

Control Versus Autonomy During Early Adolescence

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Research and theorizing about adult control have often made seemingly conflicting recommendations and predictions about the potential impact of that control on children's social and intellectual development. Researchers concerned with intrinsic motivation have argued for minimal use of controlling strategies with children; other researchers, in contrast, argue that relatively high levels of adult control, when exercised in an emotionally supportive relationship, produce the best developmental consequences. Optimal levels of control undoubtedly change as children grow older. Person-environment fit theory suggests that the match between the child's need for autonomy and the amount of adult control exercised is critically important. This article puts this theory into a developmental framework, and suggests that parents and teachers need to modulate their levels of control based on the developmental stage of the child. Optimal developmental outcomes ought to result from an environment that gradually reduces adult control as the child's desire for autonomy increases. Evidence from the Michigan Study of Adolescent Life Transitions is presented to support this hypothesis.

Because they are dependent on adults, children experience varying degrees of adult control throughout their development. Theories about the potential im-

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fact of adult control on children's social and intellectual development often make what appear to be conflicting recommendations and predictions. On one hand, researchers concerned with intrinsic motivation have argued for minimal use of controlling strategies with children (e.g., Boggiano & Katz, this issue; Boggiano, Main, & Katz, 1988; Deci & Ryan, 1985, 1987). On the other hand, researchers like Baumrind (1971) and Brophy and Evertson (1976) have argued that relatively high levels of adult control, when exercised in an emotionally supportive relationship, have more positive consequences for child development than do lower levels of adult control exercised in the same type of supportive environment.

The issue becomes even more complex when one takes developmental considerations into account in theorizing about the potential impact of adult control on children's development. Optimal levels of adult control undoubtedly change as children grow older. Person-environment fit theory (Hunt, 1975; Lee, Statuto, & Kedar-Voivodas, 1983; Lewin, 1935) suggests that the match between the child's need for autonomy and the amount of adult control exercised is critically important. People will have optimal motivation and satisfaction in settings that afford them as much autonomy as they desire. Less than optimal motivation is likely in settings that provide either less control or more control than desired.

Putting this person-environment fit perspective into a developmental framework suggests that parents and teachers need to adjust their exercise of control based on the particular child's developmental stage. Optimal developmental outcomes ought to result from an environment that gradually reduces adult control as children's desire for autonomy increases.

This article draws on the data from an ongoing, large-scale longitudinal study of adolescent development (the Michigan Study of Adolescent Life Transitions, MSALT) to examine these issues. More specifically, it presents findings regarding a mismatch between adolescents' increasing desire for autonomy and their perceptions of the autonomy they are allowed, and the consequences of this mismatch for their school motivation and attachment to their teachers and parents. But first the theory of stage-environment fit is described.

Stage-Environment Fit

Numerous studies have examined the impact of environmental characteristics on the behavior and motivation of people of all ages. Work in the area of intrinsic motivation, in particular, has documented the impact of controlling environments on children's and adults' behavior and motivation (e.g., Boggiano et al., 1988; deCharms, 1980; Deci & Ryan, 1985, 1987). These studies demonstrate the negative impact of controlling environments on students' intrinsic motivation, learning, and subsequent interest in the activity. But socialization

environments are, by their very nature, controlling to some extent. Therefore, it may be better to think about the relation between controlling environments and motivation in terms of optimal levels of control—levels that further positive growth without undermining intrinsic motivation or attachment to the adult socializers. What might these optimal levels be, how does this optimal level of environmental control change as children get older, and what happens when environmental change does not keep pace with the children's increasing desire for more autonomy as they mature? We know, for example, that children become more extrinsically motivated and less intrinsically motivated to do their schoolwork as they move into junior high schools (Eccles & Midgley, 1988). Many also "turn off" to school and to learning at about this same age. Is this decreased motivation a result of excessive control in the junior high school environment? During the same period, many parents complain about the increasing rebelliousness of their children at home. Is this rebelliousness due, in part, to a lack of parental recognition of, and adaptation to, their young adolescent's growing desire for autonomy?

Person-environment fit theory provides a useful framework in which to think about these issues. According to this theory, there are negative motivational and behavioral consequences of being in an environment that does not match one's subjective needs (Hunt, 1975; Lewin, 1935; Murray, 1938). In contrast, positive motivational consequences should result when there is a good match between individuals' needs and the characteristics of their environments. At the most basic level, this perspective suggests the importance of considering the fit between the needs of early adolescents and the opportunities afforded them in the traditional junior high school and in their home. A poor fit could explain the declines in motivation associated with the transition to junior high school.

An even more interesting way to use the person-environment fit perspective is to put it into a developmental framework. Hunt (1975) argued for the importance of adopting a developmental perspective on person-environment fit in the classroom. He suggested that the optimal level of classroom structure and control would satisfy two conditions: (a) it would mesh well with the student's current level of maturity and need for both control and autonomy, and (b) it would pull the students along a developmental path toward higher levels of maturity and independence. Furthermore, this suggestion implies that optimal levels of adult control over children's behavior should respond to, and foster, increasing independence and autonomy as children mature. Combining this idea of optimal levels of control with a developmental perspective on likely age-related increases in children's desire for autonomy suggests that children will continue to be positively motivated only if their environments change at least as rapidly as they do. We say "at least" because Hunt's perspective implies that the optimal rate of change in the actual autonomy afforded by the environment may be slightly faster than the rate of change in the children's own desire for autonomy.

These suggestions have intriguing implications for understanding the motivational declines that occur at early adolescence. First, if one accepts the notion that different types of environments are needed for different age groups in order to meet their developmental needs and to foster growth, then it is also likely that similar environments will have different effects on children of different ages. For example, if children develop a greater need for autonomy as they move through adolescence, then living in environments characterized by a constant level of adult control should produce an increasing mismatch over time between the need these adolescents have to be autonomous and the opportunities for autonomy they believe are available to them. In turn, experiencing this increasing mismatch between one's needs and one's environments should have negative consequences for both the adolescent's intrinsic motivation and their attachment to the adults in these environments.

Second, it seems likely that some types of changes in the social environments children confront as they move into adolescence may be especially inappropriate for the early adolescent period. For example, some evidence suggests that junior high school teachers are more controlling than are upper level elementary school teachers (Eccles & Midgley, 1988). This type of environmental change is at odds with the normal course of development and, as such, it could be characterized as "developmentally regressive." Exposure to increased control at this age is likely to lead to a particularly poor person-environment fit, which in turn could account for declines in motivation and in attachment to adults at this developmental period.

This analysis raises an interesting set of questions. First, how do the subjective developmental needs for autonomy from adult control change during the early adolescent period? Second, what kind of socialization environments are developmentally appropriate for this age in terms of both meeting the adolescents' needs and stimulating further development? Finally, and most importantly, is there evidence that moving into regressive (developmentally inappropriate) environments contributes to emergence of the negative motivational outcomes often associated with young adolescents? Such an explanation is in marked contrast to popular views that these negative motivational outcomes reflect the impact of the biological changes associated with puberty on psychological states (Blos, 1965; Freud, 1969).

Methodological Overview

To answer these questions, we are conducting a large-scale longitudinal study of the impact of changes in school and family environment on adolescents' achievement-related beliefs, motives, values, and behaviors (called MSALT). The initial sample of sixth graders was drawn from 12 school districts located in middle-income communities in southeastern Michigan; it included approx-

imately 80% of the adolescents asked to participate. During the first two years of this study, approximately 2300 early adolescents (80% of the initial Wave 1 sample) filled out an extensive questionnaire in their math classroom two times in the sixth grade and again two times in the seventh grade (fall and spring of both the 1983/84 and 1984/85 academic years). Each of these questionnaires took two class periods to complete.

Since we were primarily interested in the impact of various types of changing school environments on early adolescents' motivation and self-concepts, we selected school districts in which the adolescents would experience the traditional junior high school transition as they moved from the sixth to the seventh grade. The following measurement strategies were used in order to get an accurate and detailed description of the changes over this two-year period in these adolescents' home and school environments: (a) at least one classroom for each of the participating teachers was observed by trained field staff members for five consecutive days during late October or November each year, (b) all teachers completed an extensive classroom climate questionnaire at each wave, (c) all adolescents completed a similar classroom climate questionnaire at each wave, and (d) both the parents and the adolescents answered an extensive set of questions assessing the family environment at each wave. Although all parents were asked to participate, only about half agreed to do so at each of the four waves of data collection. The vast majority of the remaining parents indicated that they did not have time to fill out the questionnaires. Only a few attitudinal and demographic differences emerged when the adolescents of participating families were compared with the adolescents of nonparticipating families—most importantly, the adolescents of participating families did slightly better in school and were slightly more likely to come from White middle-class families.

The questionnaire completed by all participants (adolescents, teachers, parents, and observers) contained indicators of a wide range of environmental characteristics and achievement-related motivational constructs. To investigate the impact of physical maturation on early adolescent development, the parents were also asked a series of questions about their children's pubertal development. Most of the items were answered on Likert scales. Composite scales were derived from these items using both factor analysis and theoretically based clustering, and most of these scales had adequate internal consistency reliability ($\alpha > .60$). Single-item indicators of certain key constructs were also used. The specific scales and items used in the analyses reported herein are described where appropriate.

Perceived Control in the School Setting

Several analyses tested the developmental hypotheses regarding person-environment fit in the classroom setting (for a full description of these analyses,

see Mac Iver & Reuman, 1988; Midgley & Feldlaufer, 1987). In a sample of 2210 students and their teachers in 117 pretransition and 137 posttransition classrooms, Midgley and Feldlaufer (1987) assessed student and teacher perceptions of actual and preferred decision-making opportunities in the classroom. Yoked pairs of items (Lee et al., 1983) assessed these opportunities in five areas (i.e., where to sit, class work, homework, class rules, and what to do next) in which students might be allowed to help make the classroom policy on issues directly affecting them. For example:

For students: Do you help decide what math you work on during class? Should you have a say about this?

For teachers: Do your students have a say about what math they work on during class? Do you think students *should* have a say in this?

Three scores can be derived from this measure: (a) perceived opportunity to participate in decisions regarding each area; (b) desired opportunity to participate in decisions regarding each area; and (c) the congruence or incongruence (mismatch) between the respondents' desired opportunity to participate and their assessment of the actual opportunity to participate. These measures were used to assess (a) longitudinal changes in both the desire for and the perceived opportunity to have this type of autonomous control over the learning environment, (b) developmental differences (as assessed by pubertal maturation rate) in these indicators, and (c) the impact of stage-environmental match or mismatch on the adolescents' academic motivation and classroom behavior.

Perceived Control: Developmental Changes in Fit

Changes in the desire for autonomy. One way to look at developmental change is to look for longitudinal changes in the same children across time. Midgley and Feldlaufer (1987) reported the results of such an analysis using the first four waves of data. As predicted, these early adolescents expressed an increasing desire for input into classroom decision making as they got older; that is, they were more likely to indicate that they should have a say in classroom decisions at Waves 3 and 4 (fall and spring of their seventh-grade year) than at Waves 1 and 2 (in their sixth-grade year).

Maturation-related differences in the desire for autonomy. Another way to look at developmental change is to look for interindividual differences between same-aged children of different maturational levels. At this age, the extent of pubertal development of the females provides a good indicator of individual differences in physical maturation; the parents of the female students rated their daughter's pubertal development in terms of changes in (a) breast development, (b) oily

hair, (c) skin blemishes, (d) pubic hair, (e) growth spurt, and (f) the onset of menstruation. A 3-point scale ranging from 1 = *no development* to 3 = *substantial development* was used to rate breast growth; a yes-no scale was used to rate the presence of (b), (c), (d), and (f); reports of the actual number of inches grown in the last year were used to create a three-level indicator of growth spurt, by dividing the distribution into thirds. These various indicators were combined and standardized within age groups. This indicator of maturational level was examined in relation to the female adolescents' desire for input into classroom decisions on the Lee et al. (1983) items. Consistent with the intraindividual longitudinal pattern of age-related change reported in the previous paragraph, the more developmentally mature female adolescents expressed a greater desire for input into classroom decision making than their less developmentally mature female classmates (Miller, 1986).

Grade-related changes in the opportunity for autonomy. In contrast to these changes in desires, reports of both the adolescents themselves and their teachers indicate that the classroom environment is not positively responsive to the longitudinal increase in the adolescents' desire for autonomy. Both the adolescents and their teachers reported that the adolescents actually had fewer decision-making opportunities after the transition to junior high school than before—the classroom environment became more controlling as these adolescent went from sixth to seventh grade. As a result, the mismatch between the adolescents' increasing desire for autonomy and the actual opportunities for participation in decisions regarding their classroom experience increased as the adolescents moved from sixth grade into seventh grade (Midgley & Feldlaufer, 1987).

Maturation-related differences in the perceived opportunity for autonomy. A similar pattern of results emerged when we divided the girls into two groups based on their physical maturity in the sixth grade and then compared their sixth-grade responses to the same set of decision-making items. Although these girls 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 on classroom decision making than did their less mature female peers (i.e., the on-time and late developers).

This maturational difference was shown even more strikingly in the within-year changes in these female adolescents' perceptions of the opportunities they had to participate in classroom decision making. The mean change in their perceptions of opportunities from the fall to the spring testing was examined as a function of their pubertal status. The early-maturing sixth-grade 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 in-

crease) 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 (Brophy & Evertson, 1976), and people do perceive similar environments differently depending on their cognitive and/or motivational orientation (see Baron & Graziano, 1991). More detailed classroom observations are needed to determine the exact nature of the relationship between teachers' behavior and adolescents' perceptions.

But more important for the issues central to this article, the pubertal maturity of the female adolescents was related to the degree of mismatch between their desires for input and their perceptions of these opportunities in their classroom environment. By the end of the school year, almost twice as many early-maturing females reported experiencing the "can't have a say but should" type of mismatch as did their less physically mature classmates.

This last set of results is especially interesting in light of the findings of Simmons and her colleagues (e.g., Simmons & Blyth, 1987; Simmons, Blyth, Van Cleave, & Bush, 1979) on factors related to adolescents' successful adjustment to the junior high school transition. They have found that the pubertal status of female adolescents at the time of the junior high school transition is related to changes in their self-esteem, and to their self-reports of truancy and school misconduct. In particular, the more physically mature females reported the highest amount of truancy and school misconduct after they made the junior high school transition. The researchers suggested that experiencing both school and pubertal transitions simultaneously put these girls at risk for negative outcomes. Alternatively, it is possible that the mismatch between their desire for a less controlling adult environment and their perceptions of the actual opportunities for participation puts these females at risk for negative motivational outcomes.

Motivational Consequences of Poor Fit in Perceived Control

As outlined earlier, person-environment fit theory suggests that the mismatch between young adolescents' desires for autonomy and control and their perception of such opportunities in their environments should result in a decline in the adolescents' intrinsic motivation and interest in school. Mac Iver, Klingel, and Reuman (1986) tested this prediction using the sixth-grade data of 2239 of the students. They compared changes in the extent of match (i.e., congruence) in

students' responses to the "can decide" and "should decide" questions with changes in these early adolescents' motivation and interest in school. Students who showed an increase in this match also showed an increase over this time period in the following single-item indicators of motivation and interest (each measured on a 7-point Likert scale): their rating of math as useful and interesting, their rating of how much they liked both their math teacher and school in general, and their rating of how hard they worked in math. They also reported engaging in less misbehavior than did the students who experienced an increase in mismatch. These findings suggest that the increasing mismatch between early adolescents' desire to have input into classroom decision making and their perceptions of the actual availability of such opportunities that is typically associated with the transition to junior high school could contribute to the decline in motivation to study math in the junior high school that has been reported in several studies (see Eccles & Midgley, 1988).

Consequences of less-than-desired autonomy. More directly related to the stage-environment fit perspective is the hypothesis that adolescents who experience a particular type of increasing mismatch, or incongruence, should be most likely to experience a decline in intrinsic motivation and interest. The Mac Iver et al. (1986) study looked only at the extent of the mismatch and did not distinguish between the two possible types of mismatches that can occur: the "can't have a say but should be able to" mismatch and the "can have a say but shouldn't be able to" mismatch. Given the general developmental progression toward increased desire for independence and autonomy during the early adolescent period, Eccles and Midgley (1988) predicted that adolescents who experience too little opportunity for participation in classroom decision making (i.e., the "can't but should" mismatch) should be most at risk for negative motivational outcomes. In a longitudinal analysis of the Lee et al. (1983) items, Mac Iver and Reuman (1988) provided some support for this prediction, as shown in changes in intrinsic interest in math for adolescents across the four waves of data. Consistent with the 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 were the students who were experiencing the "can't have a say but should" type of developmental mismatch.

Summary

Thus there is evidence from our longitudinal study of adolescent development that there is an increase in early adolescents' desire for control over their own educational experiences as they move from the sixth through the seventh

grade. Unfortunately, there appears a decline, rather than an increase, in the opportunities provided to them for this type of control over this same developmental period. Consequently, the adolescents experience an increasingly poor stage—environment fit between their autonomy needs and their perception of their school environment's responsiveness to these needs. Finally, as would be predicted by stage—environment fit theory, students who experience the greatest mismatch are the ones whose intrinsic interest in school declines over these academic years.

Perceived Control in the Family

We are in the process of examining similar issues in the family context of the adolescents in the MSALT study. Family decision making was assessed in two ways: Both the adolescents and their parents responded to two items derived from the Epstein and McPartland (1977) scale of family decision-making. For example, "In general, how do you and your child arrive at decisions?" (1 = *I tell my child just what to do*; 3 = *We discuss it and then we decide*; 5 = *I usually let my child decide*); "How often does your child take part in family decisions that concern her/himself?" (1 = *never*; 4 = *always*). The adolescents were also asked to rate how they thought decisions ought to be made in their family, and the extent to which they thought "their parents treated them more like a kid than like an adult."

Adolescent motivational orientation was assessed in a variety of ways. To assess intrinsic interest and motivation in school, the adolescents rated, on 7-point Likert scales, the extent to which they enjoyed coming to school, liked doing math, and felt it was important to them to do well in math. They also answered the Harter (1981) Scale of Intrinsic vs. Extrinsic Orientation and the Harter (1982) General Self-Esteem Scale.

Consistent with the analyses reported earlier, the results showed both a longitudinal increase from the sixth to the seventh grade in adolescents' desire for greater participation in family decision making, and positive associations between the extent of the adolescents' participation in family decision making and indicators of both intrinsic school motivation and positive self-esteem (Flanagan, 1986, 1989; Yee, 1986, 1987; Yee & Flanagan, 1985). Specifically, adolescents who reported having greater opportunity to participate in decision making at home also reported having higher intrinsic interest in studying math and a greater liking of school than adolescents who reported less opportunity to participate in decision making at home (Yee, 1986). They also reported higher levels of self-esteem (Yee, 1986) and more intrinsic motivation, particularly with regard to a desire for independent mastery of academic work and a preference for challenging school work (Flanagan, 1985, 1989).

Even more interestingly from the stage—environment fit perspective, the parents generally reported that they included their children more in family deci-

sion making than the children perceived to be true (Flanagan, 1986; Yee, 1987). Furthermore, for girls in particular, the discrepancy between the adolescents' and the parents' perception of the opportunities for the adolescents to participate in family decision making increased over the four waves of the study (Yee, 1987). Finally, and most importantly, the pattern of changes in early adolescents' self-esteem and intrinsic vs. extrinsic motivation for school work were systematically, and predictably, related to changes in their perceptions of the opportunity to participate in family decision making at home. As the developmental stage—environment fit perspective on adult control implies, the adolescents who reported decreasing opportunities to participate in family decision making showed a decrease in their self-esteem and intrinsic motivation over the period of this study; the opposite pattern of change occurred for the adolescents who reported increasing opportunities to participate (Flanagan, 1989; Yee, 1987). In addition, the opportunity to participate in family decision making also predicted better adjustment to the junior high school transition (Eccles et al., 1990).

Control Fit in the Family and Early Adolescents' Orientation to Peers Versus Parents

It seems likely that the provision of developmentally appropriate amounts of autonomy within the family will affect other aspects of adolescent social development in addition to its impact on intrinsic school motivation. One area that is especially important to consider is the relative attachment of adolescents to their parents vs. their peers. Adolescence is a time when this relative attachment should gradually shift from the parents to specific members of the peer group. But optimal social development during this period is facilitated by a continuing healthy attachment to one's parents as well as by increasing healthy attachments to specific peers (Ryan & Lynch, 1989). Parent—child relationships offer the inexperienced adolescent essential guidance from a more knowledgeable member of society. They also provide an often-unsure child with a secure base from which to explore his/her identity and the complexities of the adult world. Peer relationships, on the other hand, provide developing adolescents with the opportunity to explore their potential as autonomous, independently thinking and acting individuals. These relationships, by virtue of the similarity in age and expertise, are more likely to have an equal power distribution than are parent—child relationships. Consequently, they are likely to provide the adolescent with more opportunities for autonomous control than are parent—child relationships. Early adolescents need both types of relationships. An excessive amount of one type of relationship not only denies the child the positive aspects of the other, but also increases the negative effects of the dominant relationship. However, if parents do not provide their early adolescent children with increasing opportunities to control their own lives, the adolescents may turn, prematurely, to peers for their primary social relations.

Social changes in the world of the adolescent substantially increase the opportunity for this premature shift to occur. The transition to junior high school, and cultural beliefs regarding "appropriate" amounts of adult supervision for children of different ages, lead to a dramatic increase in amount of unsupervised age-mate contact during this developmental period (Higgins & Parsons, 1983). This increase creates the opportunity for adolescents to spend a lot of unsupervised time in symmetrical peer relationships. At the same time, adolescents are attempting to introduce more power symmetry into their relationships with their parents so that they may exercise their potential as independent individuals at home as well as with their friends (see studies cited above). What happens when parents are not responsive to these bids for greater autonomy from adult control? How do changing power and control relationships in the family affect peer-group attachment? Does the way the family reorganizes its power and authority relationships at this developmental juncture have consequences for the amount of influence both parents and peers have on the child during adolescence?

Most developing adolescents want a balance of independence from, and connectedness with, their parents (Grotevant & Cooper, 1986; Hill & Holmbeck, 1986; Ryan & Lynch, 1989). Consequently, they typically attempt to take a more active role in family and personal decision making, seeking a greater degree of control over their own lives (Steinberg, 1988), but not at the expense of maintaining strong, positive relationships with their parents. It seems likely, then, that an excessive orientation toward peers, coupled with premature detachment from one's parents, arises more from a perceived lack of fit in the family than from the attractiveness of the peer group (Ryan & Lynch, 1989). If early adolescents believe their parents are not going to give them the amount of autonomy they think they deserve, or have provided them with too little guidance and emotional support, they may abandon their efforts to maintain a healthy connection with their parents, and turn instead to the peer group. It is the fit between the adolescent's desire for both increased autonomy and adequate emotional support, and the adolescent's perception of the availability of these opportunities in his/her family environment, that is critical.

We have begun to test these hypotheses using the parent and child reports of decision-making opportunities in the home and the following three indicators of peer attachment (Fuligni & Eccles, 1990): (a) the general value attached to having friends, (b) the extent to which the youths talked to their peers rather than parents about personal problems and future plans, and (c) the extent to which the youths expressed a willingness to engage in behaviors that were self-defeating in order to be popular with friends. The students rated, on 5-point or 7-point Likert scales, the extent to which a series of statements tapping each of these three constructs were true of them. Three composite scales, representing the latent constructs listed above, were created based on factor analysis. Cronbach's alphas were .60 or higher.

Consequences of too much control. The results supported our hypothesis. The adolescents who perceived that they had relatively little opportunity to participate meaningfully in family decisions had more conflicts with their parents over issues related to autonomy and control than did the adolescents who perceived that they had sufficient opportunity to participate in family decision making. In addition, as predicted, the youths reporting only limited opportunity to participate in family decision making also relied more on their friends than their parents for help with personal problems and future planning, and were more willing to disobey their parents and forgo achievement-related activities in order to keep and be popular with friends.

Consequences of too much freedom. But what about families in which there is too much opportunity for autonomy and too much freedom from adult control? As noted earlier, if the important factor is the fit between the desires for and perceived opportunities for autonomy, then too much autonomy could have just as negative an effect as too little autonomy. If this is true, then some early and middle adolescents may orient more to peers than to parents because of parental neglect rather than parental overcontrol. Condry and Simon (1974) found support for this argument in a study of peer- and adult-oriented sixth graders. Peer-oriented youth—those who complied with peer norms rather than parental values—reported receiving less parental support than adult-oriented youth. Similarly, Simmons and Blyth (1987) found that the youths who were most at risk for declining school motivation and achievement, and for increasing involvement in deviant subcultures, were the ones whose parents had relinquished control over their children's behavior prematurely. Although on the surface these results and the results we have reported here may seem contradictory, they are consistent if one adopts the stage-environment perspective outlined in this paper. These results and the results from our work suggest that there is likely to be a curvilinear relationship between amount of parental control and peer orientation. Both the lack of opportunities for the desired amount of autonomy, and an excessive amount of autonomy unaccompanied by a sufficient amount of emotional support and guidance, can result in a greater attachment to peers relative to parents. Thus it is overly simplistic to recommend that healthy adolescent development requires more autonomy from adult control. Instead, healthy adolescent development requires changing levels of autonomy that *fit the changing needs* of the early adolescent.

Conclusion

These findings indicate that adolescents desire a gradual increase in the opportunity to participate in decisions that affect their lives and they seem to develop best when these increasing opportunities occur in environments that are

emotionally supportive (Baumrind, 1971; Ryan & Lynch, 1989). Unfortunately, our data suggest that many early adolescents do not experience this increase in autonomy in either the school or family settings. When they move into junior high school, many early adolescents experience a decrease in the opportunity to participate in classroom decision making, and this decrease is accompanied by a decrease in intrinsic motivation and an increase in school misbehavior. Similarly in the family, excessive parental control is linked to lower intrinsic school motivation, to more negative changes in self-esteem following the junior high school transition, to more school misbehavior, and to relatively greater investment in peer social attachments. Since these results are correlational, it is possible that excessive parental control is the consequence rather than the cause of these negative adolescent outcomes. However, the preliminary longitudinal analyses suggest that the causal links are at least bidirectional.

Clearly, these results point out the importance of designing educational and family environments for early adolescents that provide a better match to their growing desire for greater control over their own lives. The current situation in traditional junior high schools seems especially problematic. Junior high school teachers generally appear overly controlling. Field studies of the more successful junior high schools provide numerous examples of classrooms and schools that are less controlling—ones that provide the students with increasing opportunities for meaningful participation in both school and classroom decision making (see Eccles & Midgley, 1988). Students in these schools do not display the same declines in intrinsic motivation and school attachment stereotypically associated with 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 (Eccles & Midgley, 1988).

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