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Sheyla P. Medina
University of Pennsylvania

Valerie Lewis
Children's Hospital of Philadelphia

Susmita Pati
University of Pennsylvania

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Methods: We explored the relationship between parental educational attainment and adolescents' reports of racial discrimination using written surveys from 135 African-American female adolescents seeking family planning services at an urban hospital-based adolescent clinic in Pennsylvania. Dimensions of perceived discrimination that were captured in this study included personal experiences, vicarious racial discrimination, and perceived discrimination against African-Americans as a group. Parental educational attainment was categorized as "some or completed high school/GED" and "some or completed college." To account for missing parental education data, a sensitivity analysis was performed in which missing data were recoded into parental education categories and used in chi-square cross tabulations.

Results: Most of the sample (mean age = 17.04; SD = 1.33) had completed high school or were currently enrolled in school, and were living in single-parent homes. Close to half (41.5%) of respondents did not know their father's educational attainment, and 17.8% did not know their mother's educational attainment. To account for missing education data, a sensitivity analysis was performed, which revealed no significant association between parental educational attainment and adolescents' perceived discrimination. However, although the respondents in our study do not appear to experience frequent discrimination, 85.9% reported at least one dimension of discrimination measured in this study.

Conclusions: The large percentage of African-American female adolescents who reported at least one dimension of discrimination implies an added burden and vulnerability to social stressors in their life.

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The Relationship between Parental Educational Attainment and Perceived Racial Discrimination among African-American Female Adolescents

Sheyla P. Medina, Valerie Lewis*, Susmita Pati

Faculty Mentor: Dr. Susmita Pati, Pediatrics
University of Pennsylvania School of Medicine

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* Advisor: Valerie Lewis, Assistant Physician, The Children's Hospital of Philadelphia Division of Adolescent Medicine

respondents did not know their father's educational attainment, and 17.8% did not know their mother's educational attainment. To account for missing education data, a sensitivity analysis was performed, which revealed no significant association between parental educational attainment and adolescents' perceived discrimination. However, although the respondents in our study do not appear to experience frequent discrimination, 85.9% reported at least one dimension of discrimination measured in this study.

Conclusions: The large percentage of African-American female adolescents who reported at least one dimension of discrimination implies an added burden and vulnerability to social stressors in their life.

Introduction

Adolescence marks a critical developmental period during which youth are exposed to racial discrimination (Seaton, 2006; Sellers, Copeland-Linder, Martin, and Lewis, 2006). In particular, research shows that African-American youth report having had race-based discriminatory experiences (Fisher, Wallace, and Fenton, 2000; Gibbons, Gerrard, Cleveland, Wills, and Brody, 2004) and at a higher frequency when compared to other ethnic groups (Romero and Roberts, 1998). Perceived racial discrimination and indicators of socioeconomic status (SES) have been analyzed extensively in the context of health disparities and health outcomes among adult populations in the United States. For example, educational attainment has been studied among African-American adults to understand sociodemographic variations that are associated with reports of racial discrimination and health outcomes. However, the scarcity of research regarding education and adolescents' perceived discrimination warrants an assessment of this relationship.

Previous research shows the deleterious effects of racial discrimination on the psychological functioning of adult African-Americans (Broman, Mavaddat, and Hsu, 2000; Gee, Ryan, Laflamme, and Holt, 2006). Perceived racial discrimination among adults has been associated with self-reported worse health status, cardiovascular disease outcomes, risky behavior (i.e., smoking; alcohol use), and psychological distress (Hausmann, Jeong, Bost, and Ibrahim, 2008; Paradies, 2006; Williams and Mohammed, 2009; Williams, Neighbors, and Jackson, 2003). Racial discrimination pervades many aspects of life and is also considered a risk factor for adverse psychological functioning and mental health outcomes for adolescents (Sellers et al., 2006). Further exploration of adolescents' experiences and perceptions of discrimination may provide insight into youths' view of their interactions in various settings, including the health care system.

The present study assesses the role of parental educational attainment on adolescents' reports of perceived and experienced discrimination. Further, the strength of this relationship is examined for maternal and paternal educational attainment levels. Results are compared to assertions made by other studies on adolescent populations to examine whether the study supplements or refutes trends in the literature. Although the present study does not measure mental and physical health outcomes of adolescents, the results may influence future research that explore the dimensions of perceived discrimination in different settings, ranging from health clinics to schools. In particular, the findings can help shape cultural competence training for health care providers to understand the role of parental education in the health and health behaviors of adolescents (Gee et al., 2006). The results of the study may also help increase the development of adolescent coping skills by contributing to the shape of current support services found in health care settings and schools.

Previous Literature

Socioeconomic standing and racial discrimination act as considerable stressors for African-Americans. Elements of SES are important to study in adolescent and young adult populations because these indicators could inform exposure and susceptibility to perceived racial discrimination. However, few studies have exclusively explored the relationship between features of SES and self-reports of racial discrimination among adolescents (Caputo, 2003; Seaton, 2006).

Several studies have assessed SES differences in self-reported racism among adult populations as a secondary analysis (Brondolo, ver Halen, Pencille, Beatty, and Contrada, 2009; Franzini, Caughy, Spears, and Esquer, 2005; Mays, Coleman, and Jackson, 1996; Vines et al., 2006; Watson, Scarinci, Klesges, Slawson, and Beech, 2002). The current literature on SES and perceived racism among African-American adults focuses on specific SES indicators through which the relationship between education and perceived discrimination has emerged. Studies indicate that Caucasian women who have lower levels of educational attainment are more likely to report discrimination than their college-educated counterparts (Fowler-Brown, Ashkin, Corbie-Smith, Thaker, and Pathman, 2006; Hausmann et al., 2008; Watson et al., 2002). However, this relationship does not persist among African-Americans in these studies. Conversely, other studies, with only African-American samples, report that higher levels of education are associated with race-based discrimination (Bird and Bogart, 2001; Brown, 2001; Vines et al., 2006). Further, studies display no relationship between educational attainment and racial discrimination for African-American women (Kwate, Valdimarsdottir, Guevarra, and Bovbjerg, 2003; Watson et al., 2002) nor for a racially diverse sample of women (Ro and Choi, 2009). The field thus

presents conflicting research on the relationship between educational attainment and perceived discrimination among adult populations.

Studies have demonstrated that educational attainment is a strong individual-level indicator of SES that can predict health outcomes in adults (Cutler and Lleras-Muney, 2006; Winkleby, Jatulis, Frank, and Fortmann, 1992). Associations between adult respondents' level of educational attainment and perceptions of discrimination have been thoroughly analyzed as secondary analyses in studies. However, there is little known about this relationship in adolescents. The extant literature displays an insignificant relationship between SES variables, including parental educational attainment, and adolescents' reports of discrimination (Caputo, 2003; Fisher et al., 2000; Mendoza-Denton, Downey, Purdie, Davis, and Pietrzak, 2002; Romero and Roberts, 1998; Scott, 2003). The present study examines the relationship more specifically by assessing parental educational attainment in relation to adolescents' reports of perceived and experienced racial discrimination.

Research Aims

The present study focuses on responses of perceived and experienced discrimination, and reports of parental educational attainment, from African-American female youth, ages 13 to 21, who participated in the Race and Health Care Survey study administered at an urban health clinic affiliated with The Children's Hospital of Philadelphia. Through the study, we intend:

1. To assess the relationship between parental educational attainment and direct experiences of racial discrimination, vicarious racial discrimination (i.e., racially discriminatory experiences of family members and friends; Seaton, 2006; Harrell, 2000), and perceived racial discrimination against African-Americans as a group.
2. To examine the difference between perceived intergroup and intragroup racial discrimination and its association to parental educational attainment.
3. To compare the relationship between maternal and paternal levels of educational attainment and adolescents' perceived discrimination.

Methods

Survey Development

The present study uses data from the study on "African-American adolescent girls' perceptions of racial discrimination when accessing reproductive health care and the impact on intent to return for care" (Protocol No: 2007-12-568) conducted by Dr. Nadja Peter and Dr. Valerie Lewis at The

Children's Hospital of Philadelphia. The Race and Health Care study aims to investigate African-American female adolescents' experiences and perceptions of racial discrimination during family planning visits at a hospital-based clinic, to assess respondents' intent to return for care, and to examine respondents' health outcomes, including contraceptive use, pregnancy, and sexually transmitted infections. The study consists of four phases, including the administration of in-depth interviews regarding perceived discrimination in general medical visits, reproductive health care visits, and other contexts, a survey tool assessing experiences of discrimination in health care and non–health care settings based on interview data, and reviews of enrolled subjects' medical record charts.

Dr. Valerie Lewis developed the survey tool after an extensive literature review and assessment of 24 interviews. Survey items used in the present study were adapted from other validated surveys or constructed based on qualitative analysis of interviews. The Race and Health Care Survey was designed to obtain valuable data on female respondents' past experiences and perceptions of racial discrimination on a larger scale. For the purposes of the McNair Scholars Program research project, eight items of the 32-item survey are used, which include three open-ended items and five close-ended items.

The survey was piloted with five respondents at an urban hospital-based clinic to obtain feedback on terminology, overall comprehension of survey items, and recommendations on how to improve the survey. Human subjects approval was received by the Institutional Review Board of The Children's Hospital of Philadelphia prior to subject recruitment.

Measures

Demographics. Respondents answered a number of demographic questions, including self-reported ethnicity, birth date, skin color, zip code of their home, and cohabitation with others. In addition, respondents were asked about their parents' educational attainment and employment as well as family's use of social security income, cash assistance, and health insurance coverage.

Parental or guardian educational attainment. Measures used in the present study include parental or guardian educational attainment (see Appendix). Parental educational attainment was assessed through respondents' self-report of the highest grade their biological mothers and fathers completed (i.e., items 10 and 12). During the course of subject recruitment, it became evident that some respondents did not live with their biological parents. In order to assess the educational attainment of the primary caregiver(s) in respondents' homes, an open-ended item (i.e., item 14) was used to list the primary guardian's relationship to the respondent and an estimate of the caregiver's educational attainment. Parental or guardian educational attainment responses included middle school, less than high

school, high school diploma or general equivalence diploma (GED), some college, technical school, completion of college, and completion of graduate school studies. For analysis, parental educational attainment variables were collapsed into "some or completed high school/GED" and "some or completed college" categories.

Race-based discrimination. Previous experience and perceptions of racial discrimination are captured in the following contexts within the survey: direct experiences of racial discrimination (i.e., item 22), vicarious racial discrimination (i.e., item 23), and perceived discrimination against African-Americans as a group (i.e., items 18, 19, and 20). All items use a four-point Likert scale (never to often) adapted from the Experience of Discrimination (EOD) measure (Krieger, 1990; Krieger and Sidney, 1996; Krieger, Smith, Naishadham, Hartman, and Barbeau, 2005). Although the EOD measure has been validated for African-American and Latino adults, it has not yet been validated for adolescent populations.

The item on direct experiences of racial discrimination examines respondents' previous experiences with racial discrimination. The Race and Health Care Survey question is adapted from item two in the Global Questions section of the EOD measure. However, the present survey item prompts for "racial discrimination" instead of "discrimination based on race, ethnicity or color" found in the EOD measure, which does not account for varying effects of each term on reporting (Krieger, 1990; Krieger and Sidney, 1996; Krieger, Smith, Naishadham, Hartman, and Barbeau, 2005).

The item on vicarious discrimination explores respondents' awareness of racial discrimination in their immediate community. This definition of vicarious discrimination is consistent with the extant literature (Seaton, 2006; Harrell, 2000). Vicarious discrimination was identified in the interview phase of the study and constructed without adaptation to a validated item of this type of discrimination.

Item 18 investigates respondents' perceptions of discrimination against African-Americans. The item has been adapted from item one in the Global Questions section of the EOD measure. Item 19 probes respondents' perceptions of racial discrimination against African-Americans by non-African-Americans (i.e., intergroup racism), and item 20 examines respondents' perceptions of racial discrimination against African-Americans by African-Americans (i.e., intragroup racism). These definitions are consistent with present literature (Brondolo et al., 2009; Clark, Anderson, Clark, and Williams, 1999). Items were constructed to explore the distinction of in-race and out-of-race discrimination in the qualitative portion of the study.

Participants and Recruitment

A convenience sample of respondents was recruited at an urban adolescent health clinic affiliated with The Children's Hospital of Philadelphia. The urban clinic serves patients who are predominantly (95%) African-American. More than 90% of patient visits are made by patients between the ages of 13 and 21. Female patients account for approximately 80% of medical visits. The sample consisted of 135 African-American female adolescents and young adults whose ages range from 13 to 21 years (mean = 17.04; SD = 1.33).

Survey data were collected from May 1, 2009, to August 31, 2009. Prior to survey administration, research assistants were recruited and received on-site training, including data collection procedures and survey administration simulations.

Before their reproductive health care visits with providers at the clinic, female patients were approached by research assistants and asked if they would be interested in participating in the Race and Health Care Survey study. Willing respondents were screened after their reproductive health care visit. Respondents were eligible if they met the following criteria:

- Had not previously completed the survey or participated in the interview phase;
- Were between the ages of 13 and 21 years old;
- Were comfortable that the survey was conducted entirely in English;
- Identified themselves as Black or African-American;
- Received family planning care at the clinic;
- Had not previously discussed transitioning to a new provider for adult health care services;
- Were not pregnant.

Respondents who reported previous or current enrollment in special education classes because of behavioral issues or mild learning disabilities (e.g., dyslexia and math problem solving skill deficits) were eligible. Those who reported or appeared to have more severe cognitive impairment were excluded from the study. Further, patients receiving HIV-related health care services were not approached during the survey data collection phase. Of those female family planning patients who were present at the local health clinic during recruitment (N = 617), 58.8% were approached, 23.2% were eligible, and 21.9% of eligible patients participated. One respondent withdrew from participation in the study. The completion rate for this study was 94%.

After assessing respondents' eligibility and obtaining informed consent, research assistants provided study subjects with a paper copy of the 15-minute survey. Subjects were given privacy to

complete the survey without clinic personnel or the research assistant present in the room. No monetary incentives were offered.

Statistical Analysis

Statistical Package for the Social Sciences (SPSS) version 17.0 was used to perform descriptive analyses (SPSS Inc., Chicago, IL, USA). Cross tabulations were performed between parental educational attainment variables and discrimination variables. Discrimination variables were collapsed into "never" and "ever" categories to adequately perform cross tabulations. We created an "any discrimination" variable to assess adolescents' reports of at least one dimension of discrimination measured in this study. Paternal education data were missing for 41.5% of the sample, and maternal education data were missing for 17.8% of the sample. For respondents who did not reside with their biological mother or father, caregiver education data were available for 4.4% of the sample and therefore were not included in subsequent analyses. We conducted a sensitivity analysis of missing parental education data. Analyses were conducted once missing data were recoded into the lower educational attainment category and again when the data were recoded into the higher educational attainment category. To check for reliability, a random 10% of the data was re-entered and compared with the first data entry.

Results

A majority of the sample (N = 112; 83.0%) self-identified as non-Hispanic African-American (see Table 1). Most of the respondents had either completed high school or were currently enrolled in middle school or high school. Less than half of adolescents (35.6%) were employed. Respondents most often reported living with a single biological parent (63.7%) followed by no biological parent (22.2%). Less than 15% of respondents indicated that their family received social security income or cash aid. However, close to half of the sample did not know if family members received any of these alternative sources of income. Most respondents (80.7%) reported having health insurance coverage. Though fewer than half of fathers were employed, more than 60% of respondents' mothers were employed. Over half of mothers had graduated from high school or completed a middle school or high school grade. Although less than half of fathers had earned a high school diploma or less, 41.5% of paternal educational attainment data were missing because many respondents did not know this information about their biological fathers.

TABLE 1. Sample Characteristics (n = 135)

Variable	*n (%)*
Race/Ethnicity	
African, non-Hispanic	3 (2.2)
African-American, non-Hispanic	112 (83.0)
African-American, Hispanic	1 (0.7)
Afro-Caribbean, non-Hispanic	1 (0.7)
Biracial, non-Hispanic	1 (0.7)
Mixed heritage, non-Hispanic	7 (5.2)
Mixed heritage, Hispanic	1 (0.7)
Respondent Student Status (yes)	121 (89.6)
Respondent Educational Attainment	
Middle school/High school	121 (89.6)
Some college	5 (3.7)
Living Arrangement	
Both biological parents	19 (14.1)
Single biological parent	86 (63.7)
No biological parent	30 (22.2)
Respondent Employment Status (yes, employed)	48 (35.6)
Family Social Security Income Receipt	
Yes	18 (13.3)
No	53 (39.3)
Don’t know	62 (45.9)
Family Cash Aid Receipt	
Yes	9 (6.7)
No	60 (44.4)
Don’t know	64 (47.4)
Health Insurance Coverage	
Yes	109 (80.7)
No	13 (9.6)
Don’t know	12 (8.9)
Maternal Employment Status (yes, employed)	86 (63.7)
Maternal Educational Attainment	
High school/GED or less	77 (57)
Some college or completed college	30 (22.2)
Missing	24 (17.8)
Paternal Employment Status (yes, employed)	66 (48.9)
Paternal Educational Attainment	
High school/GED or less	62 (45.9)
Some college or completed college	14 (10.4)
Missing	56 (41.5)

Descriptive statistics yielded varying reports of perceived and experienced discrimination (see Table 2). About 85.9% of respondents reported at least one form of discrimination measured in this study. More than 80% of respondents reported that African-Americans "ever" faced discrimination in comparison to 13.3% of respondents who reported that this never occurred. Almost three-quarters reported that members of their immediate community had ever experienced racial discrimination. However, only 54.1% of respondents indicated ever personally experiencing racial discrimination. Although a majority of respondents (84.4%) perceived that members of other racial or ethnic groups "ever" discriminate against African-Americans, 63% of respondents also reported that African-Americans "ever" discriminate against African-Americans.

TABLE 2. Type and Frequency of Perceived Discrimination

Variable	*n (%)*	*n (%)*
Any discrimination	116 (85.9)	-
	Never	*Ever*
Blacks discriminated against	18 (13.3)	114 (84.4)
Non-Black-Black racial discrimination	19 (14.1)	114 (84.4)
Black-Black racial discrimination	43 (31.9)	85 (63.0)
Personal racial discrimination	61 (45.2)	73 (54.1)
Vicarious racial discrimination	34 (25.2)	100 (74.1)

Because of the large amount of missing parental education data, a sensitivity analysis was performed to assess the scope of the relationship between parental educational attainment and respondents' perceived discrimination. Chi-square analyses revealed no significant relationship between parental educational attainment and any measure of discrimination (see Table 3 and Table 4).

TABLE 3. Chi-Square Values for Cross Tabulations of Discrimination with Maternal Educational Attainment: Sensitivity Analysis of Missing Data

	1*	2**
Any discrimination (n = 121)	0.882	0.812
Blacks discriminated against ever (n = 128)	0.535[a]	0.763
Non-Black-Black racial discrimination ever (n = 129)	0.696[a]	1.406
Black-Black racial discrimination ever (n = 124)	0.001	0.137
Personal racial discrimination ever (n = 130)	5.959	3.823
Vicarious racial discrimination ever (n = 130)	0.765	0.003

*Missing data recoded as HS/GED or less, deceased not included.

**Missing data recoded as some college or completed college, deceased not included.

[a] Expected count less than 5.

TABLE 4. Chi-Square Values for Cross Tabulations of Discrimination with Paternal Educational Attainment: Sensitivity Analysis of Missing Data

	1*	2**
Any discrimination (n = 122)	0.002	0.700
Blacks discriminated against ever (n = 129)	0.607[a]	0.592
Non-Black-Black racial discrimination ever (n = 130)	0.702[a]	4.076
Black-Black racial discrimination ever (n = 125)	1.025[a]	10.387
Personal racial discrimination ever (n = 131)	0.087	0.002
Vicarious racial discrimination ever (n = 131)	1.111[a]	0.131

*Missing data recoded as HS/GED or less, deceased not included.

**Missing data recoded as some college or completed college, deceased not included.

[a] Expected count less than 5.

Discussion

The findings of this study suggest that parental educational attainment is not associated with adolescents' perceived discrimination. These results are consistent with the extant literature regarding the relationship between parental educational attainment and adolescents' reports of perceived discrimination (Caputo, 2003; Fisher et al., 2000; Mendoza-Denton et al., 2002; Romero and Roberts, 1998; Scott, 2003). However, the present findings rely on a sensitivity analysis for a substantial amount of missing education data and thus are limited in capturing the true relationship between parental educational attainment and perceived discrimination. Although the present study examines one dimension of SES, it aims to address the paucity of research on the interaction between perceptions of discrimination and dimensions of SES.

Current research has paid little attention to the role of social factors in perceived discrimination, which could help identify varying levels of susceptibility to this stressor (Brondolo et al., 2009; Williams and Mohammed, 2009). For example, a large percentage of African-American female adolescents in the present study reported at least one dimension of discrimination, and over half of respondents reported experiencing frequent discrimination. Our finding raises concerns about stressors that may affect adolescents' development. Among adolescent populations, perceived discrimination has been studied in the context of mental health functioning, substance use, and risky behaviors (Williams and Mohammed, 2009). Indeed, a study by Sellers et al. (2006) demonstrated a significant association between higher perceptions of racial discrimination and poorer psychological functioning, including more depressive symptoms and stress, among African-American adolescents aged 11 to 17. Similar trends have been found among samples of African-American college students (Bynum, Burton, and

Best, 2007; Utsey and Hook, 2007), in which reports of increased experiences of racial discrimination are associated with higher levels of psychological distress.

Although the present study captures African-American adolescents' perceptions of discrimination at only one point in time, the extant literature displays valuable findings about this stressor over time and among diverse ethnic groups. A longitudinal study (Greene, Way, and Pahl, 2006) among ethnic minority adolescents reveals that African-Americans report a greater increase in perceived discrimination by peers and adults than Latino and Asian American adolescents. Regardless of respondents' ethnic or racial background, perceived discrimination is significantly correlated with depressive symptoms and lower self-esteem. Similar results have been found in studies of ethnic minorities, including Vietnamese-American college students (Lam, 2007) and Latino students (Major, Kaiser, O'Brien, and McCoy; 2007), thereby highlighting a significant relationship between discrimination and mental health in youth samples. In addition to the deleterious psychological factors associated with perceived discrimination, research has illustrated significant relationships between reports of discrimination and risky behaviors among college students (Bennett, Wolin, Robinson, Fowler, and Edwards, 2005) and school-aged adolescents (Choi, Harachi, Gillmore, and Catalano, 2006; Terrell, Miller, Foster, and Watkins, 2006). These results warrant further investigation of the role of perceived discrimination in the health status of adolescents who seek health care services at our data collection site.

The present study also highlights differences in adolescents' reports of intra-group and inter-group discrimination as well as personal experiences and perceptions of discrimination against African-Americans. A majority of respondents believed that members of other racial groups discriminate against African-Americans with greater frequency than discrimination by African-Americans. Although a majority of respondents reported that African-Americans are discriminated against, over half of respondents reported that they had ever been targets of racial discrimination. These findings suggest that adolescents perceive that African-Americans as a group experience differential treatment from other racial and ethnic groups. However, respondents may perceive a personal immunity to being discriminated against. These perceptions may inform anticipatory responses to the identification of potential exposures of discrimination. Anticipatory responses may include coping strategies to buffer a discriminatory incident. In the current literature, racial identity is identified as a unique factor that may provide a coping approach when African-American youth experience racial discrimination. Racial identity is conceptualized as one's identification of ethnic group membership, which is associated with cultural knowledge and evaluation of the group (Brondolo et al., 2009; Phinney, 1990; Phinney, 1996).

In a sample of African-American school-aged adolescents, Sellers and colleagues (2006) demonstrated that adolescents' negative beliefs about public perception of African-Americans (i.e., public regard) were associated with greater reports of personal experiences of racial discrimination. Despite this relationship, heightened sensitivity to negative public perceptions weakened the relationship between perceived discrimination and psychological functioning. These findings are commensurate with another study of public regard among African-American college students (Sellers and Shelton, 2003). Although racial identity is considered a potential buffer against the health effects of discrimination, further research is needed to examine the relationship between perceived discrimination, health status, and protective factors. This research may prove valuable in identifying factors that attenuate the relationship between perceived discrimination and the psychological development and health behaviors exercised by adolescents.

The present study has several limitations that must be acknowledged. First, the convenience sample represents perceived and experienced discrimination of help-seeking female youth from one urban health clinic. Since data were not collected from African-American males, gender differences in discrimination reporting and its relationship to parental educational attainment cannot be examined. The findings of the current study are not generalizable to other populations. Second, missing data about parental educational attainment limited analyses and resulted in findings that may not fully capture the relationship between parental education level and respondents' perceived discrimination. Third, survey items used in the study were not previously validated for the target population and only captured general discrimination. Given the methodology used, we cannot discern the influence of question format, including lifetime versus event-specific reporting, on the relationship between parental educational attainment and discrimination. Fourth, the present study uses adolescents' self-reports of sociodemographic and discrimination variables. It is possible that respondents may have given educated guesses on parental educational attainment. Respondents may interpret major and minor episodes of discrimination differently, which may affect their responses to the frequency of experiences. Finally, the majority of adolescents did not reside in two-parent households, which introduces the potential mediating effect of living arrangement on the relationship between parental educational attainment and perceptions of discrimination.

Our findings highlight that parental educational attainment and perceptions of discrimination are not significantly associated. In light of the analysis performed in the present study, it is difficult to assess the true relationship between these two variables. Despite these limitations, our study reveals that female adolescents perceive discrimination as a reality facing African-Americans. Further research is needed to

understand how adolescents perceive discrimination and how they view their interactions in different settings. Given the significance of this stressor, the present findings can contribute to interventions that moderate adverse outcomes associated with discrimination. Adolescents' reports of discrimination can aid in developing programs on adolescent coping skills in schools. To improve the quality of health care for adolescents, awareness of these perceptions can serve training initiatives geared towards adolescent medical providers. These findings can also contribute to cultural competence curricula and support services in the health care setting.

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Appendix. Items from Race and Health Care Survey (Protocol No: 2007-12-568)

Q10. What is the highest grade in school your mom has completed?

Q12. What is the highest grade in school your dad has completed?

Q14. If you do not live with your biological mom or dad, please list who is the primary caregiver (who is responsible to pay the bills) in your home and the highest grade they have completed. If you are unsure of his/her education, please take your best guess.

How often do you feel that …				
Q18. Blacks are discriminated against?	**Never**	**Rarely**	**Sometimes**	**Often**
Q19. non-Blacks discriminate against Blacks because of race?	**Never**	**Rarely**	**Sometimes**	**Often**
Q20. Blacks discriminate against other Blacks because of race?	**Never**	**Rarely**	**Sometimes**	**Often**
Q22. you, personally, have been discriminated against because of your race?	**Never**	**Rarely**	**Sometimes**	**Often**
Q23. people that you know have been discriminated against because of their race?	**Never**	**Rarely**	**Sometimes**	**Often**