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Mothers' and Fathers' Attitudes Toward Their Children's Academic Performance and Children's Perceptions of Their Academic Competence

Emily P. McGrath[1,3] **and Rena L. Repetti**[2]

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*Do mothers' and fathers' attitudes towards their children's academic performance influence children's perceptions of their academic competence? Two types of parental attitudes—parents' level of satisfaction with their children's performance in school and the importance parents place on children's academic success—were the focus of this study. The data from children (*n = *248), mothers (*n = *219), and fathers (*n = *146) were consistent with the belief that parents' attitudes play a central role in shaping children's self-perceptions. Mothers' satisfaction was positively associated with both sons' and daughters' perceptions of academic competence, independent of children's actual grades in school. Fathers' satisfaction correlated with sons' self-perceptions, but not when mothers' satisfaction was also included in the model. Both mothers and fathers reported being more satisfied with their daughters' grades than with their sons' grades, despite the fact that there were no actual differences between girls' and boys' academic performance. Finally, the importance fathers (but not mothers) placed on children's academic success was positively associated with girls' self-perceptions.*

INTRODUCTION

Children's opinions about their academic competence are important for many reasons, including because these self-evaluations are associated with behaviors that are critical for academic success. When children view themselves as incompetent, they are more likely to avoid demanding tasks and to demonstrate a lack of

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[1]University of California, Los Angeles, California.
[2]University of California, Los Angeles, California.
[3]To whom correspondence should be addressed at 300 Medical Plaza, Suite 1524, Los Angeles, California 90095-1759; e-mail: emcgrath@ucla.edu.

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persistence and independence in work habits (e.g., Boggiano *et al*., 1988; Felson, 1984; Meece *et al*., 1990). However, children's beliefs that they are academically incompetent are not always accurate (e.g., Eccles *et al*., 1989). For example, some children earn very high grades on their report cards, yet believe they are not doing well in school (Phillips, 1987). What causes children to view their academic abilities negatively, regardless of their actual academic performance? Certain psychological factors, such as negative mood, may cause children to distort information about their academic competence. For example, children who are depressed are more likely than nondepressed children to evaluate their academic abilities negatively, despite the fact that there are no differences between depressed and nondepressed children's actual academic competence (e.g., Asarnow *et al*., 1987; Hamilton *et al*., 1997; Kendall *et al*., 1990).

This study considers another potential source of influence. We examine the role that parents' attitudes toward their children's academic performance might play in shaping children's perceptions of their academic competence. Evidence suggests that parents are powerful socializers of children's self-perceptions within this domain (Eccles, 1983). Eccles and her colleagues (1990) have proposed a complex theoretical model that explains how parents' attitudes about their children's academic performance may influence children's self-perceptions. Two types of parental attitudes highlighted in the theoretical model—parents' expectations for their children's academic performance and the importance parents place on their children's academic competence—are the focus of this study.

Parents' Satisfaction with Children's Performance and Parents' Values for Academic Success

Feedback that children receive from important others (e.g., parents, teachers, and peers) about their academic abilities may influence children's perceptions of their academic competence (e.g., Cole, 1991; Parsons *et al*., 1982). Parents, in particular, are believed to exert a substantial influence on children's perceptions of their academic abilities (e.g., Jacobs and Eccles, 1992; Wagner and Phillips, 1992). For example, Phillips (1987) found that among highly competent third-grade children, parents' perceptions of their children's academic competence were more predictive of children's self-perceptions than were actual indicators such as grades and test scores. In light of this provocative finding, it is important to understand how parents communicate their perceptions to their children. The model by Eccles *et al*. (1990) suggests that parents' perceptions of their children's competence influence parents' expectations and parents' reactions to their children's objective academic performance. Consistent with the theoretical model, we argue that one avenue through which parents may communicate their competence perceptions is through their *level of satisfaction* with their children's performance in school. That is, parents help children interpret objective information, such as grades or standardized test scores, by communicating how pleased or displeased they are

with them. Children may then use this information in constructing their self-perceptions.

The association between parents' level of satisfaction with their children's performance in school and children's self-perceptions of academic competence are tested here with a high SES sample. We explore the possibility that regardless of children's actual level of academic performance at school (i.e., for both low- and high-achieving children), parents' satisfaction with their children's performance in school will predict children's self-perceptions of academic competence. Hypothesis 1 predicts that *parents' level of satisfaction with their children's academic performance, independent of their actual academic performance, will correlate with the children's self-perceptions of academic competence.*

The theoretical model by Eccles *et al*. (1990) also suggests that the degree of importance parents assign to their children's academic performance may influence children's self-perceptions. For example, Eccles (1983) found that the children of parents who placed greater importance on achievement in math had more positive self-concepts of math ability. Additional evidence suggests that children have greater confidence in their overall academic abilities when their parents place a great deal of importance on academic success (e.g., Bandura *et al*., 1996). This study will attempt to replicate these findings by testing the association between parents' values for their children's academic success and children's self-perceptions. Hypothesis 2 predicts that *children of parents who place a higher value on academic success will perceive themselves to be more academically competent, independent of their actual performance in school.*

Gender Differences

Several investigators have demonstrated that parents hold gender-differentiated attitudes toward their children's academic performance. For example, in one study, parents of sons believed advanced math was more important for their child than did parents of daughters (Parsons *et al*., 1982). Evidence from another study suggests that girls may accurately perceive some of their parents' gender-differentiated attitudes. Girls, compared with boys, believed that their mothers expected poorer school performance and set lower performance standards for them (Phillips and Zimmerman, 1990). We test for mean differences in this study between the values and satisfaction of parents of sons and parents of daughters. We also examine whether parental attitudes have a differential impact on boys and girls.

Less attention has been paid to the differential impact that mothers' versus fathers' attitudes may have on children's self-perceptions. Eccles (1983) found that mothers' achievement values for their children were stronger predictors of children's self-concepts than were fathers' values. On the other hand, Phillips (1987) found that fathers' ratings of children's academic competence were more strongly associated with children's self-perceptions than were mothers' ratings. The role that mothers' versus fathers' attitudes play in shaping children's self-perceptions

remains unclear. Some studies examined only mothers' attitudes (e.g., Bandura *et al*., 1996), and other studies that included both mothers and fathers (e.g., Eccles 1993a,b; Jacob and Eccles, 1992) did not report whether mothers' and fathers' attitudes contribute *independently* to children's self-perceptions. In this study, we test for mean differences between mothers' and fathers' attitudes toward their children's academic performance. We also test for differences in the correlates of mothers' and fathers' attitudes, in order to determine whether one is a stronger predictor of children's self-perceptions than the other.

METHOD

Procedure

The data presented here were collected as part of a larger study of stress and family development. Children completed questionnaires administered on two occasions approximately one week apart. Parents were mailed questionnaires after their child was interviewed at school. Parents who did not return their questionnaires were contacted by letter and were telephoned as reminders. In exchange for their participation, children received an honorarium of $5.00 and parents received $10.00.

Subjects

A total of 677 families with fourth graders in 2 public and 1 parochial school in a large metropolitan area in the Southwest were invited to participate. Parental consent was obtained from 248 (37%) of the families. Interviews were completed with all of the children (116 girls and 132 boys) and 224 families returned at least 1 parent questionnaire, reflecting a response rate of 90%. The sample consisted primarily of high income, highly educated Caucasian parents and their children. Over 50% of the families reported earning more than $80,000 per year, and over 80% of the parents were college graduates. Approximately 81% of the subjects were Caucasian, 8% Asian/Pacific Islander, 4% Latino, 1% African American, 1% Native American, and 5% Other.

Measures and Descriptive Statistics

Grades

Information about the children's actual performance in school was obtained from their report cards. Grades for reading from the quarter in which children completed their interviews were used in the analyses. Reading skills are critical to success in many areas of academic performance, and are essential for adaptive

functioning in our industrial society. Other investigators have also focused on this domain of achievement when examining links between children's psychological adjustment and school performance (e.g., Hinshaw, 1992). Different scales were used to assign reading grades for the different cohorts of children in the study. For example, fourth graders at one school were graded on a 3-point scale one year, and fourth graders over the next 2 years at the same school were graded on a 100-point scale. The different schools also used different grading scales. Therefore, before testing hypotheses, children's reading grades were standardized within each grading system to a mean of 0 and a standard deviation of 1. *T*-tests indicated that there were no mean differences between girls' and boys' reading grades.

Children's Self-Perceptions

Children's self-perceptions of their scholastic competence were measured by the 6-item academic competence subscale of the Self Perception Profile for Children (Harter, 1985). The child decides which of the two statements best describes him/her (e.g., "Some kids have *trouble* figuring out the answers in school," *But*, "Other kids almost *always* can figure out the answers"), and then indicates whether the statement is "Really true for me" or "Sort of true for me." Scores on each item range from 1, indicating a perception of poor academic competence, to 4, indicating a strong perception of academic competence. A *t*-test indicated that there was no difference between girls' ($M = 3.16$, SD $= 0.61$) and boys' ($M = 3.18$, SD $= 0.63$) perceptions of their academic competence.

Parents' Satisfaction

Parents' satisfaction with their children's school performance was assessed by a single item that asked parents to rate how satisfied they were with their child's grades in school. This item was rated on a 4-point scale, ranging from "very unsatisfied" (1) to "very satisfied" (4). On average, parents were highly satisfied with their children's grades in school ($M = 3.27$, SD $= 0.82$). The significant correlations between mothers' and fathers' satisfaction ratings ($r = .57$, $p < .001$), mothers' satisfaction and grades ($r = .52$, $p < .001$), and fathers' satisfaction and grades ($r = 53$, $p < .001$) offer some evidence for the validity of this single-item measure. In addition, there were moderate, significant correlations between parents' satisfaction and children's perceptions of their academic competence (see Table I). A 2 $\times$ 2 (Parent Sex $\times$ Child Sex) ANOVA tested whether there were significant gender differences among mothers' and fathers' satisfaction with their sons' and daughters' grades in school. There was a main effect for child sex ($F(1, 359) = 5.46$, $p < .05$), indicating that parents were somewhat more satisfied with their daughters' grades ($M = 3.38$, SD $= 0.76$) than with their sons' grades ($M = 3.18$, SD $= 0.86$).

Table I. Correlations Between Predictor and Control Variables and Children's Perceptions of Academic Competence

Variable	1	2	3	4	5
Satisfaction variables					
1. Mothers' satisfaction with their children's grades ($n = 219$)	—				
2. Fathers' satisfaction with their children's grades ($n = 146$)	.57***	—			
Values variables					
3. Mothers' academic values ($n = 219$)	−.05	.05	—		
4. Fathers' academic values ($n = 146$)	−.03	−.08	.15	—	
Children's grades in school					
5. Reading ($n = 232$)	.52***	.53***	.04	−.02	—
Outcome variable					
6. Children's perceptions of academic competence ($n = 248$)	.37***	.30***	.04	.17*	.35***

* $p < .05$; ** $p < .01$; *** $p < .001$.

Parents' Values

Parents' values were assessed with a 10-item paired-comparison scale developed for use in this study. Five items, representing school-related goals that parents might have for their children, made up the scale: 1) being smart in school, 2) being well behaved in school, 3) having the teacher like the child, 4) having lots of friends, and 5) being one of the popular kids. Each item was paired with each of the other 4 items, and parents were instructed to choose from each pair the goal for their child that was more important to them. An item was scored by counting the number of times it was chosen as more important when paired with the other 4 items. Thus, scores for each goal could range from 0 to 4. Parents placed a great deal of importance on being smart in school ($M = 2.99$, SD $= 1.03$). In a 2 × 2 (Parent Sex × Child Sex) ANOVA there was a main effect for parent sex ($F(1, 359) = 5.70$, $p < .05$), which indicated that relative to other goals, fathers ($M = 3.15$, SD $= .99$) placed greater importance on academic performance than did mothers ($M = 2.89$, SD $= 1.04$).

RESULTS

Parents' Satisfaction with Children's Performance in School

Hypothesis 1 predicted that mothers' and fathers' level of satisfaction with their children's academic performance, independent of their actual academic performance, would correlate with their children's self-perceptions of academic competence. Two measures of parents' level of satisfaction, the predictor variable, were used: mothers' satisfaction with their children's grades and fathers' satisfaction

Table II. Multiple Regression Analyses Predicting Children's Perceptions of Academic Competence

Predictor variables	Beta	*R*-square	df	*F*
Mothers' satisfaction and children's perceived academic competence				
Step 1				
Child sex	.10			
Grades in reading	.17***			
Mothers' satisfaction with children's grades	.17**	.19	(3, 202)	15.68***
Step 2				
Child sex × grades in reading	.02			
Child sex × mothers' satisfaction	−.03	.19	(5, 200)	9.33***
Fathers' satisfaction and children's perceived academic competence				
Step 1				
Child sex	.01			
Grades in reading	.18**			
Fathers' satisfaction with children's grades	.13[t]	.15	(3, 134)	7.86***
Step 2				
Child sex × grades in reading	.07			
Child sex × fathers' satisfaction	−.30*	.18	(5, 132)	5.77***

[t] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

with their children's grades. Children's actual academic performance, the control variable, was measured by children's grades in reading. Correlations between the predictor and control variables and the outcome variable, children's perceptions of academic competence, are presented in Table I. There were moderate, significant correlations among children's perceptions of their academic competence, children's grades in school, and parents' satisfaction with their children's grades.

Simultaneous multiple regression analyses tested Hypothesis 1 separately for mothers and fathers. As shown in Table II, mothers' satisfaction with their children's grades and children's reading grades made significant independent contributions to children's perceptions of their own academic success. Interactions between child sex and children's grades, and between child sex and mothers' satisfaction, were also examined. Neither interaction was significant, indicating no differences in the way that boys' and girls' perceptions of academic competence are related to their grades in school and to their mothers' level of satisfaction.

There was only a marginally significant association between fathers' satisfaction and children's perceptions of their academic success when children's grades were controlled in the analyses (see Table II). However, there was a significant interaction between child sex and fathers' satisfaction. Fathers' satisfaction correlated with boys' self-perceptions ($r = .46$, $p < .001$), but not with girls' self-perceptions ($r = .08$, $p =$ ns). A separate multiple regression analysis showed that the association between fathers' satisfaction and sons' self-perceptions was significant even after controlling for report card grades ($b = .26$, $p < .01$).

In summary, girls and boys perceived themselves to be more academically competent when their mothers reported greater satisfaction with their performance in school. This was true independent of the children's actual performance as

indicated by report card grades in reading. In addition, boys perceived themselves to be more academically competent when their fathers reported greater satisfaction with their grades in school, and this was also true independent of boys' actual performance. When the contributions of both mothers' satisfaction and fathers' satisfaction to boys' self-perceptions were examined together, only mothers' satisfaction with their sons' grades in school contributed significantly to boys' self-perceptions ($b = .11$, $p < .05$).

Parents' Values for Children's Academic Success

Hypothesis 2 predicted that children of mothers and fathers who place a higher value on academic success perceive themselves to be more academically competent, regardless of their actual performance in school. Two scores for parents' values for their children's academic success, the predictor variable, were used: mothers' values for their children's academic success and fathers' values for their children's academic success. The same measure of children's actual academic performance, grades in reading, was used. Correlations between the predictor and control variables and the outcome variable, children's perceptions of academic competence, are presented in Table I. Because mothers' values for their children's academic success did not correlate with children's perceptions of their academic success, Hypothesis 2 was tested with fathers' data only.

Simultaneous multiple regression analyses tested Hypothesis 2 for fathers. As shown in Table III, fathers' values for their children's academic success made a significant independent contribution to children's perceptions of their own academic competence. The interaction between child sex and fathers' academic values was marginally significant. Fathers' academic values correlated with girls' self-perceptions ($r = .27$, $p < .05$), but not with boys' self-perceptions ($r = .08$, $p =$ ns). The association between fathers' values and girls' self-perceptions was significant even after controlling for report card grades ($b = .22$, $p < .01$). Thus, daughters perceived themselves to be more competent in school when their fathers

Table III. Multiple Regression Analyses Predicting Children's Perceptions of Academic Competence

Predictor variables	Beta	*R*-square	df	*F*
Fathers' academic values				
Step 1				
Child sex	.02			
Grades in reading	.24***			
Fathers' academic values	.11*	.16	(3, 134)	8.52***
Step 2				
Child sex × grades in reading	−.03			
Child sex × fathers' values	.19[t]	.18	(5, 132)	5.95***

[t] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

reported that they valued their academic success, and this was true independent of girls' actual performance in school.[4] When the contributions of mothers' satisfaction with their daughters' grades and fathers' values for their daughters' academic success were examined in one regression model (with controls for actual report-card grades), both mothers' satisfaction ($b = .25$, $p < .05$) and fathers' academic values ($b = .23$, $p < .01$) continued to make significant independent contributions to girls' perceptions of their academic competence.

DISCUSSION

Mothers' overall level of satisfaction with their children's performance in school appeared to play a critical role in children's beliefs about their academic abilities. Mothers' satisfaction correlated with both boys' and girls' academic self-perceptions, whereas fathers' satisfaction correlated only with boys' self-perceptions. In addition, when the independent contributions of mothers' satisfaction and fathers' satisfaction to boys' self-perceptions were examined, only mothers' satisfaction with their sons' grades in school continued to contribute significantly to boys' self-perceptions. These findings are consistent with Eccles (1983), who found that mothers' achievement attitudes were stronger predictors of children's self-concepts than were fathers' achievement attitudes. Our findings may appear to conflict with Phillips (1987), who found that fathers' academic belief systems showed stronger associations to children's self-perceptions than mothers' belief systems. However, these seemingly contradictory findings may be explained by the fact that Phillips' sample included only high-achieving children, whereas our sample and Eccles' sample included children ranging from low to high levels of achievement.

Interestingly, both mothers and fathers reported being more satisfied with their daughters' grades than with their sons' grades, despite the fact that there were no actual differences between girls' and boys' academic performance. Might this suggest that parents set lower performance standards for their daughters? Eccles (1983) found that parents expect more from their sons than from their daughters in relation to performance in math. Prior research also suggests that parents' gender-differentiated perceptions of their children may influence children's evaluations of their academic competence. For example, Eccles (1983) found that fifth- through eleventh-grade girls have lower self-concepts of ability in math than boys do. In our study, however, there was not a difference between girls' and boys' ability perceptions. It is important to note, though, that Eccles (1983) examined

[4] As would be expected on the basis of the nonsignificant zero-order correlation, mothers' values for their children's academic success did not make a significant independent contribution to children's perceptions of their academic competence. An interaction between child sex and children's grades in reading, and an interaction between child sex and mothers' academic values were also examined, and neither was significant.

children's competence beliefs in the domain of math. Whereas gender differences on domain specific measures of children's self-perceptions appear to surface in middle childhood (e.g., Eccles *et al*., 1993b; Wigfield and Eccles, 1994), some evidence suggests that gender differences on more general indicators of children's perceived academic competence may not emerge until junior high school (Phillips and Zimmerman, 1990). Longitudinal data are needed to determine whether parents' satisfaction with their daughters' grades in the fourth grade will predict gender differences among children's academic self-perceptions in junior high and high school.

Although our single-item measure of parents' satisfaction proved to be powerful, our measure of parents' values appeared to be less influential. This may be due to the fact that in this high SES sample, academic achievement was so widely valued among parents that there was not much variability in our values measure. On average, parents chose "being smart in school" as a more important goal in 3 out of 4 comparisons. The fathers in our sample felt it was even more important than the mothers did. Interestingly, this attitude on the part of fathers turned out to be extremely important for girls. The importance fathers placed on academic competence was a significant predictor of girls' self-perceptions, even after controlling for grades in school and mothers' satisfaction. When fathers placed a very high value on academic achievement, their daughters felt more academically competent. Whereas both boys and girls turn to their mothers for feedback when assessing their academic abilities, girls also use input from their fathers. One can speculate whether, given a tendency in our culture to expect less from daughters' than from sons' school performance, girls gain a special benefit when their fathers place a high value on their academic success.

The present study demonstrates the importance of considering parental influences in our attempt to understand the determinants of children's perceptions of their academic competence. Our cross-sectional data were consistent with the theoretical model proposed by Eccles and her colleagues (1990), which suggests how parents' attitudes about their children's academic performance may influence children's self-perceptions. Parents' general level of satisfaction with their children's performance in school, *independent of actual academic performance*, correlated with children's perceptions of competence. Additionally, our data suggest that *mothers*' satisfaction may be particularly influential in shaping children's ability perceptions. Longitudinal data are needed to better understand the direction of influence between parents' attitudes and children's self-perceptions. In addition, the generalizability of these findings to a more ethnically and economically diverse sample, and to children of different age groups, is an important question for future research. Nevertheless, our findings help to explain why children's beliefs about themselves are not always accurate. Rather than basing opinions about themselves solely on their actual performance in school, it appears that children also use feedback from their parents when trying to figure out how smart they are.

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