Stress Correlates Related to Depressive Symptoms Among Young Black Men in Southern California

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Abstract

Black men experience higher levels of chronic stress, life stressors, and discrimination due to oppressive social and economic conditions. Black men are at greater risk of depression, but most published research on stress and depression has focused on Black people in general, Black women, or older Black men. We sought to determine whether discrimination, perceived stress, major life stress, daily hassles, and social capital were associated with depressive symptoms in young Black men. Survey data were collected from April 2010 to March 2012 in Southern California from a convenience sample of Black men (N = 201). We used two-sample t tests and one-way analysis of variance (ANOVA) to examine the association of stress correlates with depressive symptoms. Logistic regression was conducted to estimate the likelihood of reporting depressive symptoms for each significant correlate. Over half of the sample reported depressive symptoms. Health status, perceived discrimination, urban hassles, perceived stress, and neighborhood trust and safety were significantly related to depressive symptoms. Those who reported higher perceived stress had higher odds of reporting depressive symptoms, whereas lower everyday discrimination experiences were associated with lower odds of depressive symptoms. Future studies should consider examining the effectiveness of embedding coping mechanisms for stress, including perceived discrimination, in health interventions for young Black men to prevent or reduce depression.

Keywords

depression, mental health, Black men, stress, African Americans

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Introduction

Stress has been defined as a phenomenon "experienced when the demands of a situation tax or exceed a person's resources and some type of harm or loss is anticipated" (Lazarus & Folkman, 1984, p. 141). Black men experience higher levels of chronic stress, life stressors, and discrimination due to oppressive social and economic conditions compared with any other racial/ethnic group (Turner & Avison, 2003). Two studies reported that, compared with White men, in general, Black men exhibited higher oxidative stress levels, which has been linked to

organ damage (Myburgh et al., 2019), and had the poorest health profile for health outcomes such as cardiac stress, glucose dysregulation, and cognitive functioning (Jansen

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Keyonna M. King, University of Nebraska Medical Center, 984340 Nebraska Medical Center, Omaha, NE 68198-4340, USA. Email: Keyonna.king@unmc.edu van Vuren et al., 2019). Another study reported that young Black men (ages 18–29 years old) were more likely to report a history of substance use (marijuana, ecstasy, and/or gamma hydroxybutyrate [GHB]) and memory loss (due to drinking the night before) when reporting high levels of stress from living in urban areas (Seth et al., 2013).

Black men are at greater risk of depression, but manifest depressive symptoms differently (e.g., pain, anger attacks, abusive behavior, overworking) than White men and are often misdiagnosed as a result (Hankerson et al., 2015; Plowden et al., 2016). Thus, Black men are less likely to receive mental health care (Hankerson et al., 2015; Plowden et al., 2016), leading to lower rates of reported depression (Prelow et al., 2006). Studies indicated that Black women and people of other races are more likely to report their mental health status and utilize mental health services compared with Black men (Griffith et al., 2009; Yorgason et al., 2008). However, Black men tend to report higher depressive symptoms as one study indicated when examining allostatic load and depression (Thorpe et al., 2020). Several factors have been related to depression among Black men.

Environmental stressors are defined as stimuli or events that produce a physiological and psychological response to a condition that threatens or challenges an individual (Wood et al., 2011). Black men are likely to encounter environmental stressors, like perceived discrimination, which has been associated with increased depressive symptoms (Britt-Spells et al., 2018; Watkins et al., 2011). Chung et al. (2014) reported that more than 90% of Black men in their sample (N = 295) reported life stressors. Of those reporting stress, 60.8% reported finances and money, and 43.2% reported racism as specific causes of stress. Another study corroborated these findings in their sample of Black men, citing lack of work (unemployment) as a significant source of stress, which led to depression, low self-esteem, suicidal ideation, and anger (Robinson et al., 2021). Thorpe and colleagues (2017) reported that Black men who experienced any major discrimination had a higher likelihood of obesity than those who did not report experiencing any major discrimination. Another study reported that everyday discrimination (e.g., you are treated with less respect than other people), but not major discrimination (e.g., being unfairly denied a bank loan), was associated with depressive symptoms among Black men (Wheaton et al., 2018). In particular, this relationship was strongest among middle-aged men and diminished among older men (age 55 years and older; Wheaton et al., 2018). Assari et al.'s (2018) study reported a positive association among Black men with higher socioeconomic status and having a major depressive episode. They examined whether perceived discrimination explained the risk, but reported

perceived discrimination did not explain the risk, offering further insights into exploring the role of other mechanisms such as stress and coping. Another study identified that education and income did not reduce the risk of discrimination and depression for Black men compared with White people and Black women (Assari & Curry, 2020). Furthermore, the authors concluded that Black men incessantly encounter racism daily, which dehumanizes them, decreases their quality of life, and decreases life expectancy. Smith et al. (2011) corroborated these findings in their study that reported a positive association between educational attainment, racial microaggressions, and societal problems contributed to increased environmental stress leading to what they called racial battle fatigue. This is defined as emotional, psychological, and physiological distress (Smith et al., 2011, p. 64). Although these findings seem discouraging, there is some evidence supporting social capital as a protective factor against depression and a positive influence on health and health behaviors.

Social capital refers to the notion of social growth being cultivated through relationship building (Boyas et al., 2021). Intervention studies investigating or promoting social capital have mostly focused on individuallevel change rather than community and multilevel changes, and very few studies focused on Black men (Clark et al., 2018; Dean et al., 2015; Ornelas et al., 2009). Most of the studies focused on Black men reported the advantages of social capital on health and health behaviors. One study reported that social capital (i.e., through churches and mentoring) was a significant, positive influence on Black men's health (Ornelas et al., 2009). Another study reported that Black men in Philadelphia who were active in their community, thus having higher social capital, were more likely to have had a prostate-specific antigen screening test for prostate cancer. This implies that structural forms of social capital may play a role in preventive health behaviors for Black men (Dean et al., 2015). In addition to social capital, Gayman and colleagues (2018) reported that perceived family support served as a buffer for stress exposure among Black men (Gayman et al., 2018).

Most published research on stress and depression has focused on Black people in general, Black women, or older Black men. Little research has been published on young Black men between the ages of 18 and 30 years (Sharma et al., 2016) in terms of the association between stressors and depressive symptoms. Much of the literature supports a strong relationship between stress and depressive symptoms among older Black men; however, it is unclear whether the relationship exists among young Black men. Therefore, in this article we test the association of stressful life experiences and depressive symptoms among young, low-income Black men. Specifically,

we sought to determine whether discrimination (including everyday and major life instances), perceived stress, major life stress, daily hassles, and social capital (a protective factor to stressors) were associated with depressive symptoms.

Method

Sample

Project Changing Health for African American men with New and Great Experiences (CHANGE) is the parent study devoted to exploring the attitudes, beliefs, and behaviors of young Black men as it relates to stress and their likelihood of engaging in preventive health behaviors (e.g., mental health, physical activity, or healthy eating). A convenience sample of 201 low-income Black males in Southern California completed the Project CHANGE survey. The Project CHANGE survey, capturing psychosocial and health status data regarding participants' dietary patterns, physical activity, and mental health, was administered to investigate the health behaviors, perceptions, and beliefs that affect Black men's preventive health behaviors. To be eligible to complete the survey, men had to self-identify as Black; be between the ages of 18 and 30 years old, which we considered as "young" for this sample; and self-report as low-income, which was defined as living below the poverty line. Please note we use the term *Black* instead of African American based on the Project CHANGE parent study focus group data in which the men emphasized their preference of identifying as "Black" rather than African American.

Data were collected between April 2010 and March 2012. The study procedures were reviewed and approved by Loma Linda University's institutional review board (IRB; No. 59046).

Procedures

All participants who completed the Project CHANGE survey were recruited from barbershops, beaches, indoor and outdoor basketball courts, and other places frequented by young Black men in Southern California. Word of mouth and snowball techniques were used to recruit survey participants that fit the inclusion criteria. Each participant read and signed the consent form prior to completing the survey. After survey completion, each participant received a US\$10 gift card to Subway, Wal-Mart, or Stater Bros.

The survey was administered as a paper-and-pencil survey and could be self-administered or administered through a 1-hr interview with trained and IRB-certified research team members. The Project CHANGE research

coordinator and team members manually entered completed survey data into the International Business Machines Statistical Package for the Social Sciences (IBM SPSS; IBM Corporation, 2011, Armonk, NY, USA) database. Identification numbers were assigned to each survey and all queries were conducted on de-identified data.

Measures

Outcome Variable. We assessed depressive symptomology using the 10-item Center for Epidemiological Scale for Depression (CES-D; Radloff, 1977). This scale, ranging from "0" (rarely or none of the time) to "3" (all of the time), measures how often a person has felt depressed in the past week. Based on CES-D scoring procedures, we further categorized participants into the group of depressive symptoms with a score of 10 or higher versus the group of no depressive symptoms (scores <10). The CES-D-10 had an adequate internal consistency in our sample, $\alpha = .74$.

Covariates. Sociodemographic variables (e.g., age, income, education, marital status, employment, or incarceration history, if any) were collected using validated questions from the National Survey of American Life (NSAL; Jackson et al., 2004). In addition to sociodemographic questions, we used the one-item NSAL question to assess overall perceived health status. Participants were asked, "How would you rate your overall health status?" and gave responses "1" (excellent), "2" (very good), "3" (fair), "4" (poor), and "5" (very poor; Jackson et al., 2004).

Stress Variables. The four-item Perceived Stress Scale (Cohen et al., 1983), measuring the degree to which situations in one's life were considered stressful, asked respondents how often they felt stressed in the past 30 days. Response items used a 5-point Likert-type scale ranging from "0" (never) to "4" (very often). Two of four items were reverse scored such that higher scores indicated higher perceived stress. The scale's reliability for our sample was $\alpha = .52$.

A modified version of the nine-item Everyday Discrimination Scale (Williams et al., 1997) was used to assess perceptions of racism. The modification included one additional statement, "You are followed around in stores." Participants were asked the frequency of each of the situations and responses used a 6-point Likert-type scale ranging from "1" (almost every day) to "6" (never). A follow-up question for respondents who answered "a few times a year" or more frequently were asked, "What do you think is the main reason for these experiences?" The responses include nonracial (e.g., "your gender") and

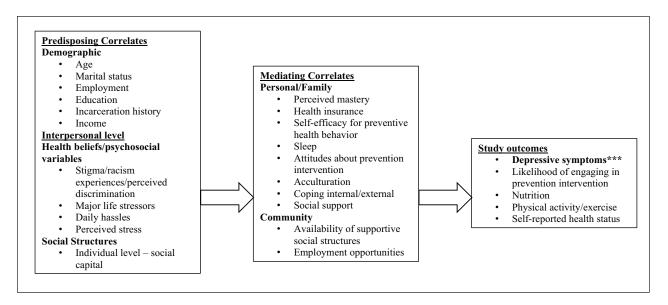


Figure 1. Project CHANGE Conceptual Model.

Note. CHANGE = Changing Health for African American men with New and Great Experiences.

racial (e.g., "your race") reasons for the discrimination. All items were reverse scored such that higher scores indicated greater perceptions of racism. The scale had good internal consistency, $\alpha = .87$.

The 11-item Major Experiences of Discrimination Scale (Williams et al., 2008) was used to assess "major" lifetime experiences that may have occurred in the past and that involved perceived interference with socioeconomic advancement (e.g., not hired, denied a bank loan, or fired). For each experience, participants responded "Yes," "No," or "Not Applicable." For example, respondents were asked whether they had been unfairly treated. If respondents answered "Yes," they were asked to give the reason for their experience, the last time the event occurred, and the number of times it occurred in their lifetime. If respondents answered "No," they skipped to the next question. The scale had good internal consistency, $\alpha = .88$.

The modified 32-item Urban Hassles Inventory (UHI; Miller & Townsend, 2005) aims to counter the bias present in similar life-events scales that were developed and standardized primarily with middle-class White adolescents. The scale includes four subscales: (a) environmental conditions, (b) interpersonal interactions/surveillance, (c) safety concerns, and (d) anticipatory victimization. Respondents were asked to indicate how often the urban hassle events listed happened to them. Examples of urban hassles include being asked to sell drugs, people hanging on street corners in front of stores, worrying about your own safety, and being pressured by friends to join a gang among others. Responses ranged from "0" (never) to "3" (very often). For each subscale, high scores indicated

experiencing more daily hassles. An index score ranging from 0 to 100 is provided summing all subscales scores. Higher index scores indicated greater overall daily hassles. The scale had good internal consistency, $\alpha=.87$.

A modified version of the three-item Goal Striving Stress Measure (Sellers et al., 2011) was used to measure the discrepancy between aspirations and achievement, weighted by the level of importance associated with achieving life goals. Respondents were asked to look at a ladder diagram with 10 steps, "where step 10 stands for the best possible way of life and step one stands for the worst possible way of life." The modification excluded a question regarding the importance of the goal as this was not relevant to our study. The scale had adequate internal consistency, $\alpha = .77$.

We used an adapted version of the Social Capital Scale (Onyx & Bullen, 2000) in which the four most relevant subscales out of five were administered. Subscales included participation in the local community, feelings of trust and safety, neighborhood connections, and connections with family and friends. Response options ranged from "1" (no, not at all) to "4" (yes, of course). The overall social capital scale showed adequate reliability, $\alpha = .74$. As an adapted version of the scale was used, the subscale reliabilities were not applicable.

Data Analysis

The original conceptual model from the Project CHANGE parent study indicated five dependent variables, including depression (see Figure 1). The model lists the proposed correlates related to depression and the other

dependent variables guided by the socioecological model (SEM; McLeroy et al., 1988). The SEM hypothesizes that human behavior occurs as an interaction between five levels, namely, (a) intrapersonal, (b) interpersonal processes and primary groups, (c) institutional, (d) community, and (e) public policy, with an individual's behavior determined by the interplay between these levels. For the scope of this article, the analytic emphasis will be on the relationship between the predisposing correlates at the intrapersonal and interpersonal levels (stress variables and covariates) and depression (dependent variable).

We conducted descriptive analyses to explore normality and distributions and then used a t test/one-way analysis of variance (ANOVA; for health status) to examine the association between correlates and self-reported depressive symptoms. Logistic regression was conducted to estimate the independent effect of each significant correlate from the bivariate analyses on odds of self-reported depressive symptoms. Any p values <.05 were considered statistically significant and all tests were two tailed. Survey data were analyzed with IBM SPSS version 20.0 statistical software (IBM Corporation, 2011, Armonk, NY, USA).

Results

Characteristics of the 201 participants are presented in Table 1. Approximately 135 men (68.2%) were 24 years or younger. One-hundred twenty-nine men (about two thirds of the men) identified as single, whereas the remaining were reportedly in a relationship or married. Approximately 165 men (81.6%) were high school graduates, earned their general educational development (GED), college graduates, or vocationally trained. Almost half of the men were unemployed (n = 102) and had no health insurance (n = 87; 47.7% and 45.3%, respectively). More than half of the men (n = 118) had been incarcerated (60.5%) and 107 men (63.2%) made less than US\$30,000 per year. The median income level for the sample ranged from US\$19,000 to US\$29,999.

The mean depressive symptoms score for the sample was 9.5 (SD = 5.5). Approximately 109 men (54.2%) reported a score greater than 10 on the 10-item CES-D scale, indicating depressive symptoms.

Stress Variables Associated With Depression

None of the standard demographic variables were significantly related to the depressive symptoms. However, self-reported health status was significantly related to depression (p=.001). Men who reported depressive symptoms were associated with poorer self-reported health status than men who reported no depressive

Table 1. Project CHANGE Study Sample Characteristics and Self-Reported Health Behaviors (N=201).

Demographics	N (%)
Age	
18 years	33 (16.7)
19–20 years	44 (22.2)
21–24 years	58 (29.3)
25–29 years	45 (22.7)
30 years	18 (9.1)
Marital status	
Single	129 (65.8)
Unemployed	102 (47.7)
Education	
Less than high school graduate	36 (18.4)
High school graduate, college graduate, graduate or vocational degree	165 (81.6)
Income	
Less than 29k	107 (63.2)
Previous incarceration	118 (60.5)
Current health insurance	87 (54.7)
Self-reported health status	
Excellent	57 (28.4)
Very good	70 (34.8)
Good	58 (28.9)
Fair	15 (7.5)
Poor	I (0.5)
Depressive symptomology ^a	109 (54.2)

Note. CHANGE = Changing Health for African American men with New and Great Experiences.

^aDepressive symptomology is defined as a score of 10 or higher on the Center for Epidemiological Studies-Depression scale.

symptoms. The results for stress correlates and covariates compared with depressive symptoms are presented in Table 2.

Bivariate results of perceived discrimination and depressive symptoms indicated significant associations. Men who reported depressive symptoms also reported a higher number of racial discrimination events than men who reported no depressive symptoms (M=22.7 vs. M=12.6, p<.001). Moreover, men in the depressive symptom group reported a significantly higher number of nonracial discrimination events in their lifetime than the men in the no depressive symptoms group (M=17.5 vs. M=6.7, p<.05). Results for everyday discrimination also demonstrated a significant relationship with depression. Men in the depressive symptoms group reported significantly higher scores on the Everyday Discrimination Scale than men in the no depressive symptoms group (M=54.3 vs. M=39.8, p<.001).

Significant associations were also reported between the three UHI subscales and depressive symptoms. Men who reported depressive symptoms also reported significantly

Table 2. Psychosocial Correlates and Depressive Symptoms.

Correlates	Depressive symptoms $n = 109$	No depressive symptoms $n = 92$	t test b value
Self-reported health status, N (%)			.001
Excellent	21 (19.3)	36 (39.1)	.001
Very good	39 (35.8)	31 (33.7)	
Good	38 (34.9)	20 (21.7)	
Fair/Poor	11 (10.1)	5 (5.4)	
Psychosocial measures, M (SD)	()	5 (5.1)	
Discrimination			
Number of racial discrimination events in lifetime	22.7 (64.9)	12.6 (27.8)	<.0001
Number of nonracial discrimination events in lifetime	17.5 (37.6)	6.7 (18.1)	.01
Everyday Discrimination Scale (range 0–100; high score indicates more discrimination)	54.3 (19.6)	39.8 (26.1)	<.0001
Urban hassles (range 0-100; higher score indicates greater	hassles):		
Environmental conditions	27.9 (23.9)	12.3 (20.4)	<.0001
Interpersonal	24.4 (20.9)	13.9 (17.8)	.0002
Safety	41.9 (31.0)	26.1 (28.2)	.0002
Urban Hassles Index Score	29.5 (20.7)	16.9 (17.9)	<.0001
Goal striving stress	, ,	` ,	
Achievement	6.1 (2.1)	6.9 (1.6)	.005
Aspiration	8.6 (2.0)	9.3 (1.3)	.005
Perceived stress (range 0–16; higher score indicates more s		` ,	
Perceived stress summary score	7.2 (2.5)	4.5 (3.0)	<.0001
Social capital	` '	, ,	
Trust and safety	6.8 (2.0)	7.6 (2.6)	.01

poorer environmental conditions (e.g., loud cars or disruptive neighbors) than men who reported no depressive symptoms (M=27.9 vs. M=12.3, p<.0001). Men in the depressive symptoms group also reported significantly more interpersonal hassles (e.g., being asked to hide, carry, or sell drugs; M=24.4 vs. M=13.9, p<.001) and higher safety concerns (e.g., worrying about the safety of friends or family; M=41.9 vs. M=26.1, p<.001) than men in the no depressive symptoms group. Finally, men in the depressive symptom group reported a significantly higher overall UHI index score than men in the no depressive symptoms group (M=29.5 vs. M=16.9, p<.001).

We examined the relationship between depressive symptoms and striving to achieve goals to determine future expectations among men in the sample. Results indicated there was no significant difference in the total goal striving stress scores and self-reported depressive symptoms in the sample (p=.80). However, there were significant differences between the achievement, aspirations subscales, and depressive symptoms. Men in the depressive symptoms group reported significantly lower achievement (M=6.1 vs. M=6.9, p<.001) and aspirations (future expectations; M=8.6 vs. M=9.3, p<.001) scores than men in the no depressive symptoms group.

We examined perceived stress to determine the association with depressive symptoms. Results indicated that men who reported depressive symptoms had significantly higher perceived stress than men who reported no depressive symptoms (M = 7.2 vs. M = 4.5, p < .001).

There was no significant association between the social capital summary score and depressive symptoms among men in our sample (p=.23). However, there was a significant difference in "trust and safety" (p<.01) social capital subscale score and depressive symptoms. Men who reported depressive symptoms had lower social capital related to "trust and safety" in their neighborhoods than men who reported no depressive symptoms (M=6.8 vs. M=7.6, p=.01).

Logistic Regression

The independent associations of the stress correlates by depressive symptoms are shown in Table 3. Health status, perceived stress, and everyday discrimination were significantly associated with depressive symptoms in Black men in our sample. Black men who reported depressive symptoms had higher odds of reporting good health (odds ratio [OR] = 3.20; confidence interval [CI] = [1.30, 7.90]) and very good health (OR = 2.17; CI = [1.00, 9.90]

Table 3. Association Between Demographic and Psychosocial Correlates to Depression.

Correlates	OR (95% CI)
Health status (ref: excellent)	
Very good	2.17 [1.00, 4.70]*
Good	3.20 [1.30, 7.90]*
Fair/poor	2.79 [0.77, 10.07]
Perceived stress	1.31 [1.14, 1.51]*
Everyday discrimination ^a	0.69 [0.50, 0.95]*
Number of nonracial discrimination events	1.01 [1.00, 1.03]
Number of racial discrimination events	1.00 [0.99, 1.01]
Urban Hassles Index	1.04 [0.98, 1.10]
Goal Striving Stress: Aspirations	1.00 [0.82, 1.22]
Goal Striving Stress: Achievement	0.84 [0.66, 1.07]
Social capital	1.07 [0.92, 1.24]

Note. OR = odds ratio; CI = confidence interval.

4.70]) than men who reported no depressive symptoms. Black men who reported depressive symptoms also had higher odds of reporting higher perceived stress (OR = 1.31; CI = [1.14, 1.51]) than men who reported no depressive symptoms, whereas Black men with no depressive symptoms had lower odds of reporting every-day discrimination experiences (OR = 0.69; CI = [0.50, 0.95]).

Discussion

The majority of men in this sample were unemployed, had no health insurance, had a previous history of incarceration, and lived in poverty. Over half of the sample reported depressive symptoms. Health status, perceived discrimination, urban hassles, perceived stress, and trust and safety in their neighborhood were significantly related to reporting depressive symptoms. Black men who reported good health, very good health, and higher perceived stress had higher odds of reporting depressive symptoms, whereas men who reported lower everyday discrimination experiences had lower odds of reporting depressive symptoms.

It is plausible that men who reported overall health status as "good" or "very good" did not consider their mental health status in their assessment. In addition, these men may disregard mental health in overall health status because they are socialized to "tough it out"; therefore they deny mental health as a concern (Hankerson et al., 2015; Plowden et al., 2016). Another plausible explanation to consider is the waning returns for Black men irrespective of increases in socioeconomic class and education (Assari & Curry, 2020; Assari et al., 2018). Finally, Black men are often misdiagnosed by White physicians in the United States (Hankerson et al., 2015;

Plowden et al., 2016), which can also affect men's mental health assessment. It is clear there is a direct association between social factors (i.e., perceived stress and perceived discrimination) and self-reported depressive symptoms in our sample. These social factors seem to adversely influence young Black men, increasing and perpetuating their vulnerability to mental health issues such as depression. Our findings are consistent with Hurd and colleagues (2014) who reported an association between perceived discrimination and depression among Black emerging adults (Hurd et al., 2014). One study of Black men reported that racism was a reported cause of stress (Chung et al., 2014). Rebbeck and colleagues (2013) reported that men who were medically uninsured were more likely to have high perceived stress. In turn, our study indicated that men with high perceived stress were also more likely to report depressive symptoms. The linkages in Rebbeck et al. (2013) and our findings may be related to social and behavioral factors such as living in a stressful environment and access to or utilization of mental health care. Another study congruent with our findings reported low social status and social support was significantly related to greater perceived stress, depressive symptoms, and perceived discrimination (Mama et al., 2016). Only one study to date has reported that social capital was related to depression (Clark et al., 2018). Our results reported no significant association between the social capital summary score and depressive symptoms among men in our sample.

Limitations

There were several limitations to our study. The sample was cross-sectional and the data were self-reported. Therefore, we cannot determine causality and we acknowledge that self-reports may be biased. As this was a convenience sample of young Black men in Southern California, the generalizability of the results is limited. There may have also been selection bias using a convenience sample. Even with these limitations, the results of our study provide important insight about factors that may prevent or reduce depression in young Black men and ultimately into older adulthood. In addition, the results are an important addition to the literature because this population is underrepresented in research.

Conclusion

Knowing that environmental stressors such as perceived discrimination are correlates that affect a person's ability to engage in preventive physical and mental health behaviors (Brody et al., 2010; Clarke et al., 2010), future studies should consider examining the effectiveness of embedding

^aFinding includes racial and nonracial discrimination events.

^{*}p < .05.

coping mechanisms for stress, including perceived discrimination, within interventions for young Black men. It also may be worthwhile to examine the impact of policies that reduce environmental stressors and influence mental health outcomes. Furthermore, future interventions focused on young Black men should consider stress reduction or stress management techniques tailored to Black men. Chung and colleagues (2014) reported that religion and family support were important to coping with depression among Black men. Religion and social support have been identified in the literature as potential protective factors against depression (Hudson et al., 2015). Therefore, it may be important to consider including social support and religious support as preventive measures for or as coping mechanisms for depression.

Additional recommendations should be considered when treating depression in the Black male population. Black men identified several barriers to depression treatment, including norms of masculinity, mistrust of the health care system, and affordability of care (Hudson et al., 2018). These barriers are important to consider when developing culturally appropriate interventions to prevent or treat depression in young Black men. In addition, Black men's depression manifests in unconventional symptoms (e.g., pain, anger attacks, abusive behavior, overworking), which should also be considered. In our study, most men had no health insurance to assist with access to or utilization of health care and depression treatment. To address affordability of treatment, future studies should also consider methods to increase access and utilization to affordable health care for depression treatment.

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