Childhood Socioeconomic Status Is Associated with Psychosocial Resources in African Americans: The Pittsburgh Healthy Heart Project

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Abstract

Objective—To determine whether lower childhood socioeconomic status (SES) was associated with fewer psychosocial resources independent of adult SES, and whether these associations differed by race/ethnicity.

Design—Cross-sectional study of 342 middle-aged (mean = 60.5 ± 4.7) African American (n = 49) and Caucasian (n = 293) adults.

Main Outcome Measures—Participants completed: (a) 6 days of ecological momentary assessment via electronic diaries to assess social support and the number of social interactions, (b) self-report measures of social support, social network diversity, and coping – specifically, active, planning, and emotion focused coping.

Results—The interaction term for childhood SES and race/ethnicity significantly predict several psychosocial resources. Lower childhood SES was associated with less perceived social support in daily life, a less diverse social network, and more limited use of proactive coping strategies in adulthood among African Americans, regardless of adult SES. Comparable associations were not observed among Caucasians.

Conclusions—Childhood SES is associated with psychosocial resources in adulthood among African Americans, independent of SES in adulthood. Given emerging associations between childhood SES and health in adulthood, future studies to disentangle the role of psychosocial resources as a mediating pathway and to further examine racial/ethnic variations across these associations is warranted.

Keywords
childhood socioeconomic status; race/ethnicity; psychosocial resources; health
A substantial literature on humans and animals has demonstrated that early life adversity confers harmful health risks into adulthood (Saplosky, 2004 for animal studies; for reviews in humans see Galobardes, Lynch, & Davey Smith, 2004; Galobardes, Davey Smith, & Lynch, 2006; Matthews, Gallo, & Taylor, 2010). The studies in humans have primarily assessed associations between predictors of early life adversity, such as lower socioeconomic status (SES) in childhood, and negative emotions and physical health in adulthood. Psychosocial resources such as social support, social network diversity, and coping skills are thought to mitigate the effects of low adult SES on negative emotions and poor physical health, and may also mediate the effects of childhood adversity on adult outcomes (Gallo & Matthews, 2003; Matthews et al., 2010). Thus, the association between childhood SES and psychosocial resources in adulthood may shed light on the psychosocial processes linking early life adversity to poor health outcomes into adulthood.

The intergenerational transmission of psychosocial resources as a function of SES has been described in the Reserve Capacity Model (RCM; Gallo & Matthews, 2003; see also the Conservation of Resources Model, Hobfoll, 1985). The RCM conceptualizes psychosocial resources as tangible, interpersonal, and intrapersonal tools that comprise one’s reserve capacity to manage stress in daily life. Having a larger supportive network, greater emotional connectedness with others, and the ability to draw on effective coping strategies when faced with stressors are posited as critical psychosocial resources.

Unfortunately, lower SES environments may expose individuals to more stressors while equipping them with more limited resources (Matthews et al., 2010). Further, when stressors do arise, already limited psychosocial resources may become strained, and, in turn, lessen an individuals’ capacity to manage stress as effectively at that time and in the future. Thus, lower SES as early as childhood may be adversely related to the development of psychosocial resources, a deficit that may be evidenced later in the lifespan. The purpose of the current study is to test whether childhood SES is associated with three psychosocial resources in adulthood – social support, social network diversity, and coping skills – and whether these associations remain, regardless of adult SES.

Several studies have assessed the association between childhood SES and psychological outcomes such as positive and negative emotions, personality characteristics, and cognitive functioning (Gilman, Kawachi, Fitzmaurice, & Buka, 2002; Harper et al., 2002; Heinonen et al., 2006; Kaplan et al., 2001; Luo & Waite, 2005; Lynch, Kaplan, & Shema, 1997; Poulton et al., 2002) in adulthood, but few have assessed the relationship between childhood SES and a psychosocial resource. Three studies (Lehman, Taylor, Kiefe, & Seeman, 2005; Sanders & Spencer, 2005; Taylor et al., 2006) have assessed the relationship between childhood SES and a psychosocial resource, specifically social support in adulthood. In the Coronary Artery Risk Development in Young Adults (CARDIA) study, an epidemiological investigation of risk factors for cardiovascular disease (CVD) in young and middle-aged African American and Caucasian adults: participants whose parents had lower education reported less support in their social interactions with others in adulthood (Lehman, 2005; Taylor et al., 2006). In contrast, childhood SES as measured by parental occupation was not independently associated with social support in adulthood in an Australian sample (Sanders & Spencer, 2005). Perhaps differences in racial/ethnic composition of the samples or type of SES measures might explain the latter null findings (Sanders & Spencer, 2005). Research has demonstrated that parents with greater education are able to provide their children with a greater array of resources from financial to social capital, which consists of resources gained through various social connections and ties (Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997). Children with such access may have the opportunity to directly engage in and benefit from related supportive social interactions and relationships. Thus, one could argue that having better educated parents would provide children with more opportunities to
develop optimal social skills helpful in establishing supportive social networks and in problem solving. Although these associations are plausible, it is unclear whether the association between parental education and support as obtained in CARDIA will replicate in another sample of African Americans and Caucasians, whether the relationship remains regardless of adult SES, and whether similar associations exist between childhood SES and other psychosocial resources – social networks and coping skills – in adulthood.

In the U.S., relative to Caucasians, African Americans are more likely to experience greater early life poverty and relatively worse health even at similar SES levels (MacArthur Foundation Research Network on Socioeconomic Status and Health, 2010). One in five children in the U.S. grow up in neighborhoods characterized as poor, and for racial/ethnic minorities, particularly African Americans, the rates are even higher (Mather & Rivers, 2006). About 24.7% of African Americans live in poverty compared to 8.6% of Caucasians (Mather & Rivers, 2006). Similarly, the impact of lower SES on the well being of African Americans is posited to be more harmful in comparison to Caucasians (MacArthur Foundation Research Network on Socioeconomic Status and Health, 2010), perhaps due to lower status on the basis of racial/ethnic and structural inequalities. Whether racial/ethnic differences in early life low SES are evidenced in more limited psychosocial resources in adulthood among African Americans is unknown.

The current study sought to address two questions regarding the association between childhood SES and psychosocial resources in adulthood in a sample of healthy middle-aged African American and Caucasian adults. First, is lower childhood SES associated with less social support, a more limited social network, and less prosocial coping skills? Second, are these effects more pronounced in African Americans? For both hypotheses, we assessed whether these associations were significant independent of adult SES.

The current study makes at least two methodological contributions to this area of study. First, we measured a number of different psychosocial resources as opposed to one. Second, we utilized a multi-methods approach in the assessment of social support. In addition to the use of a traditional questionnaire measure, we employed an ecological momentary assessment (EMA; Stone & Shiffman, 1994) method to measure real-time perceptions of social experiences and the frequency of social interactions in daily life, a method which potentially reduces the recall bias that might accompany retrospective measures. The momentary assessment of social experiences may serve as an indicator of positive social contact with others, whereas the frequency of social interactions may give some indication of social connectedness with others.

**Method**

**Participants**

Participants were healthy, older adults recruited as part of the Pittsburgh Healthy Heart Project (PHHP), a longitudinal investigation of the effects of psychosocial and biological risk factors on subclinical CVD in community dwelling, healthy older adults. There were 342 participants who completed the social support and demographic questionnaires and provided at least 30 valid momentary diary readings across each of two 3-day assessment periods (see Procedure section). Our subsample consisted of African American ($n = 49$) and Caucasian ($n = 293$) adults (mean age = 60.5; range = 50.0 to 70.8) and a little more than half were females (51%). Further details about the PHHP are provided elsewhere (Kamarck et al., 2004). PHHP was approved by the Institutional Review Board of the University of Pittsburgh.

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Procedure

Overview—At the initial screening visit, informed consent was obtained and participants completed demographic and health behavior questionnaires. Approximately 1 month later (mean = 36.5 days; range = 3.0 to 133 days), data collection began and involved 11 visits across a 5-month period in the following order: a medical screening, 3 visits for ambulatory monitoring training and questionnaire assessments, 3 visits for physiological assessments, and 4 additional visits for ambulatory monitoring training and questionnaire assessments. Specific to the current study, participants were trained to use an electronic diary at visit 2; following a 24-hour practice period, they returned to the lab where their practice data were uploaded and reviewed to ensure that procedures were being followed correctly. Actual data collection began the following morning for a 3-day period. About 3.7 months later (mean = 111.4 days; range = 59 to 325 days) a follow-up training session and an additional 3 days of monitoring took place, where the methods were the same as those used during the initial sequence.

Measures

Questionnaire Measures of Social Support, Network Diversity, and Coping: The Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck, & Hoberman, 1985) was used to assess global social support. The ISEL consists of a list of 40 statements concerning the perceived availability of four forms of social support: appraisal, belonging, self-esteem, and tangible support. The possible range for the ISEL is 10-40, with a higher score indicating greater perceived social support. The ISEL has been shown to be related to a number of mental and physical health outcomes, including depression, anxiety, and nighttime blood pressure (Cooper, Ziegler, Nelesen, & Dimsdale, 2009; Moak & Agrawal, 2010). The Cronbach’s alpha for this measure was .94 in the full sample, and .94 and .93 in the Caucasian and African American participants, respectively.

Social Network Inventory (SNI): The SNI (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997) was used to assess global participation in social relationships, specifically, the diversity of one’s network across 12 types of social relationships they may participate in: spouse, parent, child, parent-in-law, close relative, friend, student, employee, neighbor, volunteer, member of groups with and groups without religious affiliations. For each of the 12 possible social relationships, a 1 is assigned if the respondent reports having a role where they have contact with someone in that role at least once every two weeks (either on the phone or in person), and a 0 is assigned if the respondent does not report contact in that role. The total score is summed and the possible range is 0-12 for this network diversity measure, with a higher score indicating greater network diversity. Researchers using the SNI have reported associations with respiratory illness, incident stroke, and mortality rates in clinical populations (Cohen et al., 1997; Holt-Lunstad, Smith, & Layton, 2010; Rutledge et al., 2004; Rutledge et al., 2008).

Coping: A subset of the COPE (Carver, Scheier, & Weintraub, 1989) was used to assess coping strategies. The COPE consists of five subscales, of which two of the problem focused coping scales (i.e., active and planning coping) and one of the maladaptive coping scales (emotion focused coping) were used in the current study. Sample items are as follows: active coping, “I take direct action to get around the problem”; planning coping, “I think about how I might handle the problem”; and, emotion focused coping, “I get upset and let my emotions out.” The subscales are independent and each consists of four items. A higher score indicates a greater likelihood of using that particular type of coping strategy. Higher scores for active coping on the COPE measure have been associated with lessened psychological distress and better physical health outcomes including improved immune status in HIV-seropositive samples (Goodkin, Blaney et al., 1992; Goodkin, Fuchs, Feaster,
Leeka, & Rishel, 1992). The COPE has been reported to have adequate test-retest reliability (ranging from .46 to .86) and evidence of discriminant and convergent validity, with constructs such as optimism and self-esteem. The Cronbach’s alphas for these subscales were .70 for active, .86 for planning, and .82 for emotion focused coping in the full sample, and .68, .86, and .72, in Caucasians, and .78, .87, and .81, in African Americans, respectively.

Ecological Momentary Assessment (Diary) Measures of Social Support and Social Interaction Frequency

Diary of Ambulatory Behavioral States (DABS): Participants described recent social interactions using the multi-item subscales from the DABS, a 45-item closed-ended questionnaire designed for repeated, real-time assessment of present mood, activities, and descriptive features of recent social interactions. In the present study, we explicitly focus on perceived social support and the frequency of interactions. Analyses of these two variables is limited to recent social interactions, defined as those interactions that took place concurrently or within 10 minutes of the diary report.

DABS items were displayed and responses recorded by an electronic diary implemented on a palmtop computer (hardware: Palm Pilot Professional Handheld, Palm, Inc., Santa Clara, CA; software: Invivodata, Inc., Pittsburgh, PA). The diary prohibited missing or out-of-range entries and the resulting data records were time-stamped to ensure timely completion.

Quality of current social support in interpersonal interactions was assessed using a 7-item scale (e.g., “During your most recent interaction did someone offer helpful information?”). The component items were presented in the form of a visual analog scale, wherein participants used a graphically displayed “slider” to indicate their responses (0-10 range), with a higher score indicating greater perceived momentary social support. The subscale score was averaged across all available, recent observations for each participant. This DABS subscale has been demonstrated to have adequate test-retest reliability and is positively associated (Kamarck et al., 2002) with the ISEL (Cohen et al., 1985).

A social interaction was defined as a “give and take exchange with another, which may or may not involve conversation” (Reis & Wheeler, 1991). Data were aggregated to the level of individual subjects to compute the proportion of recent social interactions, which was computed by dividing the number of recent interactions (i.e., the number of interactions within the last 10 minutes of being prompted by the diary) by the total number of diary entries over the 6 days of monitoring.

Compliance with Diary Monitoring: There was a high rate of compliance with diary monitoring in PHHP (Kamarck et al., 2007). Respondents were prompted to enter data at 45-minute intervals during waking hours across the 6 days of monitoring. Assessments not completed at this time could not be back-filled later, and were treated as missing. Under the assumption of a 16-hour waking day (with 8 hours of sleep and 1 hour of morning preparation time), this monitoring schedule should yield approximately 20 observations per day with perfect compliance. Among those in the current sample, the mean number of diary observations completed per person, per day was 105($SD = 13.2$), or approximately 87.5 %. Caucasian participants had a larger mean number of observations than African Americans, 105.9($SD = 12.9$) vs. 101.1($SD = 13.9$), $B = -4.87$, $p = .02$, but the number of observations did not differ by participant education, $B = .68$, $p = .28$, or by parental education, $B = .47$, $p = .59$.

Socioeconomic Status: Childhood and adult SES were assessed using educational attainment as an indicator. The childhood SES variable was created based on the higher
educational attainment of the two parents. Due to skewed distributions and irreconcilable differences in variability between the levels of educational attainment between participants and their parents, different ordinal scales were used for childhood and participant SES. Specifically, parental educational attainment was assessed across three categories: 1) < high school diploma, 2) high school diploma or GED, or 3) ≥ some postsecondary training, whereas participant education was assessed across four categories: 1) ≤ high school diploma, 2) some college or technical training, 3) college degree, or 4) > college degree. Participant income was assessed using 4 categories: 1) ≤ $19,999, 2) $20,000-34,999, 3) $35,000-50,000, and 4) > $50,000.

Analytic Plan: To assess descriptive characteristics of the sample and racial/ethnic differences, means (SD) and frequencies (%) were assessed and t-tests, and chi-square analyses were conducted on the study variables. Additionally, unadjusted relationships among the SES and psychosocial variables were assessed using Spearman and Pearson correlations. To test the primary study hypothesis that childhood SES would predict psychosocial resources in adulthood, whether or not the effects of adult SES were adjusted, two sets of linear regression models were tested. Model 1 included age, sex, and race/ethnicity as covariates, and model 2 included adult SES as an additional covariate. To determine whether the association of childhood SES with psychosocial resources differed by race/ethnicity, the same sets of models were run where a Childhood SES X Race/Ethnicity interaction term was also included. Simple effects analyses were conducted to assess effects for significant interaction terms. Additionally, main effects and interaction term models predicting momentary social support were tested unadjusted and adjusted for the ISEL (Cohen et al., 1985) to determine whether momentary social support was independent of global social support. The results adjusted for the ISEL (Cohen et al., 1985) are reported as there was no significant difference between the two models, $p > .05$. Effect sizes are reported for major hypotheses. All analyses were conducted using Statistical Analysis System, version 9.2 software (SAS Institute, Inc., Cary, North Carolina).

Results

Sample Demographics

Socioeconomic status variables—Parental education was associated with higher levels of education among participants, $B = .36$, $p < .0001$, but this was modified by a Childhood SES X Race/Ethnicity effect, $B = −.43$, $p = .05$. Post hoc analyses revealed that higher parental education was associated with higher participant education among Caucasians, $B = .41$, $p < .0001$, but not among African Americans, $B = −.04$, $p = .86$. There were no racial/ethnic differences in parental education, $κ(339) = .22$, $p = .83$, or participant education, $κ(339) = 1.72$, $p = .09$. Caucasians had higher incomes than African Americans $t(333) = 4.50$, $p < .0001$.

Racial/ethnic differences in psychosocial variables—Caucasians were more likely to use emotion focused coping strategies than African Americans, $κ(339) = 2.18$, $p = .03$. On average, participants reported being in a social interaction for 61% of the momentary diary reports across the 6 days of monitoring. There were no racial/ethnic differences in the proportion of social interactions, $κ(56) = −.05$, $p = .96$, whereas there was a marginal racial/ethnic difference in the mean momentary social support reported, $κ(339) = −1.76$, $p = .08$, with African Americans reporting greater social support.

Unadjusted correlations among the SES and psychosocial variables stratified by race/ethnicity are reported in Table 2. Higher participant income was correlated with greater social network diversity in both African Americans and Caucasians, but was also correlated

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with higher parental and participant education, momentary social support, a greater proportion of social interactions and greater endorsement of active and planning coping strategy use among Caucasians. In both African Americans and Caucasians, momentary social support was positively correlated with the questionnaire measure of social support. Among African Americans, both parental and participant education were positively correlated with social network diversity, and with the use of active and planning coping strategies. Among African Americans, there was also a positive correlation between parents’ education and perceived social support in momentary social interactions.

Among Caucasians there were no correlations between parents’ education and any of the psychosocial variables; and higher participant education was correlated with greater perceived momentary social support, a lower proportion of momentary social interactions, and endorsed greater use of planning coping strategies.

**Childhood SES as a Predictor of Psychosocial Resources**

There were no significant main effects for childhood SES in models unadjusted or adjusted for adult SES, all p-values were >.05. However, four of the eight Childhood SES X Race/Ethnicity interaction terms emerged as significant in models unadjusted and adjusted for adult SES. Specifically, in unadjusted models, Childhood SES X Race/Ethnicity predicted momentary social support, $\Delta R^2 = .02$, $B = 1.73$, $p = .01$, social network diversity, $\Delta R^2 = .02$, $B = 1.13$, $p = .003$, and use of active, $\Delta R^2 = .01$, $B = 1.09$, $p = .03$, and planning coping strategies, $\Delta R^2 = .02$, $B = 1.67$, $p = .004$. The same pattern of results emerged in adjusted models, i.e., $\Delta R^2 = .02$, $B = .79$, $p = .008$, $\Delta R^2 = .02$, $B = 1.16$, $p = .003$, $\Delta R^2 = .02$, $B = 1.21$, $p = .02$, and $\Delta R^2 = .03$, $B = 1.87$, $p = .001$, for momentary social support, social network diversity, and the use of active and planning coping strategies, respectively.

Simple effects analyses revealed that for all four of the significant interaction terms, the effects were more pronounced in African Americans (see Table 3 and Figures 1 through 4), such that African American participants with higher childhood SES perceived greater social support in momentary social interactions, had more diverse social networks, and endorsed greater use of active and planning coping strategies than African Americans with lower childhood SES. These significant effects were consistent across models unadjusted and adjusted for adult SES. No significant effects emerged for Caucasians in these simple effects analyses.

Exploratory post hoc analyses showed that the greatest racial/ethnic differences for momentary social support and global network diversity occurred in the group with parents with at least some college education, $p < .01$, with African Americans being higher (Figures 1-2), whereas the greatest racial/ethnic differences for active and planning coping strategies occurred in the group with parents with less than a high school education, $p < .02$, with Caucasians being higher (Figures 3-4).  

**Discussion**

The primary aim of this study was to test whether lower childhood SES was associated with diminished psychosocial resources in adulthood, independent of adult SES. A secondary aim was to examine whether these effects were more pronounced in African Americans as compared with Caucasians. Contrary to our expectations, there were no main effects of childhood SES on psychosocial resources in the full sample, whether or not adult SES was adjusted. However, as expected, childhood SES had a more pronounced effect on

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1We would like to thank an anonymous reviewer for their suggestion.
psychosocial resources among African Americans, regardless of their adult SES. Specifically, lower childhood SES was associated with less perceived social support in daily life, a less diverse social network, and endorsed more limited use of proactive coping strategies in adulthood among African Americans, regardless of adult SES. Further, it appears that when compared with Caucasians with a similar SES background via parental education, among African Americans, low childhood SES may be adversely associated with relatively lower coping skills, whereas high childhood SES is positively associated with relatively higher social support and more diverse social networks.

These findings provide initial evidence for the beneficial role of higher childhood SES in relation to specific psychosocial resources in adulthood as posited by the RCM (Gallo & Matthews, 2003; Hobfoll, 1989). Specifically, the findings are consistent with the notion that higher SES is associated with a greater reserve capacity, and that this association may extend over generations in African Americans. Future research tracking the intergenerational transmission of SES in conjunction with the sociohistorical contexts of race/ethnicity in the U.S. could provide additional insight into the current findings.

That childhood SES was not associated with psychosocial resources in adulthood in Caucasians suggest that childhood SES may have a qualitatively different meaning for African Americans relative to Caucasians. Of note, the range of education as an indicator of parental SES in this sample was not significantly different in Caucasians and African Americans. Thus, the finding that childhood SES was a predictor of psychosocial resources in African Americans only cannot be explained by restriction of SES range among Caucasians.

In regard to the findings for social support and social network diversity, perhaps the temporal socio-racial context in this sample may shed some light on this qualitative difference. The current samples’ parents would have come of age during the early 1900s, a time frame in which discriminatory practices such as Jim Crow severely limited the opportunities of many racial/ethnic minorities to attain formal and postsecondary education (Douglas, 2005). African Americans who were able to attain an education during this era may have experienced a more successful integration into mainstream society, a challenge that would have been less formidable for most Caucasians. At the same time, such educational attainment may have yielded more tangible resources such as employment opportunities via a broader skill set or a trade where African Americans could also become self-employed. It is even more likely that such educational attainment strengthened important psychological skills such as better decision-making, opportunity-seeking skills and mastery, and stress-management. Such tools likely would translate into more stable home environments (Repetti et al., 2002) and a greater intergenerational transmission of these healthy skills. In sum, higher educational achievement among African American parents may promote more successful social integration and interaction with a lifelong diverse social network in their offspring. Such an outcome, if successfully negotiated, may result in greater social flexibility and reinforcement, whereas this may not be the case for Caucasians.

Alternatively, African Americans who did not have social resources in childhood may not have been able to escape the adversity and disadvantage imposed by racism and discrimination. Thus, these individuals were doubly disadvantaged, through economic constraints and sanctioned racial discrimination. Perhaps childhood poverty may be differentially associated with exposure to uncontrollable outcomes among African Americans relative to Caucasians, making it more difficult for African Americans to develop

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We would like to thank an anonymous reviewer for their feedback on this point.
coping strategies involving future orientation and active coping. Additional research is warranted to sort of these possibilities.

Using EMA, we demonstrated that, among African Americans, those whose parents had greater education, in turn, had greater perceived momentary social support, independent of their current SES. We did not find such a relationship using a questionnaire measure of social support, consistent with findings reported by Sanders and Spencer (2005), but inconsistent with findings reported from CARDIA (Lehman et al., 2005; Taylor et al., 2006). However, the CARDIA study assessed supportive social interactions, which can be considered a specific component of perceived social support. Previous studies have suggested that EMA may provide a more reliable assessment of perceptions of emotions and social experiences in daily life than self-report measures (Bolger, Davis, & Rafaeli, 2003). We have also shown in other domains that EMA-based momentary assessments of social processes can demonstrate significant associations with outcomes even when questionnaire measures fail to show similar associations (Kamarck, Muldoon, Shiffman, Sutton-Tyrrell, 2007). Comparable findings have been reported for summaries of respondent behavior (Shiffman et al., 2007). It is possible that the assessment of experience of social support in current social interactions is qualitatively different from globally-assessed, perceived social support, which relies on global recall and judgments about social support that are not embedded in specific contexts or social interactions. Future studies that replicate our approach by using questionnaire and EMA methodology may shed further light on these associations.

There were limitations in the current study. First, there was a small number of African American participants. Caution should be used when interpreting the findings due to the small number of African Americans and the unbalanced distribution of participants across the two racial/ethnic categories. Second, the data are cross-sectional and correlational. Thus, causality cannot be determined. Third, our sample may not have been representative of the general population, as almost half of our participants reported having at least a college degree. Finally, the measurement of childhood SES was limited to participant recall and only assessed education. However, several studies in this area have assessed childhood SES recall and relied on parental education as an indicator of SES (e.g., Harper et al., 2002; Heinonen et al., 2006; Huurre, Eerola, Rahkonen, & Aro, 2007; Laaksonen et al., 2007; Powers et al., 2007). A final limitation is that the psychosocial measures were developed in largely Caucasian samples and their validity in African Americans is not well documented. Although Caucasians and African Americans show comparable responses on many of these psychosocial scales, including the COPE (Culver, Arena, Antoni, & Carver, 2002; Culver, Arena, Wimberly, Antoni, & Carver, 2004; Steffen, Hindeliter, Blumenthal, & Sherwood, 2001), the ISEL (Kaufman, Kosberg, Leeper, & Tang, 2010; Kosberg, Kaufman, Burgio, Leeper, & Sun, 2007), and the SNI (Rutledge et al., 2004; Troxel et al., 2010), additional work is needed to demonstrate their construct validity of these measures across these racial/ethnic groups.

This study provides initial support for the hypothesis that childhood SES may be associated with perceived social support in daily life and also overall perceptions of ones’ network diversity and coping skills, independent of adult SES. Interestingly, the findings suggest that the association between childhood SES and psychosocial resources in adulthood is relevant among African Americans and not Caucasians. As future research continues to examine the influence of childhood SES on adult health outcomes, the role of psychosocial resources as a mediating pathway of this relationship should be examined. Research which takes into account the psychosocial strengths of minority groups is best positioned to shed light on the ways in which individuals from more challenging circumstances are able to maintain their well-being.
Acknowledgments

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3 Again, we thank an anonymous reviewer for their feedback.


Figure 1.
Bar graph illustrating the mean daily social support scores across three levels of parental educational attainment by race/ethnicity.
Figure 2. 
Bar graph illustrating the mean scores for global social network diversity across three levels of parental educational attainment by race/ethnicity.
Figure 3.
Bar graph illustrating the mean scores for endorsement of active coping strategies across three levels of parental educational attainment by race/ethnicity.
Figure 4.
Bar graph illustrating the mean scores for endorsement of planning coping strategies across three levels of parental educational attainment by race/ethnicity.
Table 1
Socioeconomic Status and Psychosocial Resource Variables in the Full Sample and Stratified by Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Full sample</th>
<th>Caucasians</th>
<th>African Americans</th>
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<tbody>
<tr>
<td></td>
<td>(N = 342)</td>
<td>(N = 293)</td>
<td>(N = 49)</td>
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<tr>
<td>Socioeconomic Status</td>
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<tr>
<td>Variables, (n (%))</td>
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<tr>
<td>Highest Parental Education</td>
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<tr>
<td>&lt;High School</td>
<td>110 (32%)</td>
<td>97 (33%)</td>
<td>13 (26%)</td>
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<tr>
<td>HS Diploma or GED</td>
<td>108 (32%)</td>
<td>86 (29%)</td>
<td>22 (45%)</td>
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<tr>
<td>Some Postsecondary Training</td>
<td>124 (36%)</td>
<td>110 (37%)</td>
<td>14 (28%)</td>
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<tr>
<td>Participant Education</td>
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<tr>
<td>&lt;High School</td>
<td>86 (25%)</td>
<td>71 (24%)</td>
<td>15 (31%)</td>
</tr>
<tr>
<td>Some College or Technical Training</td>
<td>89 (26%)</td>
<td>71 (24%)</td>
<td>13 (37%)</td>
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<tr>
<td>College Degree</td>
<td>77 (22%)</td>
<td>72 (24%)</td>
<td>5 (10%)</td>
</tr>
<tr>
<td>&lt; College Degree</td>
<td>90 (26%)</td>
<td>79 (27%)</td>
<td>11 (22%)</td>
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<tr>
<td>Total Household Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;19,999</td>
<td>32 (9%)</td>
<td>20 (10%)</td>
<td>12 (25%)**</td>
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<td>20,000–34,999</td>
<td>72 (21%)</td>
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<td>35,000–50,000</td>
<td>84 (25%)</td>
<td>75 (26%)</td>
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<tr>
<td>&lt;50,000</td>
<td>148 (44%)</td>
<td>136 (47%)</td>
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<td>Psychosocial Resource</td>
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<tr>
<td>Variables, (M (SD))</td>
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<td></td>
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</tr>
<tr>
<td>Momentary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td>5.14 (1.50)</td>
<td>5.08 (1.46)</td>
<td>5.48 (1.67)</td>
</tr>
<tr>
<td>Proportion of Social Interactions</td>
<td>61 (17.00)</td>
<td>60.9 (15.84)</td>
<td>61.14 (22.10)</td>
</tr>
<tr>
<td>Questionnaires</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Interpersonal Support Evaluation List</td>
<td>137.57 (14.30)</td>
<td>137.81 (14.14)</td>
<td>136.18 (15.31)</td>
</tr>
<tr>
<td>Social Network Index</td>
<td>6.61 (1.90)</td>
<td>6.57 (1.86)</td>
<td>6.86 (2.16)</td>
</tr>
<tr>
<td>Coping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>12.72 (2.47)</td>
<td>12.73 (2.39)</td>
<td>12.57 (2.95)</td>
</tr>
<tr>
<td>Planning</td>
<td>13.29 (2.81)</td>
<td>13.33 (2.73)</td>
<td>13.06 (3.31)</td>
</tr>
<tr>
<td>Emotion-focused</td>
<td>9.37 (2.92)</td>
<td>9.51 (2.92)</td>
<td>8.53 (2.84)*</td>
</tr>
</tbody>
</table>

\* \(p < .05\).

\** \(p < .0001\).
Table 2

Unadjusted Correlations Among Childhood and Adult Socioeconomic Status and Psychosocial Resource Variables Stratified by Race/Ethnicity.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Highest Parental Education</td>
<td>-</td>
<td>.04</td>
<td>.11</td>
<td>.38 **</td>
<td>-11</td>
<td>.09</td>
<td>.39 **</td>
<td>.30 **</td>
<td>.39 **</td>
<td>.06</td>
</tr>
<tr>
<td>2. Participant Education</td>
<td>.31 ***</td>
<td>-</td>
<td>.22</td>
<td>.06</td>
<td>-05</td>
<td>.18</td>
<td>.29 **</td>
<td>.40 **</td>
<td>.26 *</td>
<td>-15</td>
</tr>
<tr>
<td>3. Participant Income</td>
<td>.25 ***</td>
<td>.36 ***</td>
<td>-</td>
<td>.18</td>
<td>-10</td>
<td>.12</td>
<td>.39 **</td>
<td>.11</td>
<td>.10</td>
<td>-20</td>
</tr>
<tr>
<td>4. Momentary Social Support</td>
<td>.01</td>
<td>.15 **</td>
<td>.11 **</td>
<td>-</td>
<td>.05</td>
<td>.31 **</td>
<td>.26 *</td>
<td>.27 *</td>
<td>.47 ***</td>
<td>.07</td>
</tr>
<tr>
<td>5. Momentary Proportion of Social Interactions</td>
<td>-08</td>
<td>-14 **</td>
<td>.12 **</td>
<td>.05</td>
<td>-</td>
<td>.08</td>
<td>.08</td>
<td>-24 *</td>
<td>-22</td>
<td>-20</td>
</tr>
<tr>
<td>6. Interpersonal Support Evaluation List</td>
<td>-06</td>
<td>-10</td>
<td>.03</td>
<td>.18 **</td>
<td>.14 **</td>
<td>-</td>
<td>.27 *</td>
<td>.44 **</td>
<td>.45 ***</td>
<td>.02</td>
</tr>
<tr>
<td>7. Social Network Inventory</td>
<td>-.10</td>
<td>-.02</td>
<td>.26 ***</td>
<td>.21 ***</td>
<td>.30 ***</td>
<td>.27 ***</td>
<td>-</td>
<td>.16</td>
<td>.31 **</td>
<td>-.07</td>
</tr>
<tr>
<td>8. Active Coping</td>
<td>.03</td>
<td>.06</td>
<td>.07</td>
<td>.07</td>
<td>.12 **</td>
<td>.19 ***</td>
<td>.22 ***</td>
<td>-</td>
<td>.86 ***</td>
<td>.22</td>
</tr>
<tr>
<td>9. Planning Coping</td>
<td>.02</td>
<td>.13 **</td>
<td>.11 **</td>
<td>.09</td>
<td>.11 *</td>
<td>.21 ***</td>
<td>.20 ***</td>
<td>.72 ***</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>10. Emotion Focused Coping</td>
<td>.03</td>
<td>-.05</td>
<td>-.12 **</td>
<td>.09</td>
<td>-.01</td>
<td>.03</td>
<td>.01</td>
<td>.06</td>
<td>.02</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes. Spearman used for categorical variables and Pearson used for continuous variables. African Americans are above the diagonal. Caucasians are below the diagonal.

*** p ≤ .001,
** p ≤ .05,
* p ≤ .10.
Table 3
Post Hoc Analyses for Main Effects of *Childhood SES X Race/Ethnicity* Interaction Effects on Psychosocial Resource Variables in African Americans in Models Unadjusted and Adjusted for Adult SES.

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted for Adult SES</th>
<th>Adjusted for Adult SES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Childhood SES</td>
<td>Adult SES</td>
</tr>
<tr>
<td></td>
<td>B(SE)</td>
<td>p</td>
</tr>
<tr>
<td>Momentary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support +</td>
<td>.92(.30)</td>
<td>.003</td>
</tr>
<tr>
<td>Positive Social Experiences</td>
<td>.61(.31)</td>
<td>.06</td>
</tr>
<tr>
<td>Proportion of Social Interactions +</td>
<td>−4.46(4.38)</td>
<td>.31</td>
</tr>
<tr>
<td>Questionnaires</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Support Evaluation List</td>
<td>2.33(3.14)</td>
<td>.46</td>
</tr>
<tr>
<td>Social Network Inventory +</td>
<td>.97(.40)</td>
<td>.02</td>
</tr>
<tr>
<td>Coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active +</td>
<td>1.10(.57)</td>
<td>.06</td>
</tr>
<tr>
<td>Planning +</td>
<td>1.73(.61)</td>
<td>.007</td>
</tr>
<tr>
<td>Emotion Focused</td>
<td>.39(.55)</td>
<td>.49</td>
</tr>
</tbody>
</table>

Notes. Covariates included in all models were age and sex.

+ = Outcomes significantly predicted by the *Childhood SES x Race/Ethnicity* interaction term. The Interpersonal Support Evaluation List included as a covariate in models predicting momentary social support.