Addressing an Overlooked Population: The Role of Discrimination and Violence in Depression Among South Asian Female College Students

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Abstract

South Asian female college students in the United States face mental health challenges shaped by intersecting experiences of discrimination and violence. This study examined how discrimination and violence contribute to depression in this population. An anonymous, cross-sectional, web-based survey (N=673) was distributed nationally through South Asian organizations, listservs, and social media. Validated measures assessed day-to-day discrimination, college-based discrimination, experiences of violence during college, and depression (PHQ-9). Bivariate analyses and multivariate linear regression examined associations, adjusting for sociodemographic factors. Over half of participants (51.1%) reported college-based discrimination, 66.1% reported experiencing violence during college, and 25.7% met the criteria for depression. In adjusted models, day-to-day discrimination (β=0.261, $p<0.001$) and college violence (β=0.207, $p<0.001$) were significant predictors of depression. Bisexual and questioning/unsure students also reported higher depression scores than heterosexual peers. Discrimination and violence are key social determinants of mental health among this population. Findings underscore the need for culturally responsive mental health services, intersectional campus policies, and evidence-based interventions to promote health equity among minority women in higher education.

Introduction

South Asian women living in the United States trace their ancestry to countries such as Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. Among the approximately 5.4 million South Asians residing

in the U.S., women account for 46% of this population.[1] Despite being one of the fastest-growing Asian subgroups in the U.S., South Asians are often underrepresented in health and mental health research, particularly within the college student population. This lack of subgroup-specific data has resulted in a limited understanding of their unique challenges and health needs.

Improving South Asian health and designing interventions to address their health disparities pose unique challenges because this community is highly diverse, containing people with differing socioeconomic status, healthcare practices, and access to care.[2] Moreover, cultural stigma surrounding mental illness and the high value placed on academic achievement in South Asian families can discourage students from seeking help, further exacerbating unmet mental health needs.

Perceived Discrimination

South Asian women represent a key population of focus because they experience barriers rooted in the intersection of multiple marginalized identities. Perceived discrimination, or the perception of unfair treatment based on factors such as a person's race, ethnicity, age, gender or sexual orientation, is a critical determinant of health in this group.[3] Most college students who identify as a racial or ethnic minority report experiencing racial discrimination in academic and social spaces, with this experience being heightened at majority White universities.[4] One in five Black college students and one in four Hispanic college students reported feeling discriminated against in their academic programs compared to 15% of all other students.[5,6]

Intersectionality theory highlights how overlapping forms of oppression, such as racism and sexism, can result in additional experiences of discrimination and marginalization faced by a demographic group like South Asian women.[7] For example, one study found that one in two Indian Americans reported being discriminated against within the past year.[8] Research among South Asian American medical students revealed that women were more likely to face discrimination than men, indicating that differences in discrimination are highly gender-based.[9] Unfortunately, South Asian women are also underrepresented in clinical research and are more likely to be misdiagnosed, emphasizing the urgency to address health disparities among this population.[10]

College Violence

Violence is an increasingly prevalent health issue on college campuses, encapsulating intentional or unintentional acts of physical, verbal, or sexual harm against a person or group that result in a higher likelihood of psychological harm, injury or death.[11] Among undergraduate students, over a quarter (26.4%) of females and 6.8% of males experience some form of physical or sexual violence, while 9.7% of females and 2.5% of males experience this at the graduate level.[12] College increases the risk of being exposed to violence, with one study finding that women who attend college are three times more likely to experience sexual violence than the average woman, demonstrating a need to reform campus policies and combat this issue.[12]

Women of color experience significantly higher rates of campus violence compared to White women, with Black women reporting rates of intimate partner violence that are 35% higher than their White counterparts. Hispanic and Asian/Pacific Islander women report lower rates than Black women, but still face higher risks compared to White women.[13] An additional study, which measured fear of discriminatory violence, found that Black students experienced the highest level of fear followed by Hispanic, Middle Eastern and Asian students.[14] Campus violence statistics specifically among South Asian women are limited, however, South Asian women are still disproportionately impacted by violence across their lifetime, with 48% of participants reporting physical violence and 11% reporting

sexual abuse in a nationwide study.[15] The prevalence of violence among minority women demonstrates an urgency to create culturally mindful interventions to support female college students during and after college.

Depression and Mental Health

Discrimination and violence are critical factors because of their well-documented associations with adverse mental health outcomes, including depression, anxiety, and disordered eating.[16] A survey conducted in the United States found that 44% of college students reported symptoms of depression.[17] In regard to racial/ethnic differences in depression, one study found that Arab-American female students had the highest proportion of depression (23.4%), followed by multiracial (20.8%) and Black (20.6%) students.[18] Depression similarly impacts South Asian students, with one in five in the U.S. experiencing a mood disorder in their lifetime and South Asian women being prone to higher levels of distress than South Asian men.[19]

The Minority Stress Model suggests that cumulative exposure to stressors faced by minority populations within dominant social structures worsens physical and mental health outcomes.[20] However, the "Model Minority" myth, which perpetuates the false belief that Asian Americans are largely immune to social problems due to high levels of education and income, has obscured the unique mental health challenges of South Asians, leading to underinvestment in culturally responsive care.[21] Depression is important to address because evidence indicates that people who have depression are at higher risk of developing other chronic health issues such as heart disease, diabetes, stroke, and Alzheimer's disease.[22]

Despite widespread acknowledgement of discrimination and violence as mental health determinants, little research has focused on South Asian female college students in the U.S., a group located at the intersection of race, gender, culture, and higher education. This study addresses the gap by examining how perceived discrimination and campus-based violence independently and jointly contribute to depression in this underserved population. Discrimination, violence, and depression are important measures to analyze in this study because evidence indicates that they can be linked to other chronic health issues during adulthood such as asthma, heart disease, diabetes, stroke, and Alzheimer's disease.[23,22] Findings from this study will be among the first to: (1) provide disaggregated insights into South Asian women's experiences; (2) inform culturally tailored mental health interventions; and (3) support evidence-based policy development on college campuses to promote health equity among South Asian women.

Materials and Methods

Specific Aims: Conduct a quantitative, anonymous, cross-sectional survey to understand how perceived discrimination and experiences of gender-based violence on campus impact mental health outcomes of depression among South Asian female college students in the United States. *Research Question:* How do perceived discrimination and campus violence independently and collectively contribute to mental health outcomes (depression) among South Asian women in college?

Hypotheses: South Asian female college students who experience higher rates of both perceived discrimination and violence will have higher rates of depression compared to those who do not have these experiences.

Study Design and Study Sample

A quantitative cross-sectional anonymous survey was administered through Qualtrics across the United

States. As an incentive, participants were offered entry into a raffle for a chance to win $50 Amazon gift cards. The survey gathered sociodemographic data, experiences of perceived discrimination, gender -based violence on college campuses, and depression. Participant confidentiality was protected by ensuring the survey would be entirely anonymous and responses would not be linked to personally identifiable information. Participants provided written consent prior to completing the survey to conduct and publish findings from this study. Furthermore, participants experiencing distress were provided with mental health resources, including university counseling services and culturally appropriate support organizations. Participants were eligible to take the survey if they self-identified as female, self-identified as South Asian, were at least 18 years old, and were attending a college or university in the United States.

Data Collection Process

Data collection began on February 19, 2025, and concluded on March 31, 2025. To achieve an adequate sample size, the South Asian Americans Leading Together (SAALT) database was used to identify the top five cities in the U.S. with the largest South Asian populations: New York City, Chicago, Washington, DC, Los Angeles, and San Francisco. The two universities with the highest enrollment were selected within each city for the initial survey sample. The survey was distributed by George Washington University Maternal and Child Health Graduate Students to South Asian student organizations via email, listservs, and social media platforms (Instagram, GroupMe, LinkedIn, Facebook). Following this, a snowball sampling technique was used to extend the participant pool across other institutions. Additionally, personal networks were also contacted to increase participation. The survey took approximately 15-20 minutes to complete.

The initial data sample consisted of 955 responses. The data was cleaned by removing participants who did not meet all of the eligibility criteria, completed less than 50% of the survey, or completed the survey in under five minutes. Bots and duplicates were also removed. After data cleaning was completed, there were a total of 673 responses in the analytical sample. The survey received Institutional Review Board (IRB) approval from The George Washington University. (IRB Number: NCR256361)

Measures

Sociodemographic Data

Demographic questions were asked at the beginning of the survey to understand important characteristics of the study sample, identify trends among demographic groups, and compare responses across various demographic categories. Demographic questions included age group, whether or not participants were born in the United States, length of residency for those not born in the United States, sexual orientation, relationship status, college location, and year in college.

Perceived discrimination

Perceived discrimination was assessed in two different ways: day-to-day discrimination and college discrimination. Items for day-to-day discrimination were adapted directly from the 9-item Daily Discrimination scale.[24] Examples of day-to-day discrimination questions included: “In your day-to-day life, how often do any of the following things happen to you; you are treated with less courtesy than other people by classmates and professors; you receive poorer service than other people at restaurants and stores; and people act as if they are afraid of you.” Responses were recorded using a Likert Scale response (1=never, 2=rarely, 3= sometimes, 4= often), with higher scores indicating greater perceived discrimination. The 9 daily discrimination items were averaged using the compute function in SPSS. As

shown in Table 3, the mean day-to-day discrimination score was 2.048 (SD=0.688). The Cronbach's alpha for the scale was 0.923, indicating an excellent reliability.

College discrimination was assessed by asking participants if they had ever encountered specific discriminatory experiences during college, with responses being "yes," "no," or "not sure." Items were adapted from the 11-item Lifetime Discrimination scale, but questions were modified to reflect scenarios that were relevant to college students.[24] Example survey items included: "You were denied a scholarship;" "You were unfairly discouraged by a teacher or advisor from continuing your education;" and "Your teachers, classmates, or advisors made you feel like you were not smart or capable enough." Answer responses of "yes" were coded as 1 and both "no" or "not sure" were coded as 0. A composite binary score was created by summing the number of discriminatory experiences reported. This sum was then categorized into four groups: no discrimination, one form of discrimination, two forms of discrimination and 3+ forms of discrimination. These groups examined the dose-response relationship between discriminatory experiences and depression.

College Violence

Questions about experiences of violence on college campuses included verbal, physical and sexual abuse scenarios. Items were adapted from the World Health Organization's Violence Against Women (VAW) Study Instrument, a validated 13-item survey used to assess different forms of gender-based violence perpetrated by intimate partners.[25] The questions were modified to capture experiences of violence occurring during participants' college years. Example questions included: "Since you began at your school, has someone ever: insulted you or made you feel bad about yourself? Slapped you or thrown something at you that could hurt you? Physically forced you to have sexual intercourse when you didn't want to?". Participants responded with either "yes" or "no" to each item. Responses were dichotomized, with individuals reporting one or more instances of violence coded as 1, and those reporting no instances coded as 0. College violence scores were then combined into a composite binary score for the independent-samples t-test.

Depression

Participants were screened for Major Depressive Disorder (MDD) using Patient Health Questionnaire 9 (PHQ-9), a validated instrument by the American Psychological Association (APA), incorporating the DSM-V criteria for depression using self-report.[26] Example questions included: "Over the last 2 weeks, how often have you been bothered by the following problems: little interest or pleasure in doing things, trouble falling or staying asleep, or sleeping too much," with answers ranging from 0 to 3 (0 = not at all, 1= several days, 2 = more than half the days, 3= nearly every day). The compute function was used to create both total and mean depression scores. The prevalence of depression in the study sample was determined using APA guidelines for depression severity, where a total score of 0-4 indicated no depression, 5-9 indicated mild depression, 10-14 indicated moderate depression, 15-19 indicated moderately severe depression, and 20-27 indicated severe depression. Participants with a score of 10 or more meet the criteria for depression, as outlined by the APA.[27] The Cronbach's alpha for the scale was 0.902, indicating an excellent reliability.

Analysis

Bivariate analyses on differences in depression scores among participants who experienced day-to-day discrimination, discrimination during college, or violence during college were explored using Pearson's correlation, a one-way ANOVA, and an independent-samples t-test. Pearson's correlation was utilized

to determine whether higher levels of perceived day-to-day discrimination were associated with increased levels of depressive symptoms, a one-way ANOVA was utilized to compare depression scores across different levels of college discrimination, and an independent-samples t-test was utilized to compare mean depression scores among those who did and did not experience violence in college. Multivariate linear regression adjusting for statistically significant sociodemographic characteristics was conducted to provide further analysis on the data. SPSS was used to conduct all bivariate and linear regression analyses.

Results

As shown in Table 1, the majority of the study sample was aged 20-24 (59.3%), heterosexual (78.5%), single (45.5%), and were sophomores in college (26.3%). While 75% of participants were born in the United States, of those who were non-U.S. Citizens, a majority have been living in the United States for less than 5 years (12.2%). Data on college location was collected by state and subsequently categorized into the ten regions defined by the U.S. Department of Health and Human Services (HHS). A majority of participants attended college in Region 3, which includes Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and District of Columbia (20.5%).

Table 1. Descriptive characteristics of study sample (N=673)

Variable	**N (%)**
Age (N= 672)	
18-19	113 (16.8)
20-24	399 (59.3)
25-29	120 (17.8)
30-34	35 (5.2)
35+	5 (0.7)
Born in the U.S. (N=672)	
Yes	505 (75.0)
No	167 (24.9)
Length of U.S. Residency (For non-U.S. citizens ONLY) (N=167)	
Less Than 5 Years	82 (12.2)
6-10 Years	51 (7.6)
11-20 Years	29 (4.3)
21+ Years	5 (0.7)
Sexual Orientation (N= 671)	
Heterosexual	528 (78.5)
Lesbian, Gay, Bisexual, Queer (LGBQ)	100 (14.9)
Questioning/Unsure	13 (1.9)
Other/Prefer Not to Answer	30 (4.4)
Relationship Status (N=670)	

Single	306 (45.5)
In a committed relationship, living with a partner	111 (16.5)
In a committed relationship, not living with a partner	177 (26.3)
Married	70 (10.4)
Other	6 (0.8)
College Location by HHS Region (N=606)	
Region 1 (CT, ME, MA, NH, RI, VT)	32 (4.8)
Region 2 (NY, NJ)	21 (3.1)
Region 3 (DE, MD, PA, VA, WV)	138 (20.5)
Region 4 (AL, FL, GA, KY, MS, NC, SC, TN)	104 (15.5)
Region 5 (IL, IN, MI, MN, OH, WI)	72 (10.7)
Region 6 (AR, LA, NM, OK, TX)	36 (5.3)
Region 7 (IA, KS, MO, NE)	20 (3.0)
Region 8 (CO, MT, ND, SD, UT, WY)	22 (3.3)
Region 9 (AZ, CA, HI, NV)	109 (16.2)
Region 10 (AK, ID, OR, WA)	52 (7.7)
Year in College (N=671)	
Freshman (Year 1)	78 (11.6)
Sophomore (Year 2)	177 (26.3)
Junior (Year 3)	154 (22.9)
Senior (Year 4 or later)	110 (16.3)
Graduate/Doctoral/Law Student	152 (22.6)

Table 2 illustrates the prevalence of discrimination and gender-based violence during college. Results indicate that 51.1% of participants experienced at least one form of discrimination during college, and 66.1% experienced at least one form of violence during college.

Table 2. Frequency of discrimination and gender-based violence in college among study sample

Variable:	**N (%):**
College Discrimination: N = 667	344 (51.1%)
College Violence: N = 629	445(66.1%)

Table 3 provides the means and standard deviations for each of the items in the day-to-day discrimination scale, as well as the mean and standard deviation for the total scale (M= 2.05, SD= 0.688).

Table 3. Day-to-day discrimination scale item means among study sample (N=667)

Survey Item	**Mean (SD)**
You are treated with less courtesy than other people are by classmates and professors	2.17 (0.835)
You are treated with less respect than other people	2.23 (0.849)
You receive poorer service than other people at restaurants or stores	2.16 (0.877)
You receive poorer service than other people at restaurants or stores	2.07 (0.938)
People act as if they are afraid of you	1.86 (0.843)
People act as if they think you are dishonest	1.93 (0.879)
People act as if they are better than you are	2.34 (0.940)
You are called names and insulted	1.91 (0.912)
You are threatened or harassed	1.78 (0.839)
Day-to-Day Discrimination Scale Total (1-4) (α = 0.923)	**2.05 (0.688)**

Table 4 provides the means and standard deviations for each of the items in the depression scale, as well as the mean and standard deviation for the total scale (M= 0.747, SD= 0.614).

Table 4. Depression scale item means among study sample (N=666)

Survey Item	**Mean (SD)**
Little interest or pleasure in doing things	0.779 (0.753)
Feeling down, depressed, or hopeless	0.768 (0.817)
Trouble falling or staying asleep, or sleeping too much	0.932 (0.887)
Feeling tired or having little energy	0.992 (0.853)
Poor appetite or overeating	0.730 (0.847)
Feeling bad about yourself- or that you are a failure or have let yourself or your family down	0.731 (0.811)
Trouble concentrating on things, such as reading the newspaper or watching television	0.825 (0.861)
Moving or speaking so slowly that other people could have noticed? Or the opposite- being so fidgety or restless that you have been moving around alot more than usual	0.550 (0.777)
Thoughts that you would be better off dead or of hurting yourself in some way	0.417 (0.714)
Depression Scale Total (0-3) (α = 0.902)	**0.747 (0.614)**

Table 5 presents the frequency of depression among the study sample broken down into the five categories outlined by the APA. Among the study sample, 42.1% were not depressed with a score of 0-4, 31.2% were mildly depressed with a score of 5-9, 16% were moderately depressed with a score of 10-14, 7.6% were in the moderately severe depression category with a score of 15-19, and 2.1% were severely depressed with a score of 20-27. Based on these frequencies, 25.7% of the study sample had scores of 10 or higher and met the criteria for depression.

Table 5. Frequency of depression among study sample (N=666)

Depression Severity (Total Score):	**N (%):**
None (0-4)	283 (42.1%)
Mild (5-9)	210 (31.2%)
Moderate (10-14)	108 (16.0%)
Moderately Severe (15-19)	51 (7.6%)
Severe (20-27)	14 (2.1%)

Analyses

Table 6 illustrates the regression model, where depression scores were measured against each of the independent variables while adjusting for covariates. The adjusted R^2 value was 0.242, indicating that 24.2% of variation in depression could be explained by day-to-day discrimination, college discrimination, college violence and the sociodemographic covariates in the model. For every 1-unit increase in day-to-day discrimination scores, depression scores increased by approximately 0.261 points, holding all other variables constant, indicating a strong, positive and statistically significant relationship ($p<0.001$). On average, students who experienced college violence had depression scores that were 0.207 points higher than those who did not, controlling for all other variables ($p< 0.001$). Although college discrimination was not statistically significant in this adjusted model, participants who experienced college discrimination had 0.039 higher mean depression scores than those who did not.

Heterosexual participants served as the reference group for sexual orientation. Compared to their heterosexual counterparts, bisexual individuals had depression scores that were 0.132 points higher

Table 6. Multivariate linear regression model of depression[a]

		Depression **Adjusted Beta (95 % CI)**
Day-to-day Discrimination		0.261 (0.148, 0.306)***
College Discrimination	Yes No	0.039 (-0.023, 0.058)
College Violence	Yes No	0.207 (0.018, 0.048)*** Ref

Age	18-19 20-24 25-29 30-34 35+	Ref 0.048 (-0.088, 0.205) 0.032 (-0.135, 0.235) 0.070 (-0.058, 0.440) 0.068 (-0.040, 0.954)
Sexual Orientation	Heterosexual Gay Lesbian Bisexual Queer Questioning/Unsure No response Other	Ref 0.057 (-0.063, 0.582) 0.038 (-0.118, 0.385) 0.132 (0.148, 0.503)*** -0.017 (-0.536, 0.323) 0.093 (0.090, 0.683)* 0.046 (-0.077, 0.349) 0.042 (-0.414, 1.679)
Year in College	Freshman (Year 1) Sophomore (Year 2) Junior (Year 3) Senior (Year 4 or Later) Graduate/Law/Medical Student	Ref -0.104 (-0.315, 0.032) -0.076 (-0.294, 0.075) -0.115 (-0.383, 0.009) -0.121 (-0.376, 0.027)
Born in the U.S.	Yes No	-0.019 (-0.129, 0.077) Ref
College Location	HHS Region 1 HHS Region 2 HHS Region 3 HHS Region 4 HHS Region 5 HHS Region 6 HHS Region 7 HHS Region 8 HHS Region 9 HHS Region 10	Ref -0.008 (-0.285, 0.233) 0.085 (-0.019, 0.275) -0.027 (-0.201, 0.111) 0.096 (0.017, 0.360)* -0.031 (-0.298, 0.134) 0.036 (-0.141, 0.401) -0.014(-0.300, 0.206) -0.011 (-0.175, 0.138) -0.065 (-0.340, 0.043)

*p<0.05; **p<0.01; ***p<0.001

[a]adjusted for age, sexual orientation, year in college, born in the U.S., and college location

($p<0.001$), while those who identified as questioning/unsure had depression scores that were 0.093 points higher ($p<0.05$). No significant differences in depression scores were observed among those participants who identified as gay, lesbian, queer and other identities.

HHS Region 1 served as the reference group for college location. Findings from the linear regression indicate that participants in HHS Region 5 had mean depression scores that were 0.096 points higher than participants in HHS Region 1 while holding all other variables constant in the model ($p<0.05$).

Discussion

This study is among the first to empirically examine the relationship between perceived discrimination, campus-based violence, and depression among South Asian female college students in the United States. Results demonstrate that both day-to-day discriminations and experiences of violence during college are significant predictors of depression, even after adjusting for sociodemographic characteristics. These findings extend the evidence base on minority health by centering a population often overlooked in public health and higher education research.

Consistent with the Minority Stress Theory and intersectionality, the findings suggest that chronic exposure to discrimination and violence acts as a cumulative stressor that erodes physiological well-being. The Minority Stress Model offers an important lens for interpreting these results. Minority stress theory posits that individuals belonging to socially marginalized groups experience unique and chronic stressors.[20] These include discrimination, prejudice, and violence, all of which compound with general life stress and erode psychological well-being.[20] In this study, day-to-day discrimination and college-based violence emerged as strong predictors of depression, even after adjusting for other demographic factors. This suggests that minority stress is not incidental but central to the lived experiences of South Asian female students. By documenting these associations in South Asian women, this study expands the empirical reach of the Minority Stress Model and underscores the need to consider ethnic subgroups that have been historically excluded from such analyses.

Further, the intersectionality theory compounds the effects of multiple marginalized identities, including gender, race/ethnicity, and sexual orientation, on mental health outcomes.[7] The elevated depression scores observed among bisexual and questioning participants demonstrate how multiple stigmas converge to create unique vulnerabilities. Similarly, differences across U.S. regions suggest that structural and contextual factors (such as local resources, policies, or campus climates) intersect identity-based experiences to shape mental health outcomes. Intersectionality thus underscores that South Asian female students' experiences cannot be reduced to a single dimension of identity but must be understood as shaped by multiple, overlapping systems of inequality.

Taken together these frameworks reveal how discrimination and violence are not just isolated events embedded within broader systems of inequality that produced sustained mental health disparities. The convergence of Minority Stress and Intersectionality theories highlights the importance of moving beyond a one-size-fits-all approach to campus mental health. Interventions must instead be tailored to acknowledge the unique stressors facing South Asian female students, particularly those with multiple marginalized identities.

Implications for policy and practice

Universities should develop and integrate culturally responsive, gender-sensitive mental health services that reflect the cultural realities of South Asian students. Peer-led programs embedded within the South Asian student associations, multilingual counseling services, and partnerships with community-based

South Asian organizations could increase access to care. Anti-discrimination and bystander intervention training for faculty, staff, and students should explicitly address subtle forms of bias, microaggressions, and identity-based violence. Additionally, campus climate surveys and institutional data collection should disaggregate Asian American subgroups to ensure South Asian students' needs are visible in policy and programming.

At the public health level, the findings underscore the need to expand culturally competent care models and challenge the persistence of the 'model minority' myth, which continues to mask mental health inequities within Asian American communities. Recognizing and addressing the unique stressors faced by South Asian women can contribute to reducing disparities across the life course.

Strengths & Limitations

This study's strengths include a large, diverse national sample, use of validated scales with high internal consistency (Cronbach's $\alpha > 0.9$), and the integration of intersectional frameworks to interpret findings. However, the cross-sectional design limits causal inference, and reliance on self-reported data may introduce recall or social desirability bias. Recruitment through South Asian campus organizations may also limit generalizability to less-connected students or those attending smaller institutions. Future research should use longitudinal or mixed-methods approaches to explore the temporal and contextual dynamics of discrimination, violence, and mental health in this population.

However, there are various limitations to this study. The reliance on self-reported data introduces the possibility of recall bias or social desirability bias, particularly given the sensitive nature of mental health, violence, and discrimination experiences. Cultural stigma may have further contributed to underreporting. The cross-sectional design of this study precludes causal inferences between discrimination, violence and depression. While the study focused on South Asian students, it did not capture important subgroup differences, such as country of origin or religious affiliation, which may influence the observed associations. Finally, because the survey was distributed primarily through South Asian campus organizations, the sample may not fully represent the broader population of South Asian college students in the United States, particularly those at rural institutions or those less connected to cultural organizations on campus.

Conclusion

This study provides rare and critical evidence that discrimination and violence are significant predictors of depression among South Asian female college students. By integrating the Minority Stress Model and Intersectionality Theory, the findings highlight how cumulative and intersecting stressors sustain mental health inequities. Addressing these disparities requires institutional commitment to culturally responsive mental health services, inclusive campus climates, and anti-discrimination policies that center the experiences of minority women.

Depression is a major public health concern on college campuses nationwide, affecting students' academic success, physical health, and overall well-being.[28,29] The findings from this study underscore that interventions cannot take a one-size-fits-all approach. Instead, they must be culturally salient and responsive to the unique needs of South Asian women and other underserved groups to ensure that all students have equitable opportunities to thrive.

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Statements and Declarations

Ethical Considerations

This study received Institutional Review board (IRB) approval from the Ethics Review Committee at the George Washington University (IRB: NCR256361). All procedures performed in this study involving human participants were in accordance.

Consent to Participate

Informed consent was obtained from all participants involved in this research.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

1. Demographic Information | SAALT. South Asian Americans Leading Together. Available from: https://saalt.org/south-asians-in-the-us/demographic-information/
2. Health Disparities in the South Asian Community | Cigna. Available from: https://www.cigna.com/health-care-providers/resources/south-asian-health-disparities
3. Williams DR, Yu Y, Jackson JS, Anderson NB. Racial differences in physical and mental health: Socio-economic status, stress, and discrimination. J Health Psychol. 1997;2(3):335–51. https://doi.org/10.1177/135910539700200305
4. Bravo AJ, Wedell E, Villarosa-Hurlocker MC, Looby A, Dickter CL, Schepis TS. Perceived racial/ethnic discrimination among young adult college students: Prevalence rates and associations with mental health. J Am Coll Health. 2021;71(7):1–12. https://doi.org/10.1080/07448481.2021.1954012
5. Lloyd C, Brown C. One in five Black students report discrimination experiences. Gallup.com. 2023 Feb 9. Available from: https://news.gallup.com/poll/469292/one-five-black-students-report-discrimination-experiences.aspx
6. Brown C. ¼ of Hispanic students face discrimination, consider leaving college. LuminaFoundation.org. 2023 Sep 27. Available from: https://www.luminafoundation.org/news-and-views/one-quarter-of-hispanic-students-face-discrimination-leading-many-to-consider-leaving-college/
7. Crenshaw K. Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. Univ Chicago Legal Forum. 1989;1989(1):139–67.
8. Badrinathan S, Kapur D, Kay J, Vaishnav M. Social realities of Indian Americans: Results from the 2020 Indian American attitudes survey. Carnegie Endowment for International Peace; 2021 Jun

9. Available from: https://carnegieendowment.org/research/2021/06/social-realities-of-indian-americans-results-from-the-2020-indian-american-attitudes-survey?lang=en

9. Chen J, Pang J, An C, Li BUK, Nakae S, Zhang L. Exploring the intersectionality of race and gender on the incidence of and response to microaggression experienced by Asian American women medical students. Am J Surg. 2024;239:116007. https://doi.org/10.1016/j.amjsurg.2024.116007
10. Pallavi Pundir. Why South Asian Indian women's health is different. Fluent Health; 2024 Feb 7. Available from: https://fluentinhealth.com/blog/why-south-asian-indian-womens-health-is-different
11. UNDRR. Violence. United Nations Office for Disaster Risk Reduction; 2023 Jun 7. Available from: https://www.undrr.org/understanding-disaster-risk/terminology/hips/so000
12. RAINN. Campus sexual violence: Statistics. RAINN.org; 2013. Available from: https://rainn.org/statistics/campus-sexual-violence
13. American Psychological Association. Campus sexual assault. APA.org; 2023 Jun. Available from: https://www.apa.org/apags/resources/campus-sexual-assault-fact-sheet
14. Grinshteyn E, Whaley R, Couture M-C. High fear of discriminatory violence among racial, gender, and sexual minority college students and its association with anxiety and depression. Int J Environ Res Public Health. 2022;19(4):2117. https://doi.org/10.3390/ijerph19042117
15. Rai A, Choi YJ. Domestic violence victimization among South Asian immigrant men and women in the United States. J Interpers Violence. 2021;37(17–18):088626052110152. https://doi.org/10.1177/08862605211015262
16. Forbes N, Yang LC, Lim S. Intersectional discrimination and its impact on Asian American women's mental health: A mixed-methods scoping review. Front Public Health. 2023;11:993396. https://doi.org/10.3389/fpubh.2023.993396
17. Elflein J. Percentage of college students with depression U.S. 2019–2020. Statista. 2022 Mar 7. Available from: https://www.statista.com/statistics/1126279/percentage-of-college-students-with-depression-us/
18. Lipson SK, Kern A, Eisenberg D, Breland-Noble AM. Mental health disparities among college students of color. J Adolesc Health. 2018;63(3):348–56. https://doi.org/10.1016/j.jadohealth.2018.04.014
19. Mental Health Facts. SAPHA.org; 2016. Available from: https://sapha.org/resources/mental-health-facts/
20. French M. Minority stress model: What it is and why it is important. Med News Today; 2024 Sep 19. Available from: https://www.medicalnewstoday.com/articles/minority-stress-model
21. Wing JY. Beyond Black and White: The model minority myth and the invisibility of Asian American students. Urban Rev. 2007;39(4):455–87. https://doi.org/10.1007/s11256-007-0058-6
22. National Institute of Mental Health. Chronic illness and mental health: Recognizing and treating depression. NIMH.gov; 2024. Available from: https://www.nimh.nih.gov/health/publications/chronic-illness-mental-health
23. Williams DR, Lawrence JA, Davis BA, Vu C. Understanding how discrimination can affect health. Health Serv Res. 2019;54(S2):1374–88. https://doi.org/10.1111/1475-6773.13222

24. University, S, Stanford, & California 94305. Perceived Discrimination Scale | SPARQtools. Available from: https://sparqtools.org/mobility-measure/perceived-discrimination-scale/

25. Nybergh L, Taft C, Krantz G. Psychometric properties of the WHO Violence Against Women instrument in a female population-based sample in Sweden: A cross-sectional survey. BMJ Open. 2013;3(5):e002053. https://doi.org/10.1136/bmjopen-2012-002053

26. American Psychological Association. Patient health questionnaire (PHQ-9 & PHQ-2). APA.org; 2020 Jun. Available from: https://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/patient-health

27. National HIV Curriculum. Patient Health Questionnaire-9 (PHQ-9) – Mental Disorders Screening. University of Washington; 2015. Available from: https://www.hiv.uw.edu/page/mental-health-screening/phq-9

28. Liu XQ, Guo YX, Zhang WJ, Gao WJ. Influencing factors, prediction and prevention of depression in college students: A literature review. World J Psychiatry. 2022;12(7):860–73. https://doi.org/10.5498/wjp.v12.i7.860

29. The Link Between Physical Health & Academic Success | ZotKey. University of California Irvine; 2018. Available from: https://zotkey.uci.edu/blogs/the-connection-between-physical-health-and-academic-success-why-taking-care-of-your-health-matters-in-college