

Social Inequality and Racial Discrimination: Risk Factors for Health Disparities in Children of Color

abstract

A child's sense of control over life and health outcomes as well as perceptions of the world as fair, equal, and just are significantly influenced by his or her social experiences and environment. Unfortunately, the social environment for many children of color includes personal and family experiences of racial discrimination that foster perceptions of powerlessness, inequality, and injustice. In turn, these perceptions may influence child health outcomes and disparities by affecting biological functioning (eg, cardiovascular and immune function) and the quality of the parent-child relationship and promoting psychological distress (eg, self-efficacy, depression, anger) that can be associated with risk-taking and unhealthy behaviors. In this article we review existing theoretical models and empirical studies of the impact of racial discrimination on the health and development of children of color in the United States. On the basis of this literature, a conceptual model of exposure to racial discrimination as a chronic stressor and a risk factor for poor health outcomes and child health disparities is presented. *Pediatrics* 2009;124:S176–S186

AUTHORS: Kathy Sanders-Phillips, PhD,^{a,b} Beverlyn Settles-Reaves, PhD,^b Doren Walker, PhD,^b and Janeese Brownlow, MS^b

^aDepartment of Pediatrics and Child Health, ^bHoward University College of Medicine, Washington, DC

KEY WORDS

social inequality, racial discrimination, health disparities, children of color

ABBREVIATIONS

EBV—Epstein-Barr virus

CRP—C-reactive protein

The views presented in this article are those of the authors, not the organizations with which they are affiliated.

www.pediatrics.org/cgi/doi/10.1542/peds.2009-1100E

doi:10.1542/peds.2009-1100E

Accepted for publication Jul 20, 2009

Address correspondence to Kathy Sanders-Phillips, PhD, Howard University College of Medicine, 1840 7th St NW, Washington, DC 20001. E-mail: ksandersphillips@aol.com

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2009 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: *The authors have indicated they have no financial relationships relevant to this article to disclose.*

Social inequalities in income, housing, education, and other factors contribute significantly to disparities in mental and physical health for children of color in the United States. However, a gap remains in our understanding of the mechanisms by which race, ethnicity, or both might influence child health outcomes and disparities.^{1–12}

Previous studies have failed to examine the full range of social inequalities to which children in communities of color in the United States are often exposed.^{4,13–15} In particular, despite documented relationships between racial discrimination and poor health in adults,^{4,6,16,17} few studies have examined the impact of racial discrimination on health outcomes in children of color.^{6,16–21} As a result, our understanding of the etiology of health disparities and ability to develop successful prevention and intervention programs might be limited.

In this article we examine the potential effects of racial discrimination on the health of children of color in the United States. We include a discussion of children's understanding of racial discrimination; the impact of racial discrimination on parenting behaviors; biological, psychological, and behavioral responses to racial discrimination; and implications of the findings for child health disparities. A conceptual model of the possible impact of racial discrimination on health outcomes for children of color in the United States is also presented.

DEFINITIONS

Children of color, who include those identifying as African American/black, Latino, and Asian or Pacific Islander, constitute ~30% of the US population and are among the fastest growing populations in the country.^{22–24}

“Social inequality” describes societies in which specific groups do not have equal social status based on ethnicity,

TABLE 1 Theoretical Models Related to the Study of Racial Discrimination and Children of Color

| Theory | Major Premise |
|--|---|
| Ecological theory | Social circumstances and experiences at multiple levels of a society affect child development, parenting behavior, and health outcomes. |
| Social-stratification theory | Societies develop hierarchies of dominant and secondary social groups. Group location affects health outcomes by influencing the social experiences and environmental risks to which group members are exposed. |
| Theory of racial inequality and social integration | Membership in a secondary social group may result in perceptions of social inequality based on experiences of racial discrimination. |

gender, or other characteristics.⁶ “Racial discrimination” is a form of social inequality that includes experiences resulting from legal and nonlegal systems of discrimination.^{25–33} These systems of discrimination create dominant and secondary social groups that differ in levels of power (political, economic, social, and personal) and access to goods and services (eg, medical care and services) in the society.^{5,7,34,35} Racial discrimination may occur at personal (eg, individual exposure to prejudice and racial discrimination) and institutional (eg, discrimination in housing and education) levels.³⁶

Although exposure to personal racial discrimination has characterized and influenced life options for many children of color in the United States,³⁷ racial discrimination at the institutional level is the primary cause of group differences in material conditions (eg, poverty, education, employment, and access to medical care) and power (eg, access to information, control of media, and political and economic influence). Institutional racism is structural in that it has been codified in the society's institutions, customs, and laws.³⁶ Exposure to personal and institutional racial discrimination, particularly when discrimination is legal, may foster high stress levels (ie, external circumstances that challenge or obstruct) that are consistently related to poor health outcomes for secondary social group members.^{7,27,38–41}

THEORETICAL FOUNDATIONS

Studies of the impact of racial discrimination on health outcomes and disparities in children of color are influenced by 3 theoretical models (see Table 1).

Ecological Theory

Bronfenbrenner⁴² concluded that relationships between a child and his or her immediate environment (microsystem) and the larger social environment (macrosystem) must be evaluated to fully understand development.^{9,43} Because racial discrimination is pervasive and occurs at multiple levels, evaluating its impact may be particularly critical to understanding health outcomes for children of color.^{8,44} For example, at the macrosystem level, children of color may experience negative images of their reference group and chronic stress associated with an implied group difference.⁴⁴ Macrosystem variables, such as institutions (eg, banks, schools, and media) and policies (eg, lending practices and restrictions and educational practices) that affect economic well-being and foster stereotypes of groups of color in the United States, may also influence microsystem variables, such as family functioning and neighborhood conditions, that affect children's development.^{9,44–51}

Social-Stratification Theory

“Social stratification” refers to the historical and current social, political,

and cultural processes that result in a society's hierarchy of groups.^{40,52,53} For example, despite significant gains, black Americans, as a group, tend to have lower social status in the United States as a result of their history of legal segregation.^{51,53} A group's place in a social system influences its exposure to risk factors, such as racial discrimination, that lead to stress and may directly and indirectly affect health.^{26,33,39,40,51–54}

Theory of Racial Inequality and Social Integration

The theory of racial inequality and social integration addresses the psychological pathways by which racial-discrimination experiences influence mental and physical health.⁵⁵ Anomie, which is characterized by feelings of hopelessness and perceptions of little control over life outcomes (ie, decreased self-efficacy), develops when children perceive contradictions between opportunities in the larger society and the conditions and lack of opportunity in their own lives.⁵⁵ Racial discrimination increases anomie by reinforcing perceptions of inequality and limiting options for achieving life goals.^{25,36,38,44}

RACIAL DISCRIMINATION: LEVELS OF EXPOSURE AND RACIAL SOCIALIZATION

Overt racism in the United States has waned considerably.^{56–58} However, racial discrimination continues, although most individuals are not consciously aware of its impact on their judgments, decisions, and behaviors with respect to lower status groups.^{59,60}

Exposure to Racial Discrimination

Almost all (98%) black Americans experienced some form of racial discrimination.⁶¹ Across ethnic groups, adults have reported experiencing personal insults (eg, name calling),

structural barriers (eg, refusals of loans), and hostile and exclusionary social environments.^{37,49,54,62–64}

Children of color are also exposed to racial discrimination.^{65–67} Black and Latino youth, particularly males, are most likely to report negative encounters with adults in the educational system, shopkeepers who accuse them of stealing, and negative interactions with the police.^{9,45,49,67–71} Compared with other groups, Asian youth report higher levels of personal racism from peers (eg, racial slurs and name calling, rejection, physical harm threats, and exclusion from peer activities).^{67,70} Black girls are more likely than other girls to report exposure to racism, and black males and females experience steep increases in racial discrimination as they grow older, especially from adults in positions of authority such as police officers.^{71–78}

Development of Racial Awareness

The successful negotiation of racial discrimination is a critical developmental challenge for children of color, who must build a healthy self-concept, decrease psychological distress, and identify successful coping strategies in the face of racial discrimination and social experiences that undermine the likelihood of achieving their goals.^{10,11,61,70,79,80} Many become hyper-vigilant in an effort to detect racial discrimination and adjust their behavior to reduce the chance of racially aversive interactions.⁸⁰

Children of color aged 3 to 4 years are most likely to identify with members of dominant social groups and negative racial stereotypes.^{79,81–83} Younger children may not fully understand racial discrimination⁸⁴ and are often sheltered from its effects by their family and community.^{44,82,85} However, they are significantly influenced by parental attitudes and experiences concerning racial discrimination and by mes-

sages about race from macrosystem sources such as the media.^{8,45}

As children develop inference-making skills, they learn of attitudes toward and stereotypes about groups in their society that can result in negative perceptions of their own group.^{36,44,45,83,86} Exposure to racial discrimination at this point can increase self-consciousness; decrease self-esteem and self-efficacy; and foster anger, depression, and anxiety symptoms.^{45,86} These experiences can have enduring effects on mental and physical functioning in adulthood.⁶⁴

At the ages of 10 to 12 years, children become more morally conscious and concerned about merit, equity, advantage, and disadvantage issues.⁸⁷ Exposure to racial discrimination at this age can cause feelings of helplessness, demoralization, and discouragement.⁴⁵ However, the development of abstract thinking can increase children's ability to identify with members of their own group and see themselves from their own perspective instead of others' perspectives.^{45,86}

During adolescence, children of color show greater awareness of conditions related to social position and minority status and are especially influenced by observations of racial discrimination in family and friends.⁴⁵ Their recognition of membership in a devalued social group may cause anger levels to increase dramatically.^{88–91}

Racial Socialization

Children of color learn to cope with racial discrimination through racial socialization.^{92–94} The critical role of parents in preparing children to cope with discrimination's adverse effects is well documented.^{12,64,85,92,95} Nearly 90% of black parents regard racial socialization as an important goal in raising their children, and most attempt to protect their children from racial discrimination's effects while promoting

a sense of cultural pride and well-being.^{46,83,92,96} Youth whose parents prepare them to recognize and cope with racial discrimination have reported less distress in response to personal and institutional discrimination.⁶⁷

Parenting Behaviors

Parents' ability to successfully socialize their children is related to their personal experiences of and reactions to racial discrimination.^{46–49,70,71,92–94,97} Parental support of and sensitivity to their children decreases when they are stressed by their own racial-discrimination experiences.^{61,85} Parents' exposure to racial discrimination also decreases their likelihood of providing a warm and caring environment for their children⁶¹ and increases irritable, explosive, and uninvolved parenting and harsh discipline.^{9,45} Many black mothers report that they vicariously experience racism by witnessing discrimination against their children.⁶⁴ Children's reports of unfair treatment by an adult are associated with a greater likelihood of receiving parental messages about discrimination and promotion of mistrust.⁹³

SOCIAL INEQUALITY'S IMPACT ON CHILD OUTCOMES AND FUNCTIONING

Krieger⁹⁸ has argued that studies of the direct effects of social inequalities, particularly racial discrimination, are needed to assess the potential impact of these social experiences on health outcomes. To examine the impact of social inequalities on health outcomes in adults and children, studies have merged investigations of "upstream" social factors (ie, poverty, education, and racial discrimination) that affect health with "downstream" studies of biological pathways related to disease and the impact of social environments, and children's adaptation to them, on later health and development.^{7,37,99,100}

Social Inequality and Allostatic Load

Many of the studies that have linked social inequalities with health outcomes are based on a stress model that posits that inequalities result in chronic stress, which precipitates physiological responses that increase the likelihood of disease and mortality in adults and children.^{7,37,101}

When social experiences chronically challenge biological systems, the body's ability to effectively and efficiently respond to these demands may diminish, potentially resulting in overt disease pathology.^{37,101–104} Allostatic load, a measure of the body's response to environmental demands, is a marker of adjustment to perceived or actual challenge, the degree of stress to which the person is exposed, and the resulting impact on multisystem function.¹⁰¹

Biomarkers of allostatic load include heart rate changes in response to posture or activity changes; cortisol measures in response to stress and daily variations in cortisol levels; acute-phase protein of inflammatory response to pathogen exposure; antibodies to Epstein-Barr virus (EBV); weight for height and age; height for age; insulin resistance; and glucose, high-density lipoprotein, low-density lipoprotein, and triglyceride levels.^{7,102,105,106} These biomarkers are associated with social inequalities such as poverty, homelessness, family dysfunction, workload, inadequate housing, and lack of social support.

For example, homeless boys aged 10 to 14 years in Nepal had higher mean cortisol levels, whereas boys in urban settings had lower values of acute-phase protein of inflammatory response to pathogen exposure and higher antibodies to EBV titers, as well as lower cardiovascular fitness levels and vagal tone.¹⁰¹ These findings were attributed, unexpectedly, to the higher levels of

social inequality experienced by urban youth. Social inequality was also associated with higher insulin, glucose, insulin resistance, and low-density lipoprotein cholesterol levels and lower high-density lipoprotein cholesterol and triglyceride levels in US children after the authors controlled for potentially confounding variables.¹

Two of the most common measures of allostatic load are antibodies produced in response to EBV and markers of systemic inflammation, such as C-reactive protein (CRP).^{102,106–108} Exposure to social stress triggers increased antibody response to latent herpes viruses such as EBV.¹⁰⁷ Research has documented a linear relationship between social stress and decreased immune function, as measured by levels of CRP.^{108,109} Exposure to social stress in children is associated with decreased immune function based on EBV-antibody measures.¹⁰¹

Social inequality and the resulting stress can lead to an increased antibody response via the downregulation of the immune system's cellular arm, which allows replication of latent EBV within infected host cells.¹⁰⁷ This stress-related viral reactivation results in the production of more circulating immunoglobulin G antibodies to counteract the virus's heightened circulation.¹⁰⁸ Genetic factors can mediate or moderate relationships between stress, allostatic load, and health outcomes.^{17,105} Symptoms of depression in response to social inequality are associated with increased levels of CRP¹⁰⁹ and proinflammatory cytokine production.¹⁰⁷

Racial Discrimination and Allostatic Load

Few studies have specifically examined racial discrimination as a measure of social inequality and assessed its relationship to allostatic load in children. McEwen has argued that racial dis-

crimination creates a chronic biological challenge to human regulatory systems that should be evaluated empirically.^{103,104,110}

Research has linked exposure to racial discrimination to overall self-reported health status in black adults.⁶ Physiological arousal including elevated blood pressure, digital blood flow, and heart rate was related to laboratory analogues and survey measures of exposure to racial discrimination.¹¹¹ Despite differences in sampling schemes, methodologies, and analyses, findings have been remarkably consistent in documenting physiological reactivity in response to racial-discrimination exposure in black Americans.⁷

In children, interactions between perceived racism and coping responses predicted systolic blood pressure in black children aged 11 years on average.¹¹² Internalized racism (ie, belief in negative racial stereotypes) in black children aged 14 to 16 years was associated with waist circumference in girls but not boys and predicted body fat distribution and insulin resistance independently of age, income, birth weight, physical activity, and family history of diabetes.³⁷

Racial discrimination may also affect prenatal development. Black women who reported higher racial-discrimination levels were twice as likely to deliver low birth weight infants.¹¹³ Researchers who used physician-generated reports of birth weight and gestational age found, after controlling for confounding variables, that women who reported higher racial-discrimination levels were more likely to deliver premature and/or low birth weight infants.¹¹⁴ This finding may be related to high levels of corticotrophin-releasing hormones in pregnant women who have experienced long-term stress.¹¹⁴

The potential impact of racial discrimination on health outcomes in children

of color may be exacerbated by racial discrimination from health care providers. An Institute of Medicine report on health disparities concluded that “(al)though myriad sources contribute to disparities, some evidence suggests that bias, prejudice, and stereotyping on the part of health care providers may contribute to differences in care.”¹¹⁵(p1) Massey¹¹⁶ developed a biosocial model suggesting that racial discrimination and segregation results in a concentration of stressors such as poverty, unemployment, and violence. These stressors precipitate psychological and biological responses that result in persistently elevated levels of cortisol and other glucocorticoid hormones. These elevated hormone levels may, in turn, be related to higher rates of coronary heart disease and inflammatory disorders.

Racial Discrimination, Psychological Functioning, and Risk Behaviors

One of the most profound psychological effects of racial discrimination is on general self-efficacy, which is a child’s cognitive orientation and belief in his or her ability to affect future outcomes.³⁸ Self-efficacy is a critical component of mental health and a primary predictor of healthy behaviors.¹¹⁷ Lower levels of self-efficacy are associated with risk behaviors such as drug use, aggression, and sexual risk-taking.^{88,117}

The emergence of self-efficacy during childhood is critically influenced by location in a social hierarchy, and mastery varies inversely with social status and context.^{8,38,118,119} When children do not develop a sense of control from their social experiences, their psychological distress increases.^{118,119} For example, children exposed to racial discrimination can become alienated from the larger society and feel hopeless and powerless.^{120,121} Higher rates

of depression are common among black youth who are exposed to racial discrimination.^{44,46,69,70} In general, group differences in racial discrimination largely explain differences in psychological functioning between children of color and other groups.⁷⁵

Exposure to racial discrimination is also a risk factor for violence in male black children^{6,122} and is associated with lower levels of moral reasoning and development, empathy, and perceptions of justice.^{104,123–128} Exposure to racial discrimination in children of color is also consistently related to internalizing (anxiety, depression, and withdrawal) and externalizing (anger and aggression) behavior, and these associations increase during adolescence.⁹⁷

RACIAL DISCRIMINATION: A RISK FACTOR FOR CHILD HEALTH DISPARITIES

Disparities in Biological Functioning

Research findings on racial discrimination and health outcomes (eg, high blood pressure, heart rate, and insulin and glucose levels)^{7,37,111–114,116} may have implications for understanding disparities in chronic diseases, such as coronary heart disease and diabetes, in communities of color. Although the mechanisms by which racial discrimination may contribute to disparities in chronic diseases have not been fully identified, current data suggest that exposure to racial discrimination may be associated with biological and psychological changes that are complex and enduring and influence health outcomes in childhood and/or adulthood. For example, findings that women who experience racial discrimination are more likely to have preterm births are potentially important, because preterm birth, among other factors, can be a risk factor for chronic dis-

eases such as coronary heart disease, high blood pressure, and diabetes.^{57,114}

The secondary social status that results in racial discrimination might also be a risk factor for drug use. In animal studies, secondary social status is associated with the number of dopamine receptors and higher drug use in subordinate members.¹²⁹ Human studies have shown significant relationships between drug use and secondary social status, particularly exposure to current and historical racial discrimination.¹³⁰ Difficulty in successfully regulating emotional responses to social stressors, such as racial discrimination, is also associated with higher levels of drug use in humans.¹³¹

Chronic stressors such as racial discrimination may also increase susceptibility to viral infections (such as HIV infection).¹³² Endocrine hormones, such as cortisol, might mediate this pathway.¹⁰⁹ The links between social stress, immune suppression, and enhanced susceptibility to infection suggest that immune function at the time of exposure to HIV may influence viral replication and the likelihood of the HIV virus infecting cells.¹³³ This conclusion is reinforced by findings that CRP levels, which are markers of inflammatory function, are directly related to HIV acquisition even when researchers control for sexual risk behaviors.¹³³ Prospective studies have also reported that higher EBV-antibody titers are associated with HIV seroconversion.¹³⁴

Disparities in Psychological and Behavioral Functioning

Independent of effects on biological functioning, perceptions of discrimination and inequality are associated with higher levels of substance use in adults (especially women) and youth of color under the age of 18.^{135–147} A tension-reduction hypothesis^{135,136} suggests that substance use in communi-

ties of color could be related to affective anxiety or depression states associated with social stressors such as racial discrimination that increase the motivation to self-medicate. Chronic states of physiological reactivity might exacerbate the psychological distress.^{135,136} Findings also suggest increases in HIV/AIDS risk behaviors as a function of racial discrimination in black adult women and women worldwide.^{26,148–150}

The findings on racial discrimination and aggressive behavior are particularly compelling. Among black youth, both victims and perpetrators of violence report experiences of discrimination and believe that violence is necessary for their survival.¹⁵¹ Because racial-discrimination exposure is associated with lower levels of empathy, moral development, and perceptions of injustice, children who are exposed to chronic racial discrimination could also be less likely to develop the perceptions of empathy and moral justice that prevent violent behaviors.^{123–128} Recent findings also suggest relationships between hostility and aggression, which have been associated with exposure to racial discrimination,^{45,97,122} and inflammatory disease, as measured by interleukin 6 and CRP.¹⁵²

CONCEPTUAL MODEL

Childhood is a critical period for developing perceptions of the self, social relationships and realities, and a sense of mastery over life outcomes.^{8,44,45} Exposure to racial discrimination from peers and adults can diminish a child's sense of worth and control and foster mistrust of others,⁹ particularly when children see the devastating effects of personal and institutional racism on family and friends.⁴⁵ Younger children may be especially vulnerable to the effects of racial discrimination, because that may not understand the source of harsh or negative behaviors from others or the effects on their parents.⁹ Such experiences can reinforce the

feelings of injustice, powerlessness, and victimization that lead to violent behaviors in older children.

On the basis of this review of findings that exposure to racial discrimination in children of color may be a significant source of the social inequality and stress that contribute to child health disparities, we propose a conceptual model of the effects of racial discrimination on mental and physical health in children of color (Fig 1). The model incorporates findings on exposure to racial discrimination at the microsystem and macrosystem levels, psychological and biological effects, and health outcomes and disparities that may be related to changes in psychological and biological function.

FUTURE RESEARCH DIRECTIONS

Krieger⁹⁸ has compared the potential impact of research on racial discrimination on the field of health disparities to the effects on the field of child abuse of the groundbreaking 1962 article by Kempe et al,¹⁵³ who documented the “battered-child syndrome” as a significant pediatric health problem. Similarly, research on the deleterious effects of racial discrimination on the health of children has the potential to “galvanize inquiry and action”⁹⁸(p194) regarding child health disparities. However, future research must be guided by scientific rigor and methodology.

For example, improved measurement tools are critical to future research on racial discrimination and health in children of color. Measures that distinguish between personal and institutional discrimination and methods to measure and interpret data on physiological responses to racial discrimination, particularly allostatic load and stress biomarkers, are needed.^{34,36,50,101,102} Multidisciplinary studies that use social and biological science methodologies should be conducted.³⁷ Research needs to develop more specific con-

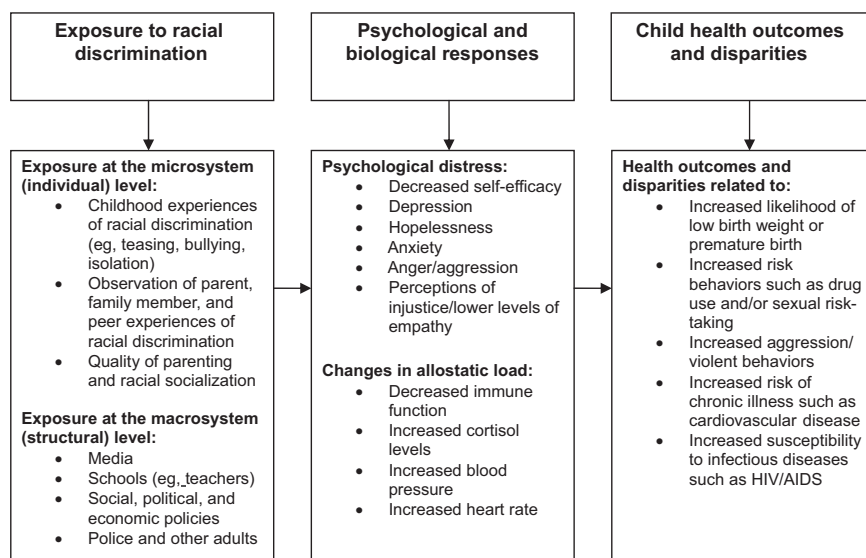


FIGURE 1

Conceptual model of the impact of racial discrimination on child health outcomes and disparities.

ceptual and theoretical models to analyze social inequality and health.^{5,26} Researchers also need to recognize and examine the impact of cumulative exposure to multiple forms of social inequality such as poverty, violence, and racial discrimination on health outcomes in children of color. Previous research has demonstrated that a cumulative representation of risk is a better predictor of poor outcomes in youth than a single-predictor model.^{154–160}

Awareness of the scientific need for and legitimacy of research on racial discrimination and child health must increase.³⁵ Federal agencies and peer-review committees should expect funded studies to include sufficient numbers of children of color to test the

external validity of theories and research across populations of youth.⁸ There must also be greater recognition of the need for studies of racial discrimination that identify within-group variation and heterogeneity in health outcomes in children of color.

Although comparisons of children in dominant versus secondary social groups can be made to examine the differential impact of dominant versus secondary social status on health, direct comparisons of racial-discrimination experiences between these 2 groups might not be fruitful or scientifically valid. First, racial-discrimination experiences do not occur at the same frequency in members of dominant and secondary groups.⁷⁵ Second, current measures of

racial discrimination are not generally normed for members of dominant groups. Third, because of power differences between groups resulting from historical and current legal and nonlegal systems of discrimination, exposure to racial discrimination in dominant groups is unlikely to have the same effects as in secondary groups.^{39,53} Thus, future studies should determine the degree to which variance in the frequency, severity, distribution, and/or developmental timing of experiences of racial discrimination contributes to heterogeneity in health outcomes within members of secondary social groups.

Finally, children's responses to social inequalities such as racial discrimination are malleable, and the related increases in risk behaviors can be modified.^{161–165} Despite the intractability of social inequalities and the complexities of conducting research that requires attention to a host of potentially confounding variables, previous findings suggest that the effects of racial discrimination on health and disparities can be successfully addressed. Intervention and prevention programs can foster empowerment and behavioral change in youth of color by acknowledging the consequences of social inequalities such as racial discrimination and helping children address these inequalities on the basis of the principles of social justice and social action.^{161–165}

REFERENCES

- Goodman E, McEwen B, Huang B, Dolan L, Adler N. Social inequalities in biomarkers of cardiovascular risk in adolescence. *Psychosom Med*. 2005;67(1):9–15
- Starfield B. Pathways of influence on equity in health. *Soc Sci Med*. 2007;64(7):1355–1362
- Braveman P. Health disparities and health equity: concepts and measurement. *Annu Rev Public Health*. 2006;27:167–194
- Schnittker J, McLeod JD. The social psychology of health disparities. *Annu Rev Sociol*. 2005;31:75–103
- World Health Organization, Commission on Social Determinants of Health. *Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health*. Geneva, Switzerland: World Health Organization; 2005. Available at: www.who.int/social_determinants/resources/esdh_framework.action_05_07.pdf. Accessed September 2, 2009
- Schulz A, Israel B, Williams D, Parker E, Becker A, James S. Social inequalities, stressors and self reported health status among African American and white women in the Detroit metropolitan area. *Soc Sci Med*. 2000;51(11):1639–1653
- Clark R, Anderson N, Clark V, Williams DR. Racism as a stressor for African Americans: a biopsychosocial model. *Am Psychol*. 1999;54(10):805–816
- Quintana SM, Chao RK, Cross WE, et al. Race, ethnicity and culture in child development: contemporary research and future directions. *Child Dev*. 2006;77(5):1129–1141
- Simons RL, Murry V, McLoyd VC, Hsui-Lin K,

- Cutrona C, Conger RD. Discrimination, crime, ethnic identity, and parenting as correlates of depressive symptoms among African American children: a multilevel analysis. *Dev Psychopathol.* 2002; 14(2):371–393
10. Spencer MB. Development of minority children: an introduction. *Child Dev.* 1990;61(2): 267–269
 11. McLoyd V. Linking race and ethnicity to culture: steps along the road from inference to hypothesis testing. *Hum Dev.* 2004; 47(3):185–191
 12. McLoyd VC, Cauce AM, Takeuchi D, Wilson L. Marital processes and parental socialization in families of color: a decade review of research. *J Marriage Fam.* 2002;62(4): 1070–1093
 13. Finkelhor D, Hamby SL, Ormrod R, Turner H. The Juvenile Victimization Questionnaire: reliability, validity, and national norms. *Child Abuse Negl.* 2005;29(4):383–412
 14. Finkelhor D, Hamby SL, Ormrod R, Turner H. Measuring poly-victimization using the Juvenile Victimization Questionnaire. *Child Abuse Negl.* 2005;29(11):1297–1312
 15. Finkelhor D, Hamby SL, Ormrod R, Turner H. Poly-victimization: a neglected component in child victimization. *Child Abuse Negl.* 2007;31(1):7–26
 16. Schulz A, Williams D, Israel B, et al. Unfair treatment, neighborhood effects, and mental health in the Detroit metropolitan area. *J Health Soc Behav.* 2000;41(3): 314–332
 17. Braun L. Race, ethnicity, and health: can genetics explain disparities? *Perspect Biol Med.* 2002;45(2):159–174
 18. Wallace JM Jr, Bachman JG, O'Malley PM, Johnston LD, Schulenberg JE, Cooper SM. Tobacco, alcohol, and illicit drug use: racial and ethnic differences among U.S. high school seniors, 1976–2000. *Public Health Rep.* 2002;117(1):567–575
 19. Wells K, Klap R, Koike A, Sherbourne C. Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. *Am J Psychiatry.* 2001;158(12):2027–2032
 20. Blankenship KM, Smoyer AB, Bray SJ, Mattocks K. Black-white disparities in HIV/AIDS: the role of drug policy and the correction system. *J Health Care Poor Underserved.* 2005;16(4 suppl B):140–156
 21. Harris KM, Gorden-Larsen P, Chantala K, Udry JR. Longitudinal trends in race/ethnic disparities in leading health indicators from adolescence to young adulthood. *Arch Pediatr Adolesc Med.* 2006; 160(1):74–81
 22. Aponte JF, Crouch RT. The changing ethnic profile of the United States. In: Aponte JF, Young Rivers R, Wohl J, eds. *Psychological Interventions and Cultural Diversity.* Needham Heights, MA: Allyn & Bacon; 1995:1–18
 23. Young Rivers R, Morrow CA. Understanding and treating ethnic minority youth. In: Young Rivers R, Aponte JF, Wohl J, eds. *Psychological Interventions and Cultural Diversity.* Needham Heights, MA: Allyn & Bacon; 1995:165–180
 24. US Census Bureau. *2000 Census.* Washington, DC: US Census Bureau; 2001
 25. Grusky DB, ed. *Social Stratification: Class, Race, and Gender in Sociological Perspective.* Boulder, CO: Westview Press; 2001
 26. Zierler S, Kreiger N. Reframing women's risk: social inequalities and HIV infection. *Annu Rev Public Health.* 1997;18:401–436
 27. Amaro H, Russo N, Johnson J. Family and work predictors of psychological well-being among Hispanic women professionals. *Psychol Women Q.* 1987;11(4):505–521
 28. Comer JP. Racism and African-American adolescent development. In: Willie CV, Rieker PP, Kramer BM, Brown BS, eds. *Mental Health, Racism, and Sexism.* Pittsburgh, PA: University of Pittsburgh Press; 1995
 29. Franklin AJ, Boyd-Franklin N. Invisibility syndrome: a clinical model of the effects of racism on African-American males. *Am J Orthopsychiatry.* 2000;70(1):33–41
 30. Utsey SO, Ponterotto JG, Reynolds AL, Cancelli AA. Racial discrimination, coping, life satisfaction, and self-esteem among African Americans. *J Couns Dev.* 2000;78(1): 72–80
 31. Williams DR, Williams-Morris R. Racism and mental health: the African American experience. *Ethn Health.* 2000;5(3–4): 243–268
 32. Essed P. Knowledge and resistance: black women talk about racism in the Netherlands and the USA. *Fem Psychol.* 1991;1(2): 201–219
 33. Sampson RJ, Morenoff JD, Raudenbush S. Social anatomy of racial and ethnic disparities in violence. *Am J Public Health.* 2005;95(2):224–232
 34. Harrell SP. A multidimensional conceptualization of racism-related stress: implications for the well-being of people of color. *Am J Orthopsychiatry.* 2000;70(1):42–57
 35. Kendall J, Hatton D. Racism as a source of health disparity in families with children with attention deficit hyperactivity disorder. *ANS Adv Nurs Sci.* 2002;25(2):22–39
 36. Jones CA. Levels of racism: a theoretic framework and a gardener's tale. *Am J Public Health.* 2000;90(8):1212–1215
 37. Mays VM, Cochran SD, Barnes NW. Race, race-based discrimination, and health outcomes among African Americans. *Annu Rev Psychol.* 2007;58:201–225
 38. Chambers EC, Tull ES, Fraser HS, Mutunhu N, Sobers N, Niles E. The relationship of internalized racism to body fat distribution and insulin resistance among African adolescent youth. *J Natl Med Assoc.* 2004; 96(12):1594–1598
 39. Aneshensel CS. Social stress: theory and research. *Annu Rev Sociol.* 1992;18:5–38
 40. Cooper R. Social inequality, ethnicity, and cardiovascular disease. *Int J Epidemiol.* 2001;30(suppl 1):S48–S52
 41. Ryff CD, Eyes CL, Hughes DJ. Status inequalities, perceived discrimination, and eudaimonic well-being: do the challenges of minority life hone purpose and growth? *J Health Soc Behav.* 2003;44(3):275–291
 42. Bronfenbrenner U. *The Ecology of Human Development: Experiments by Nature and Design.* Cambridge, MA: Harvard University Press; 1979
 43. Henderson ZP. Renewing our social fabric. *Hum Ecol.* 1995;23(1):16–19
 44. Spencer MB, Markstrom-Adams CM. Identity processes among racial and ethnic minority children in America. *Child Dev.* 1990; 61(2):290–295
 45. Simons RL, Simons LG, Burt CH, et al. Supportive parenting moderates the effect of discrimination upon anger, hostile view of relationships, and violence among African American boys. *J Health Soc Behav.* 2006; 47(4):373–389
 46. Stevenson HC, Reed J, Bodison P, Bishop A. Racism stress management: racial socialization beliefs and the experience of depression and anger in African American youth. *Youth Soc.* 1997;29(2):197–222
 47. Ceballos R, McLoyd VC. Social support and parenting in poor dangerous neighborhoods. *Child Dev.* 2002;73(4):1310–1321
 48. Jenkins EJ. Black women and community violence: trauma, grief, and coping. In: West CM, ed. *Violence in the Lives of Black Women: Battered, Black, and Blue.* Birmingham, AL: Haworth Press, Inc; 2002: 29–44
 49. Williams DR. Race, socioeconomic status, and health: the added effects of racism and discrimination. *Ann N Y Acad Sci.* 1999; 896:173–187
 50. Gee GC. A multilevel analysis of the relationship between institutional and individual racial discrimination and health status. *Am J Public Health.* 2002;92(4): 615–623
 51. Utsey SO, Bolden MA, Brown AL. Visions of

- revolution from the spirit of Frantz Fanon: a psychology of liberation for counseling African Americans confronting societal racism and oppression. In: Pentecost J, Cases J, Suzuki L, Alexander C, eds. *Handbook of Multicultural Counseling*. Thousand Oaks, CA: Sage; 2001:233–336
52. Lavis JN, McLeod CB, Mustard CA, Stoddart GL. Is there a gradient in life span by position in the social hierarchy? *Am J Public Health*. 2003;93(5):771–774
 53. Gregorio DI, Walsh SJ, Paturzo D. The effects of occupation-based social position on mortality in a large American cohort. *Am J Public Health*. 1997;87(9):1472–1475
 54. Schulz AJ, Kreiger J, Galea S. Addressing social determinants of health: community-based participatory approaches to research and practice. *Health Educ Behav*. 2002;29(3):287–295
 55. Burr J, Hartman JT, Matteson D. Black suicide in U.S. metropolitan areas: an examination of the racial inequality and social integration regulation hypothesis. *Soc Forces*. 1999;77(3):1049–1081
 56. Dasgupta N, Greenwald A. On the malleability of automatic attitudes: combating automatic prejudice with images of admired and disliked individuals. *J Pers Soc Psychol*. 2001;81(5):800–814
 57. Greenwald A, McGhee D, Schwartz J. Measuring individual differences in implicit cognition: the implicit association test. *J Pers Soc Psychol*. 1998;74(6):1464–1480
 58. Eberhardt JL, Purdie VJ, Goff PA, Davies PG. Seeing black: race, crime, and visual processing. *J Pers Soc Psychol*. 2004;87(6):876–893
 59. Dovidio J. On the nature of contemporary prejudice: the third wave. *J Soc Issues*. 2001;57(4):829–849
 60. Dovidio J, Kawakami K, Johnson C, Howard A. On the nature of prejudice: automatic and controlled processes. *J Exp Soc Psychol*. 1997;33(5):510–540
 61. Landrine H, Klonoff EA. *African American Acculturation: Deconstructing Race and Reviving Culture*. Thousand Oaks, CA: Sage; 1996
 62. Buka SL, Stichick TL, Birdthistle I, Earls FJ. Youth exposure to violence: prevalence, risks, and consequences. *Am J Orthopsychiatry*. 2001;71(3):298–310
 63. Collins RL. Issues of ethnicity in research on the prevention of substance abuse. In: Botvin G, Schinke S, Orlandi M, eds. *Drug Abuse Prevention With Multiethnic Youth*. Thousand Oaks, CA: Sage; 1995:28–45
 64. Nuru-Jeter A, Williams CT, LaVeist TA. A methodological note on modeling the effects of race: the case of psychological distress. *Stress Health*. 2008;14
 65. Johnson KA, Jennison KM. Stressful loss and the buffering effect of social support on drinking behavior among African-Americans: results of a national survey. *J Alcohol Drug Educ*. 1994;39(2):1–23
 66. Zimmerman M, Ramirez-Valles J, Maton K. Resilience among urban African American male adolescents: a study of the protective effects of sociopolitical control on their mental health. *Am J Community Psychol*. 1999;27(6):733–751
 67. Fisher CB, Wallace SA, Fenton RE. Discrimination distress during adolescence. *J Youth Adolesc*. 2000;20(6):679–695
 68. Rumbaut RG. The crucible within: ethnic identity, self-esteem, and segmented assimilation among children of immigrants. *Int Migr Rev*. 1994;28(4):748–794
 69. Banks KH, Kohn-Wood LP, Spencer M. An examination of the African American experience of everyday discrimination and symptoms of psychological distress. *Community Ment Health J*. 2006;42(6):555–570
 70. Bynum MS, Best C, Barnes SL, Burton ET. Private regard, identity protection and perceived racism among African American males. *J Afr Am Stud*. 2008;12(2):142–145
 71. Wong CA, Eccles JS, Sameroff A. The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *J Pers*. 2003;71(6):1197–1232
 72. Contrada R, Ashmore R, Gary M, et al. Measures of ethnicity-related stress: psychometric properties, ethnic group differences, and associations. *Appl Soc Psychol*. 2001;31(9):1775–1820
 73. Rolon-Dow R. Critical care: a color (full) analysis of care narratives in the schooling experiences of Puerto Rican girls. *Am Educ Rev J*. 2005;42(1):77–111
 74. Sellers RM, Caldwell CH, Schmeelk-Cone KH, Zimmerman MA. Racial identity, racial discrimination, perceived stress, and psychological distress among African American young adults. *J Health Soc Behav*. 2003;44(3):302–317
 75. Turner RJ, Avison WR. Status variations in stress exposure: implications for the interpretation of research on race, social economic status, and gender. *J Health Soc Behav*. 2003;44(4):488–505
 76. Martinez RM, Lillie-Blanton M. Why race and gender remain important in health services. *Am J Prev Med*. 1996;12(5):316–318
 77. Northridge ME, Stover GN, Rosethal JE, Sherard D. Environmental equity and health: understanding complexity and moving forward. *Am J Public Health*. 2003;93(2):209–214
 78. Fine M, Freudenberg N, Payne Y, Perkins T, Smith K, Wanzer K. "Anything can happen with police around": urban youth evaluate strategies of surveillance in public places. *J Soc Issues*. 2003;59(1):141–158
 79. Averhart CJ, Bigler RS. Shades of meaning: skin tone, racial attitudes, and constructive memory in African American children. *J Exp Child Psychol*. 1997;67(3):363–388
 80. Myers HF, Lewis TT, Parker-Dominguez T. Stress, coping, and minority health: biopsychosocial perspective on ethnic health disparities. In: Bernal G, Trimble JE, Burlew AK, Leong FT, eds. *Handbook of Racial and Ethnic Minority Psychology*. Thousand Oaks, CA: Sage; 2003:377–400
 81. Clark KB, Clark MK. The development of consciousness of self and the emergence of racial identification in Negro preschool children. *J Soc Psychol*. 1939;10:591–599
 82. Daniel JE, Daniel JL. Pre-school children's selection of race related personal names. *J Black Stud*. 1998;28(4):471–490
 83. Branch CW, Newcombe N. Racial attitude development among young black children as a function of parental attitudes: a longitudinal and cross-sectional study. *Child Dev*. 1986;57(3):712–721
 84. Caldwell CH, Zimmerman MA, Bernat DH, Sellers RM, Notaro PC. Racial identity, maternal support, and psychological distress among African American adolescents. *Child Dev*. 2002;73(4):1322–1336
 85. Piaget J. *The Child's Conception of Physical Causality*. London, UK: Paul Kessa, Tregren Trubner, 1930
 86. Harter S. The personal self in social context: barriers to authenticity. In: Ashmore RD, Jussim L, eds. *Self and Identity: Fundamental Issues*. New York, NY: Oxford University Press; 1997:81–105
 87. Turiel E. The development of morality. In: Damon W, ed. *Handbook of Child Psychology: Social, Emotional, and Personality Development*. NY: Wiley; 1997:863–932Vol 3. New York
 88. Gibbons FX, Yeh HC, Gerrard M, et al. Early experience with racial discrimination and conduct disorder as predictors of subsequent drug use: a critical period hypothesis. *Drug Alcohol Depend*. 2007;88(suppl 1):S27–S37
 89. Colder C, Stice E. The moderating effect of impulsivity on the relationship between anger and adolescent problem behavior: cross sectional and prospective findings. *J Youth Adolesc*. 1998;27(3):255–274

90. Loeber R, Hay D. Key issues in the development of aggression and violence from childhood to early adulthood. *Annu Rev Psychol.* 1997;48:371–410
91. Nyborg VM, Curry JF. The impact of perceived racism: psychological symptoms among African American boys. *J Clin Child Adolesc Psychol.* 2003;32(2):258–266
92. Hughes D, Chen LA. Parents' race-related messages to children: a developmental perspective. In: Tamis-Lemonda C, Balter L, eds. *Child Psychology: A Handbook of Contemporary Issues.* New York, NY: University Press; 1997:147–178
93. Hughes D, Smith EP, Stevenson HC, Rodriguez J, Johnson DJ, Spicer P. Parents' ethnic-racial socialization practices: a review of research and directions for future study. *Dev Psychol.* 2006;42(5):747–770
94. Hughes D, Johnson D. Correlates in children's experience of parents' racial socialization behaviors. *J Marriage Fam.* 2001;63(4):981–995
95. Thompson VL. Perceived experiences of racism as stressful life events. *Community Ment Health J.* 1996;32(3):223–233
96. Marshall S. Ethnic socialization of African American children: implications for parenting, identity development, and academic achievement. *J Youth Adolesc.* 1995; 24(4):377–396
97. Grant KE, McCormick A, Poindexter L, et al. Exposure to violence and parenting as mediators between poverty and psychological symptoms in urban African American adolescents. *J Adolesc.* 2005;28(4):507–521
98. Krieger N. Does racism harm health? Did child abuse exist before 1962? On explicit questions, critical science, and current controversies: an ecosocial perspective. *Am J Public Health.* 2003;93(2):194–199
99. Gluckman P, Hanson M, Beedle A. Nongenomic transgenerational inheritance of disease risk. *Bioessays.* 2007;29(2):145–154
100. Gluckman P, Hanson M, Beedle A, Spencer H. Predictive adaptive responses in perspective. *Trends Endocrinol Metab.* 2008; 19(4):109–110
101. Worthman CM, Panter-Brick C. Homeless street children in Nepal: use of allostatic load to assess the burden of childhood adversity. *Dev Psychopathol.* 2008;20(1): 233–255
102. Baker R, Panter-Brick C, Todd A. Methods used in research with street children in Nepal. *Childhood (Copenhagen, Denmark).* 1996;3(2):171–193
103. McEwen BS. Protection and damage from acute and chronic stress, allostasis and allostatic load overload and relevance to the pathophysiology of psychiatric disorders. *Ann N Y Acad Sci.* 2004;1032:1–7
104. McEwen BS. Stressed or stressed out: what is the difference? *J Psychiatry Neurosci.* 2005;30(5):315–318
105. Zimmermann US, Blomeyer D, Manfred L, Mann KF. How gene-stress-behavior interactions can promote adolescent alcohol use: the roles of predrinking allostatic load and childhood behavior disorders. *Pharmacol Biochem Behav.* 2007;86(2): 246–262
106. Rohleder NW, Herpfer J, Fiebich B, Kirschbaum C, Lieb K. No response of plasma substance P, but delayed increase of interleukin-1 receptor antagonist to acute psychosocial stress. *Life Sci.* 2006;78(26): 3082–3089
107. Glaser R, Kiecolt-Glaser JK. Stress-induced immune dysfunction: implications for health. *Nat Rev Immunol.* 2005;5(3): 243–251
108. Cohen S, Kessler RC, Underwood-Gordon L, eds. *Measuring Stress: A Guide for Health and Social Scientists.* New York, NY: Oxford University Press; 1997
109. Kiecolt-Glaser JK, Glaser R. Depression and immune function: central pathways to morbidity and mortality. *J Psychosom Res.* 2002;53(4):873–876
110. McEwen BS. Protective and damaging effects of stress mediators. *N Engl J Med.* 1998;338(3):171–179
111. Harrell JP, Hall S, Taliaferro J. Physiological responses to racism and discrimination: an assessment of the evidence. *Am J Public Health.* 2003;93(2):243–248
112. Clark R, Gochett P. Interactive effects of perceived racism and coping responses predict a school-based assessment of blood pressure in black youth. *Ann Behav Med.* 2006;32(1):1–9
113. Ellen IG, Majanovich T, Dillman KN. Neighborhood effects on health: exploring the links and assessing the evidence. *J Urban Aff.* 2001;23(3):391–408
114. Paradies Y. A systematic review of empirical research on self-reported racism and health. *Int J Epidemiol.* 2006;35(4): 888–901
115. Institute of Medicine. Unequal treatment: what healthcare providers need to know about racial and ethnic disparities in health-care. Available at: www.iom.edu/object.file/master/4/175/disparities_hcproviders8pgFINAL.pdf. Accessed September 2, 2009
116. Massey DS. Segregation and stratification: a biosocial perspective. *DuBois Rev Soc Sci Res Race.* 2004;1(1):7–25
117. Pulerwitz J, Amaro H, DeJong W, Gortmaker S, Rudin R. Relationship power, condom use and HIV/AIDS risk among women in the USA. *AIDS Care.* 2002;14(6):789–800
118. Mirowsky J, Ross CE. The consolation prize theory of alienation. *Am J Sociol.* 1990; 95(6):1505–1535
119. Mirowsky J, Ross CE. Control or defense? Depression and the sense of control over good and bad outcomes. *J Health Soc Behav.* 1990;31(1):71–86
120. Lamberty G, Pachter L, Crnic K. Social stratification: implications for understanding racial, ethnic, and class disparities in child health and development. In: *The Role of Partnerships: Second Annual Meeting of Child Health Services Researchers.* Rockville, MD: Agency for Healthcare Research and Quality; 2000. Available at: www.ahrq.gov/research/chsr2soc.htm. Accessed January 29, 2009
121. Sanders-Phillips K. Assaultive violence in the community: psychological responses of adolescents and their parents. *J Adolesc Health.* 1997;21(6):356–365
122. Hampton R, Oliver W, Magarian L. Domestic violence in the African American community: an analysis of social and structural factors. *Violence Against Women.* 2003;9(5):533–557
123. Fields R. Terrorized into terrorist: sequelae of PTSD in young victims. Paper presented at: third annual meeting of the Society for Traumatic Stress Studies; October, 1987; New York, NY
124. Kuther T, Wallace S. Community violence and sociomoral development: an African American cultural perspective. *Am J Orthopsychiatry.* 2003;73(2):177–189
125. Margolin G, Gordis EB. The effects of family and community violence on children. *Annu Rev Psychol.* 2000;51:445–479
126. Valois R, MacDonald J, Bretous L, Fisher M, Drane JW. Risk factors and behaviors associated with adolescent violence and aggression. *Am J Health Behav.* 2002;26(6): 454–464
127. Watts R, Griffith D, Abdul-Adil J. Sociopolitical development as an antidote for oppression: theory and action. *Am J Community Psychol.* 1999;27(2):255–272
128. Moane G. Bridging the personal and the political: practices for a liberation psychology. *Am J Community Psychol.* 2003; 31(1–2):91–99
129. Morgan D, Grant K, Gage H, et al. Social dominance in monkeys: dopamine D2 receptors and cocaine self-administration. *Nat Neurosci.* 2002;5(2):169–174
130. Brave Heart MYH. The historical trauma response among natives and its relationship

- with substance abuse: a Lakota illustration. *J Psychoactive Drugs*. 2003;35(1):7–13
131. Cohen S, Doyle WJ, Baum A. Socioeconomic status is associated with stress hormones. *Psychosom Med*. 2006;68(3):414–420
 132. Cohen S. Keynote presentation at the Eighth International Congress of Behavioral Medicine: the Pittsburgh common cold studies—psychosocial predictors of susceptibility to respiratory infectiousness illness. *Int J Behav Med*. 2005;12(3):123–131
 133. Solomon GF, Kemeny M, Temoshok L. Psychoneuroimmunologic aspects of human immunodeficiency virus infection. In: Ader R, Felten DL, Cohen N, eds. *Psychoneuroimmunology II*. Orlando, FL: Academic Press; 1991
 134. Nerurkar LS, Biggar RJ, Goedert JJ, et al. Antiviral antibodies in the sera of homosexual men: correlation with their lifestyles and drug usage. *J Med Virol*. 1987;21(2):123–135
 135. Gilbert MJ. Acculturation and changes in drinking patterns among Mexican-American women. *Alcohol Health Res World*. 1991;15(3):234–239
 136. Brady K, Sonne S. The role of stress in alcohol use, alcoholism, treatment and relapse. *Alcohol Res Health*. 1999;23(4):263–277
 137. Whitbeck LB, Hoyt DR, McMorris BJ, Chen XJ, Stubben JD. Perceived discrimination and early substance abuse among American Indian children. *J Health Soc Behav*. 2001;42(4):405–424
 138. Whitbeck LB, McMorris BJ, Hoyt DR, Stubben JD, LaFromboise T. Perceived discrimination, traditional practices, and depressive symptoms among American Indians in the upper Midwest. *J Health Soc Behav*. 2002;43(4):400–418
 139. Chapman MV, Pereira KM. The well-being of immigrant Latino youth: a framework to inform practice. *Fam Soc*. 2005;86(1):104–111
 140. Rosario M, Salzinger S, Feldman R, Ng-Mak, D. Community violence exposure and delinquent behaviors among youth: the moderating role of coping. *J Community Psychol*. 2003;31(5):489–512
 141. Shrake E, Rhee S. Ethnic identity as a predictor of problem behaviors among Korean American adolescents. *Adolescence*. 2004;39(155):601–622
 142. Richman JA, Shinsako SA, Rospenda K, Flaherty JA, Freels S. Workplace harassment/abuse and alcohol-related outcomes: the mediating role of psychological distress. *J Stud Alcohol*. 2002;63:414–420
 143. Sanders-Phillips K. Ethnic minority women, health behaviors, and drug abuse: a continuum of psychosocial risks, drug abuse. In: Hartel C, Glantz M, eds. *Origins and Interventions*. Washington, DC: American Psychological Association Books; 1999:191–217
 144. Sanders-Phillips K. Psychosocial factors influencing substance abuse in black women and Latinas. In: Kar S, ed. *Substance Abuse Prevention: A Multicultural Perspective*. Amityville, NY: Bay Publishing Company; 1999:199–216
 145. Davis SF. *Women at Risk for Alcohol and Drug Abuse Research*. Upper Saddle River, NJ: Prentice Hall; 1997
 146. McGrath E, Keita GP, Strickland BR, Russo NF. *Women and Depression: Risk Factors and Treatment Issues*. Washington, DC: American Psychological Association; 1995
 147. Rhodes R, Johnson A. A feminist approach to treating alcohol and drug-addicted African-American women. *Women Ther*. 1997;20(3):23–39
 148. Crane J. The epidemic theory of ghettos and neighborhood effects on dropping out and teenage childbearing. *Am J Sociol*. 1991;96(5):1226–1259
 149. Upchurch DM, Aneshensel C, Sucoff CA, Levy-Storms L. Neighborhood and family contexts of adolescence sexual activity. *J Marriage Fam*. 1999;61(4):920–933
 150. Jipguep-Akhtar MC, Sanders-Phillips K, Cotton L. Another look at HIV prevention in African American women: the impact of psychosocial and contextual factors. *J Black Psychol*. 2004;30(3):366–385
 151. Hammond W, Yung B. Psychology's role in the public health response to assaultive violence among young African-American men. *Am Psychol*. 1993;48(2):142–154
 152. Marsland A, Prather A, Cohen S, Manuck S. Antagonistic characteristics are positively associated with inflammatory markers independently of trait negative emotionality. *Brain Behav Immun*. 2008;22(5):753–761
 153. Kempe CH, Silverman FN, Steele BF, Droegemueller W, Silver HK. The battered child syndrome. *JAMA*. 1962;181:17–24
 154. Garbarino J. An ecological perspective on the effects of violence on children. *J Community Psychol*. 2001;29(3):351–378
 155. Deater-Deckard K, Dodge KA, Bates JE, Pettit GS. Multiple risk factors in the development of externalizing behavior problems: group and individual differences. *Dev Psychopathol*. 1998;10(3):469–493
 156. Ladd GW, Burgess KB. Do relational risks and protective factors moderate the linkages between childhood aggression and early psychological and school adjustment? *Child Dev*. 2001;72(5):1579–1601
 157. Gutman L, Sameroff A, Cole R. Academic growth curve trajectories from 1st to 12th grade: effects of multiple risk factors and preschool child factors. *Dev Psychol*. 2003;39(4):777–790
 158. Herrenkohl TI, Huang B, Tajima EA, Whitney S. Examining the link between child abuse and youth violence. *J Interpers Violence*. 2003;18(10):1189–1208
 159. Sameroff A. Identifying risk and protective factors for healthy child development. In: Clark-Stewart A, Dunn J, eds. *Families Count: Effects on Child and Adolescent Development*. New York, NY: Cambridge University Press; 2006:53–76
 160. Seifer R, Sameroff AJ, Baldwin CP, Baldwin CP. Child and family factors that ameliorate risk between 4 and 13 years of age. *J Am Acad Child Adolesc Psychiatry*. 1992;31(5):893–903
 161. Wallerstein N, Sanchez-Merki V, Dow L. Freirian praxis in health education and community organizing: a case study of an adolescent prevention program. In: Minkler M, ed. *Community Organizing and Community Building for Health*. New Brunswick, NJ: Rutgers University Press; 1997
 162. Garwick AW, Auger S. Participatory action research: the Indian Family Stories Project. *Nurs Outlook*. 2003;51(6):261–266
 163. Ramella M, De La Cruz RB. Taking part in adolescent sexual health promotion in Peru: community participation from a social psychological perspective. *J Community Appl Soc Psychol*. 2000;10(4):271–284
 164. McIntyre A. *Inner-City Kids: Adolescents Confront Life and Violence in an Urban Community*. New York, NY: New York University Press; 2000
 165. Campbell C, McPhail C. Peer education, gender and the development of critical consciousness: participatory HIV prevention by South African youth. *Soc Sci Med*. 2002;55(2):331–345

Social Inequality and Racial Discrimination: Risk Factors for Health Disparities in Children of Color

Kathy Sanders-Phillips, Beverlyn Settles-Reaves, Doren Walker and Janeese Brownlow

Pediatrics 2009;124;S176

DOI: 10.1542/peds.2009-1100E

| | |
|---|--|
| Updated Information & Services | including high resolution figures, can be found at: http://pediatrics.aappublications.org/content/124/Supplement_3/S176 |
| References | This article cites 136 articles, 2 of which you can access for free at: http://pediatrics.aappublications.org/content/124/Supplement_3/S176#BIBL |
| Subspecialty Collections | This article, along with others on similar topics, appears in the following collection(s): Community Pediatrics http://www.aappublications.org/cgi/collection/community_pediatrics_sub |
| Permissions & Licensing | Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.aappublications.org/site/misc/Permissions.xhtml |
| Reprints | Information about ordering reprints can be found online: http://www.aappublications.org/site/misc/reprints.xhtml |

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Social Inequality and Racial Discrimination: Risk Factors for Health Disparities in Children of Color

Kathy Sanders-Phillips, Beverlyn Settles-Reaves, Doren Walker and Janeese
Brownlow

Pediatrics 2009;124;S176

DOI: 10.1542/peds.2009-1100E

The online version of this article, along with updated information and services, is
located on the World Wide Web at:

http://pediatrics.aappublications.org/content/124/Supplement_3/S176

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2009 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

