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Neighborhood Social Group Participation and Depressive Symptoms Among Mid-to-Late Life Black Americans: Does the Association Differ by Ethnicity?

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Abstract
This study examined how neighborhood social participation relates to depressive symptoms among middle-aged and older African Americans and Caribbean Blacks. A subsample of African Americans (N = 1616) and Caribbean Blacks (N = 601) age 40 and older were drawn from the National Survey of American Life (NSAL). Ordinary least squares (OLS) regression was used to examine the association between neighborhood social participation and depressive symptoms. In fully adjusted models, non-participation in available neighborhood organizations was associated with higher depressive symptoms among Caribbean Blacks (b = 1.93, p < .01), while neighborhood social participation was unrelated to depressive symptoms among African Americans. Non-participation in available neighborhood group associations is a risk factor for depressive symptoms among middle-aged and older Caribbean Blacks. Future research should assess the correlates of non-participation in available neighborhood organizations, and the mechanisms underlying how non-participation in these organizations relates to the psychological well-being of Caribbean Blacks.

Keywords Neighborhoods · Depressive symptoms · Black/African American · Activity theory · National survey of American life

Introduction

This study examines how neighborhood social participation relates to depressive symptoms among middle-age and older African Americans and Caribbean Blacks. Factors that affect depressive symptoms among self-identified Blacks is important because depression is associated with chronic physical conditions, diminished role functioning, healthcare utilization, and premature mortality [1–3]. In addition to the growth of Caribbean Blacks among the middle-aged and older population of Blacks in the United States, researchers expect the number of older adults suffering from depression and depressive-related conditions to increase. Consequentially, costs for families, Medicare, Medicaid, and other publicly funded programs will proliferate.

Background

The idea that neighborhood social participation might protect against depressive symptoms among middle-aged and older Blacks is consistent with activity theory [4–6]. Activity theory derived from the work of Robert Havinghurst [7], who argued that the social and psychological needs of adults in mid-life were no different from the needs of the young-old and oldest-old. As such, advocates of this perspective contend that feelings of social disengagement and isolation were typical among older adults and likely derived from the loss of social roles and/or loved ones. Building on this theoretical perspective, prior studies have shown the mental health benefits of social participation among older adults across a range of indicators, including volunteering [8] and participation in community-based and/or religious groups [9]. For

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instance, Glass et al. [10] found that social engagement (an index combining formal and informal social activities) was associated with depressive symptoms among respondents 65 years of age and older residing in New Haven, Connecticut. Other studies have shown that participation in social groups is an essential factor that protects against depression among mid-to-late life adults [4].

Despite ongoing interest in the protective role of social participation on depressive symptoms, there are some limitations. First, a long-standing theme in aging research is that neighborhood of residence plays a crucial role in creating opportunities for social engagement or participation as well as promoting mental health among older Blacks. Consistent with this claim, prior research suggests that social assistance protects against depressive symptoms among Black Americans [11–13]. Nevertheless, minority health and aging scholars have only begun to consider the unique effect of neighborhood social group participation on depressive symptoms. Here, we define neighborhood social participation as active involvement in a group or organization within one's neighborhood. We consider the neighborhood to be a salient context for social integration opportunities in mid-to-late life, as older adults spend more time in their homes and communities compared to their relatively younger working counterparts, especially after transitioning out of the workforce [14]. Also, older adults may experience mobility challenges that restrict consistent travel outside the immediate neighborhood of residence [15].

Second, we know little about how the association between neighborhood social participation and health varies by ethnicity among middle-aged and older Blacks. Ethnic diversity among Blacks in mid- to late-life is especially crucial given recent demographic trends: U.S. Census data shows increasing growth among the Black immigrant population in the U.S., especially individuals hailing from Caribbean countries such as Jamaica, Haiti, and Trinidad/Tobago [16, 17]. While an increasing proportion of the U.S. population is immigrant, Black immigrant population growth is twice as fast as the general population [18]. Also, socialization, historical contexts, and lived experiences of Blacks vary significantly by ethnicity and nativity [19]. Middle age and older Blacks in our study were born between 1908 and 1963, an era in which U.S. racial politics were characterized by state-sanctioned violence against Blacks, de jure segregation that justified superior resources in virtually all domains for Whites relative to Blacks, and denial of basic fundamental rights to members of the African American community [20]. Thus, African Americans navigated life in America as marginalized racial subjects, many of whom experienced de jure segregation before passing of desegregation legislation in the 1950s and 1960s.

In contrast, though sharing a history of the enslavement of Africans in their countries of origin, Blacks from the Caribbean were socialized in a context in which they were the racial majority [20]. Furthermore, Black immigrants who arrived in the U.S. after the passing of less restrictive immigration legislation (i.e., The Immigration and Nationality Act of 1965) arrived during an era that was less explicitly racist and xenophobic [20]. Post-1965 Blacks of Caribbean descent arguably experienced one of the most favorable contexts of immigrant reception in U.S. history (Haitians, however, are an exception) [20]. In the 1970s through the present, both Black immigrants and Black natives have been beneficiaries of programs designed to address past injustices (e.g., affirmative action). Still, these two groups of Blacks, in general, have distinct interpretations of the U.S. racial landscape, with Black immigrants viewing the U.S. as a land of economic opportunity and Black natives still reeling from the trauma of racial violence and segregation [20].

Despite these differences in orientation to the American social milieu, both Black immigrants and African Americans experience high levels of racial residential segregation [21–23]. Yet, perceptions of predominantly Black neighborhoods are nuanced by ethnicity and nativity. For instance, while majority-African American neighborhoods are often cast as drug-ridden, violent, and lacking in resources, scholars describe majority-Black immigrant neighborhoods as culturally rich, economically self-sustaining, and abundant in resources [24, 25]. Prior research also suggests that Caribbean Blacks have developed strong immigrant co-ethnic communities in high concentration destinations such as New York City and Boston [20, 26, 27]. This feature of the immigrant experience could make the neighborhood an especially salient site of social integration for Caribbean Blacks. Overall, these distinctions in the experiences of Caribbean Blacks and African Americans may have implications for perceptions of their respective neighborhoods, willingness to participate in neighborhood organizations, and psychological well-being.

Despite limited empirical attention to ethnic diversity among Blacks, the relationship between neighborhood social group participation and depressive symptoms may vary among African Americans and Caribbean Blacks. Research among middle-aged and older Blacks has shown higher levels of depressive symptoms and lower social and religious participation among Caribbean Blacks relative to African Americans [28–32]. Furthermore, Erving and Hills [11] reported a significant inverse association between neighborhood social participation and depressive symptoms for Caribbean Blacks, but not for African Americans. However, the study did not focus on mid-to-late life adults. Marshall-Fabien and Miller [28] also found that social engagement (i.e., closeness to church members, family, and friends) was associated with a lower risk of depression among African American and Caribbean Black older adults. However, this relationship was more substantial for older Caribbean

Blacks. The implication is that perhaps social participation might be more mental health protective for Caribbean Blacks relative to their African American counterparts. Here we assess the extent to which neighborhood social participation is associated with mental health among an ethnically diverse sample of Black adults.

The Present Study

This study fills a critical gap in understanding the social dimensions of depressive symptoms among mid-to-late life adults. Though we are not the first to examine the relationship between neighborhood social participation and mental health among middle-aged and older adults, there are critical differences between the present study and prior research on this issue. First, previous studies tend to draw on samples comprised of younger and middle-aged adults to test claims regarding how neighborhood social participation relates to depressive symptoms [11–13]. In contrast, our study draws on data from a subsample of self-identified Blacks age 40 and above. Second, rather than treat self-identified Blacks as a homogenous group, we adopt a within-group framework to examine whether the link between neighborhood social group participation and depression varies between African Americans and Caribbean Blacks [33]. Based on prior research [10–12, 34], we hypothesize that higher levels of involvement in neighborhood social groups will be associated with lower levels of depressive symptoms among Blacks, and this relationship will be especially pronounced among the Caribbean Blacks in our study.

Methods

Sample

We use the National Survey of American Life (NSAL), a nationally representative sample of American adults living in Black majority population areas [35]. Data were collected between 2001 and 2003. The study includes African Americans, Caribbean Blacks, and non-Hispanic Whites. African Americans self-identify as Black but do not report Caribbean ancestry. Caribbean Blacks self-identify as Black and answered affirmatively to at least one of the following: (1) they were of West Indian or Caribbean descent, (2) they were born in a Caribbean area country (e.g., Haiti or Jamaica), or (3) they had parents or grandparents born in a Caribbean-area country. The NSAL's development was a watershed moment in survey-based research representing a broad cross-section of Caribbean Blacks in the U.S. [32, 35]. Furthermore, NSAL remains one of the few national probability-based data sources that allow for the exploration of within-group ethnic diversity among Black Americans [35, 36]. Individuals age 18 and over residing in households in the coterminous U.S. comprise the study sample [37]. The study does not include individuals living on military bases, institutionalized persons, or non-English speakers [37]. Survey respondents and interviewees were race matched. Interviews lasted an average of 2.3 h. The response rates for African Americans were 70.9% and 77.7% for Caribbean Blacks [37].

A total of 6082 face-to-face interviews were completed: 1621 Caribbean Blacks, 3570 African Americans, and 891 non-Hispanic Whites. For this study, we use the sample of respondents who (1) identified as African American or Caribbean Black, and (2) were 40 years of age or older. We included respondents who provided complete information on all variables (1616 African Americans, 601 Caribbean Blacks).

Dependent Measure

Depressive symptoms are a 12-item version of the Center for Epidemiological Studies Depression (CES-D) scale. Respondents were asked: "Please tell me how often you have felt this way during the past week." Scale item examples include I felt "that everything I did was an effort," "people disliked me," and "depressed." Response categories include "rarely/none of the time (less than 1 day)", "some/little of the time (1–2 days)", "occasionally/a moderate amount of the time (3–4 days)", and "most/all of the time (5–7 days)." We created an additive scale for the CES-D 12; scores range from 0 to 33. Higher values indicate more significant depressive symptoms. The Cronbach's alpha is high for African Americans (.79) and Caribbean Blacks (.76), an indication of high internal consistency across the items that comprise CES-D 12.

Independent Measure

We use two survey questions to develop *neighborhood social participation*: "Are there any groups in this neighborhood such as block clubs, community associations, social clubs, helping groups and so forth?" and "Are you involved with any of these groups?" We merged these questions and included three response categories: No Groups (reference), Yes, but no participation, and Yes, and participation. Eighty-two respondents reporting "Don't Know" were excluded from the analyses.

Controls

Various sociodemographic factors are associated with mental health. Thus, we include controls for *age* (40–93 years) and *gender* (female = 1). For the Caribbean Black sample, we control for nativity status (foreign-born = 1). *Region*

distinguishes among those living in the South [reference], Northeast, Midwest, and West). *Relationship status* categories include married/cohabiting (reference), never married, and divorced/separated/widowed. The number of *children living in the household* has a range of 0–4 or more.

Neighborhood Factors

In addition to assessing neighborhood social participation, we also account for other neighborhood factors that may be linked to mental health. *Homeownership* is a binary outcome (homeowners = 1). Perceived *number of resources* (0–7) available in the neighborhood included yes/no responses to whether respondents have the following in their neighborhood: park/playground/open space, a big supermarket where you can buy food, a medical clinic or health service, a bank/credit union, a check cashing or currency exchange outlet, a police station or sub-station, and a public library. *The presence of crime* in the neighborhood asked the following: "how often are there problems with muggings, burglaries, assaults, or anything else like that in your neighborhood?" Response options included: Never (1), hardly ever (2), not too often (3), fairly often (4), and very often (5). *The presence of drugs* in the neighborhood was measured with the question, "How much of a problem is the selling and use of drugs in your neighborhood?" Response options were not serious at all (1), not too serious (2), fairly serious (3), and very serious (4). *Contact with neighbors frequency* queried respondents: "How often do you get together with any of your neighbors, that is, either visiting at each other's homes or going places together?" Response options were: Never (1), A few times a year (2), At least once a month (3), A few times a month (4), At least once a week (5), and Nearly every day (6) *Difficulty with neighbors* is assessed by the question: "Have you ever moved into a neighborhood where neighbors made life difficult for you or your family?" (yes = 1).

Socioeconomic Status

Our measures of socioeconomic status (SES) include education and employment status. *Education* is measured in years, ranging from 4 to 17 or more. *Employment status* distinguishes among those not in the labor force (reference category), employed, and unemployed.

Analysis

First, descriptive statistics and differences in means tests are performed to identify group differences across study measures. Second, consistent with the within-group analytic approach [38], we used ethnicity-stratified models (i.e., separate models for African Americans and Caribbean Blacks) to assess the association between neighborhood social participation and depressive symptoms. Also, we explored the role of nativity status (i.e., whether Caribbean respondents were foreign-born, or U.S. born) further in ancillary analyses. However, the U.S.-born Caribbean sample size was significantly smaller (N = 118) than the foreign-born Caribbean sample (N = 483), thereby preventing us from producing reliable estimates for the U.S.-born Caribbean sample alone. We tested, however, for statistical interactions between foreign-born status and neighborhood social participation in the Caribbean Black models, and neither of these interactions was statistically significant. Among foreign-born Caribbean Blacks, 52% have resided in the U.S. 20 or more years, 20% for 11–20 years, 5% for 5–10 years, and 3.5% for less than 5 years. Thus, this sample of foreign-born Caribbean Blacks tends to be longtime residents of the U.S.

Ordinary least squares (OLS) regression is used to analyze depressive symptoms; however, the negative binomial regression approach yields similar results (available upon request). For each set of regression analyses, in Model 1, we include only the critical measure of interest: neighborhood social participation. In Model 2, we adjust for sociodemographic characteristics associated with mental health: age, gender, foreign-born status (for Caribbean Blacks only), region, marital status, and whether children are living in the household. Model 3 includes other neighborhood characteristics that potentially are related to both neighborhood social participation and mental health: homeownership, number of neighborhood resources, perceived presence of neighborhood crime and drugs, contact with neighbors, and difficulty with neighbors. Last, Model 4 adjusts for two measures of SES: education and employment status.

Due to the complex sampling strategy employed to collect NSAL data, survey procedures are used to correct for unequal probabilities of selection, nonresponse, and design effects. As such, coefficient estimates are adjusted for the sophisticated sampling design of the NSAL by using the ''svy'' commands in Stata S.E., 14.2 [39]. The University of Michigan's IRB approved the NSAL study.

Results

Table 1 includes descriptive statistics for African Americans and Caribbean Blacks. Both groups report low depressive symptoms and do not significantly differ from each other. Both ethnic groups report similar levels of participation: 15% for African Americans and 17% for Caribbean Blacks. A higher proportion of African Americans report there are no groups (55%) compared to Caribbean Blacks (37%). However, a higher proportion of Caribbean Blacks report groups in their neighborhood, but they do not participate (46%) compared to African Americans (30%).

Table 1 Weighted sample characteristics by ethnicity *Source* National Survey of American Life, 2001–2003

	African Americans (N = 1616)	Caribbean Blacks (N = 601)	
	Mean (SD)	Mean (SD)	Range
Depressive symptoms	6.17 (5.96)	5.90 (5.39)	0–33
Neighborhood group participation, %			
No groups (reference)	.55[a]	.37	0,1
Yes, no participation	.30[a]	.46	0,1
Yes and participation	.15	.17	0,1
Controls			
Age (years)	54.20 (11.83)	53.54 (11.24)	40–93
Female, %	.55[a]	.42	0,1
Foreign-born, %	–	.80	0,1
Region, %			
South (reference)	.57[a]	.28	0,1
Northeast	.15[a]	.57	0,1
Midwest	.18[a]	.05	0,1
West	.11	.10	0,1
Relationship status, %			
Married/cohabiting (reference)	.47[a]	.60	0,1
Never married	.12	.11	0,1
Divorced/separated/widowed	.41[a]	.29	0,1
Children in household	.29 (.64)	.40 (.72)	0–4
Neighborhood characteristics			
Homeowner, %	.61	.56	0,1
# Neighborhood resources	4.77 (2.32)[a]	5.42 (1.63)	0–7
Neighborhood crime	2.50 (1.17)	2.52 (1.07)	1–5
Neighborhood drugs	2.31 (1.13)	2.21 (1.05)	1–4
Contact with neighbors	3.12 (1.90)	3.28 (1.79)	1–6
Difficulty with neighbors, %	.08[a]	.03	0,1
SES			
Education (in years)	12.27 (2.83)[a]	12.78 (3.09)	4–17
Employment status, %			
Unemployed (reference)	.07	.06	0,1
Employed	.60[a]	.72	0,1
Not in labor force	.34[a]	.22	0,1

[a]Indicates statistically significant difference between African Americans and Caribbean Blacks at the $p < .05$ level

We also find significant differences in some controls. African American respondents are more likely to be female (55%) relative to Caribbean Blacks (42%). African Americans are more likely to reside in the South (57%) and Midwest (18%), while Caribbean Blacks are more concentrated in the Northeast (57%) and South (28%). A higher proportion of Caribbean Blacks are married/cohabiting (60%) relative to African Americans (47%). African Americans experience higher rates of being divorced/separated/widowed (41% versus 29% for Caribbean Blacks).

For neighborhood characteristics, Caribbean Blacks perceive a higher mean number of neighborhood resources (5.42, SD = 1.63) compared to African Americans (4.77, SD = 2.32). Also, a higher proportion of African Americans report difficulty with neighbors (8% versus 3% for Caribbean Blacks). In terms of SES, Caribbean Blacks have higher educational attainment with an average of 12.78 years of education (SD = 3.09), while African Americans have 12.27 years of education (SD = 2.83). Employment is higher for Caribbean Blacks (72%) relative to African Americans (60%), while not being in the labor force is higher for African Americans (34% versus 22% for Caribbean Blacks).

African Americans

As shown in Table 2, in the unadjusted model (1), neighborhood social participation was associated with fewer depressive symptoms for African Americans (b = − 1.45, p < .01). After adjusting for sociodemographic factors (Model 2) and other neighborhood characteristics (Model 3), the association between neighborhood social participation and depressive symptoms remains. However, after adjustments for SES (Model 4), the association is no longer significant. In comparing Models 3 and 4, the coefficient for neighborhood group participation is reduced by 63% (− 1.16 to − .42/− .1.16), suggesting that SES factors account for the association between neighborhood participation and depressive symptoms for African Americans.

Caribbean Blacks

In Table 3, the unadjusted model (1) shows that participation in neighborhood groups (yes and participation) is associated with fewer depressive symptoms (b = − 1.30, p < .05). After adjusting for controls in Models 2, the magnitude of the coefficient for neighborhood group participation increases (b = − 2.04, p < .05), and non-participation (i.e., yes, no participation) emerges as statistically significant. Respondents who report non-participation experience higher depressive symptoms relative to those who say no neighborhood groups (b = 1.13, p < .05). After adjusting for other neighborhood characteristics (Model 3), the positive relationship between neighborhood participation and depressive symptoms remains significant (b = − 2.16, p < .05). At the same time, non-participation is associated with higher depressive symptoms (b = 1.24, p < .05). Though the association between neighborhood participation and depressive symptoms falls to non-significance after adjusting for SES (Model 4), non-participation in neighborhood social groups remains a significant predictor of higher depressive symptoms among middle-aged and older Caribbean Blacks (b = 1.93, p < .01).

Discussion

Though numerous studies have examined the association between social participation and health among middle-aged and older adults in the United States [40–42], we know little about how neighborhood social participation influences the mental health of ethnically diverse Black Americans. To address this gap in the literature, this study examined whether neighborhood social participation was associated with depressive symptoms of middle-age and older African Americans and Caribbean Blacks. Our results are both consistent and inconsistent with the broader literature on neighborhood social participation and psychological well-being.

Table 2 OLS regression coefficients for effect of neighborhood groups participation on depressive symptoms, African Americans (N = 1616) *Source* National Survey of American Life, 2001–2003

	Model 1	Model 2	Model 3	Model 4
Yes, no participation[d]	− .45	− .64	− .44	− .00
	(.39)	(.37)	(.32)	(.30)
Yes and participation	− 1.45[b]	− 1.40[b]	− 1.16[b]	− .42
	(.45)	(.39)	(.37)	(.35)
Age (years)		− .08[c]	− .07[c]	− .14[c]
		(.01)	(.01)	(.02)
Female		.63[a]	.70[b]	.64[b]
		(.26)	(.24)	(.22)
Northeast[d]		− .04	− .78	− .25
		(.63)	(.57)	(.50)
Midwest		.39	− .14	.21
		(.54)	(.42)	(.41)
West		− .00	.16	.66
		(.85)	(.68)	(.64)
Never married[d]		1.70[a]	.99	.89
		(.62)	(.59)	(.58)
Divorced/separated/widowed		.87[a]	.33	.20
		(.33)	(.34)	(.35)
Children in household		− .21	− .20	− .32
		(.25)	(.23)	(.22)
Homeowner			− 1.15[a]	− .56
			(.49)	(.45)
# Neighborhood resources			− .29[b]	− .19[a]
			(.09)	(.07)
Neighborhood crime			.49[a]	.45
			(.22)	(.22)
Neighborhood drugs			.57[a]	.44
			(.23)	(.22)
Contact with neighbors			− .16[a]	− .25[b]
			(.08)	(.08)
Difficulty with neighbors			.69	.80
			(.52)	(.48)
Education (in years)				− .42[c]
				(.05)
Employed[d]				− 2.06[b]
				(.69)
Not in labor force				.26
				(.63)
Constant	6.53[c]	9.92[c]	9.73[c]	19.55[c]
	(.28)	(.86)	(1.22)	(1.80)

Standard errors in parentheses

[a] $p < 0.05$

[b] $p < 0.01$

[c] $p < 0.001$

[d] The reference categories for Neighborhood groups participation, region, relationship status, are employment status are no groups, South, married/cohabiting, and unemployed, respectively

Table 3 OLS regression coefficients for effect of neighborhood participation on depressive symptoms, Caribbean blacks (N = 601) *Source* National Survey of American Life, 2001–2003

	Model 1	Model 2	Model 3	Model 4
Yes, no participation[d]	1.83	1.13[a]	1.24[a]	1.93[b]
	(1.13)	(.48)	(.50)	(.61)
Yes and participation	− 1.30[a]	− 2.04[a]	− 2.16[a]	− 1.50
	(.58)	(.82)	(.96)	(.96)
Age (years)		− .01	− .010	− .11
		(.05)	(.06)	(.06)
Female		− .19	.02	.13
		(1.25)	(1.19)	(1.04)
Foreign-born		− 1.39	− 1.15	− .97
		(.92)	(.80)	(1.09)
Northeast[d]		− .33	− .47	− .72
		(1.59)	(1.51)	(1.53)
Midwest		7.98	7.28	5.37
		(5.07)	(5.38)	(4.53)
West		− .49	− 1.00	1.54
		(1.74)	(2.21)	(1.96)
Never married[d]		3.41[a]	2.99	2.49
		(1.56)	(1.46)	(1.33)
Divorced/separated/widowed		− 1.08	− 1.27	− 1.24
		(1.64)	(1.37)	(1.52)
Children in household		.01	− .06	− .39
		(.68)	(.60)	(.52)
Homeowner			− .55	− .03
			(1.35)	(1.23)
# Neighborhood resources			− .12	− .11
			(.24)	(.20)
Neighborhood crime			.18	− .20
			(.80)	(.55)
Neighborhood drugs			.04	.18
			(.62)	(.45)
Contact with neighbors			.26	.17
			(.35)	(.28)
Difficulty with neighbors			1.81	2.24
			(1.33)	(1.29)
Education (in years)				− .49[c]
				(.11)
Employed[d]				2.45
				(1.27)
Not in labor force				6.28[b]
				(1.77)
Constant	5.29[c]	7.23[a]	6.62[a]	15.00[c]
	(.79)	(3.10)	(2.75)	(3.38)

Standard errors in parentheses

[a] $p < 0.05$

[b] $p < 0.01$

[c] $p < 0.001$

[d] The reference categories for Neighborhood groups participation, region, relationship status, are employment status are no groups, South, married/cohabiting, and unemployed, respectively

Generally, we find that neighborhood social participation is associated with the mental health of Black Americans, but in distinct ways that differ by ethnic group membership.

First, for African Americans, the association between neighborhood social participation and depressive symptoms was no longer significant after adjusting for SES factors (i.e., education and employment status). Thus, participation in neighborhood-based groups might be beneficial for only a subset of the Black older population, with education being a primary form of stratification impacting how the neighborhood is experienced by its residents. In other words, neighborhood participation's role in shaping depressive symptoms is conditional on socioeconomic status. This finding is consistent with a broader literature which suggests that participation, particularly civic and social, is primarily accessed by the most elite Black Americans, especially those who are highly educated and have available time and resources to engage in groups within the neighborhood context [43, 44].

Second, we uncover that levels of non-participation (i.e., groups were available, but respondents did not participate) were high for Caribbean Blacks (45.9%), and non-participation was associated with higher depressive symptoms. Perhaps Caribbean Blacks may be less likely to participate in available neighborhood-based organizations because it may be challenging to locate organizations that appeal to their unique preferences and specific ethnic needs. This difficulty could potentially diminish a sense of community belongingness, increase social isolation, and, in turn, have a negative effect on mental health. Thus, Caribbean Black older adults may psychologically suffer from *neighborhood non-participation*, given that a large percentage report the presence of neighborhood groups but do not participate in these organizations.

Our results lend support to the broader literature on activity theory, which suggests that higher levels of participation in social activity are beneficial for psychological health. However, the results present additional nuance both for middle-age and older African Americans and Caribbean Blacks. For African Americans, neighborhood participation, in particular, is beneficial for psychological health, albeit conditional on SES, which suggests that other forms of social participation might be mental health-protective for African Americans across the socioeconomic spectrum. These different forms of social participation could include but are not limited to, participation in religious organizations, familial relationships, and close-knit friendship networks [36].

Among Caribbean Blacks, non-participation in available organizations is linked to poor psychological health. Perhaps communities can develop culturally tailored approaches to involve older Caribbean Blacks in the social life of the neighborhood. Some cities have developed neighborhood outreach programs to support older adults in their communities to reduce social isolation and strengthen social ties

within the population [45]. A Sacramento-based program formed Caring Neighborhoods groups. These groups contact and offer assistance to older adults in their neighborhood (e.g., running errands, making in-home social visits, personally inviting older residents to neighborhood events), and meet regularly to share and discuss ideas to address relevant aging-related issues in their neighborhood [45]. Likewise, neighborhood organizations historically played a central role in the communal life of Caribbean Black neighborhoods in New York [26, 27] by providing opportunities for political, social, and charitable engagement. Thus, for Caribbean Blacks, in particular, non-participation in available neighborhood organization may be especially demoralizing if such organizations facilitate critical social connections within the neighborhood that they may otherwise be unable to access.

In sum, our findings build upon and contribute additional nuance to the broader empirical base engaging activity theory by assessing the association between psychological health and a contextually-specific form of social participation (i.e., within the neighborhood), and examining within-group distinctions within the older Black population, a demographic group most susceptible to depression [46]. Despite the study's strengths, several limitations should be noted. First, the survey does not include information on the specific types of organizations in which Blacks are participating. Future work should assess the particular types of groups in which respondents are participating, as neighborhood organization type could differentially impact the psychological health of midlife and older Black Americans. Second, given the cross-sectional nature of the analysis, reverse causality is plausible. In other words, those with high depressive symptoms might be less likely to participate in neighborhood groups. However, the broader literature on social integration suggests that social causation is more likely than social selection [47]. Third, there may be urban–rural differences in neighborhood group participation; proximity to neighborhood groups would be contingent on whether one lives in an urban or rural area. Fourth, while we showed that neighborhood social non-participation was associated with poor mental health for Caribbean Blacks, future research should examine the effect of neighborhood social participation on other types of mental health outcomes.

New Contribution to the Literature

This study builds on a small but growing literature that recognizes ethnic heterogeneity within the U.S. Black population. Here, we demonstrated that the neighborhood social participation-mental health association differed for African Americans and Caribbean Blacks, an indication that future research on health and aging processes among Black Americans should take into account this significant form of intra-racial variation. As the U.S. population continues to age, and the number of Caribbean Black older adults increases, we beckon researchers to more seriously engage ethnic diversity within a minority group that is often studied monolithically.

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References

1. Kessler RC. The costs of depression. Psychiatr Clin. 2012;35(1):1–14.
2. Pratt LA, Brody DJ. Depression in US household population, 2009–2012 (NCHS Data Brief #172). Hyattsville, MD: Centers for Disease Control and Prevention; 2014.
3. World Health Organization. "Depression." 2018. https://www.who.int/news-room/fact-sheets/detail/depression. Accessed 27 June 2020.
4. Adams KB, Leibbrandt S, Moon H. A critical review of the literature on social and leisure activity and wellbeing in later life. Ageing Soc. 2011;31:683–712.
5. Lemon BW, Bengtson VL, Peterson JA. An exploration of the Activity Theory of Aging: activity types and life satisfaction among in-movers to a retirement community. J Gerontol. 1972;27(4):511–23.
6. Longino CF, Kart CS. Explicating activity theory: a formal replication. J Gerontol. 1982;37(6):713–22.
7. Havighurst RJ. Successful aging. Process Aging: Soc Psychol Perspect. 1963;1:299–32020.
8. Musick MA, Wilson J. Volunteering and depression: the role of psychological and social resources in different age groups. Soc Sci Med. 2003;56(2):259–69.
9. Taylor RJ, Chatters LM, Levin J. Religion in the lives of African Americans: social, psychological, and health perspectives. Thousand Oaks, CA: Sage Publications; 2003.
10. Glass TA, Mendes de Leon CF, Bassuk SS, Berkman LF. Social engagement and depressive symptoms in late life. J Aging Health. 2006;18(4):604–28.
11. Erving CL, Hills O. Neighborhood social integration and psychological well-being among African Americans and Afro-Caribbeans. Race Soc Probl. 2019;11(2):133–48.
12. Gary TL, Stark SA, LaVeist TA. Neighborhood characteristics and mental health among African Americans and whites living in a racially integrated urban community. Health Place. 2007;13:569–75.
13. Haines VA, Beggs JJ, Hurlbert JS. Neighborhood disadvantage, network social capital, and depressive symptoms. J Health Soc Behav. 2011;52(1):58–73.
14. Joint Center for Housing Studies of Harvard University. Housing America's older adults 2018: a supplement to the state of the nation's housing report. 2018. https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Housing_Americas_Older_Adults_2018_1.pdf. Accessed 1 July 2020.
15. White DK, Jette AM, Felson DT, Lavalley MP, Lewis CE, Torner JC, Nevitt MC, Keysor JJ. Are features of the neighborhood environment associated with disability in older adults? Disabil Rehabil. 2010;32(8):639–45.
16. Rastogi S, Johnson, TD, Hoeffel, EM, Drewery, MP. The Black Population: 2010. 2010 Census Briefs: United States Census Bureau; September 2011.

17. Thomas, KJA. A demographic profile of Black Caribbean immigrants in the United States. The Migration Policy Institute's National Center on Immigrant Integration Policy; 2012. p. 1–21.
18. Anderson M, López G. Key facts about black immigrants in the U.S. 2018; Pew Research Center. https://www.pewresearch.org/fact-tank/2018/01/24/key-facts-about-black-immigrants-in-the-u-s/
19. Waters MC, Kasinitz P, Asad AL. Immigrants and African Americans. Ann Rev Sociol. 2014;40:369–90.
20. Hamilton T. Immigration and the remaking of Black America. New York: Russell Sage Foundation; 2019.
21. Freeman L. Does spatial assimilation work for black immigrants in the US? Urban Stud. 2002;39(11):1983–2003.
22. Hall M. Residential integration on the new frontier: immigrant segregation in established and new destinations. Demography. 2013;50:1873–96.
23. Parisi D, Lichter DT, Taquino MC. Multi-scale residential segregation: Black exceptionalism and America's changing color line. Soc Forces. 2011;89:829–52.
24. Ebaugh HR, Curry M. Fictive kin as social capital in new immigrant communities. Sociol Perspect. 2000;43(2):189–209.
25. Waters MC. Black identities West Indian immigrant dreams and American realities. New York: Russell Sage Foundation; 1999.
26. Bashi VF. Survival of the knitted: immigrant social networks in a stratified world. Stanford: Stanford University Press; 2007.
27. Kasinitz P. Caribbean New York: Black immigrants and the politics of race. Ithaca: Cornell University Press; 1992.
28. Marshall-Fabien GL, Miller DB. Exploring ethnic variation in the relationship between stress, social networks, and depressive symptoms among older black Americans. J Black Psychol. 2016;42(1):54–72.
29. Chatters LM, Taylor RJ, Bullard KM, Jackson JS. Race and ethnic differences in religious involvement: African Americans, Caribbean blacks, and non-Hispanic whites. Ethn Racial Stud. 2009;32(7):1143–63.
30. Lincoln KD, Taylor RJ, Chae DH, Chatters LM. Demographic correlates of psychological well-being and distress among older African Americans and Caribbean black adults. Best Pract Ment Health. 2010;6(1):103–26.
31. Nguyen AW. Variations in social network type membership among older African Americans, Caribbean Blacks, and Non-Hispanic Whites. J Gerontol: Soc Sci. 2017;72(4):716–26.
32. Taylor RJ, Chatters LM, Jackson JS. Religious and spiritual involvement among older African Americans, Caribbean blacks, and non-Hispanic whites. J Gerontol: Soc Sci. 2007;62B(4):S238–S250250.
33. Griffith DM, Neighbors HW, Johnson J. Using national data sets to improve the health and mental health of Black Americans: challenges and opportunities. Cult Divers Ethn Minor Psychol. 2009;15(1):86–95.
34. Echeverría S, Diez-Roux AV, Shea S, Borrell LN, Jackson S. Associations of neighborhood problems and neighborhood social cohesion with mental health and health behaviors: the Multi-Ethnic Study of Atherosclerosis. Health Place. 2008;14:853–65.
35. Jackson JS, Neighbors HW, Nesse RM, Trierweiler SJ, Torres M. Methodological innovations in the National Survey of American Life. Int J Methods Psychiatr Res. 2004;13(4):289–98.
36. Taylor RJ, Chatters LM, Taylor HO. Race and objective social isolation: older African Americans, Black Caribbeans, and Non-Hispanic Whites. J Gerontol: Soc Sci. 2018. https://doi.org/10.1093/geronb/gby114.
37. Heeringa SG, Wagner J, Torres M, Duan N, Adams T, Berglund P. Sample designs and sampling methods for the Collaborative Psychiatric Epidemiology Studies (CPES). Int J Methods Psychiatr Res. 2004;13(4):221–40.
38. Whitfield KE, Allaire JC, Belue R, Edwards CL. Are comparisons the answer to understanding behavioral aspects of aging in racial and ethnic groups? J Gerontol Ser B. 2008;63(5):P301–P308308.
39. StataCorp. Stata Statistical Software: Release 14. College Station, TX: StataCorp; 2015.
40. Bassuk SS, Glass TA, Berkman LF. Social disengagement and incident cognitive decline in community-dwelling elderly persons. Ann Intern Med. 1999;131(3):165–73.
41. Fabrigoule C, Letenneur L, Datigues JF, Zarrouk M, Commenges D, Barberger-Gateau P. Social and leisure activities and risk of dementia: a prospective longitudinal study. J Am Geriatr Soc. 1995;43:485–90.
42. Mendes de Leon CF, Glass TA, Berkman LF. Social engagement and disability in a community population of older adults: the New Haven EPESE. Am J Epidemiol. 2003;157(7):633–42.
43. Lacy KR. Blue-chip black: race, class, and status in the new black middle class. Berkeley and Los Angeles, CA: University of California Press; 2007.
44. Lacy KR. "A part of the neighbourhood?": negotiating race in American suburbs. Int J Sociol Soc Policy. 2002;22(1/2/3):39–74.
45. City of Sacramento Parks and Recreation Older Adult Services. Caring neighborhoods: guidelines for neighborhood outreach to support aging in the community. ActTogetherNow.org. https://www.cityofsacramento.org/-/media/Corporate/Files/ParksandRec/OAS/Caring-Neighborhoods/Publications/CN_Guidelines_updatedJune2016/CNGuidelines_complete_updated061016-final.pdf?la=en. Accessed 1 July 2020.
46. Rodriguez EJ, Gregorich SE, Livaudais-Toman J, Pérez-Stable EJ. Coping with chronic stress by unhealthy behaviors: a re-evaluation among older adults by race/ethnicity. J Aging Health. 2017;29(5):805–25.
47. Thoits PA. Mechanisms linking social ties and support of physical and mental health. J Health Soc Behav. 2011;52(2):145–61.