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Perceived Discrimination and Children's Mental Health Symptoms

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about their experiences with perceived discriminatory acts.Key words: anxiety, BASC-Ç childrenÕs mental health, depression, health disparities, life course theory, mental health, mental health outcomes in children, perceived discrimination, racism

ONE OF the overarching goals of the U.S. Department of Health and Human Services, Healthy People 2020,[1] is to ÒAchieve health equity, eliminate disparities, and improve the health of all groups.Ó Perceived ethnic discrimination has been linked to health inequities and may have a particularly devastating impact on children. Life course theory and previous research indicate that health inequities experienced during childhood set in motion a trajectory that puts the individual at greater risk for health problems and premature death (see the special 2009 special issue of Pediatrics on childhood health disparities).[2,3] The 2008 meeting of

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For example, exposure to racism and discrimination in school may discourage children from pursuing academic excellence, thus limiting their career choices and increasing their chances of poverty in adulthood.

Life course theory highlights the importance of examining perceived discrimination in childhood as a health inequities issue. Not only does exposure to stressors such as racism and discrimination have the potential for immediate negative health-related outcomes, these adverse experiences may help put the minority child on a trajectory toward further adverse situations (chaining) as well as increasing their risk for adult physical and

Nyborb and Curry[26] found similar associations in a sample of Þfth-grade African American boys in which perceived discrimination was associated with higher feelings of hopelessness and lower self-concept. The researchers also identiÞed trait anger (hostility) as a mediating variable between perceived personal racism and externalizing behaviors, such as aggression or delinquent behaviors.

In sum, there is a growing body of research supporting the relationship between perceived discrimination and poor mental health-related outcomes in children and adolescents. In this exploratory study, we examined the association between childrenÕs perceived racial discrimination and mental health symptoms. The speciÞc aims for this study were to (1) examine the relationship between childrenÕs perceived racial discrimination, anxiety, depressive symptoms, and social stress within and between 3 groups: European American, African American, and Multiracial; and (2) examine the relationship between perceived discrimination and childrenÕs attitudes to school as well as their relationships with their parents and teachers within each of these groups as well as between these 3 groups.

METHODS

Sample and recruitment

The sample for this analysis was drawn from a longitudinal study in which participants were recruited by information sheets sent to families through public and private schools, ßyers posted in community settings, articles in several local newspapers in the Puget Sound area of Washington State, presentations at community events, and word of mouth. Married couples expressing an interest in participating in the study were contacted. Oral assent to participate in the screening interviews was obtained before conducting the telephone interviews.

The original, larger sample consisted of 129 families recruited from the Puget Sound area of Washington State. Measures were taken at baseline or Time 1 (T1), 18 months later at Time 2 (T2), and 30 months after baseline at Time 3 (T3). Data collection occurred in an off-campus laboratory setting and within family homes (see Bowie[27] and Carrère and Bowie[28] for a more complete description of recruitment and data collection procedures). The analyses for the current were based on data collected from families (ie, parent and children) for whom we had complete data at T3. In addition, we excluded 2 ethnic groups, Asian Americans and Hispanic Americans, from the analysis because of small sample size (Asian Americans: n
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but also because it permits the measure of perceived discrimination for any

The Reynolds Child Depression Scale[35] is a 30-item questionnaire measuring the construct of depression. Items are scored on a 4-point Likert-type scale ranging from Òalmost neverÓ (1) to Òall the timeÓ (4). The last item asks children to rate themselves on a 5-point Òsmiley typeÓ scale ranging from sad to happy. Reynolds and Graves[35] reported internal consistencies of 0.88 and 0.90 across 2 time points. The authors also found strong correlations with other self-rated depression scales (r = 0.68-0.79).[35]

Human subjects approval

The Family Health Project Human Subjects Application was approved by the University of Washington Institutional Review Board (Human Subjects Division) for study recruitment and procedures in February 2002 (Human Subjects Research Compliance approval no.: 01-0494-C/E-4). Written informed consents were obtained from parents for the full study and oral assents from children at the time of each data collection.

RESULTS

Group differences in childrenÕs self-reports

To explore the differences between the ethnic groups on the major study variables, a series of 1-way analyses of variance were conducted. See the Table for means and standard deviations of the major study variables. There was a statistically signiÞcant difference in childrenÕs scores for perceived discrimination at school, stigmatization, perceived threat, and perceived exclusion/rejection. Post hoc comparisons using the Tukey HSD test indicated that the mean perceived discrimination at school, stigmatization, perceived threat, and perceived exclusion/rejection scores for AA children were signiÞcantly higher than the means for EA children perceived discrimination (mean = 3.23), stigmatization (mean = 4.43), perceived threat (mean = 4.14), and perceived exclusion/rejection scores (mean = 5.98). The MR children also had mean stigmatization (mean = 5.43; $P < .01$) and

Table. ChildÕs Perceived Ethnic Discrimination Questionnaire-Community Version Subscale Means, Standard Deviations, and 1-Way ANOVA

Subscale	African American (N = 18) Mean (SD)	Multiracial (N = 30) Mean (SD)	European American (N = 40) Mean (SD)	1-Way ANOVA Results F[a]
Discrimination at School	5.56[b] (3.87)	4.37 (2.39)	3.23 (0.73)	6.84[c]
Stigmatization/disvaluation	8.39[d] (5.61)	5.43 (2.25)	4.43 (0.93)	11.65[e]
Threat/aggression	5.72[f] (2.59)	4.57 (2.13)	4.14 (0.58)	5.07[c]
Exclusion/rejection	10[g] (5.81)	6.47 (2.84)	5.98 (2.90)	7.95[e]

Abbreviation: ANOVA, analysis of variance.
[a]F statistic df (2,86).
[b]Tukey HSD post hoc test: African American children perceived signiÞcantly greater discrimination than European American children ($P < .001$).
[c]$P < .01$.
[d]Tukey HSD post hoc test: African American children perceived signiÞcantly greater stigmatization than both European American ($P < .001$) and Multiracial children ($P < .01$).
[e]$P < .001$.
[f]Tukey HSD post hoc test: African American children perceived signiÞcantly greater threats of aggression than European American children ($P < .01$).
[g]Tukey HSD post hoc test: African American children perceived signiÞcantly greater exclusion/rejection than both European American ($P < .001$) and Multiracial children ($P < .01$).

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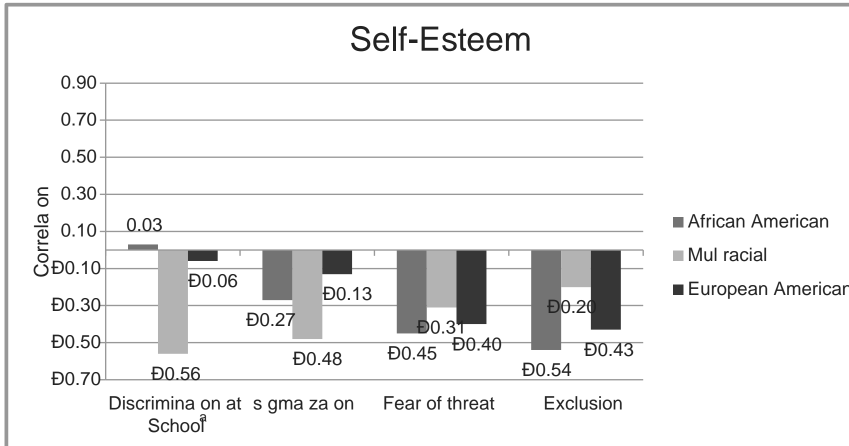

Figure 3. Comparison of correlations of childrenÕs self-esteem and perceived discrimination scale variables by racial group (N = 88). [a]P <

children feel safe from peers and authority Þgures in school and other social settings (eg, intermural sports, after school programs). Microaggressions, which can contribute to social stress, are currently being assessed in young adult and adult populations[47,48] but not in children. As a preventative measure, it is essential to assess whether elementary and preadolescent children are experiencing these situations, as they can contribute to later poor mental health outcomes. Such assessment tools need to be developed for younger populations. In addition, the need for training for teachers, school nurses, and other authority Þgures is an important step that allows for early intervention with children who are both victims and who may be carrying out these insensitive behaviors.

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