

## Looking Forward to Adolescence: Mothers' and Fathers' Expectations for Affective and Behavioral Change

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*One hundred five parents were surveyed about their expectations for what their relationship with their sixth-grade child would be like when their child becomes an adolescent. Parents rated a series of items concerning how much they felt they could influence their child's behaviors and interests currently and when their child becomes an adolescent. Parents also rated their child's level of pubertal development on several items, as well as the quality of their current relationship with their child. Findings suggest that mothers and fathers do not differ in their expectations for how their sons or daughters will change as they move into adolescence. Nevertheless, the relation between the gender of the child and parental expectations, taking the child's pubertal status into account, is mediated by current parent-child relationships in predicting parental expectations for change during adolescence. These findings are discussed in terms of the impact current parent-child relationships can have on future relationships.*

Stereotypically, adolescents are portrayed as moody, emotional and rebellious youths who are in constant conflict with their parents and other adult authorities ("Teen Rage," as cited in Buchanan et al., 1990). Often these characteristics are attributed to "raging" hormones (see Buchanan, Eccles, &

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Becker, 1992). Although the relationship between parents and children does change during adolescence (e.g., see Buchanan et al., 1990; Paikoff & Brooks-Gunn, 1991; Steinberg, 1990; Youniss & Smollar, 1985), researchers have found that this change may not be as negative as the stereotypes suggest (Montemayor, 1983; Rutter, Graham, Chadwick, & Yule, 1976). Further, it is not at all clear that these changes in parent-child relationships are due to the biological changes associated with pubertal development (see Buchanan et al., 1992) rather than to children's and parents' socially mediated responses to puberty. However, these stereotypes persist and may well affect parents' expectations regarding the likely changes in their children's behavior as these children move into adolescence. These expectations, in turn, may influence parents' behavior toward their children and thus also affect the emotional relationship between parents and children during this developmental period. This article focuses on parents' expectations for changes in children's emotional states as they pass through puberty.

As Paikoff and Brooks-Gunn (1991) pointed out, many factors influence changes in parent-child relationships during adolescence. Parental expectations about the changes likely to be associated with adolescence is one such factor. As just noted, parents are bombarded with information about adolescence which portrays adolescence as a difficult and turbulent time from the media and mental health workers (Lavigne, 1977). Given the prevalence of this view, some parents may expect that their child will become difficult, rebellious, and emotional as he or she goes through puberty. Buchanan et al. (1990) elaborated this argument in detail when they proposed that parents' general stereotypes about adolescence may well have a negative effect on their specific beliefs about their own child. Alternatively, parents may be "developmental optimists" (Knight, 1985) who think that although adolescence is a difficult time, they will be able to avoid the inevitable through their positive influence. It is important to understand both the positive and negative expectations, because they can affect how parents actually respond to their child (Eccles, in press; Eccles, Jacobs, & Harold, 1990). Parents who expect their children to become more difficult and rebellious as they go through puberty might try to restrict their children's behavior and place more demands on them. Because adolescents are likely to respond negatively to such changes (see Eccles et al., 1993), parents may inadvertently create the very behavior they were attempting to curb, thus increasing their child's rebelliousness. In contrast, parents who expect a more positive relationship with their adolescents may provide their children with increasing autonomy and increasing opportunities to make decisions that affect them. Eccles et al. (1993) have argued that such behavior is more likely to yield positive changes in parent-adolescent relationships. What then are parents' expectations for

how their children will change as they become adolescents? The study presented in this article examined this question and looked at predictors of these expectations.

What might affect parents' expectations about changes in their children's behavior and in their relationship with their children? Evidence suggests that both gender of parent and gender of child may be important. For example, Buchanan et al. (1990) examined the category-based beliefs (beliefs regarding adolescents as a group) and the target-based beliefs (beliefs regarding particular adolescents) of mothers and fathers of sixth-grade children. They found that parents of daughters were more concerned about the effect of adolescence than were parents of sons. Further, the mothers viewed adolescence and the concurrent biological changes more negatively than did the fathers. Despite their negative view, however, the mothers did not feel that adults in general are less efficacious in dealing with their adolescents' problems than did the fathers. In terms of their target-based beliefs, the mothers were more concerned than the fathers about their children's emerging adolescence and anticipated more conflict with their adolescents. The fathers expected their adolescent sons, in particular, to become closer to them and to seek their advice more often. Similarly, mothers of daughters expected that they would become closer to their child than did mothers of sons. We also tested how the gender of parents and children relates to parents' future expectations.

Although Buchanan et al. (1990) found that mothers and fathers hold a variety of opinions concerning their expectations for what adolescents are like in general, and what their own adolescent will be like in particular, they did not directly examine the effect of the child's pubertal status on parents' category- and target-based beliefs. Evidence suggests that pubertal status relates to negative changes in the parent-child relationship (Hill, 1988; Steinberg, 1987). Researchers have found that relationships change most acutely and negatively at the apex of these biological changes (Steinberg & Hill, 1978). These changes are characterized by more intense conflict, more emotional distancing, and less cohesion and acceptance between parents and adolescents. For example, Montemayor (1982) found that mothers experience more conflict with their daughters, especially if their daughter is an early maturer. Further, Hill and Holmbeck (1987) found that as girls become more pubertally mature, they perceived that their mothers and fathers are less accepting of them. Therefore, it seems likely that parents' expectations for changes in their children's behavior in the near future will be related to their child's pubertal status. The gender of child effect found by Buchanan et al. (1990) is consistent with this prediction. The girls in their study were more likely to be at their pubertal apex than were the boys because girls mature

earlier than boys. In our study, we examined the relation of pubertal status of one's child to parents' expectation of change in behavior. We examined its relation both to positive expectations such as closer bonds between family members and more adultlike behavior and to negative expectations such as increased moodiness and irritability.

There is some evidence that suggests that the history of family conflicts prior to the transition to adolescence is critical in predicting parent-adolescent conflicts (see Collins, 1990; Montemayor, 1986; Paikoff & Brooks-Gunn, 1991). Families who encounter the most problems during the child's adolescence are those who have had the most conflicts prior to the transition period. It is consistent to conclude then, that parental expectations about future adolescent-parent relationships should also reflect current relationships. Parents who report having more conflicted and distant relationships with their children should also report concerns that these relationships will worsen in the future. However, what of parents with close positive relationships with their children? Do these parents believe these positive relationships will continue throughout adolescence, or do they adopt the stereotype that their relationship with their child will be negatively affected by the advent of adolescence? We examine the impact of both positive and negative aspects of the current parent-child relationship on parents' expectations for the future parent-adolescent relationship.

One aspect of the current parent-child relationship that has not been explored extensively in the literature is the role of parenting self-efficacy in understanding parents' expectations about their children's adolescence. Bandura (1977) refers to self-efficacy as the belief that certain behaviors lead to certain expected outcomes and that one is capable of carrying out those behaviors. Using the Bandura definition of self-efficacy then, parenting self-efficacy can be operationalized in terms of how capable parents feel they are in influencing their children's behavior now. We used this definition and refer to this construct as *perceived current influence*.<sup>1</sup> We proposed that the influence parents feel they have over their children's lives now will be an important predictor of how much influence parents believe they will have in the future (referred to as *anticipated future influence*).

Additionally, parents' perceived current influence is likely to be related to parents' expectations about other aspects of their relationship with their children in the future. Knight (1985) suggested that even if parents believe that adolescence in general is a difficult time, they may also believe they can have a positive impact on their particular child. In support of this hypothesis, Buchanan et al. (1990) found that although parents believe adolescence is a difficult time of life, parents also believe that adults can influence children's development during adolescence. From these results, they suggested that

parents' positive views that adults can influence adolescents may override the more negative beliefs adults hold about adolescence generally. Buchanan et al. (1990) asked parents these types of efficacy questions about adults and adolescents generally. In the current study, we examined parents' specific beliefs about the influence they think they have over their own child currently, and their relation to parents' anticipated future influence. We predicted that parents with higher perceived current influence with their children will anticipate higher levels of influence over their children in the future and will expect fewer conflicts and problems in the future as their children move through adolescence.

There is some evidence, then, that pubertal development is associated with changes in the parent-child relationship (Hill, 1988; Steinberg, 1987) and that the current parent-child relationship is related to the future parent-adolescent relationship (Collins, 1988; Montemayor, 1983). In the current study, we examined specifically the possibility that the existing current parent-child relationship mediates the relation between pubertal development and expectations for change in the future. That is, we proposed that pubertal development has no direct relation to parents' expectations about their child in the future once we account for the current relationship. For example, pubertal development is expected to be associated with increased concerns about the child's welfare in the future only insofar as pubertal development is also associated with increased conflict in the family currently. Further, we predicted that pubertal development will be associated with less positive expectations about the parent-adolescent relationship in the future only insofar as pubertal development also decreases parents' beliefs about their ability to influence their children currently.

Paikoff and Brooks-Gunn (1991) suggested that existing parent-child characteristics may moderate the effect of pubertal development as well. For example, families with varying amounts of conflict prior to the onset of puberty may respond differently to the changes associated with puberty. Consequently, we also tested this moderating relation. We predicted that the negative association between current pubertal status and expected change in behavior in the next two years will be exacerbated if current levels of conflict are high. In contrast, parents with a more positive relationship with their child or who feel more influential in dealing with their child at present will expect more favorable outcomes in response to their child's emerging adolescence than parents with a less positive relationship and who feel less influential.

In sum, the purpose of this study was twofold. First, we examined differences between mothers' and fathers' expectations for how their children will change emotionally and behaviorally during adolescence. We were interested in whether mothers and fathers view their future affective relation-

ship with their children differently and whether there are differences in expectations for sons and daughters. We also were interested in how much influence mothers and fathers think they have now and will have in the future in terms of their children's behavior and the relationship their children will have with them.

Second, we examined the relation of current parent-child relationships and child gender on mothers' and fathers' expectations for future relationships taking pubertal status into account. We predicted that the current parent-child relationship will both mediate and moderate the relation between pubertal status and future expectations. Specifically, we predicted that children's pubertal development will not relate directly to parental expectations about what their relationship will be like with their child in the future. Rather, pubertal development will relate to future expectations only insofar as pubertal development relates to aspects of the current parent-child relationship. We tested these mediated relations only in cases where pubertal status correlated with the dependent variable; we tested for evidence of mediation using sequential regression (see Baron & Kenny, 1986, for a discussion of these procedures). We also predicted that the strength and direction of the association between pubertal status and expectations for change will vary depending on the current parent-child relationship. As suggested by Baron and Kenny (1986), we used an interaction term to test this prediction.

## METHODS

### Participants

Eccles and her colleagues (Eccles, Wigfield, Blumenfeld, & Harold, 1984; Eccles, Blumenfeld, Harold, & Wigfield, 1990) are conducting a large-scale longitudinal study in 12 schools, in four primarily White, middle-class school districts in suburban communities. The study began with groups of children in kindergarten, first, and third grades, and followed them for 4 years, at which time the cohorts were in third, fourth, and sixth grades. The students, approximately two thirds of their parents, and all of their teachers participated by completing questionnaires and interviews. The study examines many issues, including children's achievement self-perceptions in various domains and the roles that parents and teachers play in socializing these beliefs. The issue of early adolescent development is also being explored. The data presented for this study were collected from a sample of sixth-grade children during the last wave of data collection (1990). Sixth graders, particularly

girls, vary greatly in their stages of pubertal development. Consequently, we chose sixth graders as our target sample for this study so that we could examine the effects of differing degrees of pubertal development on parents' beliefs and expectations.

We surveyed 176 mothers and 109 fathers about their expectations for what their relationship with their sixth-grade child would be like when their child becomes an adolescent. Scales were constructed from this sample. Then, to examine differences between mothers' and fathers' expectations for changes in their children during adolescence, we selected the 105 sets of parents who were currently married and where both parents were participating. There were 49 girls and 56 boys in these 105 families.

### Measures (see appendix for individual items)

Using 7-point Likert-type scales, parents rated their current affective relationship with their child; we examined both positive and negative aspects of the relationship. Parents also rated their expectations for how their child would change over the next 2 years in terms of family affective relationships, attachment, and the child's emotional state. Further, parents rated two separate sets of items concerning how much they felt they could influence their child's behavior and interests currently and when their child becomes an adolescent (ages 13 to 16 years). Eccles and her colleagues developed these items for the larger study.

Additionally, mothers and fathers rated several items related to pubertal change on a scale from 1 (*not begun*) to 3 (*a lot*). This pubertal scale was adapted from the Petersen, Crockett, Richards, and Boxer (1988) scale. It has been found to have adequate internal reliability. Miller, Tucker, Pasch, and Eccles (1988), using a similar adaptation of the Petersen et al. scale, found that mothers' ratings of their children's pubertal development were very accurate. For 11- to 13-year-olds, mothers' ratings of their daughters correlated with doctors' ratings at .89, whereas mothers' ratings of their sons correlated with doctors' ratings at .68.

### Scale Construction

The 12 items relating to current affective relationship were submitted to a principle components factor analysis using an oblimin rotation and the kaiser criterion of 1.0 to extract factors. Three factors emerged: *worried about child*, *conflicted relationship*, and *positive relationship*. These factors accounted for 62% of the variance among the items. To test for internal consistency, a Cronbach's alpha was calculated for each of the factors (see

appendix for alphas). Scales were created by taking a composite mean of the items suggested by the factor analysis.

The 18 items measuring parents' expectations for what their child will be like as an adolescent were also factor analyzed using an oblimin rotation and the kaiser criterion. Four factors emerged, accounting for 57% of the variance: expectations that the child will be a *mature child* (responsible and adultlike), *emotional*, *separate from the family*, and *get into trouble*. One item, expecting that the child will take on more responsibilities in the future, loaded on two factors, mature child and separate from the family. We conducted tests of internal consistency, including this item on both scales. Results indicated that both constructs would have higher internal consistency if this item were removed; consequently, this item was not used on either scale. Reliabilities for the four outcome variables are presented in the appendix. Scales were created by taking a mean of the set of reliable items for each construct.

The Perceived Current Influence and Anticipated Future Influence scales were constructed by calculating the mean scores of the seven items for each set. Cronbach's alphas were then calculated to test for reliability (see appendix). This test of reliability found both scales to be highly reliable.

To calculate *pubertal status*, a summary score was computed by summing the scores on all seven pubertal development items (see appendix; note that for girls, menstrual period was coded 1 = *no* and 3 = *yes*). Scores ranged from a low of 7 (not yet begun developing) to a high of 21 (fully developed) for both boys and girls. In cases in which both parents responded to these questions ( $n = 77$ ), we calculated the mean of the parents' ratings because mothers' and fathers' pubertal rating scores were highly correlated ( $r = .81$ ). In cases where only one parent rated the child, that parent's rating was used. Consequently, 94 families out of the original 105 families provided complete pubertal status information for their child.

## RESULTS

The first set of analyses we conducted examined the mean level differences between mothers and fathers in their expectations and perceived current and anticipated future influence for their sons and daughters. The next set of analyses assessed the relations among the variables and tested the mediating and moderating hypotheses laid out in the introduction. First, we present zero-order correlation results and then summarize the results from the regression and path analyses. Following the guidelines for testing mediating effects outlined by Baron and Kenny (1986), we first looked at the

zero-order correlations and then evaluated whether this pattern of relations changed when mediators were included in the regression analyses. Next we used path analyses to assess the unique predictive association of our predictor variables with our five expectation variables. Finally, we introduced interaction terms into the path analyses to assess our moderation hypotheses. We ran correlations and path analyses separately for mothers and fathers to test the differences in how the current parent-child affective relationship related to mothers' and fathers' expectations for their future affective relationship, taking into account pubertal status and child's gender.

### Mean Level Analysis: Gender of Parent and Gender of Child Effects

The five parental expectations for change (mature child, separate from family, get into trouble, emotional, and anticipated future influence) were entered into a repeated measures MANOVA to test for gender of child and gender of parent effects. The between-subject factor was child gender and the within-subject factors were parent gender and the five expectations. There were no child or parent gender main effects, nor were there any child by parent gender interactions. Significant child gender by expectation interaction effects were found ( $F[4, 396] = 5.21, p < .001, \eta^2 = .05$ ; see Table 1 for means). Univariate  $F$  tests revealed that child gender was only significant in predicting parents' expectations that their child would become more emotional in the future ( $F[1, 103] = 7.84, p < .01, \eta^2 = .07$ ). Parents of girls believed their daughters would be more emotional in the future than did parents of boys.

Next, we examined the difference between parents' perceived current influence and their anticipated future influence. We used a repeated measures MANOVA with gender of child as the between-subject factors and gender of parent and time as the within-subject factors. Parents' anticipated future influence was significantly less than their perceived current level of influence (mean influence now = 5.40,  $SD = .72, N = 105$ ; mean influence in the future = 4.23,  $SD = .82, N = 105$ ;  $F[1, 100] = 100.16, p < .001, \eta^2 = .50$ ). We found no other significant main or interaction effects.

### Correlational Results

The zero-order correlations are summarized in Table 2. As would be expected, the child's pubertal status was related to the child's gender: Girls were seen as more developed than boys. Compared to less physically developed mature children, mothers of more physically developed children reported being more worried about their child, having more conflicts with

TABLE 1: Means of Parental Expectations for Parent-Adolescent Relationship

	Mature Child	Emotional	Separate From Family	Get Into Trouble	Future Parental Influence
Girls	4.40	4.07	4.70	2.86	4.82
Boys	4.65	3.50	4.58	2.96	5.02
Total	4.54	3.77	4.63	2.91	4.93

their child, and having a less positive relationship with their child. These mothers also expected their children would become more emotional and that they would have less influence over their children in the future than did mothers with less physically developed children.

Additionally, there are significant zero-order correlations among most of the mothers' responses for current relationship and expectations for future relationship. Mothers who were worried about their children and reported more conflicts currently expected that their children would become more separate from the family, get into more trouble, become more emotional in the future, and be less influenced by them in the future than did mothers who were currently less worried and reported less conflict. Conversely, mothers who reported having a positive relationship with their child currently and who had higher perceived current influence in their child's life expected that their child would get into less trouble and be less emotional in the future than did mothers who reported a less positive relationship and lower perceived influence. Further, mothers who reported a more positive relationship with their child now and higher perceived influence also reported higher levels of anticipated future influence than did mothers who had a less positive relationship and felt less influential. Mothers with higher perceived current influence also were less concerned that their child would become more separate from the family and expected that their child would become more mature and responsible in the future than did mothers who felt less influential.

Examination of the correlation matrix for fathers suggests that the relations among the variables are similar for mothers and fathers (see Table 2). Much like mothers, fathers of more pubertally developed children expected their children to become more emotional in the future; they also reported lower levels of anticipated future influence over the child's life. Pubertal development was also related to fathers' expectations that their child would become more separate from the family in the future.

The correlations between the fathers' affective relationship with his child currently and his future expectations are also similar to the correlations for mothers. Fathers who were more worried about their children and reported

TABLE 2: Correlation Matrix for Mothers and Fathers for All Variables

	Child Gender	Pubertal Status	Worried About Child	Conflicted Relationship	Positive Relationship	Perceived Current Influence	Mature Child	Separate From Family	Get Into More Trouble	More Emotional	Anticipated Future Influence
Child gender†	—										
Pubertal status	-.43**	—	.12	-.10	.16*	.03	.07	.03	.05	-.25**	.14
Worried about child	.08	.19*	.18*	.21*	-.19*	-.15	-.11	.13	.16	.26**	-.20*
Conflicted relationship	-.03	.01	.60**	.51**	-.18*	-.29**	-.05	.29**	.59**	.33**	-.29**
Positive relationship	.04	-.10	-.54**	-.46**	-.37**	-.18*	-.07	.26**	.42**	.47**	-.21*
Perceived current influence	.02	-.29**	-.46**	-.29**	—	.21*	.05	-.05	-.23**	-.23**	.26**
Mature child	.21*	-.04	-.13	-.08	.39**	—	.34**	-.21*	-.37**	-.30**	.82**
Separate from family	-.21*	.27**	.24**	.19*	.30**	.49**	—	-.29**	-.31**	-.40**	.42**
Get into more trouble	.01	.09	.40**	.30**	-.24**	-.02	-.21*	—	.49**	.57**	-.32**
More emotional	-.21*	.26**	.21*	.35**	-.42**	-.29**	-.35**	.40**	—	.67**	-.46**
Anticipated future influence	.07	-.17*	-.38**	-.31**	-.22*	-.16	-.21*	.40**	.41**	—	-.42**
					.39**	.77*	.49**	-.06	-.38**	-.15	—

NOTE: Mothers' correlations are above diagonal; fathers' correlations are below.  
†1 = girls, 2 = boys; \*p < .05; \*\*p < .01.

more conflicted relationships also reported being more concerned that their children would become more separate from the family, get into more trouble, become more emotional, and be less influenced by them in the future. Also similar to mothers, fathers who reported more positive relationships with their child expected that their child would get into less trouble, be less emotional, and be more influenced by them in the future than did fathers with less positive relationships. Fathers with more positive relationships also reported that their child would be more mature and responsible and closer to the family than did fathers with less positive relationships. Finally, fathers who had high perceived influence over their child's life now reported expecting their child to become more mature, get into less trouble, and be more influenced by them in the future than did fathers who perceived themselves as having less influence.

There were also strong correlations among both parents' ratings of their current relationship with their child and their perceived current influence. Given this high degree of association among these variables, we decided to use multivariate path analyses as well as simple multiple regression to determine the unique association of each of these variables to parents' expectations, controlling for pubertal status and child's gender.

### Mediating Effects

We conducted a series of simple regression analyses to test the hypothesis that the association of pubertal status with the current parent-child relationship and parents' perceived current influence mediates the effects of pubertal status on mothers' and fathers' future expectations. According to Baron and Kenny (1986), to conclude that there is evidence of mediation, the following criteria must be met: (a) there must be a significant correlation between the independent variable of interest and the criterion variable; (b) there must be a significant beta coefficient between the independent variable and the hypothesized mediating variable and between the hypothesized mediating variable and the criterion variable; and (c) the relation between the independent variable and the criterion variable must be significantly reduced when the hypothesized mediating variable is included in the regression equation. Given these criteria and the results of our correlation analyses (see Table 2), we tested for mediating effects for the following associations between pubertal status and future expectations: for fathers, the association between puberty and expectations regarding separation from the family, anticipated future influence, and more emotional; for mothers, the association between puberty and expectations that the child would become more emotional and anticipated future influence. Again, based on our correlation analyses, the

following mediating variables for fathers were tested: worried about the child and perceived current influence. The mediating variables tested for mothers were: worried about the child, conflicted relationship, and perceived current influence.

Table 3 presents the results of our sequential analyses. At the first step for each criterion variable, the zero-order correlation of the predictor variable with the criterion variable is shown. At the second step, the standardized beta coefficients for both the predictor and the mediator variables are shown. Mediation is evident if the relation of the predictor variable is reduced to nonsignificance at the second step and if the relation of the mediator variable to the criterion variable is significant in the multiple regression equation.

For mothers, neither current worry nor having a positive relationship with the child mediated the relation of pubertal status to the expectation that their child would become more emotional in the future (see Table 3). In both of these analyses, pubertal status continued to have a significant association with the criterion variable when the proposed mediator was included in the regression equation. In contrast, current conflict mediated the relation between becoming more emotional and pubertal status. That is, the association between the child's pubertal status and the expectation that the child will become more emotional in the future appears to result from the relation of pubertal status to current levels of conflict. Mothers with more pubertally developed children reported more current conflict than mothers with less developed children. This increased conflict, in turn, predicted mothers' expectations that their children would become more emotional in the future.

Additionally, current conflict did not mediate the relation between child's pubertal status and mothers' anticipations about their future influence. In this case, pubertal status continued to have a significant relation to the mother's anticipated future influence even when current conflict was controlled. In contrast, this relation was mediated by the relation of pubertal status to both current worry and a positive relationship with the child. Mothers with more pubertally developed children reported worrying about their children more than did mothers with less developed children, which in turn predicted lower anticipated future influence. Mothers with more pubertally developed children also reported less positive relationships with their children, which in turn predicted lowered anticipated future influence. In neither of these latter cases did pubertal status continue to have a direct effect on expectations once the mediator variable was included in the regression.

For fathers, neither current worry nor perceived current influence mediated the relation between pubertal status and the expectation that their children would become more emotional in the future. Nor did these current relationship variables mediate the relation between pubertal status and the

**TABLE 3: Tests of Current Relationship as Mediator of Pubertal Status on Future Expectations for Mothers and Fathers**

	Future Expectations					
	More Emotional		Anticipated Future Influence		Separate From Family	
	Step 1 <sup>a</sup>	Step 2 <sup>b</sup>	Step 1	Step 2	Step 1	Step 2
<b>Mothers</b>						
Pubertal status (IV)	.26**	.21*	-.20**	-.16		
Worried about child (MV)		.29**		-.27*		
Pubertal status (IV)	.26**	.17	-.20**	-.17		
Conflicted relationship (MV)		.43***		-.17		
Pubertal status (IV)	.26**	.22*	-.20**	-.16		
Positive relationship (MV)		-.19		.23*		
<b>Fathers</b>						
Pubertal status (IV)	.26**	.23*	-.17*	-.11	.27**	.23*
Worried about child (MV)		.17		-.36**		.19
Pubertal status (IV)	.26**	.24*	-.17*	.06	.27**	.29**
Perceived current influence (MV)		-.09		.78***		.06

NOTE: Significant mediated relations are indicated in bold type. IV = independent variable, MV = mediating variable.

a. The first step in each column is the regression of pubertal status on the dependent variable.

b. The second step in each column is the regression of pubertal status and the mediating variable on the dependent variable.

expectation that the child would become more separate from the family. In each case, pubertal status continued to have a unique direct relation to the criteria variables. However, the relation of anticipated future influence to pubertal status was mediated by the association of puberty to the fathers' current worry and perceived current influence. Similar to mothers, in both of these cases, the relation of pubertal status to the fathers' anticipated future influence appears to result from its relation to current worry and perceived current influence; pubertal status had no significant unique relation to anticipated future influence when these mediators were controlled.

### Path Analytic Results

Next, we ran five path analyses (one for each criterion variable) to identify the strength of each predictor, controlling for the effects of all other predictors

in the model. The results of each of the five path analyses conducted separately for mothers and fathers are illustrated in Figure 1. To test whether the model differed for boys and girls, we performed separate path analyses for the two groups and examined the differences between the unstandardized path coefficients. Because no differences emerged, we combined the data for the two groups and ran the five path analyses separately for mothers and fathers.

The first step in these path analyses was identical for each of the five dependent measures. At this step, we regressed the four indicators of the current parent-child relationship (including the parents' current influence) on the parents' estimates of the child's pubertal status and on the child's gender. For mothers and fathers, pubertal status was positively related to how worried the parent was about the child currently ( $\beta_{\text{mothers}} = .09, p < .05$ ;  $\beta_{\text{fathers}} = .08, p < .05$ ); the more pubertally developed the child, the more parents worried about the child. For fathers only, pubertal status was also negatively related to the fathers' perceived current influence ( $\beta_{\text{fathers}} = -.09, p < .01$ ) such that fathers whose children were more pubertally developed reported feeling less influential in their children's lives. Child gender was related only to mothers' current worry about the child such that mothers of boys were worried more about their sons than mothers of girls were worried about their daughters ( $\beta_{\text{mothers}} = .51, p < .05$ ). It is important to note that the zero-order relation of pubertal status to mothers' reports of both conflicted and positive current relationship (see Table 2) was reduced to nonsignificance when the gender of the child was controlled. In addition, the relation between child gender and mothers' worry about the child became significant when pubertal status was controlled.

At the next step in the path analyses, in separate analyses we regressed each of the five criterion variables on all six predictors in the left two columns of the model (see Figure 1; note that although path models were run separately for each outcome variable, the results are combined in Figure 1 for ease of comparison). First, parents' expectation that their child will be less involved with the family and more interested in socializing with friends (separate from family) was not predicted uniquely by any of the predictor variables. These results differed from the pattern reported using zero-order correlations. Apparently, none of the predictors had a significant unique relation to parents' expectation that their children would become more separate from the family in the future. This effect probably reflects the high degree of intercorrelation among the set of predictors (see Table 2). However, the significant  $R^2$ , for fathers at least, suggests the significance of the conjoint relation of all the predictors as a set to this expectation.

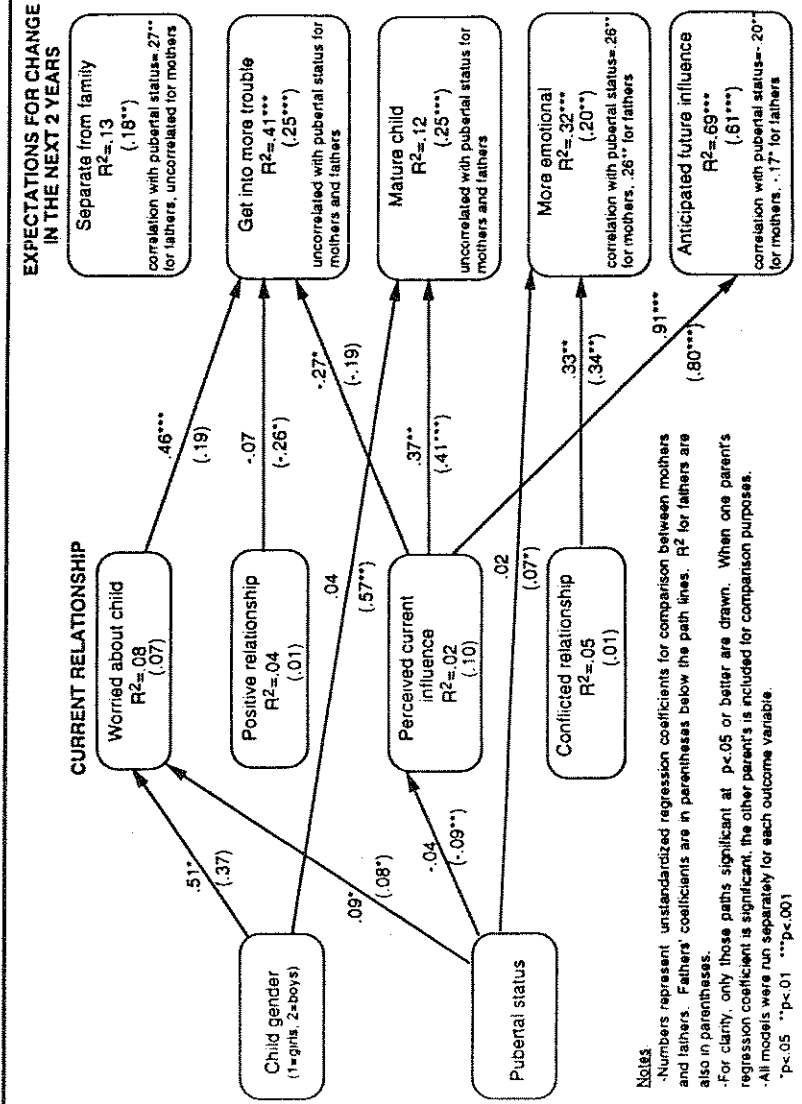


Figure 1: Path Models of Factors Influencing Parents' Expectations for Change in Parent-Adolescent Relationship



Next we examined parents' expectations that their child is likely to get into trouble in the future. For mothers, the more worried they were about the child currently, the more they expected their child to get into trouble in the future ( $\beta_{\text{mothers}} = .46, p < .001$ ) even after controlling for all predictors. This relation was not true for fathers even though there was a significant zero-order correlation between these two variables. Also, as mothers reported less perceived current influence in their children's lives, they also reported greater concern that their children would get into trouble in the future ( $\beta_{\text{mothers}} = -.27, p < .05$ ) even after controlling for the other predictors. For fathers, this relation was not significant when the other variables were controlled even though the zero-order correlation was significant. For fathers only, the less positive relationship they reported having with their children, the more concerned they were that their children would get into trouble in the future ( $\beta_{\text{fathers}} = -.26, p < .05$ ), again controlling for other predictors. This relation was true for mothers at the zero-order correlation level, but was not true when other predictors were controlled. In sum, for mothers, current worries and perceived current influence were the strongest predictors of their expectation that their child would get into more trouble in the future. In contrast, for fathers, their report of a positive relationship with their child was the most powerful predictor of reduced concerns about their child getting into trouble in the future.

Both mothers' and fathers' expectations that their child will become more mature, more confident, and more fun to be around (mature child) was the third set of analyses we conducted. This expectation was predicted by parents' perceived current influence such that parents who reported having a great deal of influence over their child now also reported that their child would be more mature and confident in the future ( $\beta_{\text{mothers}} = .37, p < .01$ ;  $\beta_{\text{fathers}} = .41, p < .001$ ). For fathers only, there was also a direct unique relation between child gender and mature child ( $\beta_{\text{fathers}} = .57, p < .01$ ). Fathers of sons expected maturity and responsibility in the future more than did fathers of daughters.

In the fourth set of analyses, we examined parents' expectations that their child would become more emotional in the future. We found, for fathers only, a direct relation between pubertal status and the future expectation that the child would be more emotional even though pubertal status was related to this expectation at the zero-order level for both mothers and fathers. Fathers whose children were more pubertally developed expected that their child would become more emotional in the future ( $\beta_{\text{fathers}} = .07, p < .05$ ). Interestingly, gender of child had no unique relation to this expectation for either mothers or fathers, even though it had a significant zero-order correlation for both parents. In addition, for both mothers and fathers, only their

perception of current levels of conflict with their child had a unique relation to how much they expected their child to become more emotional in the future ( $\beta_{\text{mothers}} = .33, p < .01$ ;  $\beta_{\text{fathers}} = .34, p < .01$ ) once the other predictors were controlled.

Finally, we examined parents' anticipated future influence on their child. Not surprisingly, this expectation was predicted most strongly by the parents' perceived current influence ( $\beta_{\text{mothers}} = .91, p < .001$ ;  $\beta_{\text{fathers}} = .80, p < .001$ ). There were no other unique predictors of this expectation even though there were several significant zero-order correlations (see Table 2).

### Moderating Effects

To examine whether moderating effects were also present, we computed five new sets of regression equations, this time including interaction terms (see Baron and Kenny, 1986, for suggested methods of analysis). To test whether varying levels of the four current relationship variables moderate the relation between pubertal status and the outcome variables, we computed the following interaction terms: Pubertal Status  $\times$  Worried About Child, Pubertal Status  $\times$  Conflicted Relationship, Pubertal Status  $\times$  Positive Relationship, and Pubertal Status  $\times$  Current Parent Influence. Before computing these interaction terms, we centered the variables at the population mean by subtracting the population mean of each variable from the individual score to avoid problems of multicollinearity (see Jaccard, Turrissi, & Wan, 1990, for a discussion of these procedures). These interaction terms, along with the six original predictors, were entered into five new regression equations for mothers and fathers. Interaction terms were considered significant only if they significantly increased the amount of variance explained using the *F* test described by Jaccard et al. (1990). Using this criterion, we found only one significant interaction effect. For fathers only, their perceived current influence moderated the relation of pubertal status to their expectation that their child would become more mature in the future. At low levels of perceived influence, increased pubertal development had no relation to how mature and responsible fathers expected their child to become in the future. However, as the level of perceived current influence increased, the positive association between pubertal status and expectation of greater maturity increased. Fathers who reported the highest levels of influence in their children's lives and whose children were the most pubertally advanced expected the greatest increases in how mature and responsible their child would become in the future ( $\beta = .08, p < .05$ ;  $\beta = .40, p < .001$ ;  $\beta = .06, p < .05$  for Pubertal Status, Current Parent Influence, and Pubertal Status  $\times$  Current Influence, Respectively).

## DISCUSSION

The goals of this study were (a) to examine differences between mothers' and fathers' expectations for how their children will change emotionally and behaviorally during adolescence, (b) to test whether the child's pubertal status, the child's gender and the current parent-child relationship predict parents' expectations about their child, and (c) to test whether current parent-child relationships mediate and/or moderate the relation between pubertal status and parents' expectations about their future relationship with their child.

In general, we found few gender of parent or gender of child effects when examining univariate or bivariate relations for parents' future expectations. However, an examination of the multivariate relations among the predictor variables and the future expectations for mothers and fathers separately revealed that the pattern of predictors for mothers' and fathers' future expectations differs in interesting and important ways.

Regarding our second goal, we found some evidence of an association between pubertal status and parents' expectations. Again, however, some of the relations were reduced to nonsignificance in our multivariate path analyses that controlled for gender of child. We found strong evidence of an association between the quality of the current parent-child relationship and parents' future expectations.

Finally, concerning our third goal, we found some evidence that some aspects of their current relationship mediated the relations of pubertal status to both mothers' and fathers' future expectations. In contrast, we found little support for a moderated relation between pubertal status and current parent-child relationship on future expectations.

### Gender Differences

The results of this study suggest that there are very few differences in how parents of boys and parents of girls expect their children will change during adolescence and in how much influence parents think they will have over their children in the future. We found some gender differences in our MANOVA and zero-order correlation analyses: Parents of girls thought their daughters would become more emotional in the future to a greater extent than did parents of boys. However, this relation was no longer evident when pubertal status was controlled in our path analyses. Further, mothers and fathers were similar in their views about how their children would change and how much influence they thought they would have in the future. We had anticipated more gender differences in parents' expectations in light of

previous findings that mothers and fathers differed in their views about adolescence generally (Buchanan et al., 1990) and in their specific concerns about their own adolescent (Buchanan et al., 1990; Steinberg, 1987; Steinberg & Hill, 1978).

Despite the sparsity of gender differences in our correlation and MANOVA analyses, examination of the path analyses revealed some important gender of parent differences in the relations among our variables. Mothers' who were currently worried about their child reported that they expected their child would get into more trouble in the future than did mothers who were less worried now. However, mothers who perceived themselves as being influential in their children's lives reported less concern that their children would get into trouble in the future. Thus, for mothers, perceived current influence may override the negative effects of their current worry about their child. More will be said about the importance of perceived influence when we discuss the mediating effects. In contrast to mothers, neither worries nor perceived influence predicted fathers' expectations that the child would get into more trouble in the future. Instead, it was the affective quality of the relationship that was predictive: Fathers who reported having a positive relationship with their children also reported less concern that their child would get into trouble in the future than did fathers with a less positive relationship with their child.

In our path analyses, once pubertal status was controlled, we found two instances where the gender of child effect was different for mothers and fathers. First, mothers reported being more worried at present about their sons than their daughters. Although it was not significant, the direction of the relation between child gender and worried about the child was the same for fathers as for mothers: Fathers of sons worried more about their child currently than did fathers of daughters. An explanation for this finding may be that the items comprising the worried about the child construct may have been more relevant for concerns about boys than girls. We did not ask parents if they were worried about this child's sexual activity or about this child being harmed in any way, concerns that may be more relevant to parents of girls. Our second finding was that fathers expected their sons to become more mature and responsible than their daughters in the future. The magnitude of this relation was not strong for mothers. It may be that fathers of daughters already perceive their daughters as being mature and responsible; fathers of sons, however, anticipate that adolescence will help their sons become less irresponsible and more mature. Why this was not true for mothers is not clear.

It is important to note that we also found few parent gender differences in comparing the correlations between pubertal development and parents' expectations. Both mothers and fathers of more pubertally developed children

expected that their children would become more emotional and that they would be less influential in their children's lives in the future than did parents of less physically developed children. For fathers only, as their children developed, they expected their children would become more separate from the family. All but one of these relations were no longer significant in the path analyses when aspects of the current parent-child relationship were controlled: Fathers whose children were more pubertally developed continued to expect their children would become more emotional in the future. We will address the implications of this finding when we discuss the more complex path model.

### Mediated Effects

We hypothesized that the relation of pubertal development to the current parent-child relationship would mediate the relation between pubertal development and future expectations. We found some support for this hypothesis, especially in examining the relation between pubertal status and anticipated future influence. For mothers, having a pubertally developed child was related to reporting a less positive relationship with their child, which in turn was related to decreased levels of anticipated future influence. For fathers, having a pubertally developed child was related to lower levels of perceived current influence, which in turn was related to decreased levels of anticipated future influence. Further for both mothers and fathers, we found a significant relation between increased pubertal development and increased levels of worry. As parents reported more worry about their child, they in turn reported anticipating less influence in their child's life in the future. It may be that parents base their ratings of their anticipated future influence less on stereotypes of adolescence generally and more on the quality of the current parent-child relationship. In fact, we found some support for this claim, especially for mothers, when we examined the more complex relations between pubertal status and future expectations, controlling for all aspects of the current relationship simultaneously. We will discuss these relations in more detail.

We found less evidence of mediation between pubertal status and parents' expectation that their child would become more emotional: Only one indicator of current relationship (conflicted relationship) mediated this relation, and then only for mothers. In all other instances, pubertal status continued to have a significant direct effect on parents' expectations that the child would become more emotional in the future, even after we controlled for other aspects of the current relationship. This link between child's pubertal status and parents' expectation of increased emotionality may be one cultural

stereotype regarding adolescence that affects parents' expectations for their own child, independent of (or despite) their current relationship with their child (Buchanan et al., 1990).

### Moderating Effects

We also hypothesized that the current parent-child relationship would moderate the relation between pubertal development and future expectations as suggested by Paikoff and Brooks-Gunn (1991). The relation of pubertal status to fathers' expectations that their child would become more mature in the future did vary depending on the fathers' reports of their current influence. At low levels of perceived current influence, pubertal development had no relation to how mature and responsible fathers expected their child would become in the future, whereas at higher levels of perceived influence, the positive association between pubertal status and expectation of greater maturity increased. It may be that fathers whose children have undergone pubertal changes realize that their stereotypical fears and negative expectations about puberty have not come to fruition. Rather, these fathers may find that they are just as influential and important in their children's lives as they were prior to puberty. Consequently, fathers whose children are more pubertally developed and who still feel influential in their children's lives report more positive expectations about their children than do fathers whose children have not yet undergone pubertal changes and who do not feel influential. The fathers of these less pubertally developed children may anticipate even less positive outcomes once their children reach adolescence, given their current feelings of low influence. Fathers of less pubertally developed children, because they have not had any experience that proves otherwise, may hold the stereotyped view that parents lose their ability to influence their children once they enter adolescence. Our finding that parents, on average, gave lower ratings to anticipated future influence than to perceived current influence supports this claim.

Despite the Paikoff and Brooks-Gunn (1991) suggestion, we found that pubertal status exhibited the same influence on parents' expectations for change regardless of the level of current worry, conflict, or positive relationship. Several factors may account for this finding. First, it should be noted that our sample represents only one age group. Although pubertal development varied across the sample, it is unlikely, given this age group, that very many children had totally completed their pubertal development. Consequently, our sample does not represent the full range of effects of children's pubertal change on parents' expectations and on the parent-child relationship. Second, although we did have variability in parents' responses to aspects of

the current parent-child relationship, parents tended to describe their relationships as quite positive, with few conflicts and relatively little current worry about their child. They also perceived themselves as having a fair amount of current influence over their child. Thus, according to their self-definitions, we had a very well-functioning set of families in our study. Finally, it may be that the moderating effects are more complex than we had hypothesized. For example, it may be that current conflicted relationship moderates the relation between pubertal status and expectations of increased trouble in the future only at low levels of perceived current influence. We did not test these multilevel interaction effects.

### Complex Relations Between Pubertal Status and Parents' Expectations

Paikoff and Brooks-Gunn (1991) suggest that research needs to examine such factors as the gender of the parent and child, the pubertal status of the child, and the quality of the current parent-child relationship in combination when predicting changes in parent-adolescent relationships. Although researchers have investigated how such factors individually affect the parent-adolescent relationship, very few studies have examined these predictors in combination. The results from our path analyses indicate that such an approach is necessary for understanding the relative contribution of each of these factors.

For example, many studies have examined the effects of pubertal status on current parent-child relationships. Other studies have explored the history of family conflicts prior to and after the transition to adolescence. Our findings indicated that at sixth grade, pubertal status was significantly related to parents' reports of being worried about their child. However, contrary to previous research on parent-adolescent relationships (e.g., Hill & Holmbeck, 1987; Papini & Sebbly, 1987; Steinberg, 1987), we did not find that pubertal status was related to degree of conflict. There are several possible explanations for this finding. First, previous studies often used observer ratings of physical maturity rather than parents' or children's reports. This difference in measurement could account for the differences in findings across studies. Observers could be using a variety of cues in making their judgment of the child's pubertal status, cues such as dress, make-up, and so on, as well as physical characteristics. Although such social cues are linked to pubertal development, they are also linked to social changes associated with adolescence—social changes that may precipitate family conflict. Further, previous studies of parent-adolescent conflict often measured specific conflict situations, such as responsibility issues (Papini & Sebbly, 1987), leisure time and

time management issues (Papini & Sebbly, 1988), and decision-making issues (Steinberg & Hill, 1978). Our measure of conflict asked parents to rate how much general conflict they thought existed between their child and themselves. Parents in our study may not have defined their relationship with their child as becoming more generally conflicted, even though they may have been experiencing increased disagreements about leisure time activities and responsibilities. Additionally, as noted previously, current conflict for this population was not particularly high.

Alternatively, the parents in our study, in fact, may not have been experiencing increased conflict with their emerging adolescents. Many of the studies have found increased conflict between parents and adolescents at the early and middle stages of puberty (Papini & Savage, 1987; Steinberg, 1981; Steinberg & Hill, 1978) using samples of children across a wide range, possibly confounded pubertal status, age, and experience. Our sample consisted of only sixth graders who had not yet made the transition to junior high. Evidence from several studies (e.g., see Blyth, Simmons, & Carlton-Ford, 1983; Eccles et al., 1993) suggests that the transition to junior high may have negative effects on adolescents and that the magnitude of these effects may vary as a function of the child's pubertal status. Because none of the children in our study have made this school transition yet, they may still have relatively unconflicted relationships with their parents. Increased conflicts between the more physically mature adolescents and their parents may arise when these adolescents move to the junior high school environment and become part of an older peer group that expects them to violate, or at least question, their parents' norms and desires.

We have several other indications that the pattern of relations among our variables is complex and changes depending on the set of constructs being looked at in the analysis. For example, the mediated role of conflicted current relations we found between pubertal status and mothers' expectation that their child would become more emotional in the future was no longer evident in our more complex path model. Rather, controlling for other factors, such as the child's gender, attenuated this mediated relation. Although results of our MANOVA indicated that parents expected girls to become more emotional in the future, and our single mediated regression analysis suggested that pubertal status was related to parents' reports of increased conflicts, our multivariate analyses revealed that, for mothers, neither child's gender nor pubertal status exerted a significant influence on emotionality once we controlled for the fact that girls at this age are more pubertally developed than boys. This finding highlights the necessity of explaining expectations based on multiple indicators.

For fathers, in contrast, pubertal status continued to have a direct relation to their expectations that their child would become more emotional and moody in the future in both our test of mediation and our path analysis. Fathers whose children were more pubertally developed reported more concern that their child would become more emotional in the future, even after all other predictor variables were controlled. This expectation may have critical consequences in later father-adolescent relationships. Researchers investigating the actual relation between pubertal stage and moodiness have found little evidence that adolescents are more moody (see Buchanan et al., 1992). Crockett and Petersen (1987) and Miller (1988) found that both child reports and parent reports of actual moodiness did not differ by girls' pubertal status. Buchanan (1991) found more variability in self-reported mood states in 9- to 10-year-old pubertal girls than in the same-age prepubertal girls. However, the moodiness of these girls may have been due to a psychological response to early pubertal development rather than a response to the pubertal changes per se. Fathers who expect their children will become more moody and emotional during their adolescence as a result of their pubertal development may begin to treat their developing children differently. Buchanan et al. (1992) suggested that children may have trouble adjusting to these different expectations and may become more moody and emotional as a result or may withdraw from their father because he has an incorrect perception of their current emotional state. Although it appears pubertal development itself does not necessarily lead to increases in moodiness, these negative expectations may create more negative affect in children. Further research is necessary to explore the consequences of these expectations. It should be noted that even though the direct effect is still significant in Figure 1, it is not large, and it is not substantially reduced by controlling for the four indicators of current relationship as a set.

Another relation that changed when we entered all the current relationship variables into the full model was that being worried about the child currently no longer mediated the relation between pubertal status and anticipated future influence for either mothers or fathers. Although pubertal status was still significantly related to parents' being worried about their children, being worried about their children was not related to anticipated future influence once perceived current influence was controlled. Apparently, high levels of perceived current influence attenuated the relation of being worried about the child to parents' anticipated future influence. This suggests that even though parents may worry about their developing adolescents, their confidence in their ability to influence their children's lives allows them to continue to be optimistic about their ability to influence their children's behavior in the future. Parents with high levels of perceived current influence

may be developmental optimists (Knight, 1985) who think that although adolescence is a difficult time, they will be able to continue to have a positive influence on their child in the future. This may be especially true for mothers. We found that the relation between current worry and concern that the child will get into more trouble in the future was reduced once perceived current influence was added into the multivariate model. It may be that mothers, because they typically are more involved in child rearing, are more aware of the importance of being able to influence children, especially through the difficult period of adolescence.

The full path model analyses also revealed the importance of perceived current influence for future expectations. Current influence was related to an increased expectation that one's child would be more mature and responsible in the future and to a relatively lower concern that one's child would get into more trouble in the future. The fact that zero-order correlation results revealed that influence was significantly related to both positive and negative aspects of the current relationship suggests that it may be an important factor in understanding parent-child as well as parent-adolescent relationships. This finding is supported by Bandura's (1986, 1991) work on self-efficacy, which found convergent evidence in the research literature attesting to the explanatory and predictive generality of self-efficacy theory. Self-efficacy has been found to have a strong impact on one's thoughts, affect, motivation, and action. Thus perceived influence is not only important in that it is related to positive parental expectations about what their child will be like as an adolescent, it is also important in that high levels of perceived influence (both in the present and in the future) may affect how parents actually respond to their child's emerging adolescence.

We advise a note of caution when interpreting the results of this study. Although we did find support for our hypothesized relation between current relationship and future expectations, the results of our path analyses are correlational in nature and do not reflect causality. It may be possible that a reciprocal relation exists between expectations and current relationship. For example, parents who expect more emotionality from their emerging adolescent may perceive that their current relationship with their adolescent is becoming more conflicted. Additionally, parents who are more concerned about the dangers of adolescence, and have negative stereotypes about adolescence generally, may perceive a less positive relationship with their child currently. Further studies that collect data prior to and during adolescence may better tease apart the direction of effect.

Clearly, parents' future expectations about what their children will be like as adolescents are not simply related to singular constructs or events such as the child's pubertal status or the amount of conflict between parent and child.

Rather, parents' future expectations are related to a complex web of individual parent and child characteristics, as well as to both positive and negative aspects of the parent-child relationship. Future research should examine other variables that may relate to expectations for change. For example, family supportiveness and parental warmth may affect parent expectations for their adolescents. Researchers in this area might also explore the relation of parent and child personality variables, parents' stereotypes about adolescence in general, parenting style, and the child's school setting to parents' expectations about their developing adolescent. Additionally, a longitudinal approach to questions involving the impact of pubertal development and family relationships on change would better explain the history of the family's relationship and how it affects expectations. Further, longitudinal studies could explore how expectations for change actually affect future relationships.

#### APPENDIX: Measures Used

*Pubertal Status:* 1 = Not at all; 2 = Just started; 3 = A lot. Fully developed = 21 points; not at all developed = 7 points.

- Growth spurt
- Hair becoming more oily
- Appearance of pimples
- Appearance of underarm hair
- Appearance of pubic hair
- Increase in muscle strength (boys)
- Genital development (boys)
- Breast development (girls)
- Menstrual period (girls, 1 = no; 3 = yes)

*Perceived current influence* (alpha = .86): Parents differ in how much they think they can do to influence their child's behavior and interests. How much do you think you can do now (1 = very little; 7 = a great deal):

- to get child to stay out of trouble in school
- to help child get good grades in school
- to prevent child from getting in with the wrong crowd
- to get this child to associate with friends who are good for him or her
- to prevent child from doing things you do not want him or her to do outside of the home
- to increase this child's interest in school
- to get this child to resist the pressure from friends to do things of which you disapprove

#### APPENDIX: Continued

*Anticipated future influence* (alpha = .90): Some people think that their influence on their children will change as their children get older. Please indicate how much influence you think you will have over this child when he or she becomes an adolescent (ages 13 to 16) (1 = very little; 7 = a great deal):

Items same as for perceived current influence.

*Current parent-child relationship:* Indicate the extent to which each of these statements is true for you and this child now and in the recent past (1 = not at all true; 7 = very true):

*conflicted relationship* (alpha = .86)

- I am worried that this child and I will have more conflicts this year.
- There is a good deal of conflict between this child and me.
- Even though being a parent can be rewarding, I am frustrated now while this child is at his/her present age.
- This child and I have had more conflicts this year than last.
- This child often argues with me about my rules or decisions for him/her.

*worried about child* (alpha = .68)

- I am worried that this child is up to something I don't like.
- I am worried about the kinds of friends this child has.
- I am worried that this child will get into more trouble this coming year than last.

I sometimes worry that I don't know where this child is or whom they are with.

*positive relationship* (alpha = .74)

- I find it interesting and educational to be with this child for long periods.
- I am physically affectionate with this child.
- I am emotionally close to this child.

*Future parent-adolescent relationship:* Rate how likely you think it is that this child will change in the following ways in the next two years (1 = very unlikely; 7 = very, very likely):

*more emotional* (alpha = .76)

- She or he will be more difficult to get along with.
- She or he will be easier to get along with.
- She or he will have more emotional problems.
- She or he will become more moody.

*get into more trouble* (alpha = .82)

- She or he will be more likely to get in trouble in school
- She or he will become more rebellious.
- She or he will be less interested in school.
- She or he will be more likely to get into trouble with his or her friends.
- His or her peers will have a negative influence on him or her.

(continued)

## APPENDIX: Continued

*Future parent-adolescent relationship:* Rate how likely you think it is that this child will change in the following ways in the next two years (1 = very unlikely; 7 = very, very likely):

*mature child* (alpha = .75)

- She or he will take school work more seriously.
- She or he will be closer to me because we can share more adult interests.
- She or he will seek my advice more.
- She or he will become more self-confident and self-assured.
- She or he will be more fun to be around.

*separate from family* (alpha = .64)

- She or he will socialize more with members of the opposite sex.
- She or he will be less concerned with what I think.
- She or he will resist my influence more.
- She or he will become less interested in doing things with the family.

## NOTE

1. Although Bandura defines self-efficacy as the capacity for exercising influence over one's motivations and behaviors, researchers often use this term to refer to other related constructs like beliefs about one's competence. Consequently, for purposes of clarity, the word *influence* will be used in place of the term *self-efficacy* throughout this article.

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