

INVESTIGATING AND LINKING SOCIAL CONDITIONS OF MINORITY CHILDREN AND ADOLESCENTS WITH EMOTIONAL WELL-BEING

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Some level of vulnerability characterizes the daily experiences of humans. Particularly for young persons, major structural conditions are frequently linked with high vulnerability. Infrequently explored are everyday or normative routines of children that appear less challenging on the surface but may interfere with resiliency and the positive outcomes that may be achieved in the face of challenge. In linking social conditions of ethnically diverse children with emotional and physical distress, sex-linked empirical findings indicate that family-level helping behavior may be perceived and experienced as overwhelming for young, primary-school girls. (*Ethn Dis.* 2006;16[suppl 3]:S3-67–S3-70)

INTRODUCTION

Vulnerability is part of the human condition that can be thought of as the balance between risk factors and protective factors. Race is a risk factor for a number of conditions and contributes to health disparities, but research studies frequently overlook race as a marker for, rather than cause of, risk. Stress, for example, is a determinant of health that can be influenced by skin color. Differences exist in social conditions that lead to stress, but more research is needed to demonstrate how stress is translated into daily experiences.¹⁻⁴

Scientists have typically looked at health as a linear model, with risk factors on one end and outcomes on the other, without acknowledging the social milieu and life course in between. Stress is a phenomenon of both normative and atypical events, but support mechanisms exist to offset the challenges of stress. We assessed stress, risk and protective factors in a primarily ethnic-minority sample of children and adolescents in order to better understand what can be done to decrease vulnerability to stress and increase positive outcomes.

STUDY SAMPLE AND METHODS

We surveyed 699 children in grade school and middle school by using institutional review board–approved measures in the spring of 2002. Questionnaire data were obtained from students' five schools in the northeastern United States during the regular school day. Students in elementary grades were administered the survey in

their classrooms by trained members of the research team. Survey proctors read each question aloud to the students, who then wrote their responses in their own survey forms.

Middle-school participants were administered the survey during their gym classes, either in the school auditorium or the gymnasium. A brief set of instructions was read aloud to all students, after which the students filled out the surveys with no additional instruction. Additional trained team members served as monitors. Assessments were administered over the course of three days.

Measures

Net Vulnerability Level: Risk Factors

Students self-reported their sex. Males were coded as 1 and females were coded as 0. Students self-reported their age at the time of the survey. Age was used as a continuous variable. The race/ethnicity items include a multiple-choice option as well as an open-ended option for students whose race/ethnicity is not represented among the various. The following dummy codes were used in correlation and linear regression analyses, for "Black," Black=1, other=0; for "Latino/Latina," Latino/Latina=1, other=0; for "White," White=1, other = 0; and for "multiracial," multiracial=1, other=0.

Net Vulnerability Level:

Protective Factors

Helping Behavior. Participants answered either yes or no to the question, "Are you involved in volunteer (unpaid) activities that help the family (eg, babysitting, elder-care, shopping, cooking, cleaning, translating, etc)?" Stu-

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dents who answered yes were asked to report how many hours per week they helped their family during the school year and how many hours per week they helped their family during the summer. These variables were used to create a dichotomous helping-behavior variable. Students who helped their families year-round were coded as 1, and students who did not help their families year-round were coded as 0.

Paid Work. Students were asked to answer yes or no to the question, "Do you do work for pay?" If they answered yes, they were asked to complete the sentence, "I get paid to..." and then indicate the number of hours per week they spend working for pay during the school year and during the summer. These variables were used to create a dichotomous paid-work variable. Students who worked for pay year-round were coded as 1, and students who did not work for pay year round were coded as 0.

Participation in Sports. Students were asked to answer yes or no to the question, "Are you involved in any sports groups?" The sports-participation variable was coded as 1 for yes and 0 for no.

Physical Resilience. A subdomain of the Child Health and Illness Profile, Adolescent Edition⁵ and Child Edition⁶ (CHIP-AE, CHIP-CE) was used to assess various aspects of health among children and adolescents including physical resilience. Sample items include, "How often do you feel really healthy?" (CHIP-CE) and "I am full of energy." (CHIP-AE). Higher scores indicate higher levels of perceived physical resilience.

Academic Resilience. A sub-domain of the CHIP-AE/CHIP-CE was used to assess academic resilience. Sample items include, "How often do you get along with your teacher?" (CHIP-CE) and "How was your overall school achievement?" (CHIP-AE).

Net Stress Engagement—Supports

Family Involvement. A subdomain of CHIP-AE/CHIP-CE was used to assess different indicators of youths' perceptions of the quality of parent-child interactions. Sample items include, "How often do your parents eat meals with you?" and "How often do you have fun with your parents?" Higher scores indicate higher levels of perceived family involvement.

Maternal and Peer Encouragement. The What People Think scale⁷ was used to capture youth's perceptions about the importance that their mothers and peers placed on physical activity, body weight, and academic achievement. Respondents rated the amount of encouragement they perceived from mothers and the amount of encouragement perceived from peers concerning these three issues. Higher scores indicate higher levels of perceived encouragement from mother and perceived encouragement from peers.

Parental Monitoring. A 10-item scale⁸ was used to assess students' perceptions of how closely their parents monitor their behavior both at home and away from home. Students responded, on a scale of one to four, to statements such as, "My parents try to see and know what I'm doing when I don't have anything else to do" and "My parents try to know who my friends are." A one-factor solution representing overall level of perceived parental monitoring had the best psychometric properties. Cronbach's alpha coefficient was .90 for middle-school students and .86 for elementary-school students. Higher scores indicate higher levels of perceived parental monitoring.

Net Stress Engagement—Challenges

Maternal and Peer Criticism. The What People Think scale was used to capture youth's perceptions about the importance that their mothers and peers

placed on physical activity, body weight, and academic achievement. Respondents rated the amount of criticism they perceived from mothers and the amount of criticism perceived from peers concerning these three issues. Higher scores indicate higher levels of perceived criticism from mothers and perceived criticism from peers.

Community-Level Distress. Students' level of community-related distress was evaluated by using a 13-item self-report measure adapted from the Fear of Calamity Scale.^{9,10} Students rated, on a scale of one to five, how much they worry about different dangers or risks (eg, getting beat up, dying young, someone they love dying, terrorist attacks, etc) in the neighborhood where they live. A one-factor solution representing overall community-related distress had the best psychometric properties. Cronbach's alpha coefficient was .95 for middle-school students and .91 for elementary-school students. Higher scores indicate higher levels of perceived community-level distress.

Emergent Identities: Stable Coping Strategies—Negative

Aggressive Tendencies. The How I Deal with Things scale (D. Olweus, unpub. data) is composed of 19 statements that assess different rationales participants might endorse for using aggressive actions. Students rate, on a scale of one to six, how much they agree or disagree with statements such as, "When my teachers put me down, I say something to them," "When unexpected things happen, I feel like hitting something," and "When people tease me, I try to give them a good beating." A one-factor solution representing youth's overall level of aggressive tendencies had the best psychometric properties. Cronbach's alpha coefficient was .97 for middle-school students and .91 for elementary-school students. Higher scores are indicative of

Table 1. Correlation between physical and emotional distress and protective factors

| Factor | Correlation Coefficient | | | |
|---------------------|-------------------------|---------------|-------------------|---------------|
| | Emotional Distress | | Physical Distress | |
| | 4th & 5th Grade | 6th-8th Grade | 4th & 5th Grade | 6th-8th Grade |
| Helping behavior | .11 | -.04 | .20* | -.01 |
| Paid work | .11 | .08 | .14* | .16‡ |
| Sports involvement | -.16* | -.13† | -.05 | -.06 |
| Physical resilience | -.16* | -.40§ | -.15* | -.32§ |
| Academic resilience | -.08 | -.25§ | -.12 | -.19§ |

* $P < .05$, † $P < .01$, ‡ $P < .001$, § $P < .0001$.

higher levels of perceived aggressive tendencies.

Life-Stage Coping Outcomes

Emotional Distress. A subscale of the CHIP-AE/CHIP-CE was used to assess youths' perceptions of various forms of emotional distress. Sample items include, "How often do you feel really sad?" (CHIP-CE) and "How often do you feel depressed?" (CHIP-AE). Higher scores indicate higher levels of perceived emotional distress.

Physical Distress. A subscale of the CHIP-AE/CHIP-CE was used to assess youths' perceptions of various forms of physical distress. Sample items include, "How often do you have a stomach-ache" and "How often do you have bad pain?" Higher scores indicate higher levels of perceived physical distress.

RESULTS AND CONCLUSION

The sample comprised 204 elementary-school students and 495 middle-school students. The elementary-school sample was almost evenly split by sex (103 girls and 101 boys), and the children were between the ages of 9 and 13 years (mean 10.39 years, standard deviation [SD] = .94). The middle school sample consisted of slightly more girls ($n=274$) than boys ($n=221$), and the children were between the ages of 11 and 16 years (mean 12.75 years, SD = 1.07). Forty-one percent of the students self-identified their race/ethnicity as Black or African American, 39% as Latino/Latina, 8% as White, 8% as biracial/multiracial, 2% as Native American, 1% as Asian American, and 1% as other. Forty percent reported living with their moth-

er and father, 17% with mother and stepfather, 2% with father and stepmother, 31% with mother only, 2% with father only, 3% with one or more grandparents, and 5% with other relatives or adults.

Girls in our sample experienced more emotional distress and physical distress. Sports involvement, physical resilience, and academic resilience appear to have protective effects against stress (Table 1). This finding has implications for interventions in that parents may be able to reduce their children's stress burden by encouraging sports participation and academic excellence. While participation in organized sports is associated with decreased emotional stress, physical distress does not appear to be reduced by sports involvement. However, this finding may be a function of sports injuries.

Table 2. Correlation between physical and emotional distress and supports and challenges

| Factor | Correlation Coefficient | | | |
|---------------------------|-------------------------|---------------|-------------------|---------------|
| | Emotional Distress | | Physical Distress | |
| | 4th & 5th Grade | 6th-8th Grade | 4th & 5th Grade | 6th-8th Grade |
| Supports | | | | |
| Family involvement | -.13 | -.40§ | .03 | -.26§ |
| Parental monitoring | -.02 | -.10 | -.16* | -.05 |
| Encouragement from mother | .06 | .00 | .06 | .04 |
| Encouragement from peers | -.08 | -.02 | -.06 | .02 |
| Challenges | | | | |
| Community-level stress | .12 | .15† | .04 | .16† |
| Criticism from mother | .21† | .31§ | .26‡ | .27§ |
| Criticism from peers | .16* | .28§ | .03 | .31§ |

* $P < .05$, † $P < .01$, ‡ $P < .001$, § $P < .0001$.

Girls in our sample were much more likely to help around the home (doing chores, helping with child care) than were boys (19.4% for girls vs 11.9% for boys in the fourth and fifth grades). While emotional distress scores were similar among children who did not help around the house, girls who helped had significantly higher scores than boys who helped in both age strata. This finding implies that girls' helping behavior leads to more distress, possibly because family expectations are higher.

Family involvement is correlated with significantly less physical and emotional distress for adolescents although not for the younger children in our sample (Table 2). Interestingly, encouragement from mother or peers does not appear to be correlated with emotional or physical distress, but criticism is strongly correlated. This finding suggests that children in our sample have positive self-esteem and expect a measure of encouragement from friends and family; when criticism is encountered, it can cause stress.

Adaptive coping was not correlated with stress, but maladaptive coping increased with stress—our measure for

maladaptive coping was aggressive tendencies. Boys may respond to stress by becoming "tougher," which manifests as callousness toward women, the sense that danger is exciting, and the notion that violence is manly.¹¹⁻¹³ We believe that stressors can be reduced by training boys to redefine their ideas of manhood, which can also reduce stressors for women who are part of their context.

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