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Social Isolation from Family and Friends and Mental Health among African Americans and Black Caribbeans

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Abstract

Social isolation is a significant social problem in the United States that many health and welfare organizations have begun to acknowledge and address. Unfortunately, extremely little research focuses on social isolation among ethnic minority populations. This study investigated the association between social isolation from family and friends and the mental health of African Americans and Black Caribbeans. Using data from the National Survey of American Life (2001–2003), we explore two indicators of mental health: depressive symptoms (CES-D) and serious psychological distress (Kessler 6). The negative binomial regression analysis examined both objective isolation (infrequent contact) and subjective isolation (lack of emotional closeness) from family and friends. Overall study findings indicated that infrequent contact (objective social isolation) and diminished emotional closeness (subjective social isolation) from family and friends were associated with higher levels of depressive symptoms and serious psychological distress for both African Americans and Black Caribbeans. The addition of subjective social isolation to regression models attenuated the association between objective social isolation and depressive symptoms for both groups. However, the addition of subjective social isolation attenuated the association between serious psychological distress for African Americans but not for Black Caribbeans. These findings contribute to the very limited, but growing body of research on the negative association between social isolation and the mental and physical health of ethnic minorities.

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Keywords

Social Support; Black Family; Depression; Well-being

Public Policy Relevance: Objective and subjective social isolation is harmful to the mental health of African Americans and Black Caribbeans. However, affective features of social isolation (lacking feelings of closeness to family members and friends) are more important than social contact with family and friends for mental health. Policies targeting both subjective isolation (e.g., changing perceptions of closeness to family members and friends) and objective isolation (increasing frequency of contact with family members and friends) are important in reducing symptoms of depression and psychological distress. Policy and practice efforts that focus on interventions that strengthen social integration and connections can yield benefits in terms of mental health and well-being.

Social relationships, particularly high-quality relationships, are sources of social support, affection, and a sense of social connectedness. Exchanges of material, informational, and psychological resources in social relationships are important for effectively coping with life stressors. Social relationships are considered powerful resources in coping with stressors and play an important role in shaping both physical and mental morbidity and mortality patterns (Lubben et al., 2015). In contrast, social isolation (i.e., a lack of social relationships and social connections) is recognized as an important social problem affecting diverse groups within the U.S. population. Due to its association with poor health outcomes and mortality, social isolation is gaining prominence and attention from national and global organizations (e.g., National Academy of Medicine, AARP, World Health Organization).

Social isolation is recognized as being comprised of both objective and subjective components that represent related, but distinct experiences (Cornwell & Waite, 2009; Courtin & Knapp, 2017; Coyle & Dugan, 2012; de Jong Gierveld, et al., 2006; Elder & Retrum, 2012). Objective social isolation has been variously defined as the amount of contact with family members and friends, the size of one's social network, and/or an individual's level of social engagement (Steptoe et al., 2013). Subjective social isolation, in contrast, is conceptualized as a felt inadequacy of or dissatisfaction with social interactions. Subjective social isolation is sometimes defined operationally as loneliness or perceptions of inadequate emotional closeness with members of one's social network (Taylor et al., 2018). Nonetheless, research on objective and subjective social isolation typically examines their relation to physical health, with only limited information pertaining to mental health (e.g., depression). Further, available studies focus primarily on non-Hispanic whites, leaving unanswered questions regarding both the extent and correlates of social isolation among racial and ethnic minority populations in the U.S.

The current study addresses these gaps by its focus on objective and subjective social isolation and their associations with depressive symptoms and serious psychological distress among African Americans and Black Caribbeans in the U.S. The literature review begins with an overview of research on social isolation in relation to physical and mental health status. This is followed by research on social isolation among African Americans and Black

Caribbeans and a review of available data specifically focused on social isolation and mental health.

Social Isolation and Mental and Physical Health

Social isolation, both objective and subjective, is associated with adverse physical health states (see reviews by Lubben et al., 2015 and Klinenberg, 2016), including worse self-rated health (Cornwell & Waite, 2009; Coyle & Dugan, 2012), higher rates of mortality (Berkman & Syme, 1979; LaVeist et al., 1997; Pantell et al., 2013; Holt-Lunstad et al., 2015), diabetes, arthritis, emphysema, liver disease, kidney disease (Tomaka, Thompson, & Palacios, 2006), and chronic inflammation (Yang et al., 2013). In fact, the health consequences of social isolation are described as being comparable to smoking 15 cigarettes per day (Holt-Lunstad, et al., 2010).

Research on social isolation and mental health outcomes, although less extensively examined than physical health (Courtin & Knapp, 2017), similarly indicates a strong negative association with mental health and well-being (Cornwell & Waite, 2009; Coyle & Dugan, 2012; Miyawaki et al., 2015). Social isolation is associated with higher levels of depressive symptoms (Cornwell & Waite, 2009) and psychological distress (Taylor et al., 2018), as well as a greater likelihood of having a mental health disorder (Coyle & Dugan, 2012) and cognitive decline (Shankar et al., 2013). Finally, evidence confirms that objective and subjective social isolation have different relationships to mental health (Cornwell & Waite, 2009). Subjective social isolation has a stronger association with mental health status and mediates the relationship between objective isolation and mental health, suggesting that subjective social isolation may be more important for mental health outcomes (Cornwell & Waite, 2009). Collectively, these data confirm that: 1) loneliness and social isolation are recognized as valid and distinct states of being that affect significant numbers of Americans and 2) the quality of social relationships are important contributors to perceptions of social isolation and loneliness.

Social Isolation and Mental Health: African Americans and Black Caribbeans

Research on social isolation in relation to mental health and well-being has special relevance for African Americans and Black Caribbeans for several reasons. First, African Americans are members of a marginalized and socially disadvantaged racial minority group within U.S. society. As such, African Americans experience additional stressors (e.g., discrimination, economic disadvantage) and life circumstances (e.g., degraded physical neighborhood and community environments) that are recognized risk factors for poor mental health status (Redwood et al., 2010; Ross & Mirowsky, 2001; Schulz et al., 2002). Second, informal social networks and the resources they provide figure prominently in the lives of African Americans who rely on family and peer (friends, church members) networks in handling daily stressors and coping with adverse life circumstances (Nguyen, Chatters & Taylor, 2016; Taylor et al., 2013). A substantial body of research describes the structure, sociodemographic correlates and functioning of family and friend social support networks and their role in the provision of needed material resources and services, information, and

psychosocial support (Cross et al., 2018; Lincoln, Chatters, & Taylor, 2005; Sarkisian & Gerstel, 2004; Taylor, Jackson, & Chatters 1997; Taylor, Taylor and Chatters, 2016). Given this, social isolation from family and friend relationships potentially limits the availability of material and psychosocial assets that directly support health and are important resources for coping with life problems.

A review of available information reveals that only a few studies specifically examine social isolation in relation to mental health and well-being among African Americans (Miyawaki, 2015; Snowden, 2001). Miyawaki's (2015) study of older Whites, Hispanics, and Blacks, found that objective isolation and subjective isolation were significantly associated with worse self-rated mental health among Whites and Hispanics. However, only subjective social isolation was significantly associated with worse self-rated mental health among Blacks. Snowden (2001) found that higher social embeddedness (i.e., interaction with friends and participation in groups and community organizations) was protective of psychological distress among both African Americans and Whites. Taylor and colleagues (2016) identified several sociodemographic correlates (gender, marital status, region and education) of objective social isolation among African Americans.

Social isolation is of special interest for Black Caribbeans for a number of reasons. For Black Caribbeans, immigrant status and immigrant generation (i.e., first- and subsequent generation Caribbean American) have important consequences for the composition, geographic dispersion of kin (i.e., transnational families), and the availability of social networks [Transnational families have members that live in several different countries. For instance, family members may reside in the home city of Kingston, Jamaica, as well as Brooklyn, London and Toronto (Bashi, 2007)]. Network composition, proximity, and availability are all factors that have known associations with frequency of contact with and degree of emotional closeness to family members (Taylor et al., 2017). Black Caribbeans' experiences as members of transnational families have given rise to distinctive cultural attitudes, expectations and network adaptations and arrangements in regards to social connections and interactions (Bashi, 2007; Taylor et al., 2017). This includes providing monetary and material remittances to family in the home country, as well as child fostering practices that allow parents to work in the U.S. (Bashi, 2007). Finally, Black Caribbeans within the U.S. are routinely subsumed under the racial category of 'Black' in both daily life and research practices (Foner, 2001; Vickerman, 2001; Waters, 1999). This is despite the fact that Black Caribbeans and African Americans have different cultural backgrounds and are dissimilar with respect to select sociodemographic factors (e.g., marital status, income, education) that are associated with social relationships and health. Nonetheless, race and racism are primary social experiences that have a profound influence on the immigration experiences of Black Caribbeans (Bashi, 2007; Foner, 2001; Vickerman, 2001; Waters, 1999). As such, connections to social networks and relationships are important for Black Caribbeans as they navigate life experiences as both immigrants and as members of a racially disadvantaged social group. In sum, among both African Americans and Black Caribbeans, family and friend connections are important resources for tangible goods and services and psychosocial supports. Social isolation from family and friends, however, may prevent individuals from accessing and using valuable resources for coping with life problems, with possible consequences for their mental health.

Despite compelling evidence for associations between social isolation and health, research examining social isolation among racial and ethnic minority groups in the U.S. is limited (Samuel et al., 2018). A broadened research focus on racial and ethnic minority populations would provide information about the overall prevalence of social isolation, its sociodemographic correlates, and its relation to mental health outcomes within and across diverse groups. Research specifically focused on Black Caribbeans and native-born African Americans can help establish the prevalence of social isolation for these groups, identify potential ethnic and cultural factors that distinguish their experiences with social isolation, and help better understand how social isolation is associated with mental health for both groups.

Purpose of the Study

The present study extends prior research on social isolation and health by examining social isolation from family and friends and depressive symptoms and psychological distress within a national sample of African American and Black Caribbean adults. The availability of a large and representative sample of African Americans and Black Caribbeans provides the opportunity to explore social isolation relationships within the entire adult age range, controlling for sociodemographic factors that have known associations with social isolation and mental health. The study is unique in that it examines objective and subjective social isolation to clarify their independent associations with depressive symptoms and psychological distress and, further, examines social isolation from family vs. friends to assess their individual associations with mental health status. Separate analyses for African Americans and Black Caribbeans permit the examination of potential differences in relationships between objective vs. subjective social isolation and depressive symptoms and psychological distress, while controlling for relevant sociodemographic factors.

Guided by prior research findings, several hypothesized associations between social isolation and the two measures of mental health are offered. We anticipate that in separate regressions, measures of objective and subjective social isolation will be risk factors for both depressive symptoms and serious psychological distress. We also expect that objective and subjective social isolation will be risk factors for depressive symptoms and serious psychological distress for both African Americans and Black Caribbeans. These expectations are based on research indicating that the informal support networks of African Americans and Black Caribbeans have similar characteristics and functions (Taylor et al., 2013). However, one major difference between African American and Black Caribbean informal support networks is that Black Caribbeans are much more likely to be members transnational families. Given this, differences between Black Caribbeans and African Americans in whether objective and subjective social isolation are associated with mental health, could be attributable to variations in their proximity to extended family members.

Methods

Sample

The National Survey of American Life: Coping with Stress in the 21st Century (NSAL) was conducted by the Program for Research on Black Americans at the University of Michigan's

Institute for Social Research. The field work for the study was completed by the Institute for Social Research's Survey Research Center, in cooperation with the Program for Research on Black Americans. The NSAL sample has a national multi-stage probability design which consists of 64 primary sampling units (PSUs). Fifty-six of these primary areas overlap substantially with existing Survey Research Center's National Sample primary areas. The remaining eight primary areas were chosen from the South in order for the sample to represent African Americans in the proportion in which they are distributed nationally.

The NSAL includes the first major probability sample of Black Caribbeans. For the purposes of this study, Black Caribbeans are defined as persons who trace their ethnic heritage to a Caribbean country, but who now reside in the United States, are racially classified as Black, and who are English-speaking (but may also speak another language). In both the African American and Black Caribbean samples, it was necessary for respondents to self-identify their race as black. Those self-identifying as black were included in the Black Caribbean sample if they: a) answered affirmatively when asked if they were of West Indian or Caribbean descent, b) said they were from a country included on a list of Caribbean area countries presented by the interviewers, or c) indicated that their parents or grandparents were born in a Caribbean area country.

The data collection was conducted from February 2001 to June 2003. The interviews were administered face-to-face and conducted within respondents' homes; respondents were compensated for their time. A total of 6,082 face-to-face interviews were conducted with persons aged 18 or older, including 3,570 African Americans, 891 non-Hispanic Whites, and 1,621 Blacks of Caribbean descent. The overall response rate was 72.3%. Response rates for individual subgroups were 70.7% for African Americans, 77.7% for Black Caribbeans, and 69.7% for non-Hispanic Whites. The response rate is excellent given that African Americans (especially lower income African Americans) are more likely to reside in major urban areas which are more difficult and expensive with respect to survey fieldwork and data collection. Final response rates for the NSAL two-phase sample designs were computed using the American Association of Public Opinion Research (AAPOR) guidelines (for Response Rate 3 samples) (AAPOR 2006) (see Jackson et al. 2004 for a more detailed discussion of the NSAL sample). The NSAL data collection was approved by the University of Michigan Institutional Review Board.

Measures

Dependent Variables.—There are two dependent variables in this analysis: depressive symptoms and serious psychological distress. Depressive symptoms were assessed using the 12-item version of the Center for Epidemiological Studies-Depression scale (CES-D) (Radloff, 1977). This abbreviated CES-D has been found to have acceptable reliability and a similar factor structure compared to the original version. Item responses are coded 0 ("rarely or none of the time") to 3 ("most or all of the time"). These 12 items measure the extent to which respondents: had trouble keeping their mind on tasks, enjoyed life, had crying spells, could not get going, felt depressed, hopeful, restless, happy, as good as other people, that everything was an effort, that people were unfriendly, and that people dislike them in the past 30 days. Positive valence items were reverse coded, and all items were summed

resulting in a continuous measure; a high score indicates a greater number of depressive symptoms ($M = 6.68$, $SE = 0.17$) (Cronbach's alpha = 0.78).

Serious psychological distress (SPD) was measured by the K6. This is a 6-item scale designed to assess non-specific psychological distress including symptoms of depression and anxiety in the past 30 days (Kessler et al., 2002; Kessler et al., 2003). Specifically, the K6 includes items designed to identify individuals with a high likelihood of having a diagnosable mental illness and associated limitations. The K6 is intended to identify persons with mental health problems severe enough to cause moderate to serious impairment in social and occupational functioning and to require treatment. Each item was measured on a 5-point Likert scale ranging from 0 (none of the time) to 4 (all of the time). Positive valence items were reverse coded and summed scores ranged from 0 to 24, with higher scores reflecting higher levels of psychological distress ($M = 3.79$, $SE = 0.12$) (Cronbach's alpha = 0.83).

Independent Variables.—There are two main independent variables: objective social isolation from family and friends and subjective social isolation from family and friends. Objective social isolation from family and friends was created by combining measures of frequency of contact with family and frequency of contact with friends. Frequency of contact with family members is measured by the question: “How often do you see, write or talk on the telephone with family or relatives who do not live with you? Would you say nearly everyday, at least once a week, a few times a month, at least once a month, a few times a year, hardly ever or never?” This same question is also asked of friends (i.e., friend contact). Both questions are recoded by combining the response categories: (1) nearly everyday, at least once a week, a few times a month vs. (2) at least once a month, a few times a year, hardly ever or never. This resulted in two binary variables, objectively isolated from family: Yes/No and objectively isolated from friends: Yes/No. These variables are then combined into a single four-category pattern variable reflecting respondents who are: 1) objectively isolated from both family and friends, 2) objectively isolated from family only, 3) objectively isolated from friends only, or 4) not objectively isolated from family and friends.

Subjective social isolation was created by combining measures of subjective family closeness and subjective friend closeness. Subjective family closeness was assessed by the item: “How close do you feel towards your family members? Would you say very close, fairly close, not too close, or not close at all?” Subjective friend closeness was assessed in the same manner as subjective family closeness. Both items were recoded into two separate dichotomous variables (family subjective closeness and friend subjective closeness) by combining the following response categories: 1) very close and fairly close vs. 2) not too close and not close at all. These two dichotomous variables were then combined to create a single four-category variable representing respondents who are: 1) subjectively isolated from both family and friends, 2) subjectively isolated from family only, 3) subjectively isolated from friends only, and 4) not subjectively isolated from family and friends.

Control variables.—Sociodemographic factors (i.e., age, gender, family income, education, marital status and number of chronic health problems) were utilized as control

variables. Age was coded as a continuous variable. Missing data for family income were imputed for 773 cases (12.7% of the total NSAL sample) and missing data for education were imputed for 74 cases. Imputations were completed using an iterative regression-based multiple imputation approach incorporating information about age, sex, region, race, employment status, marital status, home ownership, and nativity of household residents. Age and education were coded in years. Marital status was coded as married/cohabiting and not married.

Analysis Strategy

Percentages represent the weighted proportions based on the distribution of African Americans and Black Caribbeans in the United States. An examination of the univariate distribution of our two dependent variables indicated that they were not normally distributed. In particular, the variance exceeded the mean which indicated overdispersion. Consequently, instead of linear regression we used negative binomial regression which is the appropriate technique for this type of non-normal distribution. For each negative binomial regression analysis, we present two models for depressive symptoms and serious psychological distress. The first model includes objective isolation and all of the control variables. The second model includes both objective and subjective isolation and the control variables. These regressions are conducted separately for African Americans and Black Caribbeans. All analyses were conducted using SAS. Incident Rate Ratios and 95% confidence intervals, as well as regression coefficients and standard errors, are presented for negative binomial regression analyses. Standard error estimates are corrected for unequal probabilities of selection, nonresponse, post-stratification, and the sample's complex design (i.e., clustering and stratification), and results from these analyses are generalizable to the African American adult and Black Caribbean adult populations.

Results

The distribution of demographic characteristics for African American and Black Caribbean respondents is presented in Table 1. Bivariate comparisons indicate that Black Caribbeans are on average younger, are more likely to be married, and have a higher proportion of men in the sample, higher mean levels of education, and higher family incomes than their African American counterparts. African Americans, in contrast, report more chronic health problems compared to Black Caribbeans. There are no significant differences between the two groups in our main variables of interest: depressive symptoms, serious psychological distress, objective social isolation and subjective social isolation.

Depressive Symptoms

The negative binomial regression of depressive symptoms for both African Americans and Black Caribbeans are presented in Table 2. The analysis in Model 1 reveals that African Americans who were: 1) objectively isolated from both family and friends, 2) objectively isolated from family only, and 3) objectively isolated from friends only all reported significantly more depressive symptoms than African Americans who were not objectively isolated from family or friends (reference group). With the addition of subjective social isolation to the regression analysis (Model 1a), objective social isolation from family

only was no longer significant. African Americans who were: 1) subjectively isolated from both family and friends, 2) subjectively isolated from their extended family only, and 3) subjectively isolated from friends only had significantly more depressive symptoms than African Americans who were not subjectively isolated from either group. In particular, an examination of the incident risk ratios indicated that African Americans who were subjectively isolated from both family and friends had 1.41 times the risk of depressive symptoms than those who were not subjectively isolated.

Models 2 and 2a (Table 2) present the analysis of depressive symptoms for Black Caribbeans. In Model 2, Black Caribbeans who were objectively socially isolated from their family and friends, as well as those who were objectively isolated from family only had more depressive symptoms than their counterparts who were not objectively socially isolated from either group. The addition of subjective social isolation measures in Model 2a reveals that only objective social isolation from both family and friends remained significant. Further, all three subjective social isolation measures were significant. Black Caribbeans who reported subjective social isolation from: 1) family only, 2) friends only, and 3) both family and friends reported more depressive symptoms than those who were not subjectively isolated from either family or friends (reference group). The relative risks of depressive symptoms due to subjective isolation for Black Caribbeans ranged from 1.86 to 1.37.

Serious Psychological Distress

Table 3 presents the analysis of serious psychological distress on the two social isolation variables. African Americans who reported objective social isolation from family only, friends only and both family and friends all reported higher levels of psychological distress than African Americans who were not objectively isolated from both family and friends (Model 1). The addition of subjective social isolation variables to the regression in Model 1a attenuated, but did not eliminate, the significant relationships for objective social isolation. In terms of subjective social isolation, African Americans who were subjectively isolated from friends only and both family and friends reported higher levels of serious psychological distress than their counterparts who were not subjectively isolated from either family or friends. With regards to relative risks for depression, African Americans who were subjectively isolated from both family and friends had 1.31 times the risk of serious psychological distress and those who were subjectively isolated from friends had 1.20 times the risk.

Models 2 and 2a present the same analyses for Black Caribbeans. In Model 2, all three indicators of objective isolation were significant, indicating that Black Caribbeans who were not objectively isolated from family or friends have lower levels of psychological distress. In Model 2a, the addition of subjective social isolation variables did not alter the results for objective isolation in Model 2. However, none of the subjective social isolation variables were significantly associated with serious psychological distress. When controlling for subjective isolation, Black Caribbeans who were objectively isolated from both family and friends had 1.38 times the risk of serious psychological distress, those who were objectively isolated from family had 1.80 times the risk of serious psychological distress and the risk for objective isolation from friends was 1.33.

Discussion

This study's findings indicated that African American and Black Caribbean respondents were similar in terms of objective and subjective social isolation from family and friends, as well as reported levels of depressive symptoms and psychological distress. Overall, roughly a quarter of African Americans and Black Caribbeans reported objective social isolation from family and/or friends and 1 out of 6 reported subjective social isolation with family and/or friends. Significant multivariate findings indicated that objective social isolation and subjective social isolation, whether from family or friends, were associated with higher levels of depressive symptoms and serious psychological distress for both African Americans and Black Caribbeans. Further, the addition of subjective social isolation attenuated the association between objective social isolation on depressive symptoms for both groups, while the addition of subjective social isolation attenuated the association between objective social isolation and serious psychological distress for African Americans only.

Overall, study findings are consistent with previous research demonstrating that social isolation is associated with poor mental health status (Cornwell & Waite, 2009; Coyle & Dugan, 2012; Miyawaki et al., 2015). These findings contribute to the very limited, but emerging body of research in this area on the negative associations between social isolation and mental health among ethnic minorities. Further, our findings underscore the importance of understanding the differential associations that subjective vs. objective isolation have with mental health (Cornwell & Waite, 2009).

Given sociodemographic and cultural differences between African Americans and Black Caribbeans, in this section, we will discuss findings for each ethnic group in relation to each other. We do this to place our findings within the broader context of the Black population in the U.S. and to underscore the heterogeneity of this group. This ethnic comparative discussion will also permit for a greater understanding of how cultural and sociodemographic differences between Black Caribbeans and African Americans influence the functions of objective and subjective isolation in the mental health of these two groups.

Despite overall similarities, African Americans and Black Caribbeans differed with respect to specific relationships between social isolation and mental health status. For African Americans, all forms of objective social isolation and subjective social isolation (e.g., family only, friends only, and family and friends) were associated with greater depressive symptoms. However, the inclusion of subjective social isolation factors eliminated a previously significant relationship between objective social isolation from family and depressive symptoms. For Black Caribbeans, objective social isolation from both family and friends and objective social isolation from family only were associated with greater depressive symptoms (objective social isolation from friends was not significant). Like African Americans, all subjective social isolation factors were associated with greater depressive symptoms and the inclusion of subjective social isolation factors eliminated a previously significant relationship between objective social isolation from family and depressive symptoms.

Turning to serious psychological distress, for African Americans, all forms of objective social isolation were associated with higher levels of serious psychological distress; the introduction of subjective social isolation factors (isolation from family and friends and friends only were significantly associated with SPD) eliminated a previously significant association for objective social isolation from family and SPD. Similar, to African Americans, all forms of objective social isolation were associated with higher levels of serious psychological distress for Black Caribbeans. In contrast, however, subjective social isolation indicators were unrelated to serious psychological distress for Black Caribbeans. One potential reason could reflect Black Caribbean migration patterns to the United States. For Black Caribbeans, especially first-generation immigrants, family members and close friends may still reside in the country of origin or other countries (Bashi, 2007). Thus, the disruption of family and friendship relationships caused by migration could potentially influence the relationships between objective social isolation and depressive symptoms. Findings for African Americans indicated that objective isolation from family only was unrelated to depressive symptoms.

Like findings from any cross-sectional study, it is impossible to determine causality or the potential direction of a causal relationship. A review of relevant research indicates that the relationship between social isolation and mental health is likely bi-directional. On one hand, there is extensive literature indicating a clear causal link between social isolation among prisoners in “supermax” prisons (isolated for 23 hours a day) and the development of mental health problems such as depressive symptoms, anxiety, panic, paranoia, hallucinations, and self-mutilations (Haney, 2003). Conversely, research indicates that individuals with mental health problems may engage in behaviors that isolate them from others. For example, individuals with depression may sleep more often and participate in social activities with family and friends less frequently. Also, for individuals with depression or anxiety, interactions with family and friends may be more negative and problematic. For example, family and friends may be critical or engage in behaviors that lead to arguments with those with mental health problems. Even when friends and family are attempting to be supportive, they may use problematic language (e.g., pull yourself together, you should stop being so negative, other people have it worse off than you) that, over time, contributes to an individual withdrawing from social interaction and isolating themselves. In other instances, persons with mental health problems often have maladaptive cognitions and thus misinterpret positive, support messages as being negative. Over time, these maladaptive thoughts may result in them isolating themselves from others.

It is important to note that the vast majority of African Americans and Black Caribbeans are not socially isolated. As noted earlier, roughly a quarter of African Americans and Black Caribbeans reported objective social isolation from family and/or friends and 1 out of 6 reported subjective social isolation with family and/or friends. These findings confirm that both native born and immigrant Blacks are socially connected to family and friends in both objective and subjective sense. The findings are also consistent with previous research documenting the importance of kin and non-kin in the informal social support networks of these two populations (Taylor et al., 2013).

Limitations

Several limitations of the study should be acknowledged. The cross-sectional study design makes it difficult to ascertain the direction of observed associations (i.e., to ascertain the nature of causality between these constructs). At question is whether social isolation causes higher rates of depressive symptoms and serious psychological distress, or if existent depressive symptoms and psychological distress causes individuals to become socially isolated. Future studies should explore these issues using nationally representative longitudinal panel datasets. A second limitation of our study is that we are not able to rule out the potential influence of residual confounding variables (e.g., neighborhood conditions and personality differences) for the relationships between social isolation and mental health. For instance, social isolation may be associated with living in high crime neighborhoods. Individuals may be less likely to interact with their neighbors which leads to social isolation. Further, stresses associated with living in high crime areas may lead to poorer mental health.

It bears noting that the NSAL data were collected in 2001–2003 and in the ensuing years, changes in information and communication technology (ICT) have been substantial and widespread (e.g., FaceTime, Skype, Zoom). Nonetheless, recent information confirms that social isolation remains relevant despite greater availability and use of advanced communication technology and social media platforms that deliver higher levels of virtual connections with others. For example, recent data from a Pew Research Center (Bialik, 2018) survey of U.S. adults (February 26–March 11, 2018) found that 10% of persons reported feeling lonely or isolated from others all or most of the time. Dissatisfaction with the domains of family, social or community life was associated with a 3 to 5 times greater likelihood of being lonely/isolated. Further, data from Cigna U.S. Loneliness Index (Cigna, 2018) indicates that 46% of Americans report being lonely sometimes or always and 43% report feeling socially isolated. Interestingly, younger persons aged 18–22 (Generation Z) and those 23–37 (Millennials) reported higher levels of loneliness than older groups. The Cigna study also found that very heavy users of social media as well as those who never use social media had similar loneliness scores. Notably, however, persons reporting daily in person interactions with others had lower loneliness scores. Finally, some evidence suggests that use of social media and instant messaging/texting is unrelated to the size of or perceived closeness to ‘offline’ social networks (Pollet, Roberts, & Dunbar, 2011; Primack, et al., 2017). Together, these findings indicate that social isolation remain significant for various segments of the population and the associations between social isolation and the use of information and communication technology are complex.

During the time period that the NSAL was conducted, the percent of Black Africans in the U.S. was relatively small numbering around 500,000 (Anderson & Lopez, 2018) out of roughly 300 million people. At the time of the survey the NSAL investigators contemplated doing a sample of Black Africans, but were not able to because the costs were prohibitive. Black ethnic groups from African countries represent an increasing proportion of Black immigrants in the U.S. (Anderson & Lopez, 2018). Accordingly, future studies building on the current findings should include Black immigrants and their descendants who trace their heritage from countries in Africa (e.g., Nigeria, Ghana).

Finally, our study represents an initial exploration of the relationship between objective and subjective social isolation and mental health among African Americans and Black Caribbeans. The range of currently available platforms and services for connecting with family and friends (Skype, FaceTime, email, texting, Instagram) are undoubtedly useful for maintaining connections with family and friends for African Americans and, especially for Black Caribbeans whose family and friends may reside in their home countries. Finally, despite its age, the NSAL dataset remains the most comprehensive, detailed and representative source of information available concerning social isolation within African American and Black Caribbean populations in the U.S. It remains the only national dataset where within group analysis of social isolation among African Americans and Black Caribbeans can be reliably conducted.

Conclusion

An established body of research on the correlates and health consequences of social isolation (e.g., family, friend, church) confirms the negative associations between isolation and an array of health and well-being outcomes. Our study contributes to this literature by incorporating several innovations. This includes examining indicators of objective and subjective social isolation from family and friends and focusing on mental health indicators (i.e., depressive symptoms and serious psychological distress) that are both prevalent and significant for social functioning. Further, we examined these associations within nationally representative samples of African American and Black Caribbean adults, groups that are under-represented in the social isolation literature. Study findings indicated that social isolation was consistently associated with higher levels of depressive symptoms and serious psychological distress. Nonetheless, in some instances, social isolation was unrelated to mental health indicators, especially for Black Caribbeans.

Study findings contribute to the knowledge base regarding social isolation and its relation to mental health within racial and ethnic minority groups in the U.S. Information establishing social isolation prevalence rates within African Americans and Black Caribbeans provide population estimates for those at risk for social isolation and associated depressive symptoms and serious psychological distress. This information also informs relevant practice protocols and interventions for social isolation. Initial intake interviews can establish whether social isolation is a recent occurrence brought about by changes in social circumstance (e.g., a geographic relocation) or reflects a long-standing pattern experienced over a significant period of time.

Clients may experience distinct patterns of objective vs. subjective social isolation that have different implications for treatment. Clients may simultaneously experience objective and subjective social isolation, objective isolation only, or subjective isolation only. Activities with clients experiencing objective social isolation could focus on strategies for increasing level of contact with social network members. For example, various computer mediated social support interventions have been found to decrease loneliness among older adults (see review by Choi et al., 2012). For those who are experiencing subjective social isolation, activities might include exploring clients' perceptions of the quality of their social relationships. This may include determining whether the client has maladaptive

thoughts and behaviors (e.g., hypervigilance, negative thoughts/beliefs) that affect their social interactions. Other approaches for subjective social isolation could involve working directly with the client and relationship partners (siblings, children, friends) to address challenges in relating to one another. In summary, our study found that African Americans and Black Caribbeans demonstrated some similarities in the relationships between social isolation and mental health indicators. Nonetheless, there were important differences that are deserving of more in-depth study and exploration of possible ethnicity differences that characterize these two groups.

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Table 1.

Distribution of characteristics of African American and Caribbean participants in the National Survey of American Life (NSAL, 2001–2003).

| | African American n = 3570 | Caribbean n = 1621 | Total N = 5191 |
|---------------------------------------------------|------------------------------|-----------------------|-------------------|
| CESD, Mean (SE) | 6.70 (0.19) | 6.40 (0.33) | 6.68 (0.17) |
| K6, Mean (SE) | 3.81 (0.13) | 3.52 (0.11) | 3.79 (0.12) |
| Objective Social Isolation n (%) | | | |
| Objective Isolation from Both Family and Friends | 146 (4.24) | 50 (3.30) | 196 (4.17) |
| Objective Isolation from Family Only | 191 (6.05) | 108 (8.30) | 299 (6.21) |
| Objective Isolation from Friends Only | 494 (14.49) | 159 (11.31) | 653 (14.26) |
| Not Objectively Isolated from either group | 2705 (75.22) | 1290 (77.09) | 3995 (75.35) |
| Subjective Social Isolation n (%) | | | |
| Subjective Isolation from Both Family and Friends | 74 (2.12) | 35 (2.16) | 109 (2.12) |
| Subjective Isolation from Family Only | 150 (4.34) | 76 (3.16) | 226 (4.25) |
| Subjective Isolation from Friends Only | 388 (10.81) | 186 (11.47) | 574 (10.85) |
| Not Subjectively Isolated from either group | 2843 (82.74) | 1289 (83.21) | 4132 (82.77) |
| Age, Mean (SE) * | 42.33 (0.52) | 40.27 (0.84) | 42.18 (0.49) |
| Gender, n (%) | | | |
| Men | 1271 (44.03) | 643 (50.87) | 1914 (44.50) |
| Women | 2299 (55.97) | 978 (49.13) | 3277 (55.50) |
| Marital Status * | | | |
| Married | 1222 (41.65) | 693 (50.15) | 1915 (42.25) |
| Unmarried | 2340 (58.35) | 928 (49.85) | 3268 (57.75) |
| Education in Years, Mean (SE) ** | 12.43 (0.09) | 12.89 (0.15) | 12.46 (0.08) |
| Family Income, Mean (SE) ** | 36833 (1487.96) | 47044 (3416.81) | 37545 (1403.43) |
| # of Chronic Health Problems(SE) ** | 1.28 (0.03) | 1.05 (0.08) | 1.26 (0.02) |

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

Note: Column total may not sum to total sample size due to missing data.

Table 2. Negative Binomial Regression Analysis of Social Isolation and Depressive Symptoms (CES-D) among African Americans and Black Caribbeans

| Independent Variables ^a | African Americans | | | | Black Caribbeans | | | |
|---------------------------------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|
| | Model 1 | | Model 1a | | Model 2 | | Model 2a | |
| | b(S.E.) ^b | IRR(95%CI) ^c | b(S.E.) ^b | IRR(95%CI) ^c | b(S.E.) ^b | IRR(95%CI) ^c | b(S.E.) ^b | IRR(95%CI) ^c |
| Objective Social Isolation | | | | | | | | |
| Objective Isolation from Both Family and Friends | 0.35(0.06)*** | 1.41(1.24,1.61) | 0.24(0.07)** | 1.27(1.11,1.46) | 0.50(0.10)*** | 1.65(1.33,2.04) | 0.36(0.12)** | 1.43(1.12,1.81) |
| Objective Isolation from Family Only | 0.13(0.06)* | 1.14(1.01,1.29) | 0.10(0.06) | 1.11(0.97,1.26) | 0.37(0.16)* | 1.45(1.04,2.02) | 0.35(0.18) | 1.41(0.98,2.03) |
| Objective Isolation from Friends Only | 0.17(0.04)*** | 1.19(1.09,1.30) | 0.11(0.05)* | 1.12(1.02,1.23) | 0.16(0.17) | 1.18(0.83,1.67) | 0.05(0.19) | 1.05(0.71,1.56) |
| Not Objectively Isolated from either group | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| Subjective Social Isolation | | | | | | | | |
| Subjective Isolation from Both Family and Friends | -- | -- | 0.34(0.07)*** | 1.41(1.22,1.62) | -- | -- | 0.62(0.20)** | 1.86(1.24,2.78) |
| Subjective Isolation from Family Only | -- | -- | 0.18(0.09)* | 1.20(1.01,1.44) | -- | -- | 0.28(0.09)** | 1.33(1.10,1.60) |
| Subjective Isolation from Friends Only | -- | -- | 0.22(0.05)*** | 1.24(1.12,1.38) | -- | -- | 0.31(0.11)** | 1.37(1.09,1.71) |
| Not Subjectively Isolated from either group | -- | -- | 0 | 1 | -- | -- | 0 | 1 |
| Gender | | | | | | | | |
| Male | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| Female | 0.09(0.04)* | 1.09(1.01,1.18) | 0.09(0.04)* | 1.09(1.01,1.18) | -0.10(0.09) | 0.91(0.76,1.09) | -0.13(0.09) | 0.88(0.73,1.07) |
| Age | -0.02(0.00)*** | 0.98(0.98,0.99) | -0.01(0.00)*** | 0.99(0.98,0.99) | -0.01(0.00)*** | 0.99(0.98,0.99) | -0.01(0.00)*** | 0.99(0.98,0.99) |
| Family Income | -0.01(0.00)** | 0.99(0.98,1.00) | -0.01(0.00)** | 0.99(0.98,1.00) | -0.01(0.00)* | 0.99(0.98,1.00) | -0.01(0.00) | 0.99(0.99,1.00) |
| Education | -0.06(0.01)*** | 0.94(0.93,0.96) | -0.06(0.01)*** | 0.94(0.93,0.95) | -0.05(0.01)** | 0.95(0.93,0.98) | -0.04(0.02)* | 0.96(0.93,0.99) |
| Marital status | | | | | | | | |
| Married | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| Non- Married | 0.01(0.03) | 1.01(0.95,1.09) | 0.02(0.03) | 1.02(0.95,1.09) | 0.14(0.06)* | 1.15(1.02,1.30) | 0.14(0.05)** | 1.15(1.04,1.27) |
| # of Chronic Health Problems | | | | | | | | |
| F | 0.10(0.01)*** | 1.11(1.08,1.14) | 0.10(0.01)*** | 1.11(1.08,1.14) | 0.14(0.03)*** | 1.15(1.08,1.22) | 0.14(0.03)*** | 1.15(1.07,1.23) |
| N | 43.26*** | 31.66*** | 31.66*** | 13.64*** | 1671 | 1671 | 11.71*** | 1671 |

Note: Significance test of the individual parameter estimates were based on a complex design-corrected t-test.

Several independent variables are represented by dummy variables. Objective Social Isolation, not objectively isolated from either group is the excluded category; Subjective Social Isolation, not subjectively isolated from either group is the excluded category; Gender, 0 = female, 1 = male; Marital Status, non-married is the excluded category

q
= regression coefficient; S.E. = standard error.

IRR = incident rate ratio; CI = confidence interval

*
**

p < .05
p < .01
p < .001

Table 3. Negative Binominal Regression Analysis of Social Isolation and Psychological Distress(K6) among African Americans and Black Caribbeans

| Independent Variables ^a | African Americans | | | Black Caribbeans | | |
|---------------------------------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|
| | Model 1 | Model 1a | Model 2 | Model 2a | Model 2 | Model 2a |
| | b(S.E.) ^b | IRR(95%CI) ^c | b(S.E.) ^b | IRR(95%CI) ^c | b(S.E.) ^b | IRR(95%CI) ^c |
| Objective Social Isolation | | | | | | |
| Objective Isolation from Both Family and Friends | 0.32(0.10)** | 1.38(1.13,1.69) | 0.26(0.10)* | 1.30(1.06,1.59) | 0.44(0.12)** | 1.55(1.22,1.97) |
| Objective Isolation from Family Only | 0.28(0.10)** | 1.32(1.08,1.60) | 0.24(0.10)* | 1.28(1.05,1.56) | 0.60(0.23)* | 1.83(1.13,2.95) |
| Objective Isolation from Friends Only | 0.15(0.05)** | 1.16(1.04,1.29) | 0.11(0.05)* | 1.11(1.00,1.24) | 0.36(0.11)** | 1.43(1.14,1.80) |
| Not Objectively Isolated from either group | 0 | 1 | 0 | 1 | 0 | 1 |
| Subjective Social Isolation | | | | | | |
| Subjective Isolation from Both Family and Friends | -- | -- | 0.27(0.10)* | 1.31(1.06,1.62) | -- | 0.30(0.39) |
| Subjective Isolation from Family Only | -- | -- | 0.19(0.10) | 1.20(0.98,1.48) | -- | 0.31(0.16) |
| Subjective Isolation from Friends Only | -- | -- | 0.18(0.08)* | 1.20(1.03,1.40) | -- | 0.28(0.21) |
| Not Subjectively Isolated from either group | -- | -- | 0 | 1 | -- | 0 |
| Gender | | | | | | |
| Male | 0 | 1 | 0 | 1 | 0 | 1 |
| Female | 0.15(0.06)* | 1.16(1.03,1.30) | 0.14(0.06)* | 1.15(1.03,1.29) | -0.05(0.14) | 0.95(0.71,1.26) |
| Age | -0.02(0.00)*** | 0.98(0.98,0.98) | -0.02(0.00)*** | 0.98(0.98,0.98) | -0.02(0.00)*** | 0.98(0.97,0.99) |
| Family Income | -0.01(0.00)* | 0.99(0.98,1.00) | -0.01(0.00)* | 0.99(0.98,1.00) | -0.00(0.01) | 1.00(0.98,1.02) |
| Education | -0.07(0.01)*** | 0.93(0.91,0.96) | -0.07(0.01)*** | 0.93(0.91,0.95) | -0.03(0.02)* | 0.97(0.94,1.00) |
| Marital status | | | | | | |
| Married | 0 | 1 | 0 | 1 | 0 | 1 |
| Non-Married | -0.02(0.04) | 0.98(0.91,1.06) | -0.02(0.04) | 0.98(0.91,1.07) | 0.17(0.13) | 1.19(0.92,1.54) |
| # of Chronic Health Problems | 0.15(0.02)*** | 1.16(1.12,1.21) | 0.15(0.02)*** | 1.16(1.11,1.21) | 0.15(0.03)*** | 1.16(1.09,1.23) |
| F | 51.72*** | | 34.54*** | | 14.62*** | 8.27*** |
| N | 3559 | | 3481 | | 1691 | 1671 |

Note: Significance test of the individual parameter estimates were based on a complex design-corrected t-test.

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Several independent variables are represented by dummy variables. Objective Social Isolation, not objectively isolated from either group is the excluded category; Subjective Social Isolation, not subjectively isolated from either group is the excluded category; Gender, 1 = male; Marital Status, non-married is the excluded category

β = regression coefficient, S.E. = standard error.

IRR = incident rate ratio; CI = confidence interval

* $p < .05$

** $p < .01$

*** $p < .001$