

## **Expectations Regarding Development During Adolescence: Parental and Adolescent Perceptions**

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*The aims of this study were (1) to compare the age-related expectations of parents and adolescents concerning the timing of achievement in a number of developmental tasks, (2) to examine whether personal characteristics of the adolescent affect developmental expectations, and (3) to examine whether discrepancies between the adolescent's and the parent's expectations are related to the amount of parent-adolescent conflict. The sample consisted of 508 families with adolescents (12-18 years old). During a home visit, a battery of questionnaires was administered individually to mothers, fathers, and adolescents. A new 24-item instrument to assess expectations for adolescents' mastery of developmental tasks was developed for this study. Analyses showed that when the expectations of adolescents and those of their parents are compared at aggregate level, parents consistently indicate later ages for the achievement of developmental tasks than adolescents. Although parents have later timetables, parents and adolescents have strikingly similar views of the sequence in which achievement of developmental tasks should occur. The adolescent's age appears to be the most potent predictor of developmental timetables, followed by gender, pubertal timing, and temperament, respectively. The amount of conflict within the parent-adolescent relationship was associated with differences in*

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*developmental expectations. The utility of the new instrument for research and clinical work is discussed.*

## INTRODUCTION

In order to accommodate the adolescent's increasing need for autonomy, the parent-child relationship changes during adolescence in subtle but important ways. One of the factors that affects the smoothness of this transformation is the expectations about adolescence held by the parent and the adolescent.

In Western societies adolescence is viewed as a transitional stage to adulthood, with culturally defined developmental tasks such as becoming emotionally independent of parents, finishing education, finding a job, setting up an independent life, etc. There are widely held cultural myths about this developmental period. Adolescence is seen as a troubled time and adolescents are said to be rebellious and prone to mood swings. This stereotyped perception both of adolescents as a group and of specific individuals is not only consistently presented by news media, fiction, and the health professionals, but also appears to be held by parents. Parents of preadolescents, especially mothers, expect that their children will become more difficult to get along with during adolescence, that adolescents will experience problems in adjusting to physical changes and that the conflict between parent and peer pressures will increase (Buchanan *et al.*, 1990).

In this study we examine a specific type of beliefs regarding adolescence: age-related expectations of parents and adolescents concerning the timing of achievement in a number of developmental tasks. These developmental timetables are important for several reasons. First, they reveal parents' and adolescents' developmental theories and provide insight into the ways parents and adolescents view adolescence and adolescents' development and behavior. Second, they reflect the values considered important within different cultures. Third, they possibly function as a basis upon which parents evaluate and respond to children's behavior (Feldman and Quatman, 1988; Rosenthal and Bornholt, 1988). Parents' developmental timetables have been shown to be important at earlier ages (Goodnow *et al.*, 1984; Hess *et al.*, 1980), and they could be particularly important during adolescence. In this period, when new behaviors emerge and there are few consistent societal guidelines regarding age-appropriate behavior, differences in opinion between adolescents and their parents may create the potential for serious conflict. It has been suggested that a great deal of parent-adolescent conflicts result from differing expectations between par-

ents and their adolescents regarding the pacing of adolescent autonomy (Montemayor, 1982, 1983, 1986).

Most of the research on parental developmental timetables, however, has focused on infancy and early childhood (Miller, 1988). For these developmental periods there are several standardized instruments available to assess knowledge of norms and milestones as well as expectations regarding the mastery of a variety of infants' or children's behaviors and achievements: Knowledge of Infant Development Inventory (MacPhee, 1981), High Scope Knowledge Scale (Epstein, 1980), and Developmental Expectations Questionnaire (Hess *et al.*, 1980). Only a few attempts have been made to assess the expectations held by parents of older children. Rosenthal and Bornholt (1988) used a modified version of the Hess *et al.* (1980) questionnaire, and Feldman and Quatman (1988) developed a new instrument, Teen Timetables, to assess "expectations for adolescents' behavioral autonomy across a variety of everyday management domains" (Feldman and Quatman, 1988, p. 331). In both cases little information is provided about the conceptual basis for the development of the instrument—that is, the origins of the items and the reasons for the items' selection. When examining the content of the items, it appears that some domains are covered well (for example, independent behavior in everyday situations), but others, equally relevant for adolescents (for example, coping with physical changes, involvement in intimate relationships, etc.), are not. Moreover, in Rosenthal and Bornholt's study parents were asked about the achievements of children in general, which makes it difficult to disentangle whether the parents' judgements reflect normative expectations or estimates of their own child's capability (Miller, 1988). Given the shortcomings of these instruments, we tried to develop a new instrument that would have a clearer conceptual basis for item construction and would cover a broader range of specific developmental tasks faced by adolescents during this period (Palmonari *et al.*, 1991; Palmonari *et al.*, 1989; Palmonari *et al.*, 1990). Furthermore, the parents were asked to report the expectations for their own child. This was done, first, to avoid confounding beliefs about normative development and aspirations for their own child, and second, because a parent's beliefs about their own child appear to be a better predictor of their parenting behavior than their beliefs about children in general (Goodnow and Collins, 1990).

The first aim of this study was to compare parental and adolescent expectations regarding adolescent behavior and development. Expectations about developmental processes are assumed to be acquired through cultural transmission and personal experience (Goodnow, 1988; Goodnow and Collins, 1990). Though the adolescent and his/her parents share the same cultural background, they differ greatly in experience, in their roles, and in

their perspectives. They may therefore be expected to have different views on age-appropriate behavior during adolescence. Feldman and Quatman (1988) compared the expectations for adolescent autonomy in a sample of parents and their early adolescent sons, and found large generational effects: both mothers and fathers held significantly later age expectations than adolescents. However, the findings of Feldman and Quatman's study are restricted to only one domain of development (behavioral autonomy), one gender (boys), and one age period (early adolescence). The question remains whether these generational effects are consistently found across different domains, and ages, and for boys and girls.

In addition to generational differences we also examined mother-father differences. We hypothesized that parental gender would influence their developmental expectations, due to mothers' and fathers' different experiences with children and the different quality of the relationships they have with their adolescents. Most mothers spend more time in contact with their adolescents (Montemayor, 1982), and their relationship appears to be closer and more intimate than the father-adolescent relationship (Youniss and Smollar, 1985). This may result in greater similarities between timetables of adolescents and their mothers.

Expectations should also be affected by the sex of adolescents. Several studies have shown that parents are more accepting and adaptive regarding a son's maturation than a daughter's (Cooper and Grotevant, 1987; Montemayor and Brownlee, 1987; Paikoff and Brooks-Gunn, 1991). It could therefore be expected that parents of girls would have more conservative expectations than parents of boys. On the other hand, the physical changes accompanying adolescence shape not only the adolescent's self-perception, but also affect the way in which parents view the adolescents. Adolescents who look more mature are seen by their parents and by their teachers as more socially mature as well (Johnson and Collins, 1988). Since girls enter puberty at an earlier age than boys, it is possible that parents would view their daughters as more mature, and therefore have earlier timetables than parents of sons. It was not clear which of these hypotheses regarding the effect of adolescent gender would take precedence.

Pubertal status, defined as a current, actual level of physical development, may operate as a possible determinant of developmental expectations. However, because pubertal status typically shows strong associations with age and gender, the use of such a measure does not allow an estimation of the separate effects of age, gender, and level of pubertal development. Apart from this problem, it has been shown that pubertal timing (i.e., one's position as early, on time, or late in physical development relative to a referent group) has more impact on psychosocial functioning than pubertal status per se (Brooks-Gunn *et al.*, 1985). The off-time maturers

are found to suffer from demands and experiences inappropriate to their actual social maturity (Silbereisen and Kracke, 1993). Regarding adolescents' developmental expectations, Silbereisen (1992) showed that earlier onset of puberty was associated with normative expectations of an earlier mastery of other developmental transitions. Thus we expected that early maturing adolescents would consider earlier ages suitable for developmental transitions than the late maturers.

Several researchers have pointed out the importance of individual differences in temperamental characteristics for adjustment to multiple personal and social changes during adolescence (Thomas and Chess, 1991; Nitz and Lerner, 1991). The functional significance of temperament during this transitional period is most obvious in the case of the development of behavioral disorders. Temperament appears to be a variable of considerable predictive power in explaining the occurrence of adolescent behavioral problems (Thomas and Chess, 1977, 1991). Though individual differences in behavior due to differences in temperament have been identified, there has been little research on how temperament affects one's cognitions and expectations, and how temperamental differences influence the expectations held by significant others for adolescent development. It is possible that temperamental characteristics, such as impulse control, affect age-related expectations of achievement of developmental tasks of both adolescents and their parents: adolescents low in impulse-control might have earlier timetables than adolescents who are more able to control their impulses.

These three personal characteristics of the adolescent: gender, pubertal timing, and temperament are seen as possible correlates of the adolescents' and parents' developmental timetables. A final question examined in this study concerns the possible consequences of differences in expectations within the same family. Several studies have indicated that discrepancies in parent-child perceptions may be interpreted as signifying difficulties in relationships, may entail different parental responses and may lead to different adolescent outcomes (Paikoff, 1991). For example, Holmbeck and O'Donnell (1991) found that discrepancies in adolescents' and mothers' perceptions of who makes decisions in the family predicted the degree of mother-adolescent conflict. Similarly, Papini and Micka (1991) showed that the discrepancy in adolescent-parent perceptions of adolescent pubertal maturity is related to the quality of family relationships during early adolescence. Based on these findings, we hypothesized that greater discrepancies between adolescents' and parents' developmental expectations would be related to more conflict within the family.

To summarize, the aims of this study were (1) to compare the age-related expectations of parents and adolescents concerning the timing of

achievement in a number of developmental tasks, (2) to examine whether personal characteristics of the adolescent (gender, the degree of pubertal maturation, and temperament) affect developmental expectations, and (3) to examine whether discrepancies between adolescents' and parents' expectations are related to the amount of parent-adolescent conflict.

## METHOD

### Subjects

The sample consisted of 508 adolescents (254 females and 254 males) and their parents (502 mothers and 467 fathers) from a wide range of socioeconomic and educational backgrounds. All families were Dutch, *i.e.*, both parents were born in the Netherlands. Three age groups were represented: early adolescence (between 12 and 13 years old, 86 females and 84 males), middle adolescence (between 14 and 15, 73 females and 76 males), and late adolescence (between 16 and 18, 95 females and 94 males). The ages of the parents ranged from 30 to 65 years (mean age of mothers: 43 years; mean age of fathers: 45 years). Seven percent of the children were the only child in the family, 35% were the oldest child, and 41% the youngest child. Most of the families (88%) were intact families with two biological parents, 3% were stepfamilies with the biological mother and the stepfather, and 9% were single-parent families (7% of the parents were divorced or separated and 2% were widowed). No differences were found between three family types (intact, stepfamily, and single-parent family) on demographic variables: parental education, socioeconomic status, or age and gender of the target child. Also, the family type did not significantly affect any of the variables assessed here (developmental expectation, pubertal timing, temperament, level of conflict, and discrepancies in expectations). Therefore the combined sample was used in all subsequent analyses.

### Measures

The data for this study were collected as part of a larger national program of research on children/adolescents and their parents entitled "Child Rearing in the Netherlands in the 1990s." The data collection took place at the subjects' home, where a battery of questionnaires was administered individually to adolescents, mothers, and fathers.

*Developmental Timetables*

A new instrument, Developmental Timetables for Adolescence (DTA), assessing expectations for adolescent mastery of developmental tasks, was developed for this study. First, several specific developmental tasks during adolescence were defined. Following the work of Palmonari (Palmonari *et al.*, 1991; Palmonari *et al.*, 1989; Palmonari *et al.*, 1990), the developmental tasks were grouped into personal tasks, relational tasks, and socioinstitutional tasks, each group consisting of several subtasks. For each subtask, several items were developed by rephrasing the subtasks in a form suitable for adolescents' self-administration. The initial item pool was derived from the previous work on developmental timetables during adolescence (Feldman and Quatman, 1988; Feldman and Rosenthal, 1990, 1991; Noack and Kracke, 1992; Rosenthal and Bornholt, 1988) and was enhanced by additional items tapping tasks not included in the previous studies. The instrument was tested in a pilot study (Noom *et al.*, 1994). Based on the adolescents' and parents' responses to the items in the pilot study, slight modifications were made in the formulation of several items. The final version consists of 24 items (in italics) covering the following developmental tasks:

1. *Personal tasks*: (a) acquiring autonomy with regard to significant decisions one has to take (*deciding on curfew, deciding what clothes to wear, defending own rights*), (b) coping successfully with everyday life situations (*going to disco or cafe alone or with friends, handling own money, spending vacation without parents or other adults, going alone to a doctor, staying home alone when parents are away for a weekend*), (c) dealing with pubertal development (*accepting one's body changes*), (d) developing self-awareness (*being aware of own strengths and weaknesses, taking account of another's judgment regarding oneself*), (e) finding reference values (*having an opinion or a preference regarding political parties, choosing own life philosophy or religion, having an opinion regarding social issues such as abortion, death penalty*).
2. *Relational tasks*: (a) establishing a stable relationship with friends (*having a steady group of friends, having a best friend*), (b) establishing an intimate relationship (*having a boy friend/girl friend, being involved in a sexual relationship*).
3. *Socioinstitutional tasks*: (a) successfully completing one's school career (*bearing responsibility for successfully completing school*), (b) preparing oneself for integration into a work setting (*choosing a profession, having a job*), (c) achieving economic independence (*being financially independent*), and (d) preparing oneself for the responsibility of having one's own family (*living on your own, having own family and taking care of them*).

Adolescents and their parents were asked to decide the age at which the adolescent first engaged or expect to engage in the behaviors described in each item (e.g., "spending vacation without parents or other adults, being involved in a sexual relationship, choosing a profession"). The ages that were reported by respondents were later transformed into a scale ranging from 1 (*before age 8*) through 10 (*25 or older*), thus a higher score indicating later expectations. All analyses were carried out on this 10-point scale.

Each subject was assigned four scores. First, a mean score on 24 items was computed representing an Overall timetable score (alphas for adolescents, mothers, and fathers were respectively .83, .82, and .85). The second score was a mean on the 14 items concerning personal tasks (alphas: adolescents .80, mothers .78, and fathers .80). Third, a score for the relational tasks was a mean on 4 items (alphas: adolescents .53, mothers .62, and fathers .72). Finally, a mean on 6 items assessing socioinstitutional tasks was computed (alphas: adolescents .61, mothers .64, and fathers .64). Though the internal consistency of some of the subscales was only moderate, the subscales are presented here for their descriptive value.

#### *Pubertal Timing*

The degree of pubertal development was assessed with the Pubertal Development Scale (PDS; Petersen *et al.*, 1988). Though the PDS is a self-report instrument, findings from several studies show that it is a valid measure of pubertal status, as indicated by high correlations between the PDS and external (more objective) measures: physician ratings (Brook-Gunn *et al.*, 1987) and interviewer ratings (Petersen *et al.*, 1988). Adolescents were asked to report the state of development of several relevant characteristics. These characteristics included growth spurt in height, pubic hair, and skin change for both boys and girls; facial hair growth and voice change in boys only; and breast development and menarche in girls only. The state of development was indicated on 4-point rating scales (1 = *not yet begun* to 4 = *already completed*) except for menarche (response format: *no/yes*). These sets of items form scales consisting of 5 items for each gender. The internal consistency (alpha) was high for both genders (boys: .88, girls: .86). To obtain an overall pubertal development score, a mean score on the five items was computed.

The sample was then trichotomized into early ( $N = 72$ ), on-time ( $N = 335$ ), and late maturing adolescents ( $N = 94$ ). This was done as follows: subjects scoring 1 standard deviation below the mean of their referent group (the same gender and developmental period) were defined as late



maturers, subjects scoring 1 standard deviation above the mean as early maturers, and the rest of the subjects were defined as on time.

### *Temperament*

The Adolescent Temperament Questionnaire (Feij and Kuiper, 1984) was used to measure several behavioral traits assumed to have a genetic origin and to be relatively stable aspects of personality: Impulse Control (9 items; e.g., "I don't lose my self-control ever"); Thrill and Adventure Seeking (11 items; e.g., "I like new and exciting experiences, even if they are risky"); and Disinhibition (8 items; e.g., "When I do something, I almost never stop to think whether it is allowed or not"). The items were rated by adolescents on a dichotomous scale: true/untrue of me. The internal consistency of the three scales were as follows: Impulse Control .56; Thrill and Adventure Seeking .77; and Disinhibition .68.

### *Parent-Adolescent Conflict*

In order to assess the amount of conflict between adolescents and their parents, parents were asked to indicate on a 5-point scale (1 = *never* to 5 = *very often*) how often they quarrel with their son/daughter about 15 issues (e.g., "academic achievement," "curfew," "home chores," "son's/daughter's friends," etc.). In a previous study (Linden and Dijkman, 1989), it was found that these issues are the most frequent sources of conflict between Dutch adolescents and their parents. The internal consistency of the Parent-Adolescent Conflict List was high for both mothers and fathers: .85 and .86, respectively.

## **RESULTS**

### **Adolescent-Parent Differences**

First, we compared the expectations of adolescents and those of their parents at the aggregate level. It was hypothesized that parents would be more conservative, that is, parents would indicate later ages for the achievement of developmental tasks than adolescents. Mothers' expectations were hypothesized to be more similar than fathers' to the expectations of adolescents. Table I presents expected age for the various developmental tasks by early, middle, and late adolescents and their parents.

Table I. Mean Age of Timing of Developmental Tasks<sup>a</sup>

	Developmental Tasks		
	Personal	Relational	Socioinstitutional
Early (12-13)			
Adolescent	14.0	13.9	18.5
Mother	14.9	14.4	19.2
Father	14.8	14.4	19.0
Middle (14-15)			
Adolescent	14.4	13.5	18.5
Mother	15.1	14.5	19.3
Father	15.3	15.0	19.2
Late (16-18)			
Adolescent	15.2	14.3	19.2
Mother	15.8	15.2	19.6
Father	15.8	15.7	19.7

<sup>a</sup>Though all analyses were conducted on the 10-point scale values for the items measuring developmental expectation, the table shows mean age score, to facilitate interpretation.

The multivariate analyses of variance, with the family member (adolescent, mother, father) as the independent variable, were conducted first for four composite scores (Overall timetables, Personal, Relational, and Socioinstitutional) and, second, for each item.

The Overall timetable score and the scores on the three subscales: Personal, Relational, and Socioinstitutional tasks show strong generational effects. Adolescents consistently indicated earlier ages for the achievement of developmental tasks than their parents: Overall timetables,  $F(2,842) = 38.51$ ,  $p < .001$ ; Personal tasks,  $F(2,854) = 39.72$ ,  $p < .001$ ; Relational tasks,  $F(2,834) = 44.04$ ,  $p < .001$ ; and Socioinstitutional tasks,  $F(2,840) = 22.78$ ,  $p < .001$ . Post hoc analyses (Scheffé test) show that adolescents' expectations were significantly different from the scores of their mothers and their fathers, whereas no differences were found between mothers' and fathers' scores. Contrary to the prediction, mothers' Overall score and three subscale scores were not more similar than fathers' to the scores of adolescents.

The analyses conducted on the item level reveal the same pattern of findings for 14 of the 24 items. Agreement was found between adolescents', mothers', and fathers' age expectations for the developmental tasks of establishing a stable relationship with a group of friends and finding reference values. The biggest difference between adolescents and their parents was found for the items "having a boy/girlfriend" and "staying home alone when parents are away." On 2 items, both dealing with adolescents spending time without adult supervision ("spending vacation without parents or other

adult" and "staying home alone when parents are away"), there was no agreement, either between adolescents and their mothers/fathers, or between fathers and mothers.

In order to examine whether parents and adolescents hold similar views of the sequence in which achievement of developmental tasks should occur, Spearman correlations ( $\rho$ ) were computed between the rank ordering of parents' and adolescents' scores on 24 items. Rank correlations between adolescents' and mothers' scores were highly significant:  $.86, p < .001$ . The same was true for fathers,  $.86, p < .001$ . Thus, despite the fact that parents expect various transition steps to be taken later in adolescence than their adolescents do, parents and adolescents agree strongly regarding the order in which these steps will be taken. The developmental tasks that were expected to be achieved at the earliest ages were establishing stable relationships with friends and acquiring autonomy regarding personal decisions in everyday situations. The tasks that both adolescents and parents expected to be achieved during late adolescence were: preparing oneself for integration into the work setting and for the responsibility of having one's own family.

#### Sex and Age Differences in Developmental Expectations

Next, we examined whether the adolescents' gender and age affect their own and their parents' expectations. Separate 2 (sex)  $\times$  3 (age) factorial analyses of variance were performed for the adolescents', mothers', and fathers' scores. Again, these analyses were conducted on the four composite scores and on each item.

A significant main effect of *adolescent's sex* was found for the Overall timetable score only in the sample of mothers,  $F(1,482) = 11.11, p < .001$ . No significant sex differences were found for the Personal tasks, whereas for Relational tasks the sex differences emerged again only in the sample of mothers,  $F(1,477) = 6.24, p < .05$ . Finally, significant sex differences were found for Socioinstitutional tasks in the parental sample (mothers:  $F[1,482] = 11.22, p < .001$ ; fathers:  $F[1,452] = 12.94, p < .001$ ). In each case, girls were expected to achieve these developmental tasks at earlier ages than boys.

Though these results suggest that sex differences are more prevalent in the parental sample, especially the mothers, than in the sample of adolescents, the analyses performed on the item level show a more differentiated picture. In the sample of adolescents, significant sex differences were found on 6 items. The items on which boys have earlier expectations for themselves were items dealing with behavioral autonomy (deciding on curfew and staying alone for a weekend) and dating behavior. Girls, on the

other hand, expected to accept body changes, to have steady friendships, and to decide about their own clothing at an earlier age than boys did. In the samples of both mothers and fathers, 5 items produced significant sex differences. Both parents expect the acceptance of physical maturation earlier from their daughters than from their sons. They also have earlier expectations for daughters for most of the socioinstitutional tasks (living independently, having a family, taking care of school, choosing a profession, and having a job). In addition, mothers expect that their daughters will have a sexual relationship at an earlier age than their sons. On one item, spending vacation without parents, fathers indicated later expectations for daughters than for sons.

Unexpectedly, significant main effects of *adolescent age* were found on Overall scores in all three samples: adolescents,  $F(2,500) = 19.91, p < .001$ ; mothers,  $F(2,482) = 22.83, p < .001$ ; and fathers,  $F(2,453) = 26.75, p < .001$ . Similar results were obtained for Personal tasks (adolescents,  $F(2,500) = 21.06, p < .001$ ; mothers,  $F(2,486) = 25.44, p < .001$ ; and fathers,  $F(2,453) = 24.08, p < .001$ ) and Relational tasks (adolescents,  $F(2,501) = 7.51, p < .01$ ; mothers,  $F(2,477) = 11.74, p < .01$ ; and fathers,  $F(2,450) = 18.06, p < .001$ ). The effects of age were smaller for the Socioinstitutional tasks: adolescents,  $F(2,498) = 6.78, p < .01$ ; and fathers,  $F(2,452) = 12.96, p < .01$ . In the sample of mothers age effect was not significant,  $F(2,482) = 2.98, ns$ . All significant age effects showed the same pattern: late adolescents and parents of late adolescents indicated consistently later timetables than middle and early adolescents and their parents.

The item analyses show that only 2 of the items on which significant age effects were found (adolescents 14 items, mothers 14 items, and fathers 18 items) do not follow this pattern. In the adolescent sample, younger adolescents expect to have a sexual relationship and to have an opinion regarding important social issues at later ages than older adolescents. Taken together, the age effects were quite similar across the three samples (adolescents, mothers, and fathers). No age differences in expectations were found either on items concerning tasks in early adolescence, such as acquiring autonomy with regard to everyday decisions, with which most of our sample already have experience (reported age was lower than target adolescent's actual age), or on the tasks in late adolescence, which are defined more by societal rules than by personal abilities, such as being financially independent and having a job.

### Correlates of Developmental Expectations

The second aim of this study was to examine whether personal characteristics of adolescents (gender, pubertal timing, and temperament) affect

**Table II.** Results of the Regression Analysis Predicting Adolescents' and Parents' Developmental Expectations (Overall Score) from Adolescent's Age, Gender, Pubertal Timing, and Temperament

Predictor	Beta Coefficients		
	Adolescent	Mother	Father
Adolescent's age <sup>a</sup>	.30 <sup>f</sup>	.29 <sup>f</sup>	.32 <sup>f</sup>
Adolescent's sex <sup>b</sup>	-.02	.15 <sup>c</sup>	.06
Pubertal timing <sup>c</sup>			
Early	-.14 <sup>e</sup>	-.08	.08
Late	-.07	-.04	-.04
Impulse control	.01	.10 <sup>d</sup>	.00
Thrill and adventure seeking	-.09	-.00	-.02
Disinhibition	-.17 <sup>f</sup>	-.10 <sup>d</sup>	-.01
Multiple <i>R</i>	.35	.33	.34
<i>F</i> value	9.52 <sup>f</sup>	8.17 <sup>f</sup>	8.04 <sup>f</sup>

<sup>a</sup>Age in years.

<sup>b</sup>Boys = 1, girls = 0.

<sup>c</sup>Dummy variable. The coefficients for the early and late groups represent the effects of each of these levels of pubertal timing relative to the on-time group.

<sup>d</sup>*p* < .05.

<sup>e</sup>*p* < .01.

<sup>f</sup>*p* < .001.

the expectations held by adolescents and parents regarding development during adolescence. Based on the results of analysis of variance that showed strong age effects, in addition to gender, pubertal timing, and temperament, adolescent's age was also included as a potential predictor. Pubertal timing measure was entered into the regression as two dummy variables. Dummy codes were constructed so that the corresponding regression coefficients provide comparisons of the early and late maturers to the "on-time" adolescents. The regression analyses predicting the Overall timetable score from these characteristics were performed separately for adolescents, mothers and fathers (Table II). All predictors were simultaneously entered into the equation.

Age appears to be a significant predictor of developmental timetables in all three samples. Adolescents' gender emerged as a significant predictor only for mothers' timetables. In the sample of adolescents, pubertal timing was a significant predictor and its effect was in the predicted direction: early maturing adolescents expect to achieve developmental tasks at earlier ages than late maturers. Finally, the adolescents' temperamental characteristics, such as the ability to control and inhibit impulses, significantly affected expectations of the adolescents and the mothers, but not these of the fathers. In summary, the effect of age was

Table III. Correlations Between Discrepancies in Developmental Expectations and Parent-Adolescent Conflict

Age	Mother-Daughter	Mother-Son	Father-Daughter	Father-Son
Early adolescence	.24 <sup>a</sup> ( <i>N</i> = 79)	.13 ( <i>N</i> = 71)	.21 <sup>a</sup> ( <i>N</i> = 73)	.01 ( <i>N</i> = 72)
Middle adolescence	.17 ( <i>N</i> = 62)	.04 ( <i>N</i> = 67)	.21 <sup>a</sup> ( <i>N</i> = 58)	.26 <sup>a</sup> ( <i>N</i> = 64)
Late adolescence	.07 ( <i>N</i> = 87)	.09 ( <i>N</i> = 78)	.10 ( <i>N</i> = 74)	.14 ( <i>N</i> = 83)
Total sample	.14 <sup>b</sup> ( <i>N</i> = 228)	.08 ( <i>N</i> = 216)	.16 <sup>a</sup> ( <i>N</i> = 205)	.12 <sup>a</sup> ( <i>N</i> = 219)

<sup>a</sup>*p* < .05.

<sup>b</sup>*p* < .01.

greatest, followed by gender, pubertal maturation, and temperament, respectively. In all three samples, however, these predictors explained only a moderate amount of the variance in the criterion measure of developmental timetables.

#### Discrepancies in Developmental Expectations and Adolescent-Parent Conflict

The last question concerns the relationship between differences in adolescents' and parents' expectations and the amount of parent-adolescent conflict. Two discrepancy scores were calculated, one for mother-adolescent difference and one for father-adolescent difference, by summing up the absolute difference between adolescent's and parent's scores on each of the 24 items. Analyses of variance on two discrepancy scores, yielded neither significant main effects (sex of parent, sex of adolescent, and adolescent age) nor significant interactions. Though the discrepancies in expectations were not affected by adolescent age and sex or sex of parent, there is still possibility that a unique relationship exists between discrepancies and conflict for different parent-adolescent dyads in different age groups (Collins, 1991). To examine this possibility the correlations between the discrepancy scores and the amount of parent-adolescent conflict were computed separately for mother-daughter, mother-son, father-daughter, and father-son dyads in three different age groups (early, middle, and late adolescence). The results are presented in Table III.

For the total sample it appears that discrepancy in expectations between parents and adolescents, with exception of the mother-son dyad, is moderately associated with the amount of conflict. When these correlations

were computed separately for each age group, significant relationships between differences in expectations and the amount of conflict were found for parent–daughter dyads in early adolescence and for father–adolescent dyads in middle adolescence. No significant relationships were found for any of the dyads in late adolescence.

## DISCUSSION

The results of this study replicated and extended Feldman and Quatman's (1988) findings regarding parent–adolescent differences in expectations about behavior and development during adolescence. It appears that adolescents have earlier timetables than their parents, not only in the domain of behavioral autonomy, but also in several other domains of development: personal, relational and socioinstitutional.

These findings however are not consistent with the results of Rosenthal and Bornholt's study (1988), in which no differences were found between expectations held by adolescents and by their mothers and fathers. Though their study involved a small sample of only 40 families with early adolescents, and thus the results may have been an effect of some idiosyncrasy in the sample, it is also possible that cross-cultural differences exist in (dis)similarity of ideas across family members.

The greatest discrepancy between adolescents and their parents in our sample was found in the domain of personal relationships of adolescents (having a boy/girl friend) and adolescents' unsupervised activities. These differences in expectations are probably due to the substantial differences in experience and role of parents and adolescents. As Feldman and Quatman aptly put it, "The parental role is essentially conservative; mothers and fathers are, in general, invested in conserving, protecting, maintaining, promoting safe growth and development of their offspring. The adolescent, on the other hand, is more of an experimentalist, inclined to seek the new, the expansive, the differentiated in order to experience the very growth the parent envisions" (Feldman and Quatman, 1988, p. 327).

Though parents expect their adolescents to achieve the assessed tasks at later ages than the adolescents do, adolescents and parents have strikingly similar views of the sequence in which achievement of developmental tasks should occur. Earliest transitions according to adolescents and parents should be expected with regard to everyday decisions, such as choosing clothes and defending one's own rights. Establishing stable friendships, accepting one's own body and developing a realistic self-concept were also expected at a comparatively early age. The socioinstitutional tasks, such as

setting up an independent life, were expected to be achieved later in adolescence.

The results did not support the hypothesis that the mothers' expectation would be more similar than the fathers' to the expectations of their adolescents. Most of the participating families in the present study have a traditional structure, with the father being the main provider of family income and the mother primarily involved in child care. It could therefore be expected that the mothers in our sample do have more contact with their adolescents, but this did not affect their developmental timetables. No differences were found between mothers' and fathers' expectations, and their rank orderings of timing of developmental tasks were highly similar.

At overall level, sex differences in developmental timetables were somewhat more prevalent in the parental sample than in the adolescent sample. Parents, especially mothers, seem to have different expectations for their sons and daughters. Contrary to what was expected, parents expect girls to engage in the assessed behavior at earlier ages than boys. The pattern of sex differences in the adolescents shows that boys and girls have more traditional expectations regarding the age appropriate behavior for both sexes than their parents. In contrast to parents, adolescents indicate earlier achievement of behavioral autonomy and earlier engagement in dating behavior for boys, whereas the girls' earlier achievements concern friendships, clothes choice, and acceptance of physical maturation.

Another interesting finding concerns persistent age effects for both adolescents and their parents. Older adolescents and their parents indicated consistently later ages for achievement of developmental tasks than younger adolescents and their parents. A possible explanation for these results is that parents and adolescents overestimate adolescents' abilities in the domains with which they have no prior experience. This overestimation appears to decrease as the adolescent gets older and actually confronts these developmental tasks. Both adolescents and parents then receive realistic feedback concerning the adolescent's ability. This line of reasoning is consistent with the results of the studies that examined parents' prediction of children's performance, ability, or development (see for review Miller, 1988). These studies showed that parents are only moderately accurate and that they tend to overestimate what children can do. Parents' accuracy seems to increase as they have more opportunity to observe their child's performance. For example, parents' academic expectations become increasingly more realistic as children progress through school. The tendency toward overestimation of ability seems to be considerably greater when the target is one's own child than when target is "an average child." Our results suggest that overestimation is equally pronounced in adolescents' and parents' expectations.



Examination of the relative contribution of the adolescents' characteristics (age, gender, pubertal timing, and temperament) to the prediction of developmental expectations shows that age is the most potent predictor. The adolescents' gender seems to affect only the mothers' expectations, but not their own or those of fathers. Though mothers' expectations were differentiated on the basis of gender, mothers did not indicate more stereotypes in the sense of expressing traditional men's and women's roles. On the contrary, mothers expected autonomy and maturity from their daughters earlier than from their sons. Pubertal timing emerged as a significant predictor only in the sample of adolescents: the more advanced adolescents are in physical maturation relative to their sex- and age-mates, the earlier expectations they have regarding development. Similar results were obtained by Noack and Kracke (1992) in the sample of adolescent boys and their parents.

Two of the assessed temperamental characteristics also contributed to the prediction of developmental timetables in the samples of adolescents and mothers. The impulsive adolescents with a strong tendency to seek sensation through deviant means (such as alcohol, drugs, or nonconformist life style) have earlier developmental expectations. It is interesting to note the items of the DTA that correlated significantly with impulse control and disinhibition. In the sample of adolescents, a low level of control and disinhibition was positively associated with earlier expectations on 9 items, all of which indicate privileges of growing up (deciding on curfew, spending time with friend without supervision, having a boy/girlfriend, being involved in a sexual relationship and setting up an independent life). However, the items indicating responsibilities of adulthood, such as choosing a profession and taking care of school career, showed a negative relationship with temperament, i.e., adolescents low in impulse control have later expectations of achievement in these tasks. Similar patterns of correlations were also found in the sample of mothers. A low level of impulse control was associated with earlier expectations for privileges, rather than responsibilities of growing older. Interestingly, fathers' expectations were not affected by adolescents' temperament.

The final question examined in this study concerns the relationship between discrepancies in developmental expectations and parent-adolescent conflict. This relationship appears to be different for different dyads and different age groups. The hypothesis that discordant expectations would lead to more conflict was supported for mother-daughter, father-daughter, and father-son dyads. Examination of this relationship in different age groups reveals that discrepancy affects the amount of parent-daughter conflict during early adolescence. Middle adolescence appears to be a particularly sensitive period for the fathers, i.e., during middle adolescence the discrepancy

in expectations was related to the amount of conflict in both father–daughter and father–son dyads. In late adolescence no significant relationships were found between discrepancy in expectations and the amount of parent–adolescent conflict. These results are consistent with findings that show an increase in conflict in mother–adolescent relationships during early adolescence and a decrease in conflict with both parents after the age of 15–16 (Montemayor, 1986). Dyadic variations in the strength of association between discrepancies and conflict are in line with previously reported findings (Collins, 1991): the discrepancies in expectations between parents and their daughters are more strongly related to the amount of conflict than the discrepancies between parents (especially mothers) and their sons.

It should be noted that the magnitude of these associations was relatively small. In this study we examined only parental perceptions of conflicts with their adolescents. Studies using both adolescents' and parents' reports of conflicts have shown that parents assess the parent–adolescent relationship more positively and judge conflicts to be less severe and less frequent than do adolescents (Demo, 1991; Smith and Forehand, 1986). This could attenuate the strength of the relationship. Another possible explanation for the relatively weak associations concerns the differences in the domains which the two instruments cover. Most of the issues in the Parent–Adolescent Conflict List deal with concrete, everyday problems, such as siblings' quarrels, home chores or the choice of TV program. Though some of the items in the DTA assess expectations regarding autonomy in everyday situations, many of the items deal with more abstract issues, such as development of self-awareness, accepting body changes, or finding reference values. A measure of parent–adolescent conflict that is more congruent with the DTA might have produced higher correlations. Of course, this is speculative and such a possibility remains to be explored empirically.

Future research is required to provide more data regarding the reliability and validity of the DTA, but the first results seem promising. The instrument is easy to administer, it is not time-consuming, and it appears to tap issues that are relevant for both adolescents and their parents. Apart from the utility of DTA for researchers interested in the cognitive aspects of parent–adolescent relations, the instrument could also be useful for clinicians. It can provide information about issues that constitute the locus of greatest discrepancy in the adolescent's and the parent's beliefs and it can identify extreme, unrealistic, or distorted expectations held by some of the family members. The latter might be especially important in the light of findings that indicate that parents and adolescents from families in therapy adhere more rigidly to a number of unrealistic beliefs about the adolescence period than do parents and adolescents from nondistressed families (Roehling and Robin, 1986).

## REFERENCES

- Brooks-Gunn, J., Petersen, A. C., and Eichorn, D. (1985). The study of maturational timing effects in adolescence. *J. Youth Adolesc.* 14: 149-161.
- Brooks-Gunn, J., Warren, M. P., Rosso, J., and Gargiulo, J. (1987). Validity of self-report measures of girls' pubertal status. *Child Develop.* 58: 829-841.
- Buchanan, C. M., Eccles, J. S., Flanagan, C., Midgley, C., Feldlaufer, H., and Harold, R. D. (1990). Parents' and teachers' beliefs about adolescents: Effects of sex and experience. *J. Youth Adolesc.*, 19: 363-394.
- Collins, W. A. (1991). Shared views and parent-adolescent relationship. In Paikoff, R. L. (ed.), *Shared Views in the Family During Adolescence*. Jossey-Bass, San Francisco, pp. 103-110.
- Cooper, C. R., and Grotevant, H. D. (1987). Gender issues in the interface of family experience and adolescents' friendship and dating identity. *J. Youth Adolesc.* 16: 247-264.
- Demo, D. H. (1991). A sociological perspective on parent-adolescent disagreements. In Paikoff, R. L. (ed.), *Shared Views in the Family During Adolescence*. Jossey-Bass, San Francisco, pp. 111-118.
- Epstein, A. S. (1980). *Assessing the Child Development Information Needed by Adolescent Parents with Very Young Children*. Department of Health, Education and Welfare, Washington, DC.
- Feij, J. A., and Kuiper, C. M. (1984). *Adolescent Temperament Lijst (ATL)* [Adolescent Temperament Questionnaire]. Swets and Zeitlinger, Lisse.
- Feldman, S. S., and Quatman, T. (1988). Factors influencing age expectations for adolescent autonomy: A study of early adolescents and parents. *J. Early Adolesc.* 8: 325-343.
- Feldman, S. S., and Rosenthal, D. A. (1990). The acculturation of autonomy expectations in Chinese high schoolers residing in two Western nations. *Int. J. Psychol.* 25: 259-281.
- Feldman, S. S., and Rosenthal, D. A. (1991). Age expectations of behavioral autonomy in Hong Kong, Australian and American youth: The influence of the family variables and adolescents' values. *Int. J. Psychol.* 26: 1-23.
- Goodnow, J. J. (1988). Parents' ideas, actions, and feelings: Models and methods from developmental and social psychology. *Child Develop.* 59: 286-320.
- Goodnow, J. J., Cashmore, J., Cotton, S., and Knight, R. (1984). Mothers' developmental timetables in two cultural groups. *Int. J. Psychol.* 19: 193-205.
- Goodnow, J. J., and Collins, W. A. (1990). *Development According to Parents: The Nature, Sources, and Consequences of Parents' Ideas*. Erlbaum, London.
- Hess, R.D., Kashiwagi, K., Azuma, H., Price, G. G., and Dickson, W. P. (1980). Maternal expectations for mastery of developmental tasks in Japan and the United States. *Int. J. Psychol.* 15: 259-271.
- Holmbeck, G. N., and O'Donnell, K. (1991). Discrepancies between perceptions of decision making and behavioral autonomy. In Paikoff, R. L. (ed.), *Shared Views in the Family During Adolescence*. Jossey-Bass, San Francisco, pp. 51-69.
- Johnson, B. M., and Collins, W. A. (1988). Perceived maturity as a function of appearance cues in early adolescence: Rating of unacquainted adults, parents and teachers. *J. Early Adolesc.* 8: 357-372.
- Linden, F. J. van der, and Dijkman, T. A. (1989). *Jong zijn en volwassen worden in Nederland* [Being young and becoming adult in The Netherlands]. Hoogveld Instituut, Nijmegen.
- MacPhee, D. (1981). *Manual: Knowledge of Infant Development Inventory*. Unpublished manuscript, University of North Carolina.
- Miller, S. A. (1988). Parents' beliefs about children's cognitive development. *Child Develop.* 59, 259-285.
- Montemayor, R. (1982). The relationship between parent-adolescent conflict and amount of time adolescents spend alone and with parents and peers. *Child Develop.* 53: 1512-1519.
- Montemayor, R. (1983). Parents and adolescents in conflict: All families some of the time and some families most of the time. *J. Early Adolesc.* 3: 83-103.
- Montemayor, R. (1986). Family variation in parent-adolescent storm and stress. *J. Adolesc. Res.* 1: 15-31.

- Montemayor, R., and Brownlee, J. R. (1987). Fathers, mothers, and adolescents: Gender-based differences in parental roles during adolescence. *J. Youth Adolesc.* 16: 281-291.
- Nitz, K., and Lerner, J. V. (1991). Temperament during adolescence. In Lerner, R. M., Petersen, A. C., and Brooks-Gunn, J. (eds.), *Encyclopedia of Adolescence*. Garland Publishing, New York, pp. 1127-1130.
- Noack, P., and Kracke, B. (1992, September). Developmental timetables for adolescents: Similarities and differences between adolescents, their mothers, fathers, and friends. Poster presented at the Vth European Conference on Developmental Psychology, Seville, Spain.
- Noon, M., Deković, M., and Loenen, K. van (1994, June). Measures of parental behavior towards adolescents: Convergent, discriminant, and external validity. Poster presented at the Thirteenth Biennial Meeting of ISSBL, Amsterdam, The Netherlands.
- Palmonari, A., Kirchler, E., and Pombeni, M. L. (1991). Differential effects of identification with family and peers on coping with developmental tasks in adolescence. *Eur. J. Social Psychol.* 21: 381-402.
- Palmonari, A., Pombeni, M. L., and Kirchler, E. (1989). Peer group and evolution of the self-system in adolescence. *Eur. J. Psychol. Educat.* 4: 3-15.
- Palmonari, A., Pombeni, M. L., and Kirchler, E. (1990). Adolescents and their peer-groups: A study on the significance of peers, social categorization processes, and coping with developmental tasks. *Social Behav.* 5: 33-48.
- Papini, D. R., and Micka, J. C. (1991). Synchronization in ratings of pubertal maturity and faulty beliefs about family relationship. In Paikoff, R. L. (ed.), *Shared Views in the Family During Adolescence*. Jossey-Bass, San Francisco, pp. 33-50.
- Petersen, A. C., Crockett, L., Richards, M., and Boxer, A. (1988). A self-report measure of pubertal status: Reliability, validity, and initial norms. *J. Youth Adolesc.* 17: 117-133.
- Paikoff, R. L. (ed.). (1991). *Shared Views in the Family During Adolescence*. Jossey-Bass, San Francisco.
- Paikoff, R. L., and Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty? *Psychol. Bull.* 110: 47-66.
- Roehling, P. V., and Robin, A. L. (1986). Development and validation of the Family Beliefs Inventory: A measure of unrealistic beliefs among parents and adolescents. *J. Consult. Clin. Psychol.* 54: 693-697.
- Rosenthal, D., and Bornholt, L. (1988). Expectations about development in Greek- and Anglo-australian families. *J. Cross-Cult. Psychol.* 19: 19-34.
- Silbereisen, R. K. (1992, April). Psychological risks in adolescence. Paper presented at the Third Biennial Conference of the EARA, Bologna, Italy.
- Silbereisen, R. K., and Kracke, B. (1993). Variation in maturational timing and adjustment in adolescence. In Jackson, S., and Rodriguez-Tomé, H. (eds.), *Adolescence and Its Social World*. Erlbaum, East Sussex, pp. 67-94.
- Smith, K. A., and Forehand, R. (1986). Parent-adolescent conflict: Comparison and prediction of the perceptions of mothers, fathers, and daughters. *J. Early Adolesc.* 6: 353-367.
- Thomas, A. and Chess, S. (1977). *Temperament and Development*. Brunner/Mazel, New York.
- Thomas, A. and Chess, S. (1991). Temperament in adolescence and its functional significance. In Lerner, R. M., Petersen, A. C., and Brooks-Gunn, J. (eds.), *Encyclopedia of Adolescence*. Garland Publishing, New York, pp. 1131-1340.
- Youniss, J., and Smollar, J. (1985). *Adolescent Relations with Mothers, Fathers, and Friends*. University of Chicago Press, Chicago.