

How Inner-City Children See Their Family, School, Peers, and Neighborhood:
Developmental Changes During the Transition to Adolescence

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Abstract

In childhood and adolescence, the primary social contexts for development are the family, school, peer group and neighborhood. This study examines both cross-sectionally and longitudinally, the relationship between students' perceptions of the supportive features of these four social contexts and the grade they are in between grades 5 and 8. We also explore the variation in levels and rates of change in perceptions that can be attributed to gender, race, family demographics, psychological adjustment and academic achievement. The sample consists of 9,899 low-income African-American, Hispanic, and Asian-American students attending nineteen K through 8 schools in Chicago. Of these, 2,472 constitute a longitudinal sample with measurement in at least three consecutive grades. As children grow older linear declines are obtained in judgements of the supportive features of all four social contexts -- homes, schools, peer groups and neighborhoods. Several individual differences in levels of support and rates of decline were also found. Possible explanations of these findings are offered.

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Introduction

Human development is shaped through time-bound transactions that relate individuals to the persons, objects, and symbols in their social world (Bronfenbrenner, 1979; Bronfenbrenner and Ceci, 1994; Magnusson and Allen, 1983; Lewin, 1954; Sameroff, 1983). The quality of these transactions (or “proximal processes”) varies with many factors, one being the social contexts in which individuals find themselves (Bronfenbrenner, 1995). In childhood and adolescence, the primary social contexts for development are the family, school, peer group and neighborhood, though the media might also be included. During the early part of the transition from late childhood to early adolescence (ages about 10 to 14), the family and school are generally thought to be the major developmental contexts (Comer, 1988), though Harris (1995) demurs and highlights peer influences. However, peer and neighborhood factors probably come to play an even more important socializing role in the later part of the period under discussion because they promote the personal autonomy adolescents eventually need to achieve (Steinberg & Silverberg, 1987). The implication of all this is that, if empirical studies are to comprehensively map contextual factors involved in the transition from childhood to adolescence, then they need to consider simultaneously neighborhood, school, peer and family variables (Bronfenbrenner, 1995).

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such work (e.g., Brooks-Gunn, Duncan, & Aber, 1997). In this tradition, the emphasis is usually on (1) the demographic composition of a context (e.g., the percent unemployed in the case of neighborhoods); or (2) the physical or financial resources available (e.g., student-to-teacher ratio in the case of schools); or (3) theoretically specified social processes that operate within a context (e.g. authoritative parenting in the case of families). Constructs like these are typically assessed either by having trained researchers directly observe in context; or by taking ratings from a sample of individuals within a context and aggregating these to the context level; or by using official records already aggregated to the school, neighborhood and perhaps even peer or family levels (Duncan & Raudenbush, 1998). Studies in the “objective” tradition are mostly concerned with identifying situational causes of individual development (e.g., Simmons & Blyth, 1987; Brooks-Gunn et al, 1997) or with describing how different kinds of individuals ‘select’ themselves into different kinds of contexts (e.g., Furstenberg, Cook, Eccles, Elder, & Sameroff, 1999).

By contrast, a more psychological tradition deals with social environments as individuals ‘perceive’ them (Bronfenbrenner, 1979; Magnusson & Allen, 1983; Lerner, 1983). Studies in this tradition usually seek (1) to describe how individuals make meaning of their schools, neighborhoods, peers, and families (Jessor & Jessor, 1973); (2) to explore whether the perceived context mediates between the ‘objective’ environment and developmental changes (Roeser & Eccles, 1998); and (3) to see if changes in the perceptions of social contexts are as developmentally regular as changes in, say, emotional growth or attitudes towards delinquency, thus making perceptions of the environment the phenomena that developmental science first needs to describe and then to explain (Jessor, Donovan, & Costa, 1991). The research we present is in this last area. It first describes annual changes in perceptions of four social contexts for a large population of children between age 10 and 14. After demonstrating how systematic these age trends are, it begins the process of explaining the age variation in terms of a broad range of individual differences.

Most past research has examined social contexts singly rather than collectively, though it is obvious that children simultaneously inhabit home, school, neighborhood and peer group worlds. Between 5th and 8th grade, schools have probably been the most frequently studied setting, often in

order to assess effects attributable to the move from an elementary to a middle school (e.g., Blyth, Simmons, & Bush, 1978; Hirsch & Rapkin, 1987; Simmons, Black, & Zhou, 1991; Fenzel, 1989; Eccles, Lord, & Midgeley, 1991; Simmons & Blyth, 1987; Seidman, LaRue, Aber, Mitchell, & Feinman, 1994). Findings in this area point to student judgments of the school and schooling becoming more negative with age and being exacerbated by the school transition. Specific declines are noted in students' reports of (a) their commitment to schoolwork and the value they place on doing well in school and how important they think education is for their future (Roeser & Eccles, 1998; Siedman et al, 1994; Jessor et al, 1991); (b) the social support they feel teachers provide (Siedman et al., 1994), and (c) whether their friends are committed to high academic achievement (Sebring & Bryk, 1996).

A few studies have also shown declines in children's perceptions of the quality of their family life. During the period at issue, parent-child relations become more difficult around cultural symbols (e.g. clothes, hairstyles) and novel claims for autonomy (e.g. around nightly curfews and dating). Less closeness in the relationship with parents is also reported (Rutter, 1980; Paikoff and Brooks-Gunn, 1991), though children at this age typically remain strongly attached to their parents, seek them out for guidance on important matters, and share similar values on major life issues (Collins, 1990; Youniss, 1980). Nonetheless, the available studies suggest that children become somewhat more detached from their parents with age.

On entering early adolescence, peer relations are also being transformed. Young people spend increasing amounts of time with same-age peers (e.g., Brown, 1990), their friend relations become more intimate (Berndt, 1982), and status among peers becomes increasingly salient for determining personal identity (Corsaro & Eder, 1990). Peer relations are critical for positive development, but studies suggest that during early adolescence children report less intolerance of deviance, more use of illegal substances like alcohol and marijuana (Jessor et al., 1991) and more delinquent acts like theft, vandalism and physical assaults (Rutter, 1980; Dryfoos, 1990; Lerner, Entwistle, & Hauser, 1994). They also attribute the same growth in deviant behavior to their friends (Cook, Phillips, Settersten, Shagle, Degirmencioglu, Chen, & Herman, forthcoming). Finally, we

turn to perceptions of the neighborhood. Less is known about this particular context since most of the available literature is based on “objective” neighborhood attributes (e.g. Brook-Gunn et al., 1997) or on ethnographic accounts from older urban teenagers (e.g. Macleod, 1987; Sullivan, 1989). Yet, age-related decreases have been reported in participation in community-based organizations (Carnegie Corporation, 1992). In addition, the perception of neighborhood danger might increase as young people spend more unsupervised time in the neighborhood where crime and violence can be found among teens of all social backgrounds.

Examining these four contexts singly suggests that early adolescents come to see each of them as less supportive than it was in late childhood. Schools make higher demands; parents seem less approving; friends are engaged in activities that, however thrilling, are also more dangerous; and the neighborhood contains more opportunities for harm and fewer institutional resources that young people actually want to take advantage of. But this summary is only suggestive. It depends on many substantive and methodological assumptions that can be questioned.

Methodologically, the age span is rarely the same from study to study; most studies are cross-sectional rather than longitudinal; those that are longitudinal do not have annual measures over four years like we will present; and perceptions of social contexts are studied singly rather than collectively across families, neighborhoods, schools and peer groups. Such problems have to be overcome if we are to assess whether perceptions of the quality of each context decrease with age, whether such decreases occur at similar rates from one context to another, and if we are also to estimate how independent are the perceptions of each context. The possibility exists, for example, that a decrease in perceptions of the quality of all four contexts might be due to a single common factor that prompts young people to become indiscriminately more negative or less optimistic as they age, including becoming more negative about the social contexts in their lives.

We have not yet specified which attributes of a social context interests us. We assume that some research-based knowledge exists about specific contextual factors that promote positive development during the transition into adolescence. Our focus is on how children come to evaluate these particular factors, for they allow us to describe how young people see those attributes of their

social worlds that are most likely to help them in the future. Specifically, we assume that children's welfare is promoted when they see their schools as relevant to their futures and when they see their teachers as caring for their educational and social well-being and able to promote them. We assume that family life is better for young people when they see their parents as warm and actively interested in their lives. We further assume that peer groups are more supportive when their members are not engaged in counternormative activities and instead undertake conventionally (mainstream) activities after school and during the weekends. And finally, we assume neighborhoods are better when they contain conventionally promotive resources that children actually want to use, when local involvement with crime, gangs and other forms of physical danger is minimal, and when local adults monitor teens behavior in public. These are only some of the judgments we make about research-based context-specific factors that promote positive development--judgments that are necessary for describing how children see those attributes of their social worlds that will probably have important developmental consequences for them later. We do not assume that children themselves label such attributes as important or as in any other way "quality" features of their lives, though they might. To call these "quality" attributes of a specific context rests on inferences we researchers make about each context based on existing research evidence.

A second assumption we make is that such context-specific attributes are relevant to all kinds of children. The research we report deals with inner city residents deliberately chosen for study because many of them live in some of the most desperately poor sections of Chicago. In later life, young people like these are especially likely to engage in problem behaviors and experience academic failure, and, as children, they are likely to live in settings that make it difficult to support their aspirations to remain engaged in schooling, to enjoy warm relations with their parents, to interact with peers who are prosocial in their behavior, and to avoid delinquent activities in the neighborhood (Wilson, 1987; Jargowsky, 1997). Given the association between the inner city's social and economic realities and the unfortunate outcomes its residents can expect in later life--in the aggregate, that is, but not necessarily individually (Furstenberg et al, 1999) -- it is surprising that

little systematic information exists about how inner-city children of different ages judge the social worlds in which they live.

This may be because conventional understandings of development are not always entirely applicable in such difficult settings. “Mainstream” understandings of childhood and adolescence may be “luxuries”, as Burton (1995) has described for some inner-city African-American children who are forced to adopt adult roles prematurely in order to maintain a viable family life for their parents, siblings and selves. However, we do not yet know the prevalence of such behaviors. They may be rare, even in the inner city. And, anyway, such behaviors do not negate the potential relevance to these children of the normative factors that developmentalists routinely assume promote positive growth, including the specific family, school, neighborhood and peer factors identified above. To judge by survey data, most inner-city parents prefer for their children to live in settings with attributes like those we have identified, and they eagerly endorse the quite conventional life goals associated with them (Cook & Curtin, 1985). So we assume that, by and large, the same family, school, neighborhood and peer factors promote healthy adolescent development in inner city contexts as elsewhere.

Stereotypes to the contrary, inner cities are heterogeneous places (Furstenberg et al, 1999; Jargowsky, 1997). Living there are boys and girls from several ethnic groups, primarily African-Americans, Hispanics and some Asian-Americans. The young people there also differ from each other in academic performance levels (e.g., test scores), in household demographics (e.g., living with both parents, one or none), and in psychological adjustment (e.g., having mental health problems as opposed to a positive disposition towards life). We have measures of all of these individual difference variables, and they enable us to identify which factors explain whatever level or trend variation we obtain in descriptions of how this inner city population judges the quality of each social context. Assessing the role of such individual differences is important because it prevents overgeneralization, inferring that the features discovered for a population at large hold across all the subgroups constituting that population. Also identifying group differences in judgments about one or more contexts can provide clues for explaining whatever general population pattern is discovered

for changes in context judgments. So, this research seeks (1) to describe the overall form of the function relating age to perceptions of the quality of each of four unique social contexts and also (2) to test the generalizability of this form across children who vary by gender, ethnicity, social demography, academic achievement and psychological adjustment.¹

Some research already exists relating individual differences to both the perceived and objective context. But the relevant studies have dealt only with gender and race and have analyzed only the level of context judgments, not the rate of change in such judgments. For instance Steinberg (1996) compared middle class Asian-American students to their European-American, African-American, and Hispanic counterparts. He found that the Asian-Americans were exposed to the most authoritarian and controlling parenting, to peers who placed the highest value on education, and to an after-school life that was low on paid work and participation in extracurricular activities but was high on academic-related experiences like doing homework. Gender differences in children's school experiences have also been reported during early adolescence, particularly as concerns teachers recognizing the academic performance of boys more than girls (Dweck & Elliot, 1983). But past individual difference research has usually involved measuring a single context, a single point in time and a single individual difference variable. The emphasis has not been either on directly contrasting different types of social contexts like the school or family; nor has it been on examining trends in the perception of contexts; nor has it disentangled the separate effects of possibly correlated individual differences; nor has it used a sample of students in K through 8 schools so as to unconfound developmental trends from shocks caused by the transition into a new middle school.

Our purposes can now be stated. Prior research with mostly middle class samples suggests that, as children enter adolescence, they see their schools, peers, families and perhaps even their

¹ The causal meaning of subgroup breakdowns can never be totally clear. Perceptions of the social environment may change because of one or more individual differences; but in some cases these differences might themselves be the product of how the social environment was perceived at an earlier time.

neighborhoods as less supportive of them than at an earlier age. Does this pattern hold for children from some of the most desperately poor sections of the urban USA? Does it hold when these four contexts are studied simultaneously, permitting us to probe context differences in the relationship between age and judgments of context quality? And do the same age trends hold across ethnicity, gender, social demographics, prior academic achievement and psychological adjustment? Such research improves on prior work by: (1) using multi-attribute quality composites for each of four social contexts; (2) using repeated annual measures of such perceived quality; (3) studying children who remain in the same school between grades 5 and 8, thus unconfounding developmental trends from the transition into a new middle school; (4) examining how independent are perceptions of the four different social contexts; (5) using individual difference variables to ascertain how stably social contexts are perceived; (6) analyzing more independent variables than prior research; and (7) doing all of this with a sample of students large enough to permit stable estimates of judgments of each context.

Methods

Participants

The sample consists of students in grades 5 through 8 attending nineteen K through 8 schools that participated in the evaluation of the Comer School Development Program (SDP) in Chicago (Cook, Hunt, & Murphy, 1998). Data were collected annually from students beginning in Fall 1992 until Spring 1997. The district required 'passive' parental consent to participate and fewer than 1% of parents excluded their children from the study despite a letter home giving them this choice. The annual response rate at the time of data collection averaged more than 95% across schools, reduced only by those students who were absent on both the day of testing and the makeup day. In total, 10,306 students were surveyed on at least one measurement wave.

The sample reported here was restricted to African-American, Hispanic and Asian-American students, these being respectively 74%, 22%, and 4% of the total sample. Other ethnic groups were excluded because the deliberate selection of very poor Chicago schools meant that only 2.1% of students identified themselves as "European-American" and 1.4% as "Other". In these schools,

the Asian-American and Hispanic students were disproportionately recent immigrants from poorer families in their countries of origin, primarily China and Mexico. We refer to the resulting sample of 9,899 students as the cross-sectional sample. Of these, 2,472 constitute the multi-cohort longitudinal sample. These are students who were in the fifth or sixth grade in the Fall of 1993, 1994, or 1995, who remained in the same school for three or four consecutive years, and who responded to at least one survey during their years in that school. These longitudinal students constitute 68% of all students who began 5th or 6th grade in the relevant study years. Table 1 shows how many students were in the longitudinal sample by grade and first year of study eligibility.

Insert Table 1 about here

Compared to the average Chicago K-8 schools the study schools were more African-American (55% vs. 78%), less Hispanic (16% vs. 31%), and served more students from homes eligible for subsidized lunches (92% vs. 81%). Table 2 provides a demographic profile of the cross-sectional and longitudinal samples. It can be seen that a majority of students report having parents or guardians with no education beyond high school; about 25% report living in homes with none of their biological parents; and the average NCE test scores on the Iowa Test of Basic Skills (ITBS) is slightly above the 30th percentile. The cross-sectional and longitudinal samples have generally similar demographic profiles, the differences being that the longitudinal sample has fewer students living with no biological parents (22% to 26%), fewer parents who are not working (18% to 22%) and student achievement scores are higher, particularly in reading (34.4 versus 32.9). But these differences are not large, leading us to conclude that we have a very large and generally very disadvantaged student population that does not differ much between the cross-sectional and longitudinal samples.

Insert Table 2 about here

Measures

student perceptions of social contexts. The social context measures were developed from two questionnaires administered to students during the school year. The School Climate

Questionnaire (SCQ) was administered in early Spring of the first year a school entered the study and in the late Spring of subsequent years. The Adolescent Attitude Questionnaire (AAQ) was administered in late Fall of the school's first study year and in late Spring thereafter. When both surveys were administered during Spring, the attitude questionnaire was administered several weeks prior to the climate one. Spanish and Chinese language versions of the questionnaires were prepared and made available to those classrooms and individual students who requested them. The language level used throughout the questionnaires was appropriate for 5th graders, and psychometric analysis restricted to students with officially designated learning disabilities showed the measures had adequate psychometric properties for even this language-challenged group (Fleming, 1999). Perceptions of school and neighborhood come from the SCQ; perceptions of peer quality from the AAQ; and family quality was measured with items from both the SCQ and AAQ. 5-point Likert items were used and these were later reverse-coded where necessary so that all scores represent contexts that theory suggests are of higher quality for promoting positive adolescent development.

Table 3 shows the primary constructs created for each social context through a combination of factor and conceptual analysis. Also reported are some psychometric properties of each construct and a sample item. Each of these primary constructs is listed under a more general domain heading that is described in bold type face. To create this domain, the primary constructs were standardized across grades before being added.

For schools, the relevant domains concern: (a) the social relationships students have with teachers, plus the social support they think teachers provide for them; (b) the social skills students attribute to other students; (c) the personal attachment they feel to the school, plus the attachment they attribute to other students; (d) the actions teachers take to encourage and motivate achievement, plus the actions taken in the school at large to recognize academic achievement; and (e) student's personal commitment to schooling and the values it represents, as well as the corresponding commitment they attribute to other students.

Insert Table 3 about here

For families, the relevant domains assess (a) student perceptions of their parents' support for academic success and their recognition of such success; and (b) their perceptions of the responsiveness of parents and guardians to the emotional and social needs of the child, as indexed by assessment of the warmth of the parent-child relationship, of how involved parents are in how student spends his or her free time, of the extent to which parents value conventional outcomes for the students, and of how responsive parents would be if the child were caught skipping classes or not doing homework.

For the peer context, two domains are assessed: (a) student perceptions of how many of their friends hold values or behave in ways most adults find objectionable with respect to petty delinquent acts, the use of alcohol, drugs, and cigarettes, and engaging in sexual relations; (b) the ratio of time students spend after-school and on weekends in structured activities or in activities that adults typically approve of (e.g., clubs, lessons, and sports) as opposed to the time spent in less structured activities (e.g., hanging out, playing video games, talking on the telephone).

The neighborhood context has three primary constructs: (a) students perceptions of the availability of adult role models; (b) their assessment of the ability of neighborhood adults to monitor the behavior of young people; and (c) their judgements of the ability of the neighborhood to provide safe organized activities and places where young people can spend their time.

In the case of schools, families and peers, an even higher-order standardized composite was created by aggregated up from the domains just listed. In the case of neighborhoods, the three primary constructs were simply standardized and added. These composites provide convenient summaries of each context since their constituent parts were related to students' age in generally similar ways. For reasons of space primarily, these composites will be emphasized in this report.

individual differences. Also measured from student self-reports were gender, ethnicity, number of biological parents living in the home (none, one, or two), and parental education (didn't finish high school, high school graduate, some college education, and college graduate).

In addition achievement test scores were available for math and reading prior to fifth grade. Since the number of prior years varied by student cohort, students were assigned the average of their math and reading NCE scores for all the years available prior to fifth grade.

Psychological adjustment was assessed in the first year children were eligible for the study, three dimensions being used: (1) Negative Mental Health deals with depression, anger and its control, and the use of negative coping strategies when problems arise in school; (2) Positive Mental Health is based on indices of self-efficacy in school, racial pride, and satisfaction with current life and relationships; and (3) Avoidance of Negative Social Behaviors is based on (a) an “acting out” scale asking how many of eleven illegal or mischievous acts the student had committed in the last six months; (b) a construct assessing normative beliefs about misbehavior; and (c) questions about substance use, analyzed here as the sum of whether students had ever used cigarettes, tobacco, or marijuana during the previous 30 days and had ever used more serious drugs during the last 6 months. A summary measure of global adjustment was also created by computing the mean of the three separate adjustment domains outlined above.

Statistical Analyses

Hierarchical Linear Models (HLM) were used for the analyses of the longitudinal sample (Bryk & Raudenbush, 1992). At level 1 were the multiple measurement occasions nested within individuals, and the intercept parameter was set to be 8th grade status. Estimates of the level 1 regression coefficients (initial status and linear rate of change) were treated as outcome variables at level 2, where they were modeled as functions of all the individual differences listed above in order to examine how 8th grade standing and linear rates of change vary across types of children.

Different analyses were performed on the larger cross-sectional sample. For each of the four contexts, a one-way ANOVA was first used to describe the relationship between grade level and attributed context quality. The linear trend component was also computed. Multiple regression

techniques were then used to examine how context quality was related to gender, ethnicity and family composition.²

Results

How are Perceived Context Qualities Related to Grade?

Table 4 shows the means and standard deviations by grade and sample for the global indices summarizing the quality of each social context. Mean levels and grade trends are very similar across the two samples. However, the cross-sectional means tend to be slightly more stable than their longitudinal counterparts--due to the larger sample size. But statistical relationships are somewhat more often reliable for the longitudinal sample because of its within-subject error term.

Insert Table 4 about here

Figure 1 represents a plot of grade trends using the cross-sectional data. Two findings stand out: (1) For each of the four social contexts there is a strong, linear, negative relationship between grade and children's perceptions of context quality; and (2) across the four grades students' perceptions of quality decrease at approximately the same rate across all the contexts. One-way ANOVAs indicated that the four linear trends were highly reliable for the cross-sectional sample (school context [$F(1, 15358) = 491, p < .0001$]; home context [$F(1, 17820) = 468, p < .0001$]; peer context [$F(1, 16107) = 1002, p < .0001$]; and neighborhood context [$F(1, 12856) = 211, p < .0001$]). Breaking the data down into lower-order constructs (not reported here) shows the near universality of this pattern of linear decrease. So, older students from the inner city see all four of their social worlds as less supportive of them; this decrease occurs at about the same rate for each

² Since the cross-sectional and longitudinal results produced very similar results and statistical significance is not much of an issue with sample sizes like these, no attempt was made to correct for the correlated error that arises in the cross-sectional analyses because some respondents provide data at more than one time.

context; and the decrease can be found across a wide range of quality attributes within any one context.³

Insert Figure 1 about here

How Stable are these Age Trends across Gender and Race?

Three-way ANOVAs including race and gender produced the results shown in Table 5. Three gradeXgender interactions are reliable or marginally so. They indicate that females experienced a steeper rate of decline in perceived quality for the peer, home and school contexts, but not for neighborhoods. However, these gender differences are very modest in size when compared to the age differences. At issue is variation in the rate of decrease, not relationships that are negative for one gender but positive for the other.

Insert Table 5 and Figure 2 about here

The gradeXrace interactions are reliable for the school, home, and peer contexts and marginally so for the neighborhood context. The means, depicted in Figure 2, indicate a complex pattern of findings. Asian-Americans decline at a slower rate than others when it comes to the quality of peers and attachment to the school's academic enterprise, but their judgments of the home quality decline at a slightly faster rate than for other groups. Across most contexts, Hispanic youth decline at a faster rate than African-Americans. But since they start out rating the contexts more favorably (the neighborhood being an exception), these two ethnic groups tend to finish up similarly by the end of eighth grade.

The results for the longitudinal sample confirm and modestly extend these gender and race findings. Table 6 shows statistical a partially conditional model (Model 2) that includes race and gender at level 2. The findings reveal that females view the peer and neighborhood context less

³ HLM analyses of the longitudinal sample without any individual difference variables --to be presented later as Model 1 in Table 6--show for each social context that the mean quality was significantly lower in 8th grade than earlier and that the annual linear rate of change was negative, highly reliable and relatively uniform in size across contexts (though the neighborhood relationship is somewhat smaller). Thus, the longitudinal results mirror the cross-sectional ones.

positively than males and that the annual rate of decline is steeper, particularly for the home and peer contexts. Hispanic 8th graders are less positive about the quality of the home and neighborhood contexts than their African-American counterparts, but are more positive about the peer context. They also experience steeper declines than Blacks, especially across the school and neighborhood contexts. Asian-Americans 8th graders are less positive than African-Americans in their views of the home and neighborhood, but they tend to be more positive in their judgments of the school and peers for which their rate of change is also more positive. So, the race and gender findings are generally consistent across the longitudinal and cross-sectional samples. Females decline slightly more steeply than males; Hispanics more than African-Americans; and while Asian-Americans are disadvantaged in the level of home and neighborhood support they describe, by 8th grade they have the most positive levels and rates of change in their perceptions of both schools and peers.

Insert Table 6 about here

Age Variation and Other Individual Differences

In addition to race and gender, the full conditional HLM model also includes as level 2 variables family demographics, initial psychological adjustment, and prior academic achievement. Table 7 gives the relevant results.⁴ It shows that by 8th grade children living in households with both biological parents and with better educated parents tend to see the four social contexts most positively. They also become relatively more positive in their views over time. Although the change relationship is only statistically reliable for parental education, taken together these findings indicate that children living in structurally more advantaged homes see their social worlds as universally more positive and becoming more so with time.

Insert Table 7 about here

⁴ The gender and race results are similar to those from the partially conditional HLM models (see Table 6), though some Asian-American are now statistically reliable that were not so quite before, especially as regards more positive perceptions of 8th grade school and peer contexts and a faster rate of negative change in assessments of the home.

The results for prior academic achievement are also clear, but troubling. Children with higher math and reading scores prior to 5th grade judge all of their 8th grade social contexts less favorably than others. There is also a slight tendency for such children to experience steeper declines in their views of the home, peer and neighborhood contexts, with five of the six relevant coefficients being negative. Thus, it is the academically better performing students who see their social worlds as less supportive and perhaps becoming ever more so with the passage of time.

The results for initial psychological adjustment are more complex. The findings for positive mental health are consistent across the four social contexts. Children who report higher levels of optimism in 5th grade view their social contexts more favorably at all times but experience steeper rates of decline, though not to a level that cancels out their initial relative advantage by 8th grade. Children who are initially better at avoiding negative behaviors judge their social contexts more positively in 5th grade and maintain this differential until 8th grade. The findings for children with mental health problems are less consistent across indicators. Those with more problems in 5th grade see their homes as less promotive at all times and becoming ever more so with time. But, after seeing their friends as more involved in problematic activities in 5th grade, they judge their friends as relatively less involved in these activities as time goes by. So that by 8th grade, these students judge their friends' behaviors in similar ways to other students.

Interdependence among the Perceived Contexts

Are the four social contexts we have examined independent of one another, or are we merely measuring a general negativity factor that increases with age? Two sources of evidence are relevant to this. The first uses the only other context data not yet presented. It deals with assessments of safety and comfort in the school. School Safety and Rules includes constructs dealing with students' perceptions of their own physical safety within the school and of the adequacy and fairness of school rules governing social behavior and doing homework. Sense of Belonging and Fitting-in assesses each student's personal comfort level in the school, plus the level of belonging they attribute to other students. Since both domains are similarly related to grade level, we present them here in Figure 3 combined as School Safety and Comfort. This composite has a strong

positive linear relationship with grade. Older students feel safer in school and more comfortable there, the exact opposite to the relationship found with other perceptions of the school. So, students see some aspects of the school more positively as they age.

Insert Figure 3 about here

The second kind of evidence comes from cross-context correlations for both the intercepts and linear rates of change. The relevant correlations are in Table 8, based on estimated Bayesian residuals from the HLM analyses. (These values are not dissimilar from the OLS ones, though consistently slightly larger). In the table, the slope correlations are below the diagonal and the intercept ones above it. Although the intercept correlations tend to be somewhat higher than the slope ones, all are positive. None seems so high as to justify the conclusion that measures of the four contexts are interchangeable, merely alternative measures of some more general construct. So, we conclude that these individual context judgments are all positively related, indicating some evidence of a possible underlying optimism or negativism factor. But at the same time they are not so totally redundant that a single factor can explain all (or most) of the variation observed.

Insert Table 8 about here

Summary

One way to draw conclusions is to sum each of the four contexts--remember they are in standard score form--in order to produce a total context quality composite. Analyses of this highly aggregated pan-context quality measure result in the findings in Table 9, while Figure 4 shows the individual differences in grade trends.⁵ Clear findings emerge about:

1. The steep decrease in the quality students attribute to the four social worlds combined.

While each of the individual difference variables moderate these negative age trends in some way, none of them changes the sign of the basic relationship. Whether in cross-sectional or

⁵ For ease of presentation, the individual initial psychological adjustment and prior achievement measures have been combined to create two unique variables labeled as “initial psychological adjustment” and “prior academic achievement”.

longitudinal analyses, young people from all of the groups examined see the social contexts in their lives changing in ways that should be problematic for their positive development.

2. After controlling for all other variables in the model, some individual differences emerge that moderate the rate of the negative age trend.

- In 8th grade, females are less positive about social context quality, and they experience a marginally steeper decline in these views.
- In comparison to African-Americans, 8th grade Hispanics see their contexts as more negative and experience a steeper decline.
- In 5th grade, Asian-Americans judge their social world less favorably than African-Americans but experience a less steep decline in these views, coming to finish like the other groups. (However, this confounds relatively positive rates of change for the school and peer contexts with similar or more negative rates of change for homes and neighborhoods).
- Children living with both biological parents and with better educated parents view their social worlds more favorably than others and experience a less steep decline.
- Children with better 5th grade psychological adjustment view their 8th grade social environment more positively, but over time they experience a steeper decline in their views and, by the end of 8th grade, their 5th grade advantage has been halved.
- Children with better academic records in childhood tend to experience steeper declines in their views of the social environment and, by 8th grade, see their social world less favorably than their same-age peers.

Insert Table 9 and Figure 4 about here

Discussion

As they grow older, members of this inner city sample increasingly characterize their schools, neighborhoods, families and peer groups in terms that developmental research suggests are detrimental to their well-being. They live in a constellation of settings that are becoming more difficult for them to manage and from which they think adults are slowly withdrawing. It would be one thing if a single setting were becoming more problematic for them. But a striking feature of the results is the multi-context generalizability of the growing realization that a setting does not offer the support and certainty it used to. Also striking is that these changes hold across many individual difference factors within the inner city. They are not localized to certain kinds of children. Nor is this bleak picture attenuated much by the finding that older students see their schools as safer and more comfortable. As they move into high school, students will almost certainly find themselves at the bottom of a new pecking order, with all the insecurities this entails. The reality for young people is that the social worlds in which they live present them with new and harder challenges as they get older. In schools, curricula become more challenging, teachers expect more, the consequences for failure are greater, and teachers seem less caring. At home, parents appear less warm, they appear less appropriate as sources of advice, they expect greater personal accountability, and they also seek to impose tighter behavioral standards on their children as they increasingly move into a peer world that often worries parents and undermines the quality of the parent-child relationship. In the peer world, students take more of their style cues from peers as they get older, and these peers increasingly behave in ways that make many adults apprehensive, that portend personal danger and are fraught with uncertainty for young persons. In the neighborhood, the recreational activities available locally seem less age appropriate to older children than younger ones, streets and malls are full of seductive opportunities and dangers, and non-familial adults seem less concerned to monitor what young people do in public.

In all of this, students describe a pattern of adult emotional and behavioral participation in their lives that is being systematically and linearly reduced, whatever the social context. It would be a mistake to attribute this to parents, teachers and community residents trying to promote the autonomy of young people in order to prepare them for a tougher adult world. Although this

interpretation is consonant with some of the data presented, it cannot explain all the findings. For example, if adults plan this way, why should older students see teachers making less effort to encourage academic success and behaving less often in ways that will help motivate them to learn? Why should the promotion of autonomy cause older students to see their parents as less responsive to school reports of misbehavior or to see their parents as less likely to verbally reward them for positive school performance? Why should promoting autonomy lead older students to hang out less often with peers who could serve as positive role models, or to note that there are fewer relevant institutional and human resources in their local neighborhood, including adults who offer positive developmental examples to them? Adult attempts to foster autonomy cannot completely explain why, between 10 and 14, young people attribute to social contexts increasingly more characteristics that are not conducive to positive human development.⁶

It would be a mistake to see the similarity in these changes in context judgments as products of ratings that lack discriminant validity. The neighborhood, peer, school and family measures are all interrelated, but none so highly they can be treated as alternative measures of the same underlying construct. Moreover, assessments of the school social climate reveal some judgments become more positive not less positive with age. Nor can a measurement bias hypothesis explain by itself why most contextual ratings go down year by year. Why should low quality data collection entail a different mean each year? For that matter, why should it lead to the very systematic pattern of individual differences noted in the figures provided here? The commonality of age trends revealed in the figures--even down to similar slope values when the data are scaled in standard score form--is not a product of a common measurement bias.

However, the findings can be interpreted as partially consistent with the hypothesis that a general pessimism increases during the transition to adolescence that affects many things, including context ratings. However, if there is such an increase it is not universal. Otherwise, some ratings of the school social climate would not have increased. Nor is the onset of pessimism in any way

⁶ The children do not themselves make the link to positive development; they merely report on their social worlds. We create the links using substantive theory and past empirical findings.

sudden for this population at large. The 5th to 8th grade decreases in positive contextual attributions were almost always linear, with no evidence of a sudden onset at any particular grade for any context. More importantly, if the decreases do reflect a general growth in adolescent pessimism, we have added to the forms such pessimism can take--viz., as growing disillusionment with the social contexts in which young people live. However, an underlying growth in pessimism cannot totally explain all the relevant findings. We discovered that although students with more positive outlooks on life in 5th grade made the most positive contextual attributions at all times, their rate of decline tended to be steeper than for students who did not report as positive an outlook. Moreover, while students with the most pessimistic 5th grade outlook saw their home lives as increasingly less positive, they rated their friends as behaving increasingly more conventionally relative to others. So, no clear and simple link emerges between 5th grade levels of optimism or pessimism and positive rates of change in context attributions. Unfortunately, individual differences in mental health may not be identical with developmental shifts for an entire age cohort. So, we cannot be definitive about whether the present findings are or are not epiphenomena of a general cultural move towards pessimism that occurs as young people in the USA enter adolescence. Most of the findings are consistent with such an account, but some are not.

The interpretation we prefer is more contingent. The developmental tasks of adolescence clearly enter the picture, as students enter into peer worlds that involve important implications for social status, self concept, and experimentation with new behaviors and uncertainty and standards. Less time is spent at home in the company of parents and guardians with whom certain relationships had been worked out in the past that may not as relevant now as they once were. And in school, the social side of relationships becomes clearly more important to students than the academic, even though important long-term positive consequences are attached to academic performance. The peer world is vital if young people are to separate from their parents and are to learn to relate well to peers in their own right. For most 14 year olds, the greater importance of peer relations entails many uncertainties and no sure outcome. Added to this are the new or higher standards by which young people are judged--at school with respect to academic performance, at

home with respect to personal accountability, in peer settings with respect to social competence in the right crowds, and in the neighborhood with respect to being simultaneously seen as cool and nice, sometimes even by the same persons. Higher standards mean more doubt and uncertainty and more personal experience with real or anticipated failure that “somehow” has to be coped with. But the available coping mechanisms are not well understood by most early teens, adding to life’s pressures. Young people see ever less available to them the sources of support in school, peer, family and neighborhood settings that research indicates promote positive development.

This interpretation does not apply only to the inner city children studied here. After all, most of the existing literature which suggested we would find age-based decreases in perceptions of contextual support was based on studies with middle class samples. Moreover, the forces we have invoked that lead to these decreases are common across all American society. Everywhere, schools get tougher, parents conflict with their children more over autonomy and identity needs, peers increasingly explore more threatening worlds, and local communities fail to provide for adolescents as well as they do for children. In our view, the crucial issue is whether rates of decrease in perceived contextual support are steeper for inner city children than for their materially more advantaged counterparts.

Without data from middle class control communities with African-American, Hispanic, and Asian-American families we cannot answer this question. But examining the variation in social class indicators within this inner city sample did reveal that students from homes with two biological parents and better educated guardians started in 5th grade with more positive views of the social contexts in their lives and became even more positive with time. Such results incline us to expect steeper declines in context assessments in less materially advantaged localities. But even this does not incline us to expect positive or even zero age relationships in, say, the very most affluent suburbs. Achieving such a sign reversal would fly in the face of the considerable incidental knowledge we have of how development occurs in the USA at large. Parental standards increase with age almost everywhere; school tasks become more difficult everywhere; more individual accountability is expected from young people almost everywhere; and personal identity has to be

constructed in social milieus often characterized by conflicting signals from the home, school, friends and other local people. So, the multi-context decreases in judgments of context quality that we have described are likely to be well-nigh universal in the USA.

However, this does not preclude rates of change from varying across population groups. Indeed, we have demonstrated that they do, even within this inner city sample that inevitably has a more limited range than a nationally representative sample. But before discussing the individual difference results, it is important to note that the age-related decreases in perceptions of contextual support that we obtained are much larger than any modifications to the trends attributable to individual difference moderator variables. This is not to minimize the individual difference findings; it is merely to put them into one kind of perspective. Of the reliable individual difference results not yet discussed, two stand out.

The African-American and Hispanic results largely mirror each other over time, though the decreases are slightly steeper for the Hispanics (see Figure 2). Striking, by contrast, are the results for the Asian-Americans. They see the school and peer contexts as increasingly more supportive of them, probably because their school performance is higher (Cook, Hunt, & Murphy, 1998) and because their same-race friends are more conventional in their social behavior (Steinberg, 1996). They do not see these two social contexts as problematic in the way children from other ethnic groups do. However, Asian-American students see both their homes and neighborhoods as less supportive in 5th grade and thereafter. Most of the Asian-American students in this study are first-generation, poor and live in ethnic enclaves adjacent to, or surrounded by, very troubled, densely poor African-American neighborhoods. So, negative assessments of their neighborhoods is not a surprise. However, the home findings seem anomalous at first sight. The effect is a general one. It includes constructs that deal with school-home links that may be of little concern to many Asian-American parents because their children are doing well in school, because they do not know how to interact with American schools or because they believe it is not culturally appropriate for them to interfere with authority structures like schools. But it also includes constructs that tap into the non-school aspects of home life--e.g., for closeness in the parent-child relationship and monitoring the

child's social behavior. It may well be then, that our home and family are less relevant to culture and family practices that are specific to first and second generation Chinese in the USA (Chao, 1994).

The second interesting individual difference finding is in Table 7 and, aggregated across contexts, in Figure 3. It concerns prior academic achievement. Students who achieved more prior to 5th grade see their social contexts similarly to other students at the beginning of 5th grade, but they see them as systematically less supportive as they age. Why this should be is not clear. One possibility is that their greater cognitive abilities lead them to adopt ever higher standards about what a quality social context should look like, and the worlds in which they actually live suffer by comparison. What is disheartening here, though, is the following possibility. If the rate at which children see their social worlds decreasing in quality has causal implications for later mental health or social behavior or school performance, then in this one respect the more able students are exposed to higher risk. While their superior objective abilities might protect them from later problems, this protection could be attenuated by their growing realization that their home, peer, school and neighborhood worlds are increasingly less promotive of positive development by mainstream American standards. Does academic ability undermine itself in this way for these children? To examine this we would need to relate their perceptions of contexts to actual changes in adolescent outcomes.

The general decrease we have documented in students' judgments of social contexts is important if the way social contexts are perceived affects important objective outcomes later. Most psychologists study contexts because they believe that how individuals think they see reality becomes a reality for them. But this hypothesis has not yet been sensitively and generally tested. It is not an unreasonable idea though (Thomas & Thomas, 1928), and the next paper in this series will test it by relating levels and rates of change in how social settings are perceived to both levels and rates of change in school performance, mental health and a variety of positive and negative social behaviors. The inner city sample is particularly important for such a test since it is here that we eventually find the highest rates of poor school performance and involvement with crime. Do

perceptions of the level and rate of change in contextual features contribute to these high rates of problem behaviors?

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Table 1: Longitudinal Sample -- Number of Students by Grade and Year of Eligibility

Grade	1993	1994	1995	
<i>5th</i>	282			
<i>6th</i>	269			
<i>5th</i>		645		
<i>6th</i>		458		
<i>5th</i>			713	
<i>6th</i>			105	
Totals	551	1103	818	2472

Table 2: Demographic Characteristics of Samples: Cross-Sectional Vs. Longitudinal

		Cross-Sectional Sample (%)	Longitudinal Sample (%)
Student and Family Demographics: (Source: Student Self-Report)			
Gender			
	Male	49	47
	Female	51	53
Ethnicity			
	African-American	74	72
	Hispanic-American	22	24
	Asian-American	4	4
Highest Level Parental Education^a			
	High School or Less	55	54
	Some College	45	46
Parental Work Status^a			
	Not Working	22	18
	Working Part-Time	12	15
	Working Full-Time	66	67
Number of Biological Parents Living in Household^a			
	Living With No Biological Parents	26	22
	Living with One Biological Parent	45	45
	Living with Two Biological Parents	29	33
Achievement^b: Sixth Graders 1993 - 1995 (Source: District Archives)			
Math	Mean	31.01	32.60
	(Std. Deviation)	19.90	19.81
Reading	Mean	32.85	34.41
	(Std. Deviation)	16.21	16.28

^a Modal status across years

^b Iowa Test of Basic Skills (Normal Curve Equivalents)

Table 3: Context Measures

Measure	Number of Items	Average Reliability	Mean	Std. Dev.	Sample Item and Question Stem Where Appropriate
School Context					
Teachers' Social Relationships with Students					
Teachers' Respect for Students	6	0.75	3.58	0.72	How many of your teachers really listen to what you have to say?
Teachers' Caring for Students	3	0.87	3.66	0.72	When you have a problem, how often can you depend on...your teachers to help you out?
Social Skills Attributed to Students					
Social Maturity of Students	9	0.87	3.23	0.73	How many students in this school...accept criticism without getting angry?
Use of Positive Problem Solving Strategies	3	0.75	2.81	0.87	When problems occur among students in this school, how often do students...work out the problems amongst themselves by talking it over?
Attachment to the School					
Pride in the School	6	0.85	3.26	0.78	How proud do you feel of this school?
Attachment to the School	6	0.87	3.27	0.98	If you had to stop going to this school, how much would you miss...your fellow students?
Schools' Encouragement of Achievement					
Teachers' Encouragement of Academic Success	5	0.79	4.00	0.68	Of the teachers you know in this school, how many...tell students that doing well in school now is important to their future?
Teachers' Concern with Childrens' Learning Behaviors to Motivate Students	6	0.71	4.01	0.60	How many of your teachers...don't care if you get bad grades? (R)
	10	0.80	3.71	0.56	How many of the teachers in this school are willing to go out of their way and spend extra time to help students do their best?
Recognition for Achievement	4	0.85	3.69	1.12	How many times are students recognized or given awards at school assemblies or other special gatherings for... making good grades?
Students Valuing of Academic Success					
Student Acceptance of School Values	7	0.79	3.46	0.54	How many students in your school think doing homework is important?
Personal Valuing of Education	3	0.69	3.19	0.68	School is boring. (R) (5-point Likert scale, Strongly Agree to Strongly Disagree)

(R) = Reverse Coded

Table 3: Context Measures (Continued)

Measure	Number of Items	Average Reliability	Mean	Std. Dev.	Sample Item and Question Stem Where Appropriate
Home Context					
Academic Press					
Parental Encouragement of Positive Academic Behaviors	5	0.72	2.98	0.63	How often does someone at home...look to make sure you've done your homework?
Parental Support for Academic Success	6	0.84	3.94	0.70	When I don't do well in school work, my parents help me understand why. (5-point Likert scale, Strongly Agree to Strongly Disagree)
Parental Reinforcement of Positive Academic Outcomes	3	0.73	4.17	0.69	How often does a parent or other adult living with you...praise you for good grades?
Social Responsiveness					
Closeness of Parent-Child Relationship	6	0.81	3.96	0.65	My parents...approve of my friends. (5-point Likert scale, Strongly Agree to Strongly Disagree)
Parent Valuing of Conventional Outcomes for Their Child	3	0.75	3.89	0.54	How important do you think it is to your parents that...you will have a job that pays well?
Parental Monitoring and Rule-Setting	6	0.66	3.82	0.54	In your home, how often do you have to follow rules about...what time you should be home at night?
Parental Non-response to School Misbehavior (R)	2	0.84	4.03	1.15	If your parents found out you were skipping class, how often would they do nothing about it? (R)
Peer Context					
Influence of Friends					
Peers Who are Positive Influences	5	0.78	2.92	0.86	Think about the friends you spend the most time with. During the last year, how many of them...did their homework regularly?
Peers Involved in Delinquent Acts (R)	3	0.81	4.42	0.75	Think about the friends you spend the most time with. During the last year, how many of them...damages or destroyed something that did not belong to them?
Friends' Attitudes about Drug Use (R)	4	0.91	4.26	0.90	How do you think most of your friends feel about people your age...drinking alcohol?
Sexual Activity of Friends (R)	2	0.83	3.63	1.10	How many friends who are boys have had sex?
Proportion of Time Spent In Activities^a					
Unstructured Activities	10	0.87	0.38	0.17	On a school day how many hours do you spend watching television or videos?
Clubs and Lessons	6	0.87	0.16	0.12	On a weekend how many hours do you spend taking classes or lessons?
Playing Sports	4	0.79	0.22	0.13	On a school day how many hours do you spend playing pickup games outside of school like basketball, baseball, etc.?
Neighborhood Context					
Adult Monitoring of the Neighborhood Children	3	0.76	3.67	0.73	When teenagers are hanging around outside, there are neighbors who keep an eye on them. (5-point Likert scale, Strongly Agree to Strongly Disagree)
Presence of Positive Adults in the Neighborhood	3	0.73	3.37	0.75	There are a lot of adults in your neighborhood that you look up to. (5-point Likert scale, Strongly Agree to Strongly Disagree)
Availability of Neighborhood Resources	3	0.73	3.42	0.69	Your neighborhood has a safe place like a mall or park where teenagers can hang out. (5-point Likert scale, Strongly Agree to Strongly Disagree)

(a) primary constructs converted to proportions
(R) = Reverse Coded

Table 4: Means by Grade for Perceptions of Social Context

Cross-sectional and Longitudinal Samples

<i>Social Context</i>		<i>5th Grade Mean</i>	<i>6th Grade Mean</i>	<i>7th Grade Mean</i>	<i>8th Grade Mean</i>
School	<i>Cross-sectional</i>	0.16	0.05	-0.08	-0.12
	<i>Std. Dev.</i>	0.63	0.63	0.64	0.64
	<i>Longitudinal</i>	0.14	0.05	-0.09	-0.08
	<i>Std. Dev.</i>	0.61	0.63	0.64	0.65
Home	<i>Cross-sectional</i>	0.12	0.06	-0.04	-0.16
	<i>Std. Dev.</i>	0.58	0.63	0.67	0.71
	<i>Longitudinal</i>	0.10	0.05	-0.04	-0.14
	<i>Std. Dev.</i>	0.55	0.60	0.68	0.75
Peers	<i>Cross-sectional</i>	0.15	0.07	-0.07	-0.20
	<i>Std. Dev.</i>	0.50	0.53	0.55	0.54
	<i>Longitudinal</i>	0.12	0.07	-0.06	-0.19
	<i>Std. Dev.</i>	0.52	0.53	0.54	0.55
Neighborhood	<i>Cross-sectional</i>	0.14	0.06	-0.06	-0.14
	<i>Std. Dev.</i>	0.82	0.85	0.84	0.83
	<i>Longitudinal</i>	0.06	0.06	-0.05	-0.07
	<i>Std. Dev.</i>	0.81	0.83	0.87	0.85
Mean Social Context	<i>Cross-sectional</i>	0.14	0.06	-0.06	-0.16
	<i>Std. Dev.</i>	0.45	0.47	0.50	0.51
	<i>Longitudinal</i>	0.11	0.05	-0.06	-0.13
	<i>Std. Dev.</i>	0.44	0.46	0.51	0.55

5 6 7 8

Figure 1: Grade Trends in Perceptions of Multiple Social Contexts.

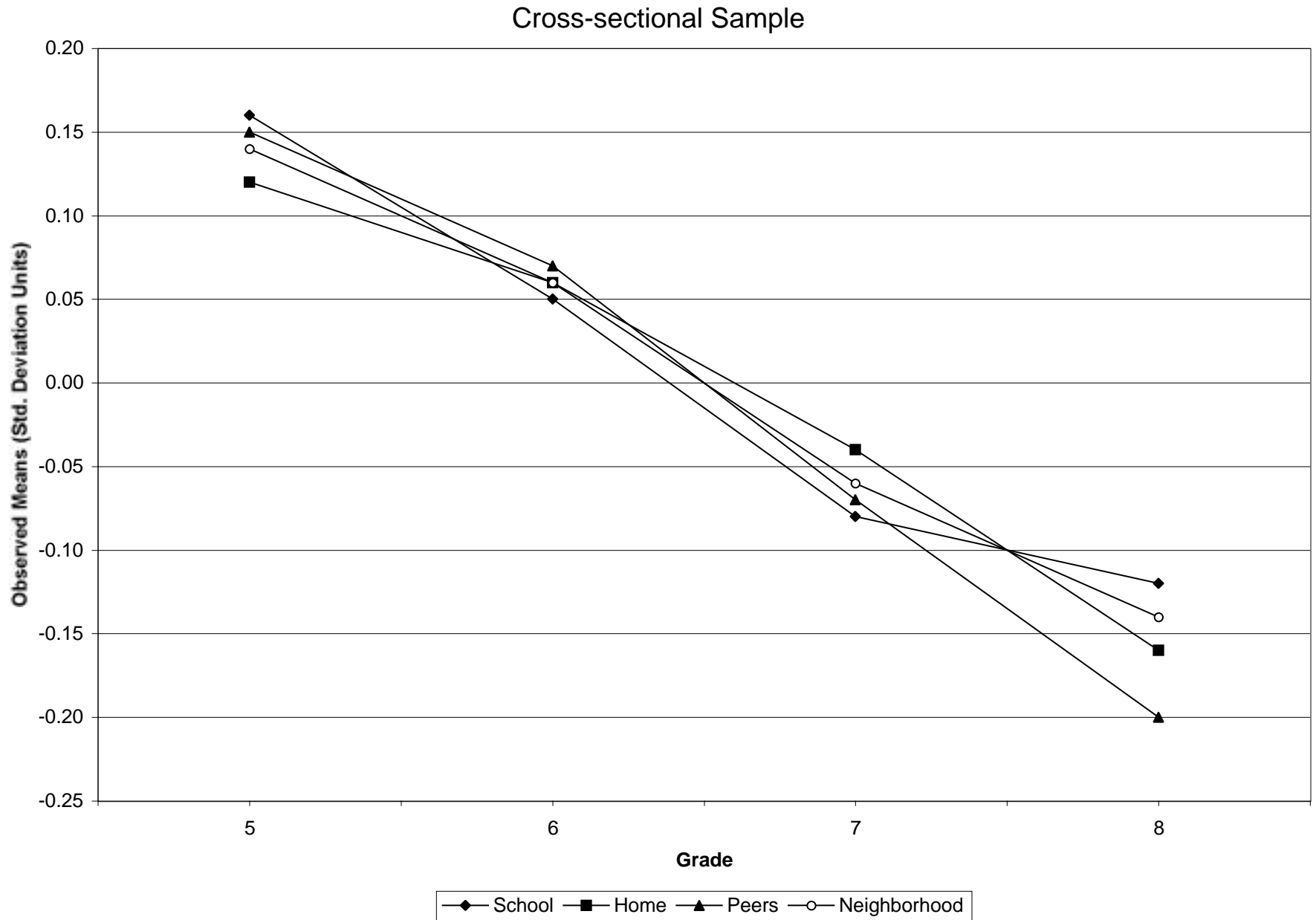


Table 5: Three-Way Anova Results

Cross-sectional Sample

	<i>Df</i>	School Context		Home Context		Peer Context		Neighborhood Context		Mean Social Context	
		<i>Mean Square</i>	<i>F</i>	<i>Mean Square</i>	<i>F</i>	<i>Mean Square</i>	<i>F</i>	<i>Mean Square</i>	<i>F</i>	<i>Mean Square</i>	<i>F</i>
Grade	3	16.23	40.41***	25.13	61.44***	13.50	48.57***	15.85	22.96***	18.53	79.16***
Race	2	3.91	9.72***	52.1	127.42***	12.10	43.54***	2.02	2.96+	1.93	8.26***
Gender	1	1.24	3.07+	3.46	8.46**	1.31	4.72*	11.68	16.93***	0.00	0.00
GradeXGender	3	1.02	2.55+	1.05	2.56+	0.88	3.18*	1.09	1.58	0.80	3.43**
GradeXRace	6	1.13	2.82**	0.93	2.28*	1.85	6.66***	1.41	2.04+	0.72	3.06*
GenderXRace	2	3.53	8.79***	0.79	1.93	0.62	2.22	0.447	0.65	0.06	0.25
GradeXGenderXRace	6	0.33	0.82	0.39	0.96	0.02	0.08	0.75	1.08	0.24	1.03
Total	12857	6669.06 ^a		7624.23 ^a		4813.19 ^a		9069.39 ^a		4415.12 ^a	
Error	12833	6436.61 ^a	.40 ^b	7276.37 ^a	.41 ^b	4471.53 ^a	0.28 ^b	8859.97 ^a	0.69 ^b	4171.49 ^a	0.23 ^b
R²		0.04		0.05		0.07		0.03		0.05	

[a] Type III Sum of Squares

[b] Error Sum of Squares/Error Dfs

+ = p<.10 * = p<.05 ** = p<.01 *** = p<.001

Figure 2: Perceptions of Social Contexts -- Observed Mean by Grade and Race.

Cross-sectional Sample

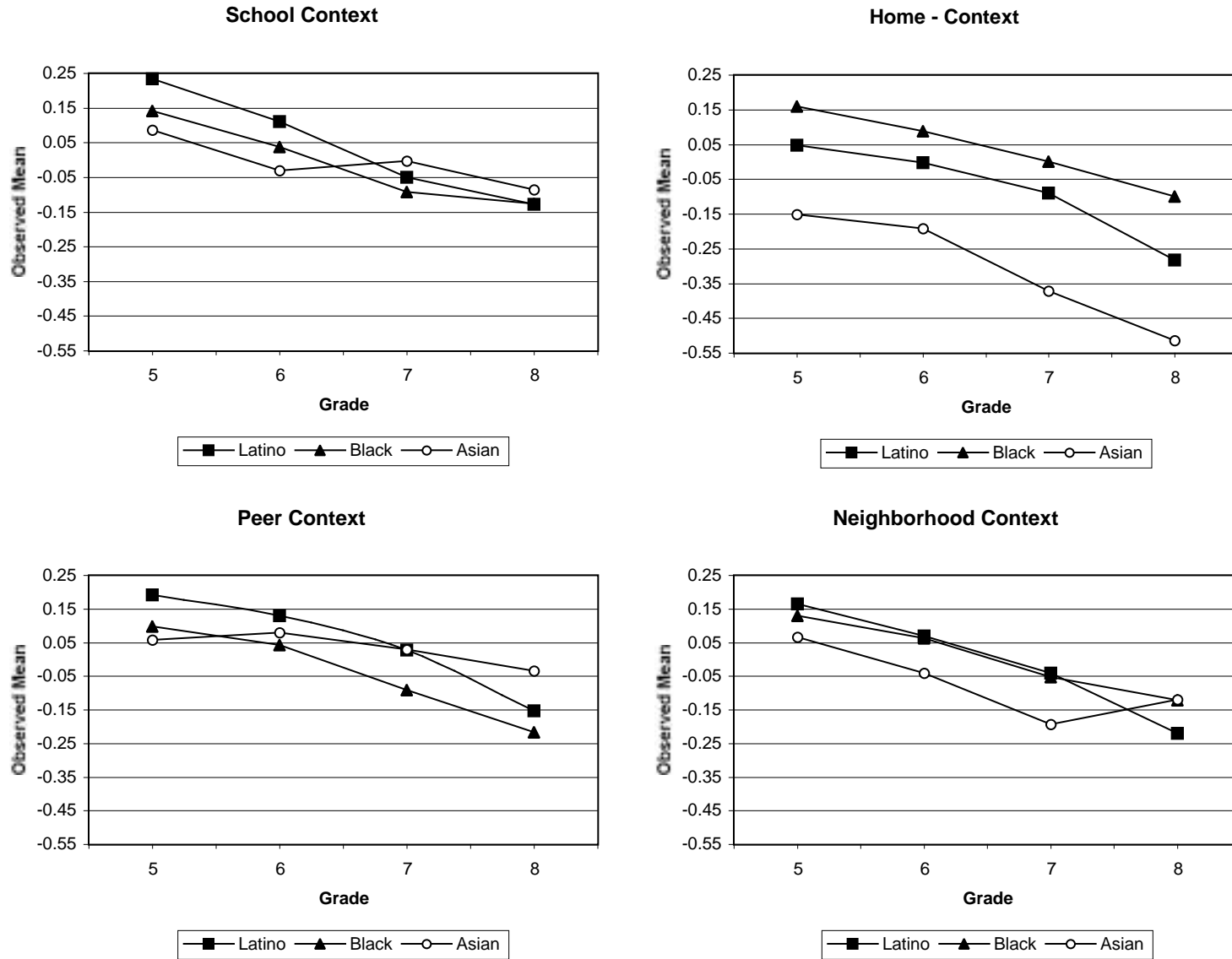


Table 6: Results of Unconditional and Conditional HLM Models.

Longitudinal Sample

<i>Social Context</i>						Model 1 Unconditional				Model 2 Conditional				Race ^b							
		5th Grade		6th Grade		7th Grade		8th Grade		Gender ^a		Hispanic		Hispanic		Asian		Asian			
		Mean	Mean	Mean	Mean	b	se	b	se	b	se	b	se	b	se	b	se	b	se		
School	<i>Mean</i>	0.14	0.05	-0.09	-0.08	-.11***	.014	-.07***	.006	.00	.028	-.01	.011	-.03	.034	-.06***	.013	.08	.072	.04	.034
	<i>Std. Dev.</i>	0.61	0.63	0.64	0.65																
Home	<i>Mean</i>	0.10	0.05	-0.04	-0.14	-.12***	.016	-.08***	.006	.03	.032	-.03*	.013	-.09*	.039	-.00	.015	-.42***	.077	-.04	.034
	<i>Std. Dev.</i>	0.55	0.60	0.68	0.75																
Peers	<i>Mean</i>	0.12	0.07	-0.06	-0.19	-.16***	.012	-.09***	.006	-.12***	.024	-.05***	.011	.06*	.029	-.01	.013	.15	.049	.05*	.024
	<i>Std. Dev.</i>	0.52	0.53	0.54	0.55																
Neighborhood	<i>Mean</i>	0.06	0.06	-0.05	-0.07	-.06***	.018	-.04***	.007	-.15***	.035	-.02	.015	-.14**	.043	-.07***	.019	-.16	.092	-.02	.041
	<i>Std. Dev.</i>	0.81	0.83	0.87	0.85																

a = Relative to "Male"
b = Relative to "African-American"
* = p< .05, ** = p<.01, *** = p<.001

Table 7: Full Conditional HLM Model for Multiple Social Contexts

Longitudinal Sample

		<i>School Context</i>		<i>Home Context</i>		<i>Peer Context</i>		<i>Neighborhood Context</i>	
		Difference in 8th Grade Status	Difference in Rate of Change	Difference in 8th Grade Status	Difference in Rate of Change	Difference in 8th Grade Status	Difference in Rate of Change	Difference in 8th Grade Status	Difference in Rate of Change
Gender^a	Female	-.03	.00	-.01	-.01	-.14***	-.04***	-.18***	-.01
		.028	.012	.033	.013	.024	.011	.036	.015
Race^b	Hispanic	-.06	-.06***	-.14***	-.02	.01	-.02	-.16***	-.06**
		.038	.015	.043	.017	.031	.014	.046	.022
	Asian	.19*	.01	-.36***	-.09**	.21**	.07**	.01	-.01
		.076	.035	.083	.033	.068	.026	.098	.043
Family Demographics^c	Number of Biological Parents Living in Household	.06**	.01	.08***	.02*	.04*	.01	.04	-.01
		.021	.009	.023	.009	.017	.008	.026	.011
	Parental Education	.02*	.01*	.03*	.01	.02*	.01**	.04**	.01*
		.012	.005	.013	.005	.010	.005	.015	.006
Initial Psychological Adjustment	Positive Mental Health Attributes	.09***	-.03***	.10***	-.04***	.02	-.02**	.08***	-.02*
		.017	.006	.019	.007	.014	.007	.020	.009
	Avoidance of Negative Social Behaviors	.05**	-.01	.08***	-.01	.09***	.00	.07**	.02
		.018	.008	.021	.009	.015	.007	.023	.009
	Negative Mental Health Attributes^d	.02	.01	.05**	.02*	.01	-.02*	-.03	.00
		.018	.007	.020	.008	.015	.007	.022	.010
Prior Academic Achievement	Mean Reading (ITBS) Score Prior to Grade 5	-.002	.000	-.004*	-.003***	-.007***	-.003***	-.004*	-.001
		.0016	.0006	.0018	.0007	.0013	.0006	.0020	.0008
	Mean Math (ITBS) Score Prior to Grade 5	-.004**	.000	-.002	.000	-.002	-.001	-.005**	-.001
		.0013	.0005	.0015	.0006	.0011	.0005	.0016	.0006

* = p < .05, ** = p < .01, *** = p < .001

a = Relative to "Male"

b = Relative to "African-American"

c = Modal Status Across Years

d = Reverse Coded

Table 8: Correlations Among the Perceived Context Qualities.
 (Intercepts above the diagonal and slopes below it)

Longitudinal Sample

	1	2	3	4
School		0.511	0.389	0.535
Home	0.413		0.417	0.344
Peer	0.260	0.308		0.239
Neighborhood	0.402	0.247	0.139	

Note: All correlations significant at the 0.01 level (2-tailed)

Table 9: Full Conditional HLM Model -- Mean Social Context.

		Longitudinal Sample	
		Mean Social Context	
		Difference in 8th Grade Status	Difference in Rate of Change
Gender^a	Female	-.08***	-.02
		.023	.010
Race^b	Hispanic	-.11***	-.04**
		.030	.013
	Asian	-.04	.01
		.064	.028
Family Demographics	Number of Biological Parents Living in Household	.07***	.02*
		.017	.007
	Parental Education	.03**	.01*
		.010	.004
Initial Psychological Adjustment	Mean Mental Health Attributes	.15***	-.04***
		.018	.008
Prior Academic Achievement	Mean Achievement (ITBS) Prior to Grade 5	-.008***	-.002***
		.0009	.0004

a = Relative to "Male"

b = Relative to "African-American"

* = p < .05, ** = p < .01, *** = p < .001

Figure 4: Perceptions of Mean Social Context.

Longitudinal Sample

