

Lessons Learned at Home:  
Relations Between Parents' Child-rearing Practices  
and Children's Achievement Perceptions

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## Background

A large body of literature has established the relation between general patterns of child rearing and children's achievement motivation (e.g., Goodnow & Collins, 1990 or Eccles, 1992 for review). Most studies show that parents' general beliefs about the value of achievement and their provision of a warm and supportive environment are related to higher achievement motivation and self-perceptions of abilities in their children. Grolnick and Ryan (1993) suggest that two of the important components of the child-rearing climate are support for autonomous behavior and structure. Although much of the developmental literature implies that parenting practices surrounding issues of autonomy, monitoring, and inclusion of the child in decision making are stable characteristics of the parent, it is likely that parents' practices are responsive to their perceptions of their child's characteristics. For example, parents may have different reasons for giving their children autonomy. Some children may receive greater autonomy and less monitoring because their parents believe they are responsible, while others may receive the same treatment because their parents believe they are wild and have given up trying to control them. It seems likely that parental views of their children's characteristics form early in childhood, but have far-reaching implications for the relationship that develops between parent and child, the child-rearing practices used by the parent with the child, and the achievement outcomes as the child matures. By the time children reach adolescence, the perceptions and practices of their parents may be related to the adolescents' achievement and to their perceptions of parental monitoring and strictness. The goals of the current, study were to examine relations between parents' perceptions of their children during middle childhood and their subsequent monitoring and affective relationship with that child

and to examine the relations between parenting practices in middle childhood and adolescents' achievement, self-perceptions of achievement, and perceptions of the autonomy and monitoring they are receiving. The research questions we asked were: 1) Are parents' perceptions of their children's characteristics during middle childhood related to their affective relationship with the child a year later? 2) Is the parents' perception of their affective relationship with the child related to parenting practices? and 3) How are the affective relationship and parenting practices in middle childhood related to the child's perceptions and achievement in adolescence?

### **Sample and Measures**

Data reported here were collected from 354 children and their parents as part of the Childhood and Beyond study, a large, longitudinal study of childhood and early adolescence in the upper Midwest. Three cohorts of children were included in the study (the design has already been described by Jenn Tanner). The analyses included here were based on parents responses to questionnaires about their perceptions of their children when the children were in the second, third, and fifth grades and again when they were in the third, fourth, and sixth grades; these responses were related to adolescents' responses about achievement, perceived parental strictness, monitoring, and relationships with their parents when they were in the seventh, eighth, and tenth grades.

#### **Measures**

Using 7-point Likert type scales, parents and students completed self-report measures that assessed their values, personalities, well-being, perceptions, and self-concepts. All scales were computed using the entire sample and were guided by the use of

principle components factor analysis (See Appendix A for alpha reliabilities and sample items).

### Parent Measures

In order to create groups based on mothers' values, mothers were asked to complete two measures; social and academic value. On a 7-point Likert scale, the mean value for mothers' academic value was 6.58 (range = 4.68 to 7). Because the value "4" on the scale represented "neutral" all mothers described themselves as "high" on academic value. In order to stringently restrict the sample to mothers with high academic value, two mothers who had reported scale values of less than "5" were excluded from the sample. A similar procedure was used to develop groups based on mothers' social value. The mean report for mothers' social value was 4.8 (range = 2.25 to 7). Mothers who reported values equal to or above "4" were assigned to the "high social value" group, while those mothers who reported a social value of less than "4" were assigned to the "low social value" group.

### Student Measures

The research questions in this study addressed the relations between IQ, academic success, and psychosocial adaptation. Therefore, academic as well as psychosocial measures were used to assess student outcomes (See Appendices A and B for alphas and sample items). In order to assess students' academic success four variables were

measured; student Math self-concept of ability, student English self-concept of ability, student GPA, and student's Future educational Plans.

The participants in this research were part of a seven-phase, large-scale longitudinal study of child and adolescent development conducted by Eccles and her colleagues (Eccles, Wigfield, Blumenfeld, & Harold, 1984; Eccles, Blumenfeld, Harold, & Wigfield, 1990). The population from which this sample was drawn was a subset of 12 schools, in four primarily white, middle class school districts in suburban communities. At phase 1 of the study, in 1986 there were 1108 students in the sample, 334 in kindergarten (cohort 1), 342 in first grade (cohort 2), and 432 in third grade (cohort 3) (see Figure 1 for study design). In addition, 432 mothers, 269 fathers, and all of the students' teachers provided information through questionnaires and/or interviews about the target child, adult's relationship with the child, and the school and familial contexts of the target child.

For purposes of this study, cohorts 1 and 2 were combined ( $N = 766$ ). Student and parent data from Phase 4 (when children were in grades 3 and 4) and student data from Phase 5 (during adolescence when the students were in grades 7 and 8) were used in the present study. Of the 766 students, 437 mothers and only 271 fathers returned questionnaires. Therefore, a decision to include only mothers' reports for this study was made. This decision was based on empirical reports that mothers tend to more strongly influence the academic performance of their children (Winner, 1996). No group differences were found between students whose mothers did and did not participate at Wave 4 on any of the student measures used in these analyses.

Of the sample of 437 mother-child dyads, 212 girls and 225 boys were included for purposes of these analyses. Students were, on average, 10 and 14 years of age at Time 1

and Time 2 respectively. Therefore, student reports from Time 1 represent childhood data and responses at Time 2 will be referred to as adolescent data. The range of income for parents in this study was \$50,000 to \$70,000 and mothers' and fathers' average education was just below a four year undergraduate degree.

Although both mothers and fathers responded to questionnaires in the original study, all analyses presented here involved only mothers' data. Variables used in these analyses were created by averaging across 2- 6 items that had been answered on 7-point Likert scales by mothers or adolescents. Alphas and example items of each scale are given in Tables 1 and 2.

## **Results**

### Are parents' perceptions of their children's characteristics during middle childhood related to their affective relationship with the child a year later?

To answer this question we performed a series of three regressions, using the child characteristics of disruptive, prosocial, independent, and perfectionist as the independent variables (from grades 2, 3, & 4) and mothers' perceptions of conflict with the child, closeness to the child, and trust of the child a year later as the dependent variables. In addition, cohort was added as an independent variable to each model to control for any cohort effects. The results are presented in Table 2. In general, although the results were not identical across the dependent variables, the results give a consistent and coherent picture: mothers who perceive their children as disruptive and lacking prosocial skills, describe less trust and higher conflict a year later, while mothers who view

their children as prosocial, independent, and perfectionistic describe greater closeness and trust and less conflict a year later.

Is the parents' perception of their affective relationship with the child related to parenting practices?

We expected parents who trust their children, feel close to them, and experience low conflict with them to describe different parenting practices than those who do not experience such a positive affective relationship. Thus, we decided to try to highlight the differences between parents. This was accomplished by the use of a cluster analysis on the three variables just described. Two groups emerged from the cluster analysis: one that was high in closeness and trust, but low in conflict and one that was high in conflict and low in closeness and trust. The parenting practices of the two groups were then compared. We were particularly interested in practices that might be related to later achievement, so the practices included in the analysis were 1) doing homework with the child, 2) talking to the child about school, 3) allowing the child to participate in family decision making, and 4) the parent having control over the child's academic outcomes. We found consistent differences across all of the parenting practices -- the group who felt close to their children was higher on every count than the group who did not feel close (all differences were significant except "doing homework."). See Figure 1.

How are the affective relationship and parenting practices in middle childhood related to the child's perceptions and achievement in adolescence?

The most important question that we asked in this study was how mothers' perceptions and parenting practices were related to their children's achievement and perceptions four years later. To maximum differences between parenting practices, we

again clustered mothers, but this time according to the four parenting practices reported above. This resulted in two clusters: one in which mothers were highly involved in homework, talked to their child often, included the child in family decisions, and felt that they had a lot of control over academic outcomes; the other in which mothers were seldom involved in homework, talked to the child less, included the child in decision making less, and felt less control.

To test the relations between mothers' perceptions and practices and adolescent outcomes, a series of ANOVAs was conducted. The independent variables were the two grouping variables created from the cluster analyses: mothers' perceived Closeness (low vs. high) and mothers' Involvement (low vs. high). Two sets of dependent variables were tested: 1) achievement outcomes and perceptions (GPA at wave 5, self-perceptions of math ability at wave 5); 2) perceptions of affective relationship with parents (closeness to parents at wave 5, perceived parent support at wave 5); and 3) perceptions of parental monitoring (parent monitoring of social activities at wave 5, parental strictness at wave 5). Cohort was included as a covariate in all analyses to control for any effects of cohort membership. The results are depicted in Figures 2, 3, and 4.

In the set of achievement variables, main effects for Closeness were found for both variables, with teens whose mothers felt close to them in elementary school getting better grades ( $F(2, 127) = 14.47, p < .001$ ) and feeling better about their academic abilities ( $F(2, 351) = 5.07, p < .05$ ). A main effect for Involvement was found only for ability perceptions with those whose mothers were less involved feeling better than those whose mothers were more involved ( $F(2, 351) = 7.18, p < .01$ ). No interaction effect was found.



The tests with the affective variables revealed main effects for both Closeness and Involvement, but not interaction effects. The adolescents of mothers who felt close to them in elementary school reported significantly higher levels of parental support ( $F(2, 342) = 7.12, p < .01$ ) and closeness ( $F(2, 361) = 7.10, p < .001$ ) than did those whose mothers did not feel close four years earlier. In addition, teens of mothers who were more involved in elementary school reported significantly higher levels of support ( $F(2, 342) = 12.98, p < .001$ ) and closeness ( $F(2, 361) = 12.98, p < .001$ ) than those whose mothers were not involved.

Finally, the ANOVAs using adolescents' perceptions of parental monitoring revealed a main effect for Involvement when the dependent variable was parental monitoring of activities. Teens whose mothers were highly involved in the earlier years report significantly more monitoring than those whose mothers were less involved ( $F(2, 352) = 7.71, p < .01$ ). In addition, adolescents whose mothers did not feel close in the elementary years, see their mothers as significantly more intrusive four years later ( $F(2, 352) = 6.73, p < .01$ ).

### **Discussion**

The results of this study suggest that mothers' early beliefs about their child's characteristics are related to differentiated feelings of closeness and differentiated parenting practices related to decision making and academic involvement, that are, in turn, related to adolescents' achievement, and their perceptions of the parental closeness, monitoring, and strictness they experience. It is likely that mothers' positive perceptions of their children are conveyed throughout middle childhood and into adolescence by

the child positive affective responses, more trust, and more autonomy about schoolwork. Although many of us would see parent involvement in schoolwork as a positive thing, it may have a downside. Over-involvement may convey lack of trust to children, resulting in lower perceptions of ability and grades. The analyses reported here represent only a beginning look at the roles of parent affect and practices related to later adolescent perceptions and achievement; however, it is clear that parents' perceptions of their children and their affective responses have long-term implications for educational outcomes. Parents who believe that their children are hard to control appear to give them less decision autonomy and become more involved in schoolwork, but their adolescents less academic achievement and less support from their parents.

These findings are important for educators and researchers because they underscore the importance of parents' child-specific beliefs and practices for our understanding of how learners come to achievement settings. Although most parents will say that they value education and that they want their children to succeed in school, we may need to look more closely at how their perceptions of their own children are related to the way they structure the environment. Some practices may be more consistent with academic success than others.

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**Table 1**  
**Mother Scales: Examples Items and Alphas**

<b>Title</b>	<b>Example</b>	<b>Alpha</b>
Child is Independent	5 characteristics (e.g., curious, eager to try new things)	.70
Child is Disruptive	5 characteristics (e.g., annoys others, can't sit still, aggressive)	.61
Child is Prosocial	6 characteristics (e.g., cooperates with peers, concerned about others)	.75
Child is Responsible	6 characteristics (e.g., well-organized, doesn't give up)	.79
Trust Child	I trust this child to do what I expect without checking up. (6 items)	.73
Conflict w/Child	There is a good deal of conflict between this child and me. (5 items)	.86
Close to Child	I am emotionally very close with this child. (3 items)	.74
Talk with Child	We discuss the child's experiences at school. (5 items)	.83
Homework with Child	I help this child with school work. (5 items)	.86
Control over Child	How well are you able to get this child to stay out of trouble in school? (5 items)	.87
Family Decision Making	How often does the child take part in decisions concerning him/her? (5 items)	.87

**Table 2**  
**Adolescent Scales: Examples Items and Alphas**

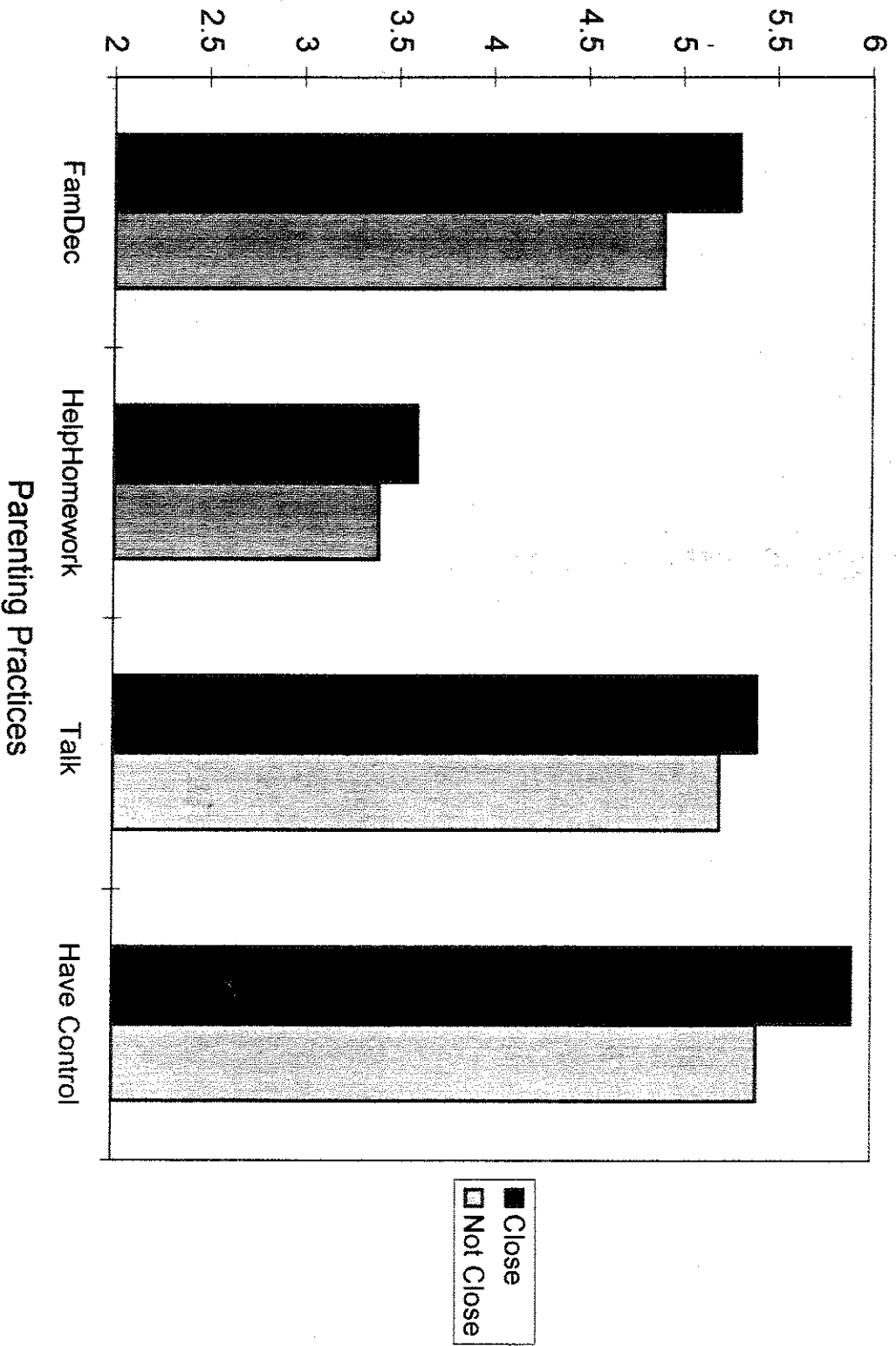
<b>Title</b>	<b>Example</b>	<b>Alpha</b>
Affective Relationship w/Mother	How often does your mom listen carefully to your point of view? (3 items)	.86
Parental Support	How often does your mom/dad listen carefully? (7 items)	.86
Parental Strictness	My parents are always telling me what to do. (4 items)	.75
Parental Monitoring	How often do your parents know where you are? (2 items)	.82
Math Self Concept	How good at math are you? (5 items)	.90

Table 3

Beta-weights for Regression Analyses:  
Mothers' Conflict, Closeness, and Trust

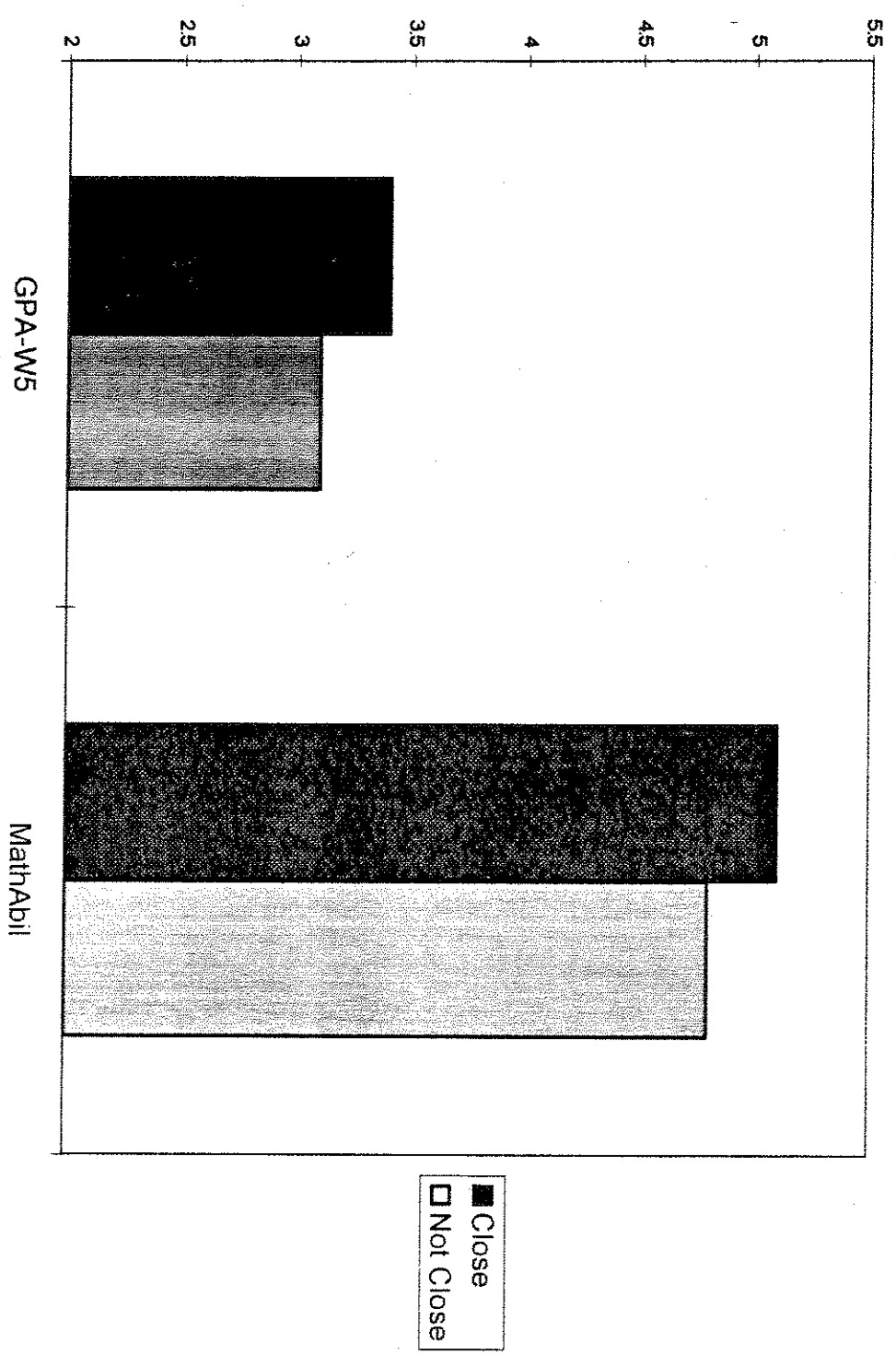
	Conflict	Closeness	Trust
Child is:			
Disruptive	.08	.01	-.23*
Prosocial	-.33*	.31*	.23*
Independent	-.08	.13*	-.00
Responsible	.03	.13*	.29*
Cohort	.09	-.07	-.03
$R^2$	.16	.18	.33

# Parenting Practices by Mother's Closeness

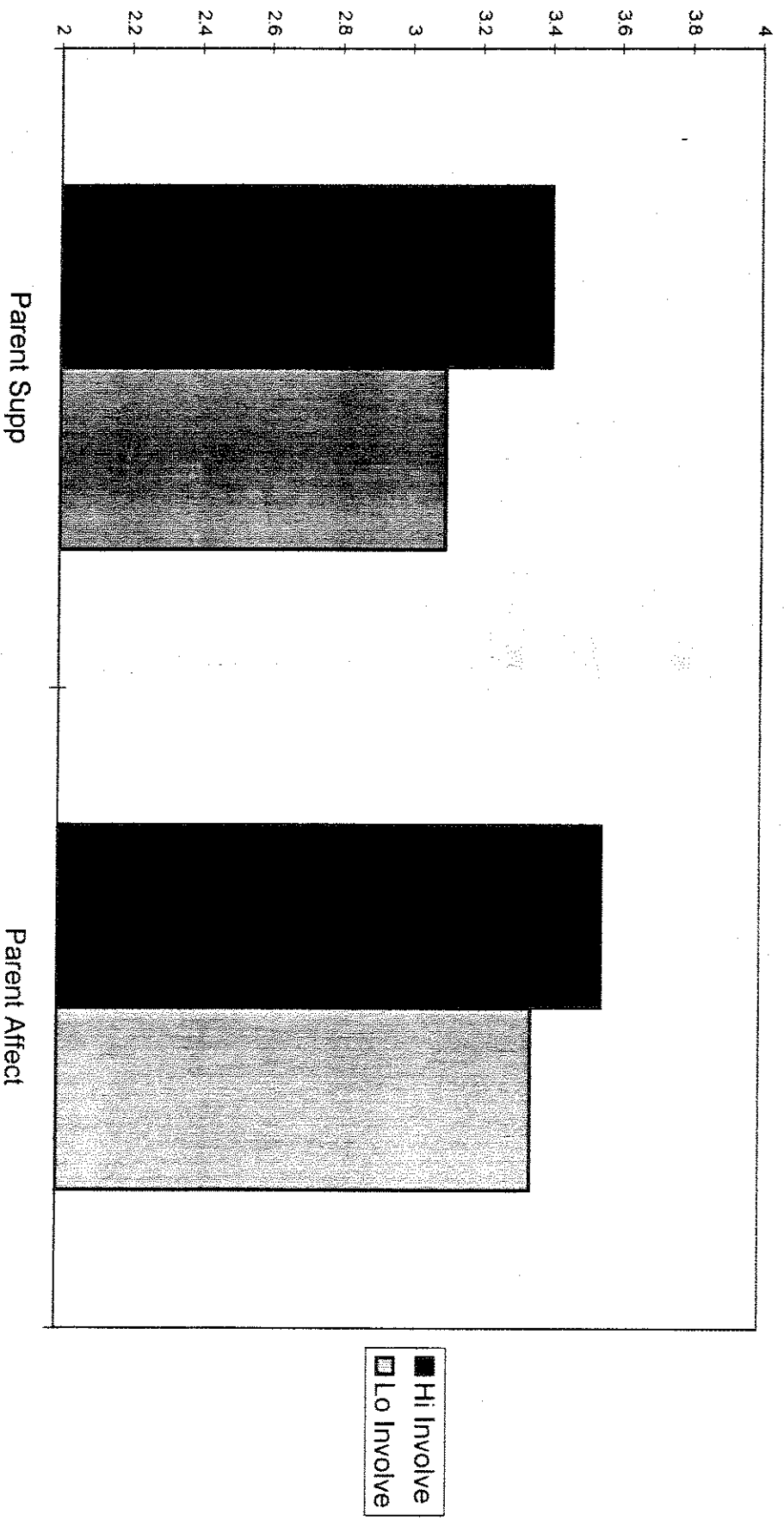




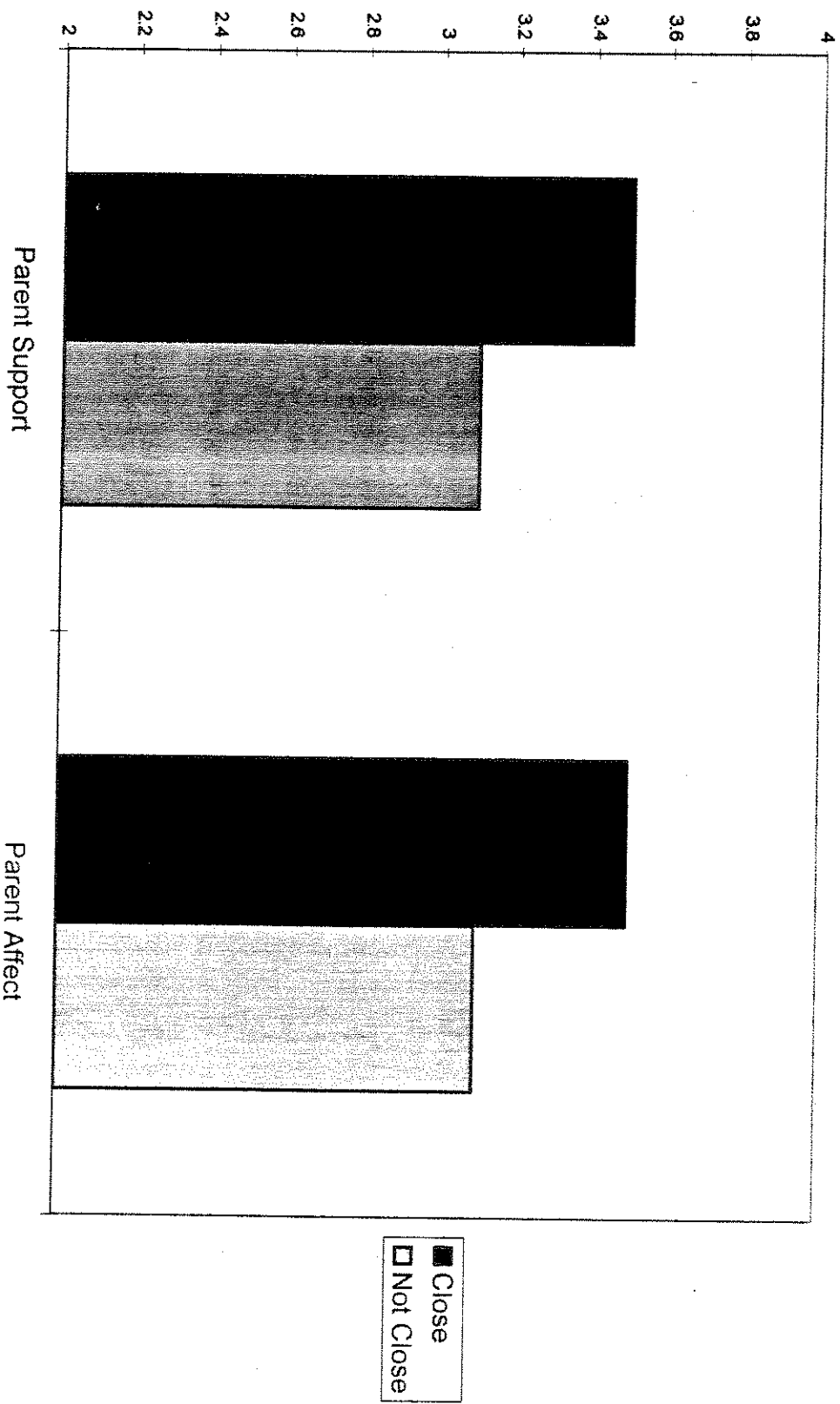
# Adolescent Academic Outcomes by Mothers' Closeness in Middle Childhood



# Adolescent Perceptions of Support by Mothers' Involvement in Middle Childhood



# Adolescent Perceptions of Support by Mothers' Closeness in Middle Childhood



# Adolescents' Perceptions Related to Earlier Parent Reports

