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CHILDHOOD RACISM EXPERIENCES AND POSTPARTUM DEPRESSIVE SYMPTOMS IN AFRICAN AMERICAN MOTHERS

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In the present research, we examined the effects of childhood experiences of racism—both directly and vicariously experienced when directed at family members or close others—on postpartum depressive symptoms one month after the birth of a child. The sample included 1,349 African American women, who were predominantly low-income. Data were collected by an NIH network in five different regions of the United States using community-based participatory research methods. Participants completed interview measures of childhood experiences of racism, current everyday experiences of discrimination, and postpartum depressive symptoms at one month after birth. We also assessed adult everyday experiences of discrimination as a potential mediator of the association between childhood racism and depressive symptoms. Direct and vicarious childhood racism experiences were each independently associated with greater postpartum depressive symptoms. Furthermore, when adult everyday experiences of racism were included in the models, the effects of childhood racism were no longer significant, suggesting mediation. Consistent with this hypothesis, associations between both childhood direct and indirect racism experiences and postpartum depressive symptoms were partially mediated by the participant's everyday experiences of racism as an adult. Our findings suggest that childhood racism experiences, even those that are observed rather than directly experienced, may have implications for future mental health.

Keywords: Racial discrimination, childhood racism, early adversity, mental health

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Racism is defined as the unequal treatment of an individual based on skin color or race/ethnicity (Williams & Williams-Morris, 2000). Studies in nationally representative samples show that a majority of African Americans frequently experience racism, which negatively influences employment prospects (Bertrand & Mullainathan, 2004; Wallace, Mendola, Liu, & Grantz, 2015), housing opportunities (Emerson, Yancey, & Chai, 2001), physical health (Richman, Bennett, Pek, Siegler, & Williams, 2007; Ryan, Gee, & Laflamme, 2006), and healthcare experiences (Hausmann et al., 2011). Racism may also affect individuals at important life stages. For example, research indicates that the lifelong accumulation of experiences of racial discrimination reported by pregnant African American women constitutes a risk factor for preterm delivery that is not explained by extraneous variables such as socioeconomic status, pre-existing health conditions, etc. (Collins et al., 2000; Collins, David, Handler, Wall, & Andes, 2004; Dominguez, Dunkel Schetter, Glynn, Hobel, & Sandman, 2008).

In addition to the adverse outcomes listed above, meta-analytic reviews conclude that there is a reliable relationship between perceived discrimination and poorer mental health outcomes (e.g., Pascoe & Smart Richman, 2009). Of particular relevance is a meta-analysis of 328 studies involving a total of 144,246 participants that revealed significant correlations between perceived racism and lower self-esteem and life satisfaction; and higher depression, anxiety, and psychological distress among African American men and women, even in longitudinal studies that controlled for initial levels of well-being (Schmitt, Branscombe, Postmes, & Garcia, 2014).

Although the link between racial discrimination and adverse mental health outcomes in adults is well established, no studies, to our knowledge, have examined the impact of childhood experiences of racism on mental health in adults. This lack of research is important to address, given that childhood is a critical developmental period for many health-relevant processes (Shonkoff, Boyce, & McEwen, 2009). Thus, the present research aimed to explore whether being the target of racism during childhood (direct childhood experiences of racism) or simply observing racism targeted at a family member or close peer during childhood (vicarious childhood experiences of racism) has implications for postpartum depressive symptoms among African American

mothers. As substantiated in other health research on observing others' experiences of racism (see, Dominguez et al., 2008; Hilmert et al., 2014; Kelly, Becares, & Nazroo, 2013; Priest et al., 2013), we use the term vicarious to refer to the notion that observations of unfair treatment targeting a close other (e.g., a parent, close relative, sibling, or same-race peer) as a child that are likely to have implications for understanding one's group identity.

RACISM AND DEPRESSIVE SYMPTOMS AFTER CHILDBIRTH

Postpartum depression is a mental health disorder characterized by feelings of sadness, irritability, fatigue, and worthlessness following the birth of a child (DSM-5; American Psychiatric Association, 2013). Postpartum depression affects approximately half a million mothers in the United States each year (Gavin et al., 2005). Though not all studies find evidence of a racial disparity in postpartum depression (Wei, Greaver, Marson, Herndon, & Rogers, 2008), there is fairly consistent evidence that African American women face an increased risk of postpartum depression when compared to non-Hispanic White women (Howell, Mora, Horowitz, & Leventhal, 2005; McLennan, Kotelchuck, & Cho, 2001; Rich-Edwards et al., 2006). For example, in a nationally representative sample of 7,537 teen and adult mothers, McLennan and colleagues (2001) found that Black race was associated with greater maternal depressive symptom levels even after controlling for sociodemographic risk variables (McLennan et al., 2001). This suggests that there is something specific about race that is influencing depressive symptoms during the postpartum period among minority women. Stress is one of the most consistent predictors of postpartum depression, particularly when paired with other psychological, social, and biological risk factors that may make the individual more vulnerable to postpartum depression (Beck, 2001; Halbreich, 2005; O'Hara, 2009; Robertson, Grace, Wallington, & Stewart, 2004; Yim, Tanner Stapleton, Guardino, Hahn-Holbrook, & Dunkel Schetter, 2015). Racism is a potential stressor that is particularly likely to affect African American women (Dominguez et al., 2008; Giscombé & Lobel, 2005), which merits a closer look as a possible predictor of postpartum depressive symptom in this population.

CHILDHOOD EXPERIENCES OF RACISM

Over the past decade, researchers have examined the influence of racial discrimination on the health and well-being of children and young people, who are considered vulnerable to its harmful effects (Patcher & Garcia Coll, 2009; Paradeis, 2006; Sanders-Phillips, Settles-Reaves, Walker, & Brownlow, 2009; Williams & Mohammed, 2009). Direct exposure to racism during childhood has been linked to poor child health, well-being, and development (Coker et al., 2009; Nyborg & Curry, 2003; Simons et al., 2002; Szalacha et al., 2003). For example, cross-sectional studies show that young people who experience racist treatment are more likely to struggle with mental health issues such as depression and anxiety (Priest et al., 2013). Importantly, racism does not need to be directly experienced for children to suffer from its harmful effects (Kelly et al., 2013; Priest, Paradies, Stevens, & Bailie, 2012). Children of parents affected by racism may also be at an increased risk of developing emotional and behavioral problems in adolescence (Caughy, O'Campo, & Mutaner, 2004).

Although the direct link between childhood racism experiences and mental health in adults has not been clearly established, there is strong evidence that suggests that adversity experienced in childhood is linked to poorer adult mental health outcomes. For example, adults who report experiences of adversity as children have a greater likelihood of nearly every type of psychopathology including depression, anxiety, drug and alcohol disorders, personality disorders, and generalized distress compared those who do not report these experiences (e.g., Banyard, Williams, & Siegel, 2001; Felitti et al., 1998; Repetti, Taylor, & Seeman, 2002). Research also finds that witnessing adversities experienced by close others may amplify the effects of personal adversities and increase the risk for mental health problems in adulthood (Edleson, 1999). For example, Turner and Lloyd (1999) found that both witnessed violence and hearing traumatic news (e.g., victimization of a relative or friend) during childhood independently predicted depression among young adults. Other research suggests that witnessing domestic violence during childhood may have psychological effects later in life (Edleson, 1999). This work dem-

onstrates that adversity does not need to be experienced firsthand to have nefarious effects on mental health.

EVERYDAY ADULT EXPERIENCES OF RACISM

Everyday experiences of racism are typically characterized by daily experiences of routine encounters with prejudice and discriminatory behavior that pervades people's daily social interactions (Essed, 1991). The frequency and negative effects of racism on the lives of African Americans are far reaching and well-documented (e.g., Kwate & Goodman, 2015). For instance, in a sample of 520 African American individuals, 96% reported experiencing racism over the past year, 98% reported experiencing racism at some point in their lives, and 95% found these events to be stressful (Landrine & Klonoff, 1996). In addition, studies of nationally representative samples of African Americans confirm that African Americans experience higher levels of everyday discrimination than Whites (Thomas, 1992), which has been found to be adversely related to life satisfaction and psychological distress in African Americans (Kwate, Valdimarsdottir, Guevarra, & Bovbjerg, 2003; Williams, Yu, Jackson, & Anderson, 1997).

Although a less well studied area in the racism literature, vicarious racism has emerged as a powerful aspect of African American women's experiences (Nuru-Jeter et al., 2009). In one study that examined the frequency of vicarious racism (sometimes also called indirect racism), 48% of African American pregnant women reported observing another person being the target of unfair treatment during childhood and 35% reported vicarious experiences during adulthood (Dominguez et al., 2008). Moreover, that reported vicarious exposure predicted lower birth weight whereas other stressors and direct racism did not. In another study of a subset of this sample, African American women who were vicariously exposed to racism in childhood and who also had higher blood pressure had lower birth weight infants compared to African American women without both of these factors (Hilmert et al., 2014).

How might direct or vicarious experiences of racism during childhood influence adult mental health? Racism is considered a stressor (Clark, Anderson, Clark, & Williams, 1999) and we know

that many stressors experienced during childhood may lead children to become vigilant to threat and mistrusting of others (Miller, Chen, & Parker, 2011). This vigilance can shape the manner in which people engage their social worlds, causing them to be more aware of potential threats directed toward them (Miller et al., 2011). These tendencies can produce adaptive responses among individuals such as an increased predisposition to read threat in ambiguous situations (i.e., when it is unclear whether another person is intentionally acting negatively; Miller et al., 2011), greater sensitivity to recognizing and responding to anger (Pollak & Kistler, 2002), and possible uncertainty about others' intentions and behaviors (Pollak & Sinha, 2002). For example, research demonstrates that a past history of experiencing discrimination can lead to increased activation of discrimination-related thoughts when individuals are faced with ambiguous circumstances. These thoughts, in turn, can bias how ambiguous events are interpreted (Inman & Baron, 1996). Again, it is important to point out that being vigilant for personally directed discrimination can protect an individual from potential harm if he or she is faced with a hostile environment where prejudice is common and overt (Feldman-Barrett & Swim, 1998). Although vigilance can serve an adaptive function in the short term (Hughes & Johnson, 2001), over the long term, these tendencies may lead to adverse outcomes. For example, researchers have found that vigilance to discrimination can lead stigmatized group members to experience heightened physiological threat responses (Blascovich, Mendes, Hunter, Lickel, & Kowai Bell, 2001), poorer mental health (Miller et al., 2011), increased anxiety (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002), and even decrements in academic performance (Mendoza-Denton et al., 2002). Thus, childhood racism, both directly and vicariously experienced, may increase postpartum depressive symptoms, and this association may be mediated by making individuals more aware of discriminatory behaviors directed at them in adulthood.

CURRENT STUDY

The present study utilized data collected from a multisite study in the United States. The sample consisted of 1,349 African American mothers. We examined participant reports of direct and vicarious exposure to racial discrimination during childhood, current experiences of racism/discrimination, and postpartum depressive symptoms at one month following the birth of a child. Our primary goal was to determine whether being the target of racism during childhood, or simply observing racism targeted at a family member or close peer as a child, has implications for postpartum depressive symptoms.

Based on previous studies demonstrating that negative childhood experiences may influence adult well-being (e.g., Banyard et al., 2001; Felitti et al., 1998), we hypothesized that these childhood experiences of racism would be associated with higher levels of postpartum depressive symptoms in African Americans. We expected this relationship to persist even after controlling for potential confounding variables such as education, income, and history of depression. Finally, we were interested in whether adult everyday experiences of racism would mediate the relationship between childhood racism experiences and postpartum depressive symptoms. This would potentially reflect on how childhood experiences set the stage for how adult experiences are perceived, and other possible means of linkage.

METHOD

OVERVIEW OF THE COMMUNITY CHILD HEALTH NETWORK

The Community Child Health Network (CCHN) is a national partnership of clinicians, academics, and community members funded by the *Eunice Kennedy Shriver* National Institutes of Child Health and Development (NICHD). The network conducted a study in a diverse cohort of women and their partners across five sites in the U.S. (Washington, DC; Baltimore, MD; Los Angeles County, CA; Lake County, IL; and eastern North Carolina) over two years following the birth of a child. The current study uti-

lized data from structured in-home interviews administered by trained interviewers at one month after the child's birth. Recruitment procedures, eligibility criteria, and sample characteristics for the full CCHN cohort are described in detail in previous publications (Dunkel-Schetter et al., 2013; Ramey et al., 2014). Women in each study site were recruited in the hospital following the birth of a baby, with the exception of one site (North Carolina), where participants were recruited during pregnancy or in postpartum clinics. Women were eligible to participate if they met the following inclusion criteria: 18 to 40 years of age, residence in one of the study communities for at least 6 months, having four or fewer children including the new infant, and absence of plans to be surgically sterilized after childbirth, so as to allow follow-up of a subsequent birth. The study protocol was approved by the institutional review boards at each participating site.

SAMPLE

The current study involved a subsample of mothers who self-identified as African American/Black ($N = 1,349$) at one month after birth. Participants were primarily recruited from Baltimore (33%), eastern North Carolina (23%), and Washington, D.C. (28%) with fewer from Lake County (7%) and Los Angeles (9%). On average, mothers were 24 years old ($SD = 4.9$) at the time of study enrollment and had completed 12.7 years of education ($SD = 1.99$). The mean per capita household income was \$10,867, with 53% of participants living in poverty (household income <100% federal poverty level), and another 26% near poverty (<200% federal poverty level). Fourteen percent of participants were married to the baby's father and 39% were living together.

MEASURES

Childhood Direct Discrimination. Participants were asked, "Think about when you were a child, age 16 or younger. At that time, did you ever feel you were personally discriminated against or were the target of prejudice, because of your race?" (Yes/No; Dominguez et al., 2008; Kreiger, 1990). If participants responded Yes to this question, they were then asked to report the type of

discrimination that occurred: personal, educational, employment, housing, or other.

Childhood Vicarious Discrimination. We used a similar validated item in order to capture childhood vicarious or observed experiences of racism (Dominguez et al., 2008; Krieger, 1990). Participants were asked: "Think about when you were a child, age 16 or younger. At that time, did you ever feel someone close to you was discriminated against or was the target of prejudice because of their race?" (Yes/No). If participants responded Yes to this question, they were then asked to report the race of the target of observed discrimination (open response), their relationship to the target (open response), and the type of discrimination that occurred (personal, educational, employment, housing, or other).

In addition to this measure, and in order to better capture same-race vicarious exposure to discrimination, we used participant reports of the race of the target to characterize each experience as either involving a race-congruent (e.g., an African American participant observing discrimination against an African American target) or race-incongruent target (e.g., an African American reporting discrimination towards another race target).

Depressive Symptoms. Participants completed the 10-item Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987). The EPDS is a validated screening instrument that assesses the severity of common postpartum depressive symptoms (e.g. In the past 7 days, have you felt sad or miserable?) The measure assessed symptoms experienced during the past 7 days. A composite was created using the sum of the 10 items, with imputation when three items or fewer were missing. Higher scores indicated more severe depressive symptoms ($\alpha = .84$).

Everyday Experiences of Racism. Participants completed a standardized 10-item instrument called the Everyday Discrimination Scale (Williams et al., 1997), which measures chronic, routine, and subtle everyday experiences of unfair treatment. Participants were asked: "In your day-to-day life how often do any of the following things happen to you?" Participants were then presented with situations of unfair treatment and were asked to report the frequency for each one on a scale from 1 (almost ev-

eryday) to 6 (never). Items were summed, with higher composite scores indicating more frequent experiences of discrimination.

Participants were then asked to identify the reason they believed they had experienced this treatment: ancestry or national origins, gender, race, age, shade of skin color, language or accent, sexual orientation, age, height or weight, or another reason that was not listed. The final score included only experiences of discrimination that were attributed to race, shade of skin color, or ancestry or national origins ($\alpha = .87$). Experiences of discrimination that were attributed to gender, age, sexual orientation, and height or weight were set to zero because they were infrequent and not pertinent to this study's hypotheses on racial/ethnic discrimination.

Control Variables. Participants reported their years of education, and history of depression (Yes/No). A per capita index of annual household income (in dollars per year) divided by household size was computed.

DATA ANALYSIS PLAN

We tested the primary hypothesis that both direct and vicarious experiences of childhood discrimination would be associated with depressive symptoms during the postpartum period among African American mothers. While there may be questions of interest to pursue with comparative racial analysis, we were primarily interested in the issues in African American women that follow from research demonstrating that experiences of racism impact physical and mental health (Kwate et al., 2003). In order to accomplish this, we ran two t-tests to compare (1) mean levels of depressive symptoms at 1 month postpartum between women who had or had not reported direct childhood racism experiences, and (2) mean levels of depressive symptoms at 1 month postpartum between women who had or had not reported indirect childhood racism experiences looking at the congruency between the participant's race and the target's race. Next, we used an ANCOVA to test for group differences while simultaneously controlling for education, income, and history of depression. Finally, everyday adult experiences of racism was tested as a mediator on the relationship between childhood racism experi-

TABLE 1. Demographic Characteristics and Descriptive Statistics in 1,349 African American Mothers

Categorical variables	<i>n</i>	(%)
Poverty group		
<=100% FPL	711	(52.7)
> 100 to 200% FPL	344	(25.5)
> 200% FPL	294	(21.8)
Relationship Status		
Not Married or Cohabiting	783	(58.3)
Cohabiting, Not Married	506	(39.4)
Married	185	(13.7)
Childhood Direct Discrimination (% yes)	264	(19.6)
Childhood Indirect Discrimination (% yes)	276	(20.5)
History of Depression (% yes)	154	(16.9)
Continuous variables	<i>M</i>	(<i>SD</i>)
Per capita household income	8847	(1058)
Education (years)	12.72	(1.99)
Age	24.08	(4.92)
Depressive Symptoms	4.54	(4.76)
Everyday Discrimination	3.00	(5.27)

ences (both direct and indirect) and depressive symptoms using the PROCESS macro for SPSS (Hayes, 2012; see also, Preacher & Hayes, 2008). Following the guidelines by Hayes (2012), we ran two separate mediation models, one for each type of childhood racism experience (direct and vicarious), to test for indirect effects using bootstrapped confidence intervals (CIs). Each indirect effect was evaluated as significant if the bias-corrected 95% confidence interval did not cross zero (Preacher & Hayes, 2008). In addition, we report results of the Sobel test, which is the traditional mediation significance test (Sobel, 1982).

RESULTS

DESCRIPTIVE DATA ON DISCRIMINATION

Table 1 displays descriptive statistics for demographic variables, childhood racism variables, everyday experiences of racism, and postpartum depressive symptoms. Table 2 provides correlations

TABLE 2. Correlations of Predictor and Control Variables with Postpartum Depressive Symptoms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Childhood Direct Discrimination	1						
(2) Childhood Vicarious Discrimination	.39**	1					
(3) Years of education	.10**	.12**	1				
(4) Per capita household income	.03	.05	.29**	1			
(5) History of Depression	.10**	.09**	-.04	.01	1		
(6) Williams Discrimination Score	.23**	.22**	-.01	-.04	.09**	1	
(7) EPDS Total Score	.11**	.11**	-.06*	-.08**	.27**	.23**	1

Notes. Per capita household income is adjusted for cost of living in study site. EPDS = Edinburgh Postnatal Depression Scale. * $p < .05$; ** $p < 0.01$

among all study variables including childhood vicarious and direct discrimination, adult everyday discrimination, control variables, and postpartum depressive symptoms.

Childhood direct discrimination was reported by 20% ($n = 264$) of Black mothers. In the subset of women who reported discrimination, African American mothers most frequently reported experiencing personal discrimination (such as racial slurs or names, dirty looks, etc.) in childhood (83%). The next most common reported form of discrimination was educational discrimination (such as unfair treatment by teachers or during admissions; 36%). Without considering the race of the target, childhood vicarious discrimination was reported by 21% of African American mothers ($n = 276$). Seventeen percent ($n = 226$) of African American mothers reported observing discrimination targeting another African American individual during childhood. Among African American mothers, the majority of participants who reported experiences of childhood vicarious discrimination most frequently reported family members (siblings, parents, or grandparents) to be the target of discrimination (94%, $n = 259$).

Concerning the frequency with which childhood direct and childhood vicarious experiences of discrimination co-occurred in this sample of African American mothers, women who reported experiences of direct childhood discrimination were significantly more likely to report vicarious childhood discrimination (47%) than those who did not report direct childhood discrimination (10%), $\chi^2(1) = 207.22, p < .001$.

ASSOCIATIONS BETWEEN CHILDHOOD RACISM EXPERIENCES AND DEPRESSIVE SYMPTOMS

In regards to childhood direct experiences of discrimination, African American mothers who reported experiencing discrimination as a child reported significantly greater postpartum depressive symptoms at one month postpartum ($M = 5.56$, $SD = 5.03$) compared to African American mothers who did not report such experiences ($M = 4.28$, $SD = 4.66$; $t(1281) = -3.86$, $p < .001$). An ANCOVA did not reveal a significant effect of childhood direct discrimination on depressive symptoms after controlling for the effect of education, income, and history of depression, $F(1, 856) = 2.80$, $p = .09$.

Results were similar when we examined the relationship between childhood *vicarious* experiences of discrimination and postpartum depressive symptoms. African American mothers who reported childhood vicarious discrimination for a race-congruent target ($M = 5.75$, $SD = 4.96$) reported higher levels of depressive symptoms compared to African American mothers who did not report vicarious discrimination or reported discrimination targeting an individual of a different race ($M = 4.32$, $SD = 4.69$, $t(1269) = -4.01$, $p < .0001$). Again, the relationship did not remain significant after controlling for education, income, and history of depression, $F(1,849) = 3.01$, $p = .08$.

MEDITATIONAL ANALYSES: EVERYDAY EXPERIENCES OF RACISM

We first tested adult everyday experiences of racism as a mediator of the relationship between childhood direct racism and depressive symptoms at 1 month postpartum. The effect of childhood direct racism on postpartum depressive symptoms through adult everyday experiences of discrimination was statistically significant, (indirect effect = $.61$, $SE = .12$, 95% CI [0.42, 0.91], Sobel $z = 5.74$, $p < .0001$) (See Figure 1). African American women who reported childhood direct racism (compared to those who did not report childhood direct racism) reported significantly more experiences of everyday experiences of discrimination as an adult ($b = 3.07$, $SE = 0.36$, 95% CI = 2.37, 3.76, $p < .0001$), which

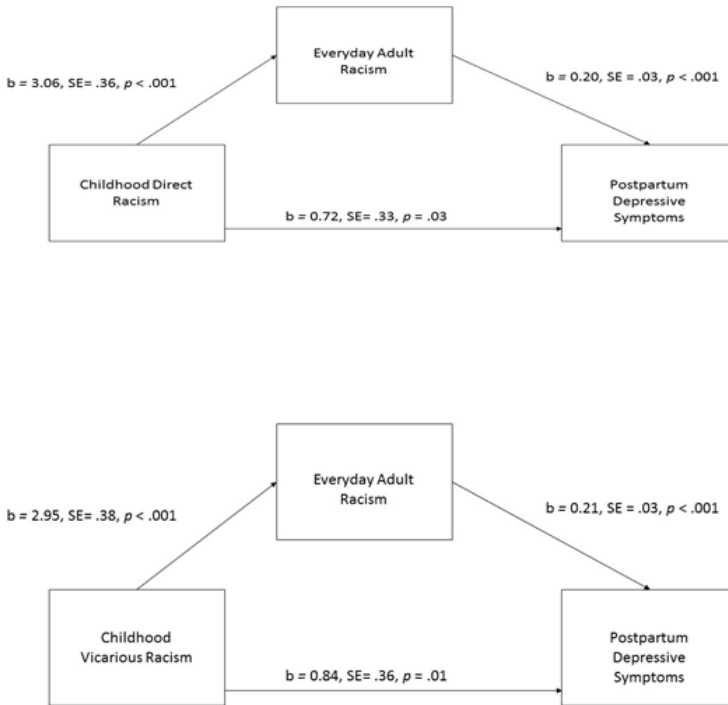


FIGURE 1. Direct and indirect effects of childhood racism experiences (direct and vicarious) on postpartum depressive symptoms among African American mothers.

were in turn associated with significantly higher levels of postpartum depressive symptoms ($b = .20$, $SE = .03$, $95\% CI = .15, .25$, $p < .0001$). Notably, a significant direct effect of childhood direct discrimination on postpartum depressive symptoms remained when the mediator was included in the model ($b = .72$, $SE = .34$, $95\% CI = .06, 1.37$, $p = .03$).

Childhood vicarious experiences of racism showed the same pattern. The indirect effect of the childhood vicarious racism variable on postpartum depressive symptoms through adult everyday experiences of discrimination was statistically significant (indirect effect = $.61$, $SE = .12$, $95\% CI [0.40, 0.88]$, Sobel $z = 5.50$, $p < .0001$). African American women who reported childhood vicarious racism reported more frequent experiences of discrimination as an adult at one month postpartum ($b = 2.96$, $SE = 0.38$, $95\% CI = 2.20, 3.70$, $p < .0001$) which were in turn associated with significantly higher levels of depressive symptoms ($\beta = .21$, SE

= 0.03, 95% *CI* = .15, .26, $p < .0001$). Again, a significant direct effect of childhood direct discrimination on postpartum depressive symptoms remained when the mediator was included in the model ($b = .85$, $SE = .36$, 95% *CI* = .14, 1.54, $p = .02$).

DISCUSSION

In a large sample of mostly low-income African American mothers of young infants, we found that direct and vicarious experiences of discrimination during childhood were relatively common and predicted depressive symptoms during the weeks immediately following the birth of a child. Extending the literature on the impact of childhood racism and other adverse early experiences, these reports of racism in childhood were associated with significantly greater depressive symptoms among African American women. In addition, these depressive symptoms appeared during the early postpartum period, which is a time when depressive symptoms are common but also highly variable, meaning that not every woman experiences PPD symptoms (Cooper & Murray, 1995). These findings are consistent with prior evidence that childhood experiences of racism can influence birth outcomes (Dominguez et al., 2008) as well as maternal health during pregnancy (Hilmert et al., 2014) and highlight the potential lasting impact these experiences can have on women's mental health.

A particularly notable finding of this research is that observed racism during childhood when directed toward others, most often a family member of the participant, was significantly associated with postpartum depressive symptoms. That is, African American individuals need not be the direct target of racism in order to experience its nefarious effects. From an attachment perspective, a child's sense of security and emotional stability is inextricably linked to parents' well-being (Sroufe, Carlson, Levy, & Egeland, 1999), and thus, threats to one's parents are likely to be personally threatening to the child. These findings underscore the need for prospective and longitudinal developmental research on racism that is now understudied in this time of life relative to stress of other types such as early adversity thought

to influence adult mental and physical health outcomes (e.g., Repetti et al., 2002).

One interpretation of these findings is that the more frequent reports of experiences of racism during adulthood by women who also report childhood experiences of racism may reflect the tendency for individuals to see more discrimination in ambiguous situations, referred to as a vigilance bias (Kaiser & Major, 2006). Given the aversive nature of racism, and the formative developmental period in which these incidents occurred, experiencing or observing racism as a child is likely to influence an individual's understanding of one's group and personal identity. Our findings suggest that discrimination in childhood may leave a residue that colors perceptions of experiences in adulthood. African American mothers who directly or indirectly experienced racism as a child might also anticipate being the target of racism as an adult, which in turn induces a stressful state (Shelton, Richeson, & Salvatore, 2005; Tropp, 2003) and can lead to poorer mental health. Indeed, research in psychopathology supports this notion that childhood adversities might make individuals more aware of adverse behaviors directed toward them (Hammen, Henry, & Daley, 2000). Furthermore, social psychological research suggests that previous experiences with prejudice and discrimination can create expectations among members of stigmatized groups to use a "zero miss signal detection strategy" wherein cues in the environment that appear unjust trigger vigilance for discrimination (Feldman-Barrett & Swim, 1998).

However, this interpretation should be considered with caution. For example, an inaccurate interpretation of our meditational findings would be that childhood experiences of racism lead African Americans to claim discrimination when none exists, or that they are overly sensitive to discrimination. This interpretation is dangerous for two reasons. First, it suggests that the experiences are not real and are only in the eyes of the beholder and considerable evidence goes against this interpretation. Second and related, such approaches tend to place the blame on the victims of prejudice and discrimination and further, to suggest that it is their responsibility to fix the situation which totally discounts the dangers of the larger societal realities of racism affecting children and adults. It also removes the responsibility from

the perpetrators of prejudice (Case & Hemmings, 2005). Third, this interpretation fails to consider a possible alternative explanation, that is that these findings may be the result of individuals remaining in an environment comparable to their childhood environment which call for vigilance and barrier to upward mobility support that phenomena as well (Cole & Omari, 2003; Shaw & Coleman, 2000). Since the current study did not include information on participants' childhood environments, we are unable to address this issue. Regardless, these results lend further empirical support to the robust links between perceived discrimination and postpartum depressive symptoms, and specifically provides insight how childhood experiences of racism may influence emotional well-being later in life.

In the present research, we found that current everyday experiences of racism partially mediated the relationship between childhood experiences of racism and postpartum depressive symptoms among African Americans. However, the direct associations between childhood experiences of racism (both direct and vicarious) and postpartum depressive symptoms remained significant even when current everyday experiences of racism was included in mediational models. The complete mechanisms through which early experience influences adult depression are not clear and deserve consideration in future studies. Many possible mechanisms are likely that are not addressed here.

When interpreting the findings, it is necessary to take into account study limitations. One limitation is that self-report is potentially subject to errors in recall (Krieger, Chen, Waterman, Rehkopf, & Subramanian, 2003), and reports of childhood experiences of racism may be biased toward over-reporting as a function of greater recent adult everyday experiences of racism (Krieger et al., 2003). While we would ideally like to capture childhood experiences of racism more proximally to when they occurred (i.e., during childhood), such a longitudinal study would be very difficult and costly because it involves following individuals from childhood to adulthood. In lieu of this, we used a reliable, well-validated measure to assess experiences of childhood direct and indirect racism recalled by adults (Dominguez et al., 2008; Krieger et al., 2003). Although retrospective,

we place value on this measure for several reasons. First, previous research has shown that experiences of racism are salient, memorable, and considered traumatic (Bryant-Davis & Ocampo, 2005; Carter, 2007). Second, given research demonstrating the powerful impact of childhood adversity on adult outcomes (e.g., Banyard et al., 2001; Felitti et al., 1998; Finkelhor & Browne, 1985; Repetti et al., 2002), racism (which is inarguably an adversity) experienced as a child may have the potential to shape the way in which the child perceives the world and interacts with others in the future. Third, although there may be some bias in the retrospective reporting of adverse experiences in childhood, research has shown that such bias does not necessarily invalidate retrospective studies of major adversities and false positive reports are rare (Hardt & Rutter, 2004). Despite these strengths, conclusions as to the validity of the retrospective recall of any childhood experience should include its limitations.

The correlational nature of this study also limits the ability to make inferences regarding causality. In other words, it is still unclear if childhood experiences of racism are solely responsible for these adverse outcomes, or if other factors such as living in a low-income neighborhood as a child, parenting, or other adult comorbid mental health issues may also be contributing to poorer mental health. Reverse causality is also a possibility, and it may be that depressed mothers are able to more easily recall negative experiences in both childhood and adulthood. Until we have longitudinal work on racism in children and their effects in adolescence and adulthood, this study points us to potential powerful influences on adult health and well-being, especially in new mothers, in this case poor mothers from several communities in the U.S.

This study also has several strengths. Although the associations of perceived racism with negative mental health outcomes among adults has been reported in the literature (see, Schmitt et al., 2014 for a review), to our knowledge, none of the prior racism studies have explicitly examined the associations between childhood direct and childhood vicarious experiences of discrimination on adult mental health. Ultimately, identifying potential stressors that occur early in life will improve the field's

understanding of the ways in which discrimination can influence disparate outcomes across the life course.

In sum, the results of this study demonstrate that childhood discrimination—both directly and vicariously experienced—were significantly associated with postpartum depressive symptoms in adult African American women at one month postpartum when controlling for some key potential confounds. These effects were partially mediated by reports of more frequent adult everyday experiences of racism. While research on pregnancy and depression has increased markedly, little research has examined postpartum depression among African American women (Steer, Scroll, & Beck, 1990) despite the fact that specific race-related stressors would potentially be quite powerful in precipitating depressive symptoms (e.g., Howell et al., 2005). These results suggest that a life course approach could prove useful for identifying early risk factors that may influence postpartum depressive symptoms among African American women in general and after the birth of a child.

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