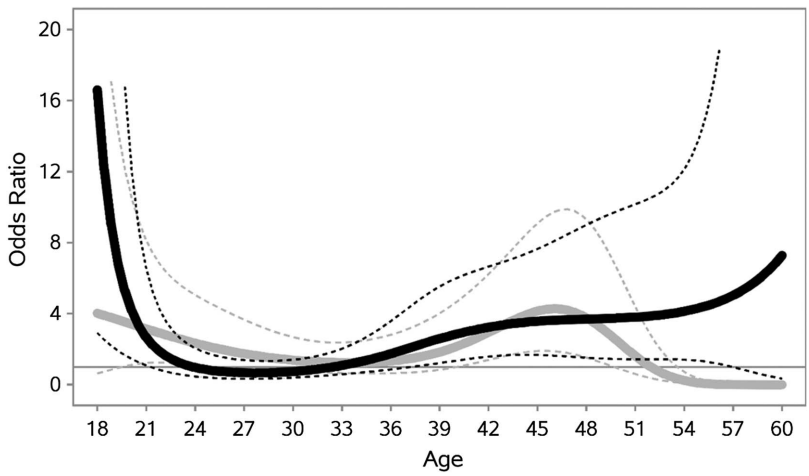


Note. SUD = substance use disorders.

family support enabled us to identify nuanced patterns of associations including specific range of ages in which the association between past-year discrimination and SUD was significant. As shown in Figure 2, for Latin American immigrants with lower childhood family support (black line), higher past-year discrimination was significantly associated with higher odds of having a SUD in the past year between ages 18 and 21 (*OR*s range from 2.70 to 16.60) and 38 and 57 (*OR*s range from 1.44 to 2.16). Similarly, for Latin American immigrants with higher childhood family support, higher past-year discrimination was significantly associated with higher odds of having a SUD in the past year between ages 20 and 24 (*OR*s range from 2.14 to 3.14) and 37 and 49 (*OR*s range from 2.33 to 3.96). However, higher past-year discrimination was significantly associated with lower odds of having a SUD in the past year between ages 54 and 60 (*OR*s range from 0.01 to 0.32), despite generally wide confidence intervals in early and late adulthood for those with low childhood family support. In addition, we conducted a sensitivity analysis to explore whether the association between past-year discrimination and SUD would differ across men and women participants. However, the results showed no gender differences in this association.

Figure 2

The Association Between Past-Year Discrimination and SUD Across Ages 18–60 by Childhood Family Support (Dotted Lines Indicate 95% Confidence Intervals; Gray Line = Higher (+1 SD) Family Support; Black Line = Lower (−1 SD) Family Support)



Note. SUD = substance use disorders.

Discussion

Guided by cultural stress theory (Salas-Wright & Schwartz, 2019), the present study advanced our understanding of the important role of discrimination experience and childhood family support on Latin American immigrants' SUD risk. Specifically, we examined the age-varying associations between past-year discrimination and SUD between ages 18 and 60 among Latin American immigrants, as well as the moderating role of childhood family support in this association. We found that discrimination increased the odds of SUD in young and middle adulthood among Latin American immigrants. The protective benefits of childhood family support extended into late adulthood for individuals who experienced past-year discrimination. This study highlights the importance of family support in early life as a protective factor for immigrants from Latin America and also suggests the need to consider distinct developmental periods of SUD risk across adulthood.

Discrimination and SUD

Results showed that discrimination was significantly associated with Latin American immigrants' SUD risk, and this association varied across adulthood. The magnitude of the association between discrimination and SUD was strongest in young adulthood and remained significant until middle adulthood. This finding was in line with the theoretical assumptions of the cultural stress theory regarding the detrimental effect of discrimination on elevating alcohol and drug use problems (Salas-Wright & Schwartz, 2019). Similarly, past studies suggest discrimination is related to substance use among Latin American immigrants (Basáñez et al., 2013; Schwartz et al., 2015) and that discrimination is associated with many poor physical and mental health problems in young adulthood, such as emotion dysregulation and maladaptive physiological functioning (Cave et al., 2020; Stein et al., 2016). In particular, our results showed that the magnitude of the association between discrimination and SUD was strongest between ages 18 and 20, suggesting that younger adults are the most vulnerable to the negative effects of discrimination. Such developmental differences in the impact of discrimination may exacerbate health disparities in SUD for Latin American immigrants who experience discrimination.

The Role of Childhood Family Support

Findings indicated that the association between past-year discrimination and SUD varied by the levels of childhood family support. Experiencing discrimination was associated with higher odds of having a SUD during early and middle adulthood for Latin American immigrants with low childhood family support, but this association was relatively limited for those with high childhood family support at the same ages. Individuals may be internalizing the high childhood support, and using these resources in to find stability and security in young and middle adulthood, as they face a wide range of social, familial, and occupational responsibilities (Bühler et al., 2021; Burt & Masten, 2010; Freund & Ritter, 2009). These results highlight the need to consider the timing of postmigration stressors and family support across developmental periods. Immigrants who experience discrimination may use family support, and the potential psychosocial resources it conferred in childhood to cope with the experienced discrimination. Although past research has indicated that discrimination negatively influences the health and well-being of older adults as they aged (Luo et al., 2012; White et al., 2020), the present study found that the protective effect of childhood family support follows a unique pattern across the lifespan and might be even more robust for older adults (i.e., between 54 and 60) in the context of discrimination. Together, the present findings uncovered that childhood family support might operate as a resilience factor for Latin American immigrants in reducing their SUD risk.

These findings extend the theoretical framework of the cultural stress theory by identifying potential protective factors in early life that can mitigate SUD risk in the face of cultural stressors (e.g., discrimination; Salas-Wright & Schwartz, 2019). Especially for Latin American immigrants, examining how family characteristics may influence their health outcomes and well-being is necessary to better inform family-based prevention programs (e.g., Pantin et al., 2003; Parra-Cardona et al., 2022). Consistent with existing research that underscores the central role of family in the lives of immigrants (Fuligni, 2007; Glick, 2010), this study further highlights how childhood family support functions is an early source of resilience with lasting implications in shaping future risk for SUD. In addition, high quality family relationships in childhood can foster the development of close and supportive relationships in adulthood, which may further prevent the adverse impacts of cultural stressors. Overall, the results shed light on the continued importance of family support in childhood for promoting immigrant health across adulthood.

Implications

In the present study, we found that discrimination was linked with higher SUD risk during early and middle adulthood. Given calls to provide culturally response care (Manson, 2020), prevention scientists should culturally tailor their programs to consider discrimination as a salient cultural stressor for Latin American immigrants (Cobb et al., 2021). Furthermore, findings show that childhood family support has long-lasting benefits for Latin American immigrants who are vulnerable to SUD despite cumulative cultural stress and acute discrimination stress. The results underscore the potential benefits of prevention programming for immigrant children who, in the current sociopolitical climate, face risk factors for adulthood SUDs across several levels of the environment. Culturally sensitive prevention programs that are directed at the whole family, with strong emphasis on family engagement are likely beneficial for increasing these children's resilience (e.g., Dillman Carpentier et al., 2007; Martinez et al., 2012).

Limitations

There are some limitations that should be noted. First, the cross-sectional data restricted our ability to evaluate developmental effects and causal relationships. The age-varying association between past-year discrimination and SUD may also arise from generational effects such that young adults may have higher accessibility and use of substances compared to older adults. More recent public health data are needed to understand the proximal role of discrimination on health outcomes, which may be even more salient in present times. Second, it is critical to note that data from the present study were collected nearly 10 years ago. Discrimination against immigrants

and anti-immigrant discriminatory policies have increased at an alarming rate during this time (Gonzalez-Barrera & Lopez, 2020) and have worsen the health and well-being of Latin American immigrants including increases in suicidal ideation, suicide attempts, and death by suicide (e.g., Goldstein & Wilson, 2022; Stark et al., 2022). Third, because of the relatively low prevalence of each type of SUD (e.g., tobacco use disorder, opioid use disorder), our analyses did not distinguish the associations between discrimination and different types of SUDs. Future research may benefit from exploring these associations to identify specific patterns of risk and protective factors in the developmental context. Next, due to sample size limitations, we could not examine heterogeneous groups such as differences by country of origin and individuals older than 60. Furthermore, we did not examine individuals' experiences with acculturation, a critical process regarding adapting to a new country and acquiring values, aspects, and practices of the new culture among immigrants (Cobb et al., 2017; Schwartz et al., 2010; Wong et al., 2017). Future research should investigate how acculturation may interact with discrimination in relation to the prevalence of SUD among Latin American immigrants. Moreover, this study only focused on discrimination as one indicator of cultural stressors. However, research has shown that other cultural stressors, such as bicultural stress and negative context of reception, would also impact Hispanic immigrants' alcohol initiation (Meca et al., 2019), substance use attitudes (Grigsby et al., 2018), and drunkenness and marijuana use (Schwartz et al., 2015). Thus, understanding age-varying associations between multiple cultural stressors and substance use risk would be a critical next step in future research. Last, we were unable to assess the association between discrimination and SUD beyond current levels of family support as it was not available in this data set. Future studies that disentangle the effects of childhood and current family support on SUD would provide valuable insights into whether perceived family support in early life would have lasting impacts on health outcomes across adulthood.

Conclusion

Overall, this study employed the cultural stress theory to examine the age-varying association between discrimination, childhood family support, and the risk for SUD among Latin American immigrants. The findings show that the association between past-year discrimination and SUD risk varied by age and childhood family support. We found that greater discrimination was related to higher risk for SUD during young and middle adulthood for Latin American immigrants. Specifically, for young adults who reported low levels of childhood family support, discrimination was highly associated with risk for SUD. Future work on prevention and intervention efforts should consider culturally relevant assets or resources that may contribute to the long-lasting protective effects on the risk for SUD among immigrant families. Overall, this study shed new light on preventing SUD among adult Latin American immigrants and also suggests new directions for expanding the cultural stress theory.

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