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## *School Transitions in Early Adolescence: What Are We Doing to Our Young People?*

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There has been growing concern with adolescence as a time of risk. By whatever criteria one uses, a substantial portion of U.S. adolescents are not succeeding: Between 15% and 30% (depending on ethnic group) drop out of school before completing high school, adolescents have the highest arrest rate of any age group, and increasing numbers of adolescents consume alcohol and other drugs on a regular basis (Office of Educational Research and Improvement, 1988). In addition, the prevalence of several types of clinical dysfunctions increases at this time (Kazdin, 1993). For example, there is an increase in the prevalence of depression and eating disorders, particularly among females. Perhaps most serious, the incidence of attempted and completed suicides increases dramatically with the onset of adolescence.

Many of these problems appear to begin during the early adolescent years (Carnegie Council on Adolescent Development, 1989). Why? Several investigators have suggested that the transition to junior high school may contribute to the emergence of these problems (Eccles et al., 1993; Simmons & Blyth, 1987). This transition occurs at a time when most young adolescents are also experiencing the physical, psychological, and social changes associated with adolescence, including the new role demands presented by parents, peers, and teachers. Moreover, the environments of traditional junior high schools are usually quite different from those of elementary schools. Several investigators have argued that these differences undermine healthy development for many youth (e.g., Eccles et

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Transitions through Adolescence: Interpersonal

Domains and Context (pp 251-284). Hillsdale, NJ:

Lawrence Erlbaum Associates.

al., 1993; Simmons & Blyth, 1987). The first part of this chapter focuses on this hypothesis.

Difficulties with this transition, however, are by no means universal. Hirsch and Rapkin (1987), for example, found no change in self-esteem in students making the transition from sixth grade into a junior high school. These authors did report, however, an increase in depressive symptomatology in girls making the transition as compared to boys. Other studies have also found no change in the self-esteem of children making the transition (e.g., Fenzel & Blyth, 1986; Hawkins & Berndt, 1985; Nottelmann, 1987). Although some of these differences undoubtedly reflect variations across studies in populations, school environments, and varying methodological techniques, it is likely that individual differences in young adolescents' responses to the transition to junior high school also play a role. In support of this hypothesis, several studies have found negative changes for some youth and not for others. For example, Simmons and Blyth (1987) found that girls already involved in dating and showing the most advanced pubertal development were most at risk for negative changes in their self-esteem in conjunction with the transition to junior high school. Similarly, Midgley, Feldlaufer, and Eccles (1988a, 1989) found more extreme negative effects of the junior high school transition on low-achieving students. Thus, it is probable that some adolescents adapt well to the transition, whereas others find the transition more difficult. What factors influence individual differences in the response to the junior high school transition? The second part of this chapter focuses on this question.

### GENERAL DEVELOPMENTAL CHANGES IN ADOLESCENTS' SCHOOL MOTIVATION AND SELF-CONFIDENCE

#### The Possible Effects of Stage-Environment Match

Several investigators have reported mean level declines at early adolescence in such motivational constructs as interest in school (Epstein & McPartland, 1976), intrinsic motivation (Harter, 1981), theories about the nature of ability (Stipek & Mac Iver, 1989), and self-concepts (Eccles, Midgley, & Adler, 1984; Eccles et al., 1989; Simmons & Blyth, 1987; Wigfield, Eccles, MacIver, & Reuman, 1991). Furthermore, these declines appear to be associated with the junior high school transition. For example, Simmons and Blyth (1987) found a marked decline in some young adolescents' school grades as they move into junior high school. Furthermore, the magnitude of this decline was predictive of subsequent school failure and drop out. Simmons and Blyth (1987) also reported declines

in self-esteem among girls making the junior high school transition. There are also reports of similarly timed developmental increases in such negative motivational and behavioral characteristics as focus on self-evaluation rather than task mastery (Maehr & Anderman, 1993; Midgley, Anderman, & Hicks, 1995; Nicholls, 1980; Roeser, Midgley, & Maehr, 1994), and both truancy and school drop out (Rosenbaum, 1976; see Eccles et al., 1984, for a full review). Although these changes are not extreme for most adolescents, there is sufficient evidence of gradual decline in various indicators of academic motivation, behavior, and self-perception over the early adolescent years to make one wonder what is happening (see Eccles & Midgley, 1989, for a review).

A variety of explanations have been offered to explain these "negative" changes. Some have suggested that these declines result from the intrapsychic upheaval assumed to be associated with early adolescent development (e.g., Freud, 1969; Hamburg, 1974). Others have suggested that it is the coincidence of the timing of multiple life changes. For example, Simmons and her colleagues have demonstrated that the coincidence of the junior high school transition with pubertal development accounts for the declines in the school-related measures and self-esteem (e.g., Blyth, Simmons, & Carlton-Ford, 1983; Simmons & Blyth, 1987; see also Crockett, Petersen, Graber, Schulenberg, & Ebata, 1989). Drawing on cumulative stress theory, these theorists suggested that declines in motivation result from the fact that adolescents making the transition to junior high school at the end of Grade 6 must cope with two major transitions: pubertal change and school change. Because coping with multiple transitions is more difficult than coping with only one, these adolescents are at greater risk of negative outcomes than adolescents who only have to cope with pubertal change during this developmental period. To test this hypothesis, Simmons and her colleagues have compared the pattern of changes on young adolescents' school-related outcomes for children who move from sixth to seventh grade in a K-8, 9-12 system with the pattern of change for children who make the same grade transition in a K-6, 7-9, 10-12 school system. This work unconfounds the conjoint effects of age and transition operating in most developmental studies of this age period. These researchers find clear evidence, especially among girls, of greater negative change among children making the junior high school transition than among children remaining in the same school setting. The fact that the junior high school transition effects are especially marked for girls provides additional support for the cumulative stress theory, because girls are more likely than boys to be undergoing both a school transition and pubertal change at this age.

We have obtained similar findings using the data from the National Educational Longitudinal Study. We compared eighth graders in a K-8

school system with eighth graders in either a K-6, 7-9 system or a K-5, 6-8 system. The eighth-grade students in the K-8 systems looked better on several motivational indicators such as self-esteem, preparedness, and attendance than the students in either of the other two types of school systems (Eccles, Lord, & Midgley, 1991). In addition, the eighth-grade teachers in the K-8 system reported fewer student problems, less truancy, and more student engagement than the teachers in either of the other two types of school systems. Clearly both the young adolescents and their teachers seem to be faring better in K-8 school systems than those in the more prevalent junior high school and middle school systems. Why?

Several investigators have suggested that the changing nature of the educational environments experienced by many young adolescents may also explain both these types of school system differences and the mean level declines in the school-related measures associated with the junior high school transition (e.g., Eccles, 1993; Eccles & Midgley, 1989; Eccles et al., 1984; Simmons & Blyth, 1987). Drawing on person-environment fit theory (see Hunt, 1975), Eccles and Midgley (1989) proposed that these motivational and behavioral declines could result from the fact that junior high schools are not providing appropriate educational environments for many young adolescents. According to person-environment theory, behavior, motivation, and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of these social environments. Individuals are not likely to do very well, or be very motivated, if they are in social environments that do not fit their psychological needs. If the social environments in the typical junior high school do not fit very well with the psychological needs of adolescents, then person-environment fit theory predicts a decline in the adolescents' motivation, interest, performance, and behavior as they move into this environment. Furthermore, Eccles and Midgley (1989) argued that this effect should be even more marked if the children experience a fundamental change in their school environment when they move into a junior high school or middle school; that is, if the school environment of the junior high school or middle school fits less well with their psychological needs than the school environment of the elementary school.

Is there any evidence that such a negative change in the school environment occurs with the transition to junior high school? Yes, and it occurs at both the macro and micro levels. For example, Simmons and Blyth (1987) enumerated the following types of macro changes: increased school size, increased bureaucratic organization, increased departmentalization, and decreased teacher-student individual contact and opportunity to have a close relationship with a particular teacher. Simmons and Blyth (1987) suggested that such changes put young adolescents at risk in several ways. Because early adolescence is a period of exploration,

youth in this developmental period are likely to try out various types of behaviors and identities. Although such experimentation is both healthy and normal, it can also be quite risky. Successful passage through this period of experimentation requires a tight safety net carefully monitored by caring adults—adults who provide opportunities for experimentation without letting the youth seriously mortgage their futures in the process. Clearly the large, bureaucratic structure of the typical junior high and middle school is ill suited to such a task. In addition, Higgins and Parsons (1983) suggested that the increased size results in the disruption of one's peer network at a time when peer relations are especially important. Each of these characteristics of the junior high school transition could have detrimental effects on young adolescents, especially those already somewhat at risk due to psychological, social, or academic problems.

Although remarkably few empirical studies have been done on more microlevel changes in the classroom environment, there is some evidence of negative changes at this level. Looking across the various relevant studies, the following five patterns seem especially important for this discussion. First, junior high school classrooms, as compared to elementary school classrooms, are characterized by a greater emphasis on teacher control and discipline and fewer opportunities for student decision making, choice, and self-management (e.g., Brophy & Evertson, 1976; Midgley & Feldlaufer, 1987; Midgley, Feldlaufer, & Eccles, 1988b; Moos, 1979). For example, in our own work with the Michigan Study of Adolescent Life Transitions (MSALT), sixth-grade elementary school teachers in 12 different school districts reported less concern with controlling and disciplining their students than these same students' seventh-grade junior high school math teachers reported 1 year later (Midgley et al., 1988b). Similar differences emerged on our indicators of student opportunity to participate in decision making regarding their own learning (see also Ward et al., 1982).

Such differences in the opportunity for participation in decision making and self-control are likely to be especially problematic for young adolescents. This is a time in development when youth begin to think of themselves as young adults. It is also a time when they increase their exploration of possible identities. They believe they are becoming more responsible and, consequently, deserving of greater adult respect. Presumably, the adults responsible for their socialization would also like to encourage them to become more responsible for themselves as they move toward adulthood. In fact, this is what typically happens across the elementary school grades (see Eccles & Midgley, 1989). Unfortunately, the evidence suggests this developmentally appropriate progression is disrupted with the transition to junior high school. Advocates of the stage-environment fit theory would predict that such a developmentally

disruptive and perhaps regressive change in the school environment is likely to undermine the motivation and engagement of the young adolescents experiencing the change.

Second, junior high school classrooms, as compared to elementary school classrooms, are characterized by less personal and positive teacher-student relationships (see Eccles & Midgley, 1989). For example, in the MSALT study, both students and observers rated junior high school math teachers as less friendly, less supportive, and less caring than the teachers these students had 1 year earlier in the last year of elementary school (Feldlaufer, Midgley, & Eccles, 1988). In addition, the seventh-grade teachers in this study also reported that they trusted the students less than did these students' sixth-grade teachers (Midgley et al., 1988b). Such a shift in the quality of student-teacher relationships is likely to be especially detrimental at this stage of development. Adolescence is a time when children are trying to find their own identity. This process often involves questioning the values and expectations of one's parents. In more traditional cultures, children have the opportunity to do this questioning with supportive nonparental adults such as religious counselors, neighbors, and relatives. In our highly mobile, complex society, such opportunities are not as readily available. Teachers are the one stable source of nonparental adults left for many U.S. youth. Unfortunately, the sheer size and bureaucratic nature of most junior high schools, coupled with the stereotypes we hold regarding the negative characteristics of adolescents, lead teachers to distrust their students and to withdraw emotionally from them (see Eccles et al., 1993; Miller et al., 1990). Consequently, these students have little choice but to turn to peers as nonparental guides in their exploration of alternative identities. Evidence from a variety of sources suggests that this can be a very risky solution for many youth. The demise of the close relationship between students and teachers has another unfortunate consequence for children at this age: It decreases the likelihood that teachers will be able to identify students on the verge of getting themselves into serious trouble and to get these students the help they need. In this way, the holes in the safety net may become too big to prevent unnecessary "failures."

Third, the shift to junior high school is associated with an increase in practices such as whole-class task organization, between classroom ability grouping, and public evaluation of the correctness of work (see Eccles & Midgley, 1989). For example, in the Junior High School Transition Study (Rounds & Osaki, 1982), whole-group instruction was the norm in the seventh grade, small-group instruction was rare and individualized instruction was not observed at all. In contrast, the sixth-grade teachers mixed whole- and small-group instruction within and across subject areas (Rounds & Osaki, 1982). Similar shifts toward increased whole-class in-

struction with most students working on the same assignments at the same time, using the same textbooks, and the same homework assignments were evident in the MSALT (Feldlaufer et al., 1988). In addition, several reports have documented the increased use of between-class ability grouping beginning at junior high school (e.g., Oakes, 1981). Changes such as these are likely to increase social comparison, concerns about evaluation, and competitiveness (see Eccles et al., 1984). Such changes may also increase the likelihood that teachers will use normative grading criteria and more public forms of evaluation, both of which have been shown to impact negatively on many young adolescents' self-perceptions and motivations. These changes may also make aptitude differences more salient to both teachers and students, leading to increased teacher expectancy effects and decreased feelings of efficacy among teachers.

Fourth, junior high school teachers feel less effective as teachers, especially for low-ability students. This was one of the largest differences we found between sixth- and seventh-grade teachers in the MSALT study. Seventh-grade teachers in traditional junior high schools reported much less confidence in their teaching efficacy than sixth-grade elementary school teachers in the same school districts (Midgley et al., 1988b). This decline in teachers' sense of efficacy for teaching the less competent students could help explain why it is precisely these students that appear to give up on themselves following the junior high school transition.

Finally, junior high school teachers appear to use a more competitive standard in judging students' competence and in grading their performance than do elementary school teachers (see Eccles & Midgley, 1989). There is no stronger predictor of students' self-confidence and sense of personal efficacy for schoolwork than the grades they receive. If grades change, then we would expect to see a concomitant shift in the adolescents' self-perceptions and academic motivation. In fact, it appears that junior high school teachers do use stricter and more social comparison-based standards than elementary school teachers to assess student competency and to evaluate student performance, leading to a drop in grades for many young adolescents as they make the junior high school transition. For example, Simmons and Blyth (1987) found a greater drop in grades between sixth and seventh grade for adolescents making the junior high school transition at this point than for adolescents enrolled in K-8 schools. Interestingly, this decline in grades is not matched by a decline in the adolescents' scores on standardized achievement tests, suggesting that the decline reflects a change in grading practices rather than a change in the rate of the students' learning (Kavrell & Petersen, 1984). Imagine what this decline in grades might do to young adolescents' self-confidence, especially in light of the fact that the material they are being tested on is not likely to be more intellectually challenging.

Changes such as these are likely to have a negative effect on many children's motivational orientations toward school at any grade level. However, Eccles and Midgley (1989) argued that these types of changes are particularly harmful at early adolescence given what is known about psychological development during this stage of life. Evidence from a variety of sources suggests that early adolescent development is characterized by increases in desire for autonomy, peer orientation, self-focus and self-consciousness, salience of identity issues, concern over heterosexual relationships, and capacity for abstract cognitive activity (see Simmons & Blyth, 1987). Simmons and Blyth (1987) argued that adolescents need a reasonably safe, as well as an intellectually challenging, environment to adapt to these shifts—an environment that provides a "zone of comfort" as well as challenging new opportunities for growth. In light of these needs, the environmental changes often associated with the transition to junior high school seem especially harmful in that they disrupt the possibility for close personal relationships between youth and nonfamilial adults at a time when youth have increased need for this type of social support; they emphasize competition, social comparison, and ability self-assessment at a time of heightened self-focus; they decrease decision making and choice at a time when the desire for self-control and adult respect is growing; and they disrupt peer social networks at a time when adolescents are especially concerned with peer relationships and social acceptance. We believe the nature of these environmental changes, coupled with the normal course of individual development, is likely to result in a developmental mismatch so that the "fit" between the early adolescent and the classroom environment is particularly poor, increasing the risk of negative motivational outcomes, especially for adolescents who are already having difficulty succeeding in school academically.

#### IMPACT OF ENVIRONMENTAL CHANGES ON YOUNG ADOLESCENTS' MOTIVATION

To test these predictions, we conducted a large-scale longitudinal study of the impact of changes in the school and classroom environment on adolescents' achievement-related beliefs, motives, values, self-evaluations, affective reactions, and behaviors. The first 2 years of this study focused intensively on the junior high school transition. Although all of the children made the junior high school transition between Grades 6 and 7 and all districts had a K-6, 7-9, 10-12 grade structure at the time of this study, we purposely selected 12 school districts in Southeastern Michigan that differed in nature of the junior high school environment. The data summarized in this chapter come from the first 2 years of this study (the MSALT). Approximately 1,500 young adolescents participated at all four waves of

the first 2 years of this study. The median family income for these students was approximately \$30,000 per year in 1983. Most families would be classified as working or middle class based on their occupation, education, and family income and most lived in the working- and middle-class communities surrounding Detroit. Seventy-five percent of the mothers reported being married, 8% reported being remarried, and 13% reported being separated or divorced. Eighty-five percent of the sample were White; 8% were African American. Questionnaires were administered at school during the fall and spring terms of the two consecutive school years. In this chapter we summarize the results for changes in teacher efficacy, teacher support and warmth, and opportunities for involvement in autonomous decision making.

#### Teacher Efficacy

As noted earlier, one of the largest differences between the sixth- and seventh-grade teachers is in their confidence in their teaching efficacy. Consistent with other studies, the seventh-grade teachers in the MSALT study reported less confidence in their ability to teach all children in their classes than the sixth-grade teachers. Do these differences in teachers' sense of efficacy before and after the transition to junior high school contribute to the decline in young adolescents' beliefs about their academic competency and potential? To answer this question, we divided our sample into four groups based on median splits of their math teachers' ratings of their personal teaching efficacy (see Midgley et al., 1989, for a full description of this study). The largest group (559 out of the 1,329 included in these analyses) moved from a high-efficacy sixth-grade math teacher to a low-efficacy seventh-grade math teacher. Another 474 adolescents had low-efficacy teachers both years, 117 moved from low- to high-efficacy teachers, and 179 had high-efficacy teachers both years. Thus, fully 78% of our sample of children moved to a low teacher efficacy math classroom in the seventh grade. As predicted, the adolescents who had moved from high-efficacy to low-efficacy teachers during the transition (the most common pattern) ended their first year in junior high school with lower expectancies for themselves in math, lower perceptions of their performance in math, and higher perceptions of the difficulty of math than the adolescents who had experienced no change in teacher efficacy or who had moved from low- to high-efficacy teachers. Also as we had predicted, teacher efficacy beliefs had a stronger impact on the low-achieving adolescents' beliefs than on the high-achieving adolescents' beliefs. By the end of the junior high school year, the confidence of those low-achieving adolescents who had moved from high- to low-efficacy teachers had declined dramatically. It is important to note, however, that the decline in self-confidence and efficacy for learning math was not

characteristic of either the low- or high-achieving adolescents who moved into a high teacher efficacy classroom at the seventh grade, suggesting that the decline is not a general feature of early adolescent development but rather a consequence of the fact that so many young adolescents experience a debilitating shift in their classroom environments as they make the junior high school transition.

### Teacher-Student Relationships

Negative change in the affective relationship between students and teachers is also one of the characteristic changes associated with the junior high school transition. Consistent with this pattern, we found that student-teacher relationships deteriorated after the transition to junior high school in the MSALT sample. Using a strategy similar to that described for teacher efficacy, we divided the sample of students into four groups based on the pattern of change they experienced in teacher support and warmth as they made the junior high school transition. As predicted, the young adolescents who moved from elementary teachers they perceived to be high in support to teachers they perceived to be low in support showed a decline in the value they attached to math; in contrast, the young adolescents who moved from teachers they perceived to be low in support to junior high school teachers they perceived to be high in support showed an increase in the value they attached to math. Again we found evidence that low-achieving students are particularly at risk when they move to less facilitative classroom environments after the transition (Midgley et al., 1988a).

Both of these analyses show that the declines in adolescents' school motivation and self-concepts often reported in studies of young adolescents' development are not inevitable. Instead these declines are associated with specific types of changes in the nature of the classroom environment experienced by many young adolescents as they make the junior high school transition. A transition into more facilitative types of classrooms can induce positive changes in young adolescents' motivation and self-perceptions. Unfortunately, for all adolescents, but especially for low-achieving adolescents, the findings from MSALT also indicate that most adolescents experience a negative change in their classroom experiences as they make the junior high school transition.

### Stage-Environment Fit in Classroom Decision Making

Neither of these analyses, however, directly tested our stage-environment fit hypothesis. To do this one must directly assess person-environment fit and relate this fit to changes in adolescents' self-perceptions and

motivation. Both the adolescents and the teachers in this study were asked to rate whether students were allowed to have input into classroom decisions regarding where to sit, classwork, homework, class rules, and what to do next and whether students ought to have input into each of these decisions (items were developed by Lee, Statuto, & Kedar-Voivodas, 1983). These questions can be used in the following ways: (a) to plot the developmental changes in adolescents' preferences for decision making opportunities in the classroom, (b) to determine changes in the opportunity for them to participate in decision making, and (c) to determine the extent of match or mismatch between their preferences and the opportunities actually afforded them in the school environment. If developmental changes in this match are related to developmental changes in the adolescents' self-perceptions and school-related motivation then we would have support for our stage-environment fit hypothesis.

As noted earlier, both the young adolescents and their teachers reported that there was less opportunity for participation in classroom decision making in the seventh grade than in the sixth grade. In contrast, the young adolescents' desire for more participation in classroom decision making increased over the transition. As a consequence of these two divergent patterns, the congruence between young adolescents' desire for the opportunity to participate in classroom decision making and their perception of the extent to which such opportunities were available to them was lower when the adolescents were in the seventh grade than when they were in the sixth grade (Midgley & Feldlaufer, 1987).

How might the widening mismatch between the students' desire for autonomy and their perceptions of their opportunity for autonomy affect motivation? Person-environment fit theories suggest that a mismatch between one's needs and the environmental affordances will lead to declines in motivation and engagement. Mac Iver, Klingel, and Reuman (1986) tested this prediction with the sixth-grade students by relating perceived congruence versus perceived incongruence to student motivation and behavior. Congruent children differed from incongruent children in several ways: They rated math as more useful and interesting, they liked the teacher and their school better, they had higher expectations for their own performance in math, and they engaged in less misbehavior according to their own and their teachers' reports. Therefore, it seems likely that this decline in the opportunity for decision making and this increase in the misfit between students' desire for autonomy and their perceptions of the opportunities for autonomy in their seventh-grade math classrooms could contribute to the decline we find in their motivation to study math.

However, more specifically, given the general developmental progression toward increased desire for independence and autonomy during the

early adolescent period, Eccles and Midgley (1989) predicted that adolescents who experience decreased opportunities for participation in classroom decision making along with increased desires for greater participation in such decisions (i.e., a "can't but should be able to" mismatch) should be most at risk for negative motivational outcomes. In a longitudinal analysis, Mac Iver and Reuman (1988) provided some support for this prediction. They compared the changes in intrinsic interest in math for adolescents reporting different types of changes in their responses to the actual and preferred decision-making items across the four waves of data. Consistent with the Eccles and Midgley (1989) prediction, the adolescents who perceived their seventh-grade math classrooms as putting greater constraints on their preferred level of participation in classroom decision making than their sixth-grade math classrooms showed the largest and most consistent declines in their intrinsic interest in math as they moved from the sixth grade into the seventh grade. These are the students who are experiencing the type of developmental mismatch Eccles and Midgley (1989) predicted would be most detrimental to positive growth.

### Summary

Thus far, a theoretical rationale has been outlined for the average level declines in motivation and self-evaluation associated with the junior high school transition. The results of a longitudinal study designed to provide an in-depth description of the classroom environment changes experienced by most children as they make the transition from elementary school into junior high schools have been summarized. In general, evidence of the following types of predicted changes was reported: an increase in teacher control of students and a decrease in teacher's feelings of efficacy and in the quality of teacher-student relations. We have also begun to assess the impact of these changes on student motivation using a quasi-experimental approach. These results confirm the negative consequences of these types of changes and provide evidence that a different type of change would produce positive motivational changes at this developmental period. Together these two outcomes support our suggestion that declines in motivation often assumed to be characteristic of the early adolescent period are less a consequence of the students' developmental stage than of the mismatch between the students' needs and the opportunities afforded them in the traditional junior high school environment.

The MSALT results also suggest that there are individual differences in adolescents' response to the junior high school transition. In both the study on the impact of changes in teacher efficacy and the study on the impact of changes in student-teacher relationships, low-achieving students were more negatively affected by the change than high-achieving

students. In the two studies of person-environment fit, students varied in their desire for autonomy and only those students who perceived a mismatch between their desire for autonomy and the opportunities for autonomous behavior showed the negative changes in motivation and self-concept often associated with the junior high school transition.

### INDIVIDUAL DIFFERENCES IN THE ADJUSTMENT TO SCHOOL TRANSITIONS DURING EARLY ADOLESCENCE

In the next sections, we explore individual differences in the response to school transition more thoroughly. First, we summarize our work on pubertal development. Then we summarize our findings regarding the moderating influence of a set of psychological and familial protective and risk factors on adaptation to the junior high school transition.

#### Differences Related to Pubertal Timing

In their now classic study, Simmons and Blyth (1987) found that girls were more at risk for showing negative changes in response to the junior high school transition than boys. As they explored gender differences in more depth, a particular subset of girls were most at risk—White girls who were advanced in both their physical and social pubertal development. These girls had already begun dating and were well advanced in their physical development. Simmons and Blyth (1987) interpreted this effect in terms of the cumulative negative effects of multiple transitions on individual development (see also Petersen & Crockett, 1985, for studies with a similar theoretical perspective). People who experience more than one transition simultaneously are more at risk for the negative effects of the stress associated with transitions than people who experience only one major transition (Garnezy, 1983).

The person-environment fit perspective outlined earlier provides another way to look at this individual difference in response to the junior high school transition. It is quite possible that variations in pubertal development are associated with variations in the adolescents' desire for autonomy and adult respect. If so, the types of regressive changes in the authority relationships between students and teachers associated with the junior high school transition would create a particularly salient mismatch for the most pubertally advanced students—who at this age are most likely to be females. To test this hypothesis with the MSALT data, we related an indicator of maturational level to the female adolescents' desire for input into classroom decisions on the Lee et al. (1983) items

collected at one wave. As we expected, the more physically mature female adolescents expressed a greater desire for input into classroom decision making than their less developmentally mature female classmates (Miller, 1986). Unfortunately, the more physically mature females did not perceive greater opportunities for participation in classroom decision making (see Fig. 10.1). Although the females with varying degrees of pubertal development were in the same classrooms, the more physically mature females (i.e., the early developers) reported fewer opportunities for participation in classroom decision making than did their less mature female peers (i.e., the on-time and late developers).

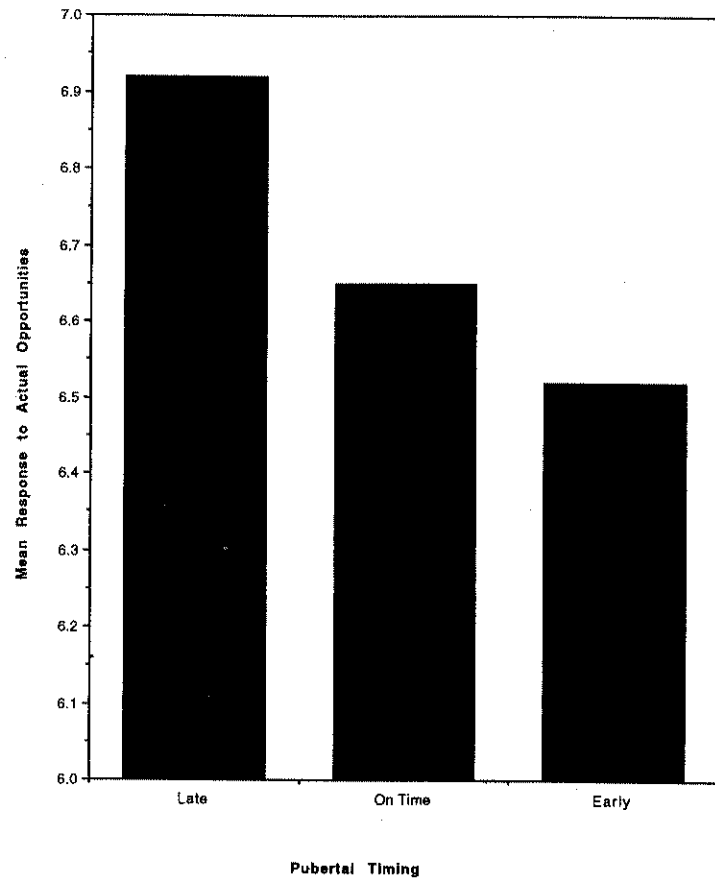


FIG. 10.1. Young adolescent females' perceptions of decision-making opportunities in their classroom in the spring of their sixth-grade year. Score represents the sum of the young woman's response to five items. A no response was coded 1 and a yes response was coded 2.

These maturational differences were even more striking when we looked at the within-year changes in these female adolescents' perceptions of the opportunities they have to participate in classroom decision making. We calculated the mean change in these females' perceptions of opportunities from the fall to the spring evaluation. We then looked at this change as a function of pubertal status. The early-maturing females showed a negative change (a decline) over the course of the school year in the extent to which they could participate in classroom decision making. In contrast, the late-maturing females in these same classrooms showed a positive change (an increase) over the course of the school year (Miller, 1986). How can this be, given that these adolescents were in the same classrooms? Did the teachers actually treat these adolescent females differently (i.e., did the teachers respond to earlier physical maturity with more controlling behavior)? Or did the adolescents perceive a similar environment differently (i.e., did the early-maturing adolescents perceive the same level of adult control as providing less opportunity for self-control than did the later maturing adolescents)? Evidence from educational psychology, developmental psychology, and general psychology suggests that either or both of these explanations could be accurate: Teachers do respond differently to various children in the same classroom depending on a variety of characteristics differently depending on their cognitive and/or motivational orientation (see Baron & Graziano, 1991). In addition, Paikoff and Brooks-Gunn (1991) reviewed evidence that parents respond differently to young adolescents depending on their physical maturity. More detailed classroom observations are needed to determine the exact nature of the relation between teachers' behavior and adolescents' perceptions.

More importantly, however, for the issues central to this discussion, the pubertal maturity of the female adolescents was associated with the degree of mismatch between the adolescents' desires for input and their perceptions of these opportunities in their classroom environment; that is, there was a greater degree of mismatch among the more physically mature female adolescents than among the less mature. As can be seen in Fig. 10.2, over the course of the school year, all girls reported greater frequency of "can't but should" situations. These are situations in which the student reports that she should be able to have a say in a particular decision (like where to sit) but is not allowed to have a say by the teacher. Both the frequency of this type of mismatch and the degree of change over the school year are greater for the early-maturing girls in this sample. In fact, by the end of the school year, almost twice as many early-maturing females reported experiencing the "can't but should" type of mismatch (e.g., Answering "no" to the question "Do you get to help decide what math you work on during math class?" but "yes" to the question "Should



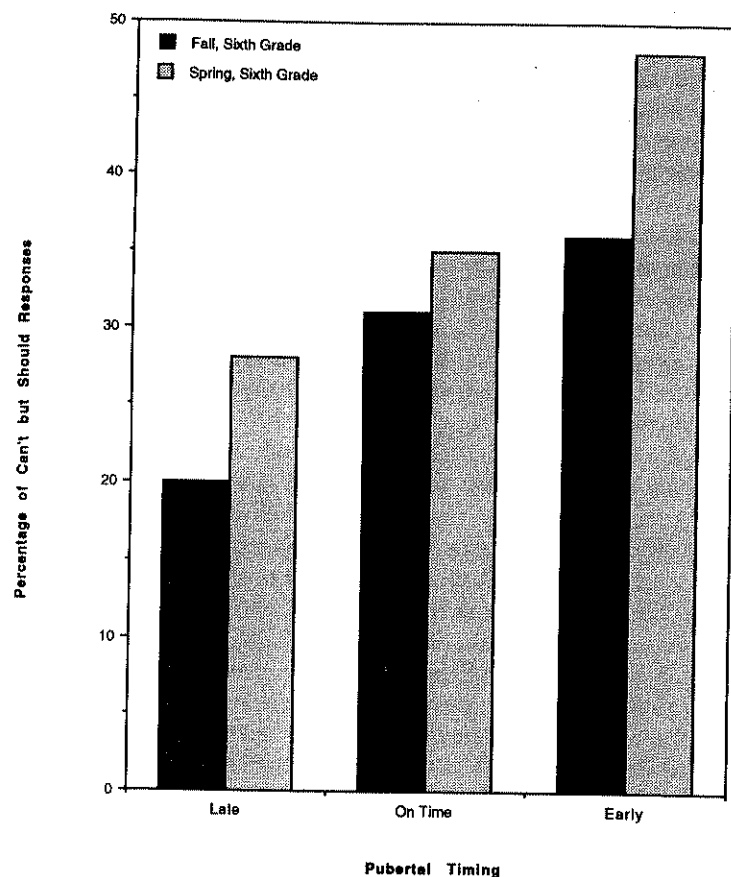


FIG. 10.2. Frequency of "can't but should" mismatches in decision-making opportunities in the fall and spring of the sixth-grade year. For each pair of items, the type of match was recorded. A can't but should mismatch occurs when the young woman responds yes to the question regarding whether they should have the particular decision-making opportunity and a no to the question regarding whether they actually do have this opportunity.

you have a say about this?") as did their less physically mature classmates. As a result, the change in the congruence between the young women's desire for opportunities for decision making and the existence of such opportunities in their classrooms was greatest for the early-maturing females (see Fig. 10.3). For these young women only, the perceived congruence had substantially declined over the course of the school year.

We find these results especially interesting in light of the findings of Simmons and her colleagues (e.g., Simmons & Blyth, 1987) linking the pubertal status of female adolescents at the time of the junior high school

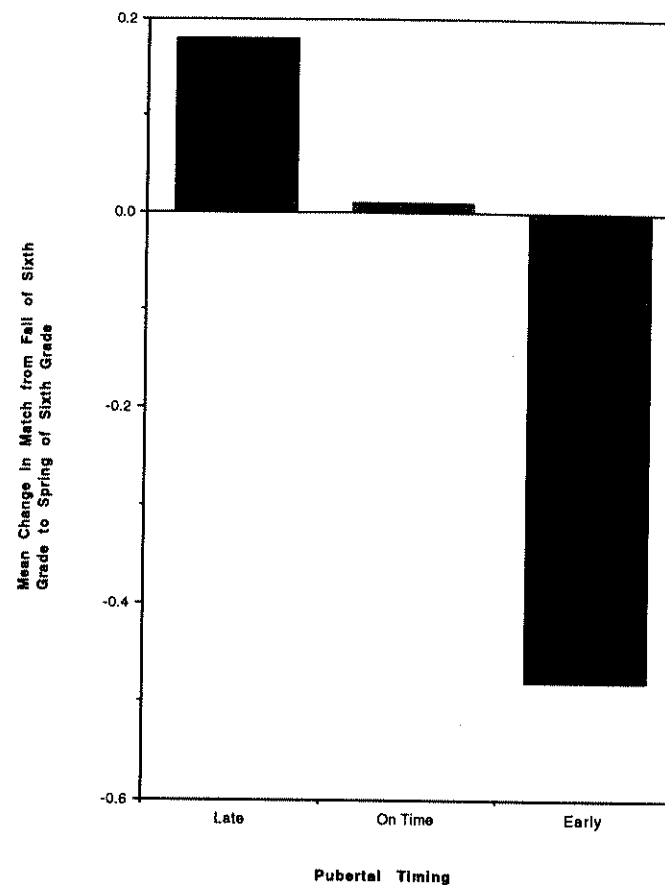


FIG. 10.3. Mean change in match in decision-making opportunities from the fall until the spring of the sixth-grade year. For each pair of items, the type of match was recorded. A match occurs when the young woman answers yes to both the can and should question for a particular decision-making opportunity.

transition to changes in the females' self-esteem and to the females' reports of truancy and school misconduct. In particular, the more physically mature females in their study reported the highest amount of truancy and school misconduct after they made the junior high school transition. Simmons and Blyth (1987) suggested that experiencing both school and pubertal transitions simultaneously puts these girls at risk for negative outcomes. It is also possible that it is the mismatch between their desire for a less controlling adult environment and their perceptions of the actual opportunities for participation that puts these females at additional risk for negative motivational outcomes.

### Individual Differences Related to Protective and Risk Factors

Both Simmons and Blyth (1987) and Fenzel (1991) analyzed the transition to junior high school in terms of stress and coping. From this perspective, transitions are considered stressful events in that they tap the individual's resources for adaptation. Within the stress and coping literature (e.g., Garnezy, 1983; Rutter, 1981), differences in individuals' responses to stressful life events are assumed to result from the balance between the protective and the risk factors they have at their disposal. Protective factors buffer against the adverse effects of transitions, whereas risk factors tend to exacerbate such effects.

We have now completed a set of analyses of the MSALT data based on this perspective (Lord, Eccles, & McCarthy, 1994). We investigated both psychological and general family environment factors as potential moderators of our adolescents' response to the junior high school transition. The psychological factors included adolescents' ability self-concepts, worries, and self-consciousness. The family environmental factors included decision-making opportunities and developmental attunement to the adolescent. The rationale for each of these sets of moderating constructs is summarized in the following sections, followed by a summary of our findings.

#### Psychological Protective and Risk Factors

In thinking about the psychological protective and risk factors most likely to affect adjustment to the junior high school transition, we decided to focus on a set of constructs directly related to the school setting. In terms of protective factors, several investigators have suggested that personal coping resources are key influences on individuals' adjustment to stressful situations such as school transitions. Personal coping resources are typically conceptualized as a set of relatively stable personality, attitudinal, and cognitive dispositions that promote effective adaptation, thereby reducing the potentially harmful effects of stress (Fenzel, 1991). Personal coping resources that seem most likely to buffer against the detrimental effects of stressful school transition at adolescence include a sense of autonomy, a sense of personal efficacy, and confidence in one's competence (Bandura, 1986; Compas, 1987; Garnezy, 1983; Harter, 1990).

Perceptions of one's competencies and efficacy are especially relevant for an understanding of the changes in self-esteem associated with the junior high school transition. Several studies support a connection between these self-relevant beliefs. For example, Bohrnstedt and Felson (1983) showed that perceived academic and athletic competence are posi-

tively predictive of self-esteem among adolescents. Similarly, Harter (1990) showed that perceived competence in academic, social, athletic, and physical appearance domains are positively related to self-esteem, with confidence in one's physical appearance and social competence having the strongest relations. Other studies have focused on the protective role that actual abilities may play as one makes the junior high transition. This work has demonstrated that success in academic and social domains in the sixth grade is positively related to increases in self-esteem following the junior high school transition (e.g., Hirsch & Rapkin, 1987; Simmons & Blyth, 1987). These studies suggest that both ability self-concepts and actual achievement levels are related to the children's overall self-esteem as well as to their adjustment to the junior high school transition.

In terms of risk factors, achievement-related worries and self-consciousness seem the most likely candidates for undermining the school transition adjustment process. For example, Elkind and Bowen (1979) showed that self-consciousness is negatively related to self-esteem. Similarly, several studies indicate that anxiety about one's performance in the academic and social domains is negatively related to children's school performance (e.g., Payne, Smith, & Payne, 1983; Willig, Harnish, Hill, & Maehr, 1983). Eccles and her colleagues have suggested that both anxiety and self-consciousness may be particularly detrimental as the early adolescent is forced to adjust to a new school environment characterized by increased rigor in grading, less variety in evaluation techniques, and an increase in social comparison among students (Eccles & Midgley, 1989; Feldlaufer et al., 1988). These detrimental effects are likely to be especially salient during early adolescence, as this developmental period is characterized by increased self-focus and self-consciousness (e.g., Eccles & Midgley, 1989; Eccles et al., 1984; Elkind & Bowen, 1979).

#### Family Protective and Risk Factors

In thinking about the possible impact of the family environment on adolescents' adaptation to the junior high school transition, it is useful to consider the salient developmental tasks confronting adolescents during this time. A central task of adolescence is to develop a sense of oneself as an autonomous individual (Blos, 1979; Eccles et al., 1993; Steinberg, 1990). The drive for such autonomy derives from the internal, biological processes marking the transition to a more adult role, such as puberty and increasing cognitive maturity, as well as from the social changes and expectations that accompany these physiological changes. As Eccles et al. (1993) noted, social changes in the worlds of adolescents increase the opportunity for them to experience independence outside of the home.

This increased out-of-home independence is often in the form of unsupervised peer contact, providing the adolescent with the opportunity to spend a great deal of time in relationships that are likely to be more mutual in terms of interpersonal power and authority (Eccles et al., 1993; Higgins & Parsons, 1983).

In keeping with our stage-environment fit perspective, we have focused on the fit between an early adolescent's family environment in terms of support of autonomous decision making and his or her developmental needs as the framework for studying the relation of adolescents' developing need for autonomy to adolescents' adjustment to the junior high transition (e.g., Eccles et al., 1993; see also Hunt, 1975). Similar to our earlier discussion regarding the importance of fit in the school environment, person-environment fit theory suggests that the fit between the individual's need for autonomy and the amount of control parents continue to exert on the adolescent's decision making should affect the individual's motivation and sense of satisfaction. Adopting a developmental framework (i.e., a developmental stage-environment fit perspective), we assume that the "fit" between desire for self-control and opportunities for self-control is likely to change as the individual develops unless the environment changes at the same rate and in the appropriate direction. As children mature, they are likely to desire more control and opportunities for decision making. When they enter early adolescence, the rate of increase in this desire for control over one's own life likely accelerates, increasing the need for the family to renegotiate the power balance between parent and child (Collins, 1990; Eccles et al., 1993; J. P. Hill, 1988; Montemayor, 1986; Steinberg, 1990). It seems plausible that those parents who are able to adjust to the adolescent's changing needs with relatively little conflict will provide a better match between the early adolescent and his or her family environment. This better match should then serve a positive role in the adolescent's developmental trajectory.

In support of this hypothesis, research has shown that family environments that provide opportunities for personal autonomy and encourage the adolescent's role in family decision making are associated with such positive outcomes as higher self-esteem, greater self-reliance, greater satisfaction with school and student-teacher relations, more positive school adjustment, more advanced moral reasoning, and a mastery orientation toward problem solving in the classroom (e.g., Epstein & McPartland, 1977; Flanagan, 1985, 1986, 1989; Yee, 1986, 1987; Yee & Flanagan, 1985). Conversely, a parenting style that is coercive, authoritarian, and not attuned to the adolescents' need for more decision-making opportunities is associated with greater self-consciousness, lower confidence in the self, and greater self-image disparity (Leahy, 1981; Ryan & Lynch, 1989; Yee & Flanagan, 1985). In a study that addressed the fit between early ado-

lescent needs and family decision-making opportunities using the MSALT data, Flanagan (1986) found that young adolescents' perceptions of fit between how much say they should have in decisions and how much they do have is positively correlated with their perceptions of autonomy and negatively correlated with their perceptions of parent-child conflict and high parent control.

Consistent with this perspective, the period of early adolescence has been acknowledged by developmentalists (e.g., Collins, 1990; Eccles et al., 1993; J. P. Hill, 1988; Paikoff & Brooks-Gunn, 1991; Steinberg, 1990), family sociologists (e.g., Aldous, 1977), and clinicians (e.g., Blos, 1979) as a time of transition that requires a renegotiation of family rules and roles for successful adaptation. Research and clinical evidence suggests that the family's ability to adapt to the changing needs of its early adolescent has implications for the process of identity formation (Grotevant, 1983), for the development of psychopathology such as eating disorders (Minuchin, Rosman, & Baker, 1978) and possibly, for how the early adolescent negotiates the transition to junior high school (Eccles et al., 1993).

It is reasonable to postulate that family environments that are responsive and developmentally sensitive to the early adolescent may serve as protective factors for the transition to junior high school. These family environments may provide enough psychological support and scaffolding for the young adolescent so that the transition is less stressful and disruptive. A developmentally responsive environment may also help the adolescent develop certain competencies that can serve as protective factors for the transition such as autonomy, maturity, and high self-esteem. For example, Leahy (1981) found that when parents encourage children to express their opinions and listen to and consider the opinions of other family members, their adolescent children develop a more internally elaborated system for moral judgments and a more positive sense of self-esteem. When parents emphasize unilateral respect for authority and inhibit opportunities for debate and questioning, lower self-esteem can result (e.g., Leahy, 1981).

Lord et al. (1994) examined adolescents' perceptions of the family environment with regard to two general dimensions: parent-adolescent mismatch and provision of decision-making opportunities. Parent-adolescent mismatch refers to the degree to which the adolescent feels his or her parents do not communicate reasons for rules and inhibit the adolescent's pursuit of autonomous behavior. This construct reflects a lack of attunement of the parents to the developmental needs of their child. Provision of decision-making opportunities refers to the degree to which the parents provide their adolescent with opportunities to be involved in making decisions that would affect the adolescent. Both of these dimensions are considered relevant because the premise of stage-

environment fit theory suggests that optimal positive growth occurs in the context of a family environment that is developmentally sensitive and that offers the kinds of stimulation that will propel continued growth toward maturity. Such an environment conveys to the adolescent a sense of acknowledgment and appreciation of the adolescent as an individual. Meaningful autonomy should then facilitate the young adolescent's transition to a new school setting and may compensate for the lack of support for autonomy in this new context.

### Findings of the Lord, Eccles, and McCarthy Study

Lord, Eccles, and McCarthy (1994) assessed the association of the following psychological, achievement, and family constructs to adolescents' adjustment to the junior high school transition: sixth-grade school achievement level, perceptions of one's own abilities, worries about one's abilities and self-consciousness, and perceptions of the family environment. They tested the following general hypotheses: (a) actual levels of competence, and perceptions of both one's own competence and of the support of autonomy and involvement in decision making at home at Grade 6 will be positively related to adolescents' adjustment to the junior high school transition; and (b) worries about one's competence, self-consciousness, and perceptions of parent-adolescent mismatch, or lack of attunement, at Grade 6 will be negatively related to this adjustment.

Analyses were conducted using preplanned hierarchical multiple regression techniques. These analyses were run for outcomes at both Wave 3 and Wave 4, representing adjustment at the beginning (Wave 3) and end of seventh grade (Wave 4). Self-esteem assessed at Wave 2 was entered into the regression equation first based on the hypothesis that posttransition self-esteem would be most affected by students' self-esteem prior to the transition and based on the desire to test the impact of the other predictors on change in self-esteem from Wave 2 to Waves 3 and 4. Academic competence (ability) was entered second. By controlling for self-esteem and academic ability at Wave 2, these models test the extent to which the other predictor variables are associated with a gain or loss in self-esteem between the end of the sixth grade and the beginning (or end) of the seventh-grade year, controlling for prior achievement level.

The other predictors were entered as sets of conceptually related constructs (i.e., all ability self-concept scales were entered at one step, all worries and self-consciousness scales were entered at the next step, etc.). Gender (coded as  $-1 = \text{male}$  and  $+1 = \text{female}$ ) was added at the last step in order to determine if gender contributed additional variance once the psychological predictors (on which there are gender differences) were taken into account.

Although several indicators of adjustment were used, only the results for changes in self-esteem are summarized here. These results are illustrated in Table 10.1. The table presents the summary results of each step of the hierarchical multiple regression analyses (columns 2–4 and 6–8), as well as the unstandardized regression coefficients for each predictor in the final model (columns 5 and 9). Steps 1 and 2 represent the change in explained variance in self-esteem with the addition of Wave 2 self-esteem and ability, respectively. Step 3 presents the change in explained variance when the first set of predictors (specific self-concepts) was added to the equation. Step 4 presents the change in explained variance when the second set of predictors (worries and self-consciousness) was added. Step 5 presents the change in explained variance when perceived family characteristics were added and Step 6 represents the change when gender was added.

**Psychological Protective and Risk Factors.** As expected, both self-esteem in Grade 6 and academic performance in Grade 6 were related to self-esteem. However, sixth-grade academic ability was not a significant predictor of self-esteem change in the final full model at either Wave 3 or 4 (see columns 5 and 9). In contrast, self-esteem at the end of Grade 6 was the strongest predictor by a very wide margin of self-esteem at both Waves 3 and 4, suggesting considerable stability in self-esteem across these time periods.

Also as predicted, over and above Wave 2 self-esteem and academic ability, the psychological protective factors—positive self-concepts of one's ability in both academic and nonacademic domains—were associated with positive change in self-esteem. As a set, students' ratings of their abilities in academic, athletic, and peer social domains and of their physical attractiveness all predicted gains in self-esteem at both waves. In competition with each other as predictors, ratings of one's physical attractiveness, one's math ability, and one's peer-social ability yielded significant coefficients in the final, full model at Wave 3; and ratings of one's math ability and one's peer-social ability yielded significant coefficients in the final, full model at Wave 4.

Again as hypothesized, the psychological risk factors—worries and self-consciousness related to math, school deadlines, and social acceptance—were associated, as a set of predictors with declines in self-esteem over the junior high school transition. However, in competition with the other predictors, only social self-consciousness and academic self-consciousness yielded significant negative coefficients.

Taken as a whole, these results support the hypotheses that protective factors in both academic and nonacademic self-perceptions facilitate positive gains in self-esteem, and that psychological risk factors are linked to

TABLE 10.1  
Change in Total Variance Explained in Posttransition Self-Esteem

| Step                       | Self-Esteem Wave 3         |          |          | Self-Esteem Wave 4         |          |          |          |
|----------------------------|----------------------------|----------|----------|----------------------------|----------|----------|----------|
|                            | Change R <sup>2</sup>      | Change F | F model  | Change R <sup>2</sup>      | Change F | F model  | B model  |
| Step 1<br>Self-Esteem 2    | .257                       | 631.9*** | 631.9*** | 0.249                      | 621.6*** | 621.6*** | .339***  |
| Step 2<br>Ability          | .01                        | 25.1***  | 332.7*** | 0.011                      | 26.7***  | 328.4    | n.s.     |
| Step 3: Self-Concepts      | .034                       | 18.0***  | 112.3*** | 0.025                      | 13.2***  | 106.3*** | n.s.     |
| Appearance                 |                            |          |          |                            |          |          | n.s.     |
| English                    |                            |          |          |                            |          |          | n.s.     |
| Sports                     |                            |          |          |                            |          |          | n.s.     |
| Math                       |                            |          |          |                            |          |          | n.s.     |
| Friends                    |                            |          |          |                            |          |          | .051***  |
| Step 4: Worries            | .02                        | 9.05***  | 66.3**   | 0.022                      | 9.72***  | 63.3***  | .041**   |
| Self-conscious: social     |                            |          |          |                            |          |          | -0.48    |
| Self-conscious: academic   |                            |          |          |                            |          |          | -0.53    |
| Non-Worried: social        |                            |          |          |                            |          |          | n.s.     |
| Non-Worried: academic      |                            |          |          |                            |          |          | n.s.     |
| Nervous: english           |                            |          |          |                            |          |          | n.s.     |
| Nervous: math              |                            |          |          |                            |          |          | n.s.     |
| Step 5: Family environment | .02                        | 25.6***  | 62.4***  | 0.017                      | 22.7***  | 59.2***  | n.s.     |
| Parent-adolescent mismatch |                            |          |          |                            |          |          | -0.78*** |
| Democratic decision-making |                            |          |          |                            |          |          | .099***  |
| Step 6: Gender             | n.s.                       | n.s.     | —        | 0.001                      | 4.24*    | 55.8***  | -0.027*  |
|                            | Total R <sup>2</sup> = .34 |          |          | Total R <sup>2</sup> = .33 |          |          |          |

Note. Column 1 shows variables entered at each step of the multiple regression model. Columns 2 and 3 indicate the changes in R<sup>2</sup> and the F value and the significance for each step. Column 4 is the F value for the whole model with each additional step. Column 5 indicates the unstandardized regression coefficient for each variable with all variables in the model.

declines in self-esteem across the transition to junior high school. More specifically, greater confidence in one's academic, social, and athletic abilities in the sixth grade is associated with gains in one's self-esteem following the transition to junior high. In contrast, worries and self-consciousness were associated with declines in self-esteem across the transition to junior high school.

That confidence in one's peer-related social skills and one's physical attractiveness emerged as such salient contributors to adolescents' adjustment to junior high school probably reflects the impact of changing pressures on adolescents at this particular period of life. Several investigators have suggested that there is an increased emphasis at this time, from both peers and families, on physical appearance, social presentation, and popularity with the opposite sex (Higgins & Parsons, 1983; Hill & Lynch, 1983). Coupled with the new and much larger social environment of the junior high setting, confidence in one's competence in peer social relationships and one's physical attractiveness may be particularly important protective factors.

The salience of physical appearance for self-esteem across the transition to junior high also raises concern, however. The implications of a focus on physical attractiveness may have a negative effect on some adolescents, particularly females. Given that physical appearance is in large part biologically determined and out of the individual's control, the implications of a focus on physical attractiveness for a person who is not, or does not feel, attractive relative to her peers may propel a young adolescent toward extreme efforts to try to change her natural endowment in order to meet both real and perceived peer and societal standards. It follows that girls at this age who have a negative perception of their appearance may be at risk for developing symptoms that reflect their diminished self-esteem, such as eating disorders. Excessive concern with physical attractiveness could also explain the recently reported increase in interest among adolescents for plastic surgery. We were also struck by the number of young adolescents in our ongoing study of development during middle childhood and adolescence who report that, if given \$1 million, they would use this money for plastic surgery or liposuction.

**Family Protective and Risk Factors.** The two indicators of family protective and risk factors—the adolescent's Wave 2 perception of his or her family environment—were simultaneously entered at Step 4. Again as predicted, these two indicators were related to changes in self-esteem at both waves. As expected, the perception that one's parent is not attuned to one's needs was associated with declines in self-esteem, whereas the perception that one's family uses a democratic decision-making style was associated with increases in self-esteem.

The results also support the hypothesis that adolescents' perceptions of their family environments influence their adjustment to the junior high transition. As predicted, the perception that one's parents are not developmentally attuned to one's needs was associated with declines in self-esteem following this school transition. In addition, adolescents' perceptions of a democratic family environment were associated with increases in self-esteem throughout the seventh grade. Together with the results of other studies, these findings are consistent with the hypothesis that family environments that support the adolescents' need for autonomy are more facilitative of positive adjustment during early adolescence than family environments in which the adolescents' autonomy is suppressed (e.g., Eccles et al., 1993; Epstein & McPartland, 1977; Flanagan, 1989; Yee, 1987; Yee & Flanagan, 1985).

*Female Gender as a Risk Factor.* Even though student gender was weakly related in a predictable pattern to several of the predictor variables as well as to self-esteem, student gender added little to the predictive power of the regression equation when it was added at the final step of the regression model. Although gender added nothing significant at Wave 3, at Wave 4, it had a negative relation with self-esteem, indicating that males' self-esteem at Wave 4 is still higher than that of females at Wave 4 even after all the other variables are controlled. Consistent with the findings of Simmons and Blyth (1987), this result suggests that being a female is predictive of decreasing self-esteem over time even after the other predictors of self-esteem change are controlled.

## CONCLUSION

In this chapter, we reviewed evidence of a decline in school motivation and attachment during early adolescence. We outlined a theoretical perspective—the stage-environment fit perspective—for understanding how changes in school context might contribute to this decline. Stage-environment fit theory suggests that the fit between the individual's psychological needs and the opportunities provided by the school (as well as other contexts) to meet these needs influences the individual's motivation and attachment to the school. We focused on two specific psychological needs: (a) the increasing need for autonomy and participation in decisions regarding one's experiences, and (b) the continuing need for strong social supports and close, trusting relationships with adults. For example, we argued that the match between an adolescent's need for autonomy and the amount of control adults continue to exert on the adolescent's decision making either at home or at school should affect the individual's motivation and

sense of satisfaction (Eccles et al., 1993; Eccles, Miller Buchanan, et al., 1991). From a developmental framework, the perceived match between the adolescents' increasing desire for self-control and the opportunities for self-control is likely to decrease if the opportunities for self-control do not increase at the same rate as the young adolescents' desire for autonomy and more democratic participation in decision making. Also, to the extent that the perceived match is not good at school, young adolescents are likely to develop a more negative view of the school context and of themselves as students. Similarly, to the extent that the social relationship with teachers deteriorates as young adolescents move into junior high school, the match between their social needs and the opportunity for positive, healthy relationships with teachers will decrease and the young adolescents will turn away from the adults in the school as a source of emotional support.

We also summarized our findings regarding these hypotheses. In particular, we provided evidence of the negative effects of the decrease in personal and positive relationships with teachers after the transition to junior high school. We also noted the increase in ability grouping and comparative and public evaluation at a time when young adolescents have a heightened concern about their status in relation to their peers. Finally, we provided evidence of the negative consequences of these kinds of developmentally inappropriate environmental changes on early adolescents' school motivation, academic self-concepts, and mental health. We also discussed the role of opportunity for self-determination and participation in rule making. As children enter and move through adolescence, they reported an increasing desire for opportunities for self-control and participatory decision making. It should be noted, however, that, although the adolescents wanted more freedom from adult control than children, they did not want total freedom and they did not want to be emotionally detached from their parents. Instead they reported a gradual increase in the opportunity for self-determination and participation in decision making and rule making. Adolescents who reported having less opportunity to express their own desires and opinions at school than they thought they were entitled to, and adolescents who perceived a lack of attunement between themselves and their parents, adjusted more poorly to the transition into junior high school than did adolescents who had more opportunities for participation in decision making at home and school and who felt their parents and teachers were attuned to them. These findings suggest that family and school environments that are responsive and developmentally sensitive to these changes in young adolescents' needs and desires may serve as protective factors for the transition to junior high school. Those adults who are able to adjust to their adolescent's changing needs for autonomy provide a better match for the adolescent and serve a positive role in the adolescent's develop-

mental trajectory. These family and school environments may provide enough psychological support for the young adolescent so that the transition is less stressful and disruptive.

Unfortunately, our research also suggests that many early adolescents do not have these experiences in either the school or family setting. After the transition to junior high school, in particular, early adolescents are often confronted with a regressive environmental change; that is, many early adolescents experience a decrease in the opportunity to participate in classroom decision making when they move into junior high school. Not surprisingly, there is also a decrease in intrinsic motivation and an increase in school misbehavior associated with this transition, as well as a decline in indicators of mental health. These changes are most apparent among the adolescents who report experiencing the greatest mismatch between their needs and their opportunities to participate in classroom decision making. Clearly, these results point out the importance of creating educational and family environments for early adolescents that provide a better match to their developing needs and desires. How could the creation of such developing appropriate environments be accomplished?

*Turning Points* (Carnegie Council on Adolescent Development, 1989) outlines a variety of changes in the structure of middle-grades educational institutions that would make it easier for teachers to maintain a high sense of self-efficacy, and for students and teachers alike to have a stronger sense of shared community with each other. In turn, these changes could make it easier for teachers to provide a more positive learning environment for early adolescents. One potential strategy for remediating the impersonal quality of traditional junior high schools involves within-school reorganization based on the middle school teaching philosophy. Some characteristics of the middle school philosophy that have been identified as potentially helpful are small house programs, team teaching, and advisory sessions (see Eccles & Midgley, 1989).

Field studies of the more successful middle and junior high schools provide numerous examples of classrooms and schools that have more positive and developmentally appropriate learning environments—for example, higher teacher efficacy, greater opportunity for meaningful student participation in both school and classroom decision making, an academic culture that stresses task mastery and improvement, and more positive student-teacher relationships (see Bryk, Lee, & Smith, 1989; Carnegie Council on Adolescent Development, 1989; Dryfoos, 1990; Eccles & Midgley, 1989). Young adolescents in these schools do not evidence the same declines in intrinsic motivation and school attachment stereotypically associated with students in junior high schools; they also do not engage in the same amount of school misbehavior as students in more traditional junior high schools. Unfortunately, many junior high schools do not

provide such a developmentally appropriate environment (see Eccles & Midgley, 1989). Clearly, future research is needed to determine the beneficial impact of these restructuring strategies on adolescent adjustment.

In addition to the structural changes that would facilitate a more community-oriented environment in schools, there are other changes that schools can implement to foster a more positive, developmentally responsive environment. One such change is the promotion of greater parent involvement in schools. The evidence is fairly strong that parent involvement in their child's schools is linked to better academic performance and overall psychological competence in the children (e.g., Epstein & McPartland, 1977). A school governance that provides a more integral role for parents in policy and curriculum decision making can result in parents feeling more efficacious for influencing their child's education, which, in turn, can be reflected in the adolescent's own improved competence, both academically and psychologically. For example, teachers could encourage parent involvement by assigning tasks in which parents and their adolescents work together on tasks or issues that are relevant to the adolescents—such as occupational exploration or delineation of one's family lineage tree. Tasks such as these encourage parents to be a resource for the adolescents' own self-development.

The promotion of increased parent involvement in school can also be the gateway to greater parent-teacher communication about the child. Such communication can be used to facilitate the integration of the home and school lives of adolescents in order to get a more complete picture of what adolescents' lives are like. This integration of contexts would help foster the type of safety zone Simmons and Blyth (1987) advocated as necessary for healthy development during this period—a zone in which adolescents can experiment but where the adults are available to catch the adolescent if he or she starts to get into trouble. Again, such communication should not be intended as a venue for strict monitoring of adolescents, but rather as a means by which teachers and parents can better understand and be attuned to the experiences of their adolescents.

Better efforts could also be made in school environments to increase the degree to which teachers are attuned to the psychological needs of adolescents. For example, focus groups in which adolescents are given a forum to openly discuss the issues most relevant to them could provide an excellent arena from which teachers, and parents for that matter, can learn about what is happening in the lives of adolescents and about what their concerns are. It is likely that both policy and practice could be greatly informed if we as adults listen to what adolescents themselves are saying about their lives and their social environments.

Overall, each of these reform efforts may serve to increase the degree to which teachers and parents are attuned to the psychological needs of

adolescents. For example, creating smaller groups with more consistent contact between teachers and specific students would increase the opportunity for teachers to get to know students in the same way elementary school teachers get to know their students. In addition, facilitated parent involvement in schools and parent-teacher communication could increase the amount of important information shared concerning the progress and wellness of each adolescent in his or her home and school settings. Furthermore, more individualized techniques such as focus groups in which adolescents are given a forum to openly discuss the issues most relevant to them could provide a superb arena within which the significant adults in young adolescents' lives can learn about adolescents' lives. Finally, increased opportunities for adolescents to become involved in their community would not only model prosocial ways in which young people can be responsible, but could also help young people feel like they belong and are valued members of their community.

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## Dropping Out

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Youth, what they do and where and why they do it, what they think and say about themselves, their peers, and the adults and social institutions in their lives hold a compelling interest for all of us. We view this period of the life cycle as a very special one, more accountable than childhood, but still a time of growth and development, one of preparation and promise for the adult roles we cast for our children. Some of our concerns seem remarkably similar from place to place and from generation to generation. Will they grow and develop into proper adults and have a happy and productive life? What can we do as parents or adult caretakers to help them along in this? Yet at the present time, and, especially in particular communities, we have come to see adolescence as a time of trouble and uncertainty, a period that presents adolescents and us with some very special and increasingly ominous problems—dropping out of school and chronic unemployment, drug and alcohol abuse, sexual laxity leading to early parenthood and HIV infection, and aggressive and sometimes violent behavior to others and to themselves—we have come to associate with youth. Each of these problems has its own social drama and deficits and its own solutions and public demands for prevention and remediation, yet these share the same disturbing portrait of youth rejecting or rebelling against what we project as appropriate roles and behavior and in many cases dropping out of the life-cycle script we have projected for them.

Each of these problems and their attendant risk factors can be injurious to adolescent development and destructive to social competence and an