Ways in which parents influence children's developing perceptions of their academic competence were examined in a study of 81 academically competent third-graders and their parents. The study was designed to (1) determine whether the illusion of incompetence documented for fifth-graders appears in younger children, (2) examine whether parents' competence-related perceptions—or children's beliefs about these perceptions—significantly distinguish children with varying levels of perceived competence, and (3) develop a predictive model of the association between parent and child competence beliefs. A significant minority of the third-graders were found to severely underestimate their academic competence. Mothers' and fathers' perceptions of their children's abilities varied significantly with the perceived competence status of the child, as did the children's perceptions of their parents' appraisals. Path analyses further revealed that children's perceived academic competence was influenced more by their parents' ability appraisals and the children's perceptions of these appraisals than by their actual achievement records. Results suggest that parents exert a powerful influence as socializers of their children's perceived academic competence. (RH)
Parents as Socializers of Children's Perceived Academic Competence
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Being smart does not guarantee that a child will have confidence in her abilities. There is even some evidence to suggest that among the children who are particularly likely to have unrealistically low expectations for success or negative competence judgments, are some of the most proficient students. Deborah Stipek (Stipek & Hoffman, 1980), for example, found that high-achieving girls in third-grade had lower expectations for success on an experimental task than did average- and low-achieving girls. Virginia Crandall (1969) found that girls' expectations for success were negatively correlated to IQ. And, in my own work with third and fifth graders whose achievement test scores place them in the top quartile nationally (Phillips, 1984, 1987), 20% of both boys and girls seriously underestimated their abilities as assessed with Susan Harter's (1982) Perceived Competence Scale.

How can such capable children fail to acquire positive and accurate perceptions of their abilities? This is the question that I will be directing my remarks to today with an emphasis on the contribution of mothers and fathers.

This issue has theoretical significance for models of socialization, for the achievement motivation literature, and for the emerging work on the functional significance of parental belief systems (Sigel, 1985). It also has tremendous practical significance in light of evidence that children's
perceptions of their abilities may be among the most potent predictors of their reactions to achievement demands and their future aspirations.

Susan Harter (1983), for example, compared the challenge-seeking behavior of children who had high abilities in common, but who differed in their perceived academic competence. She found that capable children who underestimated their abilities sought less challenging tasks than did the children with accurate ability appraisals. In fact, they selected tasks that were consistent with their low self-perceptions rather than with their actual high abilities leading Harter to conclude that it is the underraters' beliefs about their abilities rather than their actual competence that mediates their behavioral choices.

Similarly, high-achieving fifth graders in my prior research (Phillips, 1984) who erroneously judged themselves as academically incompetent, aimed for and expected lower levels of success in school, were less likely to ascribe their high grades to ability, and were rated by their teachers as less persistent and less likely to excel in school than their equally competent, but more confident peers. I have recently replicated these results in a sample of high-achieving third graders (Phillips, 1987).

Despite growing documentation of the behavioral significance of children's beliefs about their abilities, we are only now beginning to identify factors that contribute to the early acquisition of these beliefs. In part, the achievement focus of this literature has led to a general neglect of family influences that are likely to figure prominently in children's earliest self-perceptions of competence. We have also lacked models of achievement motivation that incorporate factors beyond the immediate school setting.
Yet, Jackie Eccles (Parsons, Adler, & Kaczala, 1982; Eccles, 1983) has reported that children's self-perceptions of their math abilities are influenced more by their parents' appraisals of these abilities than by their own record of math achievement. Nancy Thomas (1985) found that parents' beliefs about their children's math abilities are more powerful predictors of children's ability and task perceptions than are measures of classroom climate. Doris Entwisle (Entwisle & Baker, 1983) discovered that middle-class parents' expectations significantly affected their children's expectations in reading and arithmetic, as well as their actual school marks across the first three years of elementary school. Harold Stevenson (Stevenson & Newman, 1986) found that mothers' ratings, but not teachers' ratings, of children's cognitive abilities in the elementary grades were predictive of daughters' attitudes about math and reading in tenth grade.

Parents thus appear to exert a strong, and perhaps causal, influence on their children's developing achievement attitudes and behaviors. My variation on this theme was to assess whether parents' beliefs about their children's generalized abilities are sufficiently influential as to account for instances where children's perceived competence diverges from evidence of actual competence. I hypothesized that children's perceptions of their own abilities would vary with their parents' ability appraisals, and that parents' would, in effect, mediate the contribution of objective indicators of competence -- in this case achievement test scores -- to children's ability perceptions.

Method

A sample of 81 families participated in the study. The families were predominantly upper- and middle-class, and were drawn from both urban and rural school districts. Each family had a third-grade child whose achievement
test score exceeded the 77th national percentile and who was rated by the teacher as being in the top third of his or her immediate classmates in ability. Both parents of 55 children were available to participate, and one parent of the remaining 26 children participated.

As a first step, the children completed Harter's (1982) Perceived Competence Scale, which elicits self-appraisals of competence in athletic, social, and academic domains, as well as a general self-worth subscale. They and their parents then completed additional questionnaires designed to provide convergent assessments of self- and other-perceptions on a broad range of constructs, including expectancies, achievement standards, estimates of school difficulty, and perceived academic competence. So, for example, in addition to the children's self-assessments of their abilities, they provided their perceptions about how their parents would rate their abilities, as well as their perceptions of their parents' actual abilities; the parents rated their own abilities, and the parents rated their children's abilities. The same is true of expectancy and difficulty ratings.

Results

The children's perceived academic competence scores ranged widely from 1.29 to 4.00 on a 4-point scale, despite the restriction of the sample to high achievers. Based on these scores, the children were divided into three groups -- low, average, and high perceived competence -- to examine whether child and parent achievement beliefs varied with the perceived competence status of the children.

As can be seen in the first slide, 18 of the children were assigned to the low perceived competence group. This 22% of the sample -- 21% of the girls and 24% of the boys -- had an average Harter score of 2.34. To place
this in perspective, this average score is more than one standard deviation below the average score reported for Harter's third-grade standardization sample which encompassed the full normal range of abilities. In contrast, the average achievement test score of the low perceived competence group places it in the 90th national percentile. These children are seriously underestimating their actual competence.

A preliminary check to see if the three perceived competence groups differed in their achievement test scores revealed no significant effects. Nevertheless, the test scores were covaried in all analyses of variance to provide a relatively conservative assessment of group differences on the questionnaire measures.

Before addressing the question of whether and how parents contribute to perceived incompetence among high-achieving children, it is important to ascertain whether third-graders who differ in their self-perceptions of ability show distinctive patterns of achievement attitudes and behaviors. In other words, at this young age, do differences in perceived competence have any practical significance?

The answer is yes. The third-grade children with low perceived competence differed significantly from their more confident peers in several respects. They held lower expectations for future success in school, found their current schoolwork more difficult, felt that doing well in school took more effort, preferred less challenging assignments, and portrayed themselves as more reliant on external feedback. Moreover, their mothers portrayed them as less capable of independent work and their fathers portrayed them as less persistent compared to parents of the children with average and high perceived competence.
Do mothers and fathers contribute to this constellation of disparaging self-perceptions and achievement beliefs? Based on the prior work of Jackie Eccles, two mechanisms for parental influence were examined.

The first assigns parents a role as models for the acquisition of achievement beliefs. Perhaps children who underestimate their abilities have parents who underestimate their own abilities. Or, alternatively, the children with low, average, and high perceived competence may judge -- accurately or inaccurately -- that their parents' abilities differ.

No support was obtained for the modeling hypothesis. As seen here (slide 2), the children and parents, regardless of perceived competence group, held uniformly positive views of the parents' abilities. Role modeling does not explain the acquisition of disparaging self-perceptions among bright children.

A more likely candidate is the relatively subtle transmission of parental beliefs and expectancies that, over time, may be incorporated by children as they construct their self-perceptions of academic competence. Eccles has identified this model as expectancy socialization. Does it hold for children whose self-perceptions deviate from evidence of their actual academic talents?

Initial evidence suggests that it does. Seen here (Slide 2), both mothers and fathers of the children with low perceived competence held significantly less favorable impressions of their child's abilities, compared to the parents of the children with positive and accurate perceptions of their abilities. The parents of the children with low perceived competence did not, however, expect less of their children or judge school to be more difficult for them. The children accurately perceived their parents' ability appraisals, such that those who underestimated their own abilities perceived correctly that their parents judged their abilities to be lower than did
parents of the other children. They also believed, incorrectly, that their parents expected less of them in school.

Thus, parents' beliefs about their children's abilities and children's estimates of their parents' ability appraisals and expectancies distinguish children with low, average, and high perceived competence. These results provide initial support for the hypothesis that parents socialize their children to hold differing perceptions of their abilities.

The more intriguing issue, however, is whether there is a predictive relation between parents' perceptions of their children's abilities and children's perceived competence. Do parent beliefs influence children's self-perceptions or do both sets of beliefs derive independently from interpretations of objective ability feedback, such as that provided by test scores?

Recursive path analysis was used to explore this question. Path analysis is simply a method to clarify relations among variables. A form of multiple regression, it can determine how much of the covariation between pairs of variables -- children's perceived competence and their achievement test scores -- is due to a direct association between them and how much is accounted for by the effects of intervening variables, for example, parent's judgments of their children's competence.

The subsample of 55 children with both parents participating provided the sample for the path analyses so mother and father models could be examined. Because this is such a restricted sample, only a few variables were entered into the path analysis. As can be seen in the third and fourth slides, the children's achievement test scores were entered as the first antecedent predictor variable and their perceived competence scores were
entered as the final criterion variable. Three intervening predictor variables were included in the model: the children's perceptions of their parents' ability appraisals and the parents actual judgments of their children's competence and difficulty in school.

The paths that are connected by solid lines are significant at $p<.01$, and those connected by dashed lines are significant at $p<.05$. Standardized beta weights are shown on the path followed by unstandardized weights in parentheses. The $R^2$ listed under each criterion measure represents the percent of variance accounted for by the significant preceding variables.

Both the mother and father analyses supported the socialization model of parent influence. Specifically, taking children's actual achievement test scores as a point of departure, this objective marker of ability appears to serve as the basis on which parents form perceptions of their children's school competence. The children's perceptions of these parental appraisals, as well as their self-perceptions of competence, were found to derive from the parents' perceptions rather than directly from the objective competence feedback provided by their own test scores. These data cannot, however, clarify relations among the child-to-child links. It is quite possible that children project their self-perceptions on to their parents when asked about their parents' ability appraisals. Moreover, it should be noted that each of the models accounts for slightly less than 30% of the variance in perceived academic competence. Parents are important socializers, but clearly not the sole influence on children's developing impressions of their abilities.

In sum, the results from the path analysis lend support to the pattern of parental influence first proposed by Eccles and her colleagues. Apparently, children's generalized perceptions of academic competence, like their math
self-concepts examined in these prior investigations, are more directly
influenced by their parents' beliefs than by their own record of achievement.
As a next step, separate path models for children with low, average, and high
perceived competence need to be examined to determine whether this conclusion
is equally valid across the full range of perceived competence.

The most significant implication of this study, then, is its
demonstration of the influence that parents exert on their children's
developing self-perceptions of academic competence. The mechanism of
influence that has received the greatest support in this study and elsewhere
(Eccles, 1983) assigns parents a role as interpreters of objective competence
feedback for their children. Parents' resulting impressions of their
children's capabilities are incorporated by children into their own
attitudinal repertoires, including their perceptions of academic competence.
Parental beliefs thus appear to provide more influential feedback to children
as they forge their earliest self-appraisals of ability than do objective
indicators of ability.

Parental belief systems, and their expression in parent behavior, have
been broadly implicated as instrumental to effective parenting, and,
ultimately, to adaptive child behavior (Sigel, 1985). Within this literature,
increasing attention is being paid to the accuracy, rather than simply the
content, of parent's perceptions of their children's capabilities. In the
extreme, inaccurate inferences about children's behavior have been linked to
child abuse (Azar, Robinson, Hekimian, & Twenteman, 1984). And within non-
problematic populations, the accuracy of parents' judgments of their
children's abilities have been found to predict young children's performance
on Piagetian tasks (Miller, 1986).
With respect to the data at hand, this literature suggests that the accuracy with which parents perceive their children's abilities is a central determinant of whether bright children will view themselves accurately as academically competent or inaccurately as academically incompetent. A significant minority of the third graders studied here had already acquired misperceptions of incompetence which, in turn, corresponded to differential parent beliefs about their children's abilities. These parent beliefs, moreover, appear to provide children with highly salient feedback as they construct their self-perceptions.

Among the issues that remain to be understood are the bases on which parents construct competence-related appraisals of their children, and why these appraisals sometimes defy objective reality. Research is also needed to elucidate how these mechanisms function over time, how they are expressed behaviorally, and how children, in reciprocal fashion, affect their parents' perceptions. Finally, interactions among family, school, and other socializing influences require examination before a complete picture of early influences on the development of perceived academic competence can be formed.

References


Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches.* San Francisco: Freeman.


### Third-Grade Perceived Academic Competence by Perceived Competence Group and Sex

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td><strong>Low Perceived Competence</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Girls</td>
<td>10</td>
<td>2.26</td>
<td>.39</td>
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<td>Boys</td>
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<tr>
<td>Boys</td>
<td>19</td>
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<td><strong>High Perceived Competence</strong></td>
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<tr>
<td>Girls</td>
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<td>3.81</td>
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<tr>
<td>Boys</td>
<td>7</td>
<td>3.80</td>
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Mean Ratings and F-Values for Dependent Measures by Perceived Competence Group

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<tr>
<th>Measure</th>
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<th></th>
<th>F-Value</th>
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<td></td>
<td>Low</td>
<td>Average</td>
<td>High</td>
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<tr>
<td>Mother: Own Ability</td>
<td>4.93</td>
<td>5.05</td>
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<td>4.86</td>
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<td>1.97</td>
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<td>3.84</td>
<td>5.81</td>
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<td>5.61</td>
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<td>5.34</td>
<td>1.41</td>
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<td>4.94</td>
<td>5.04</td>
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<td>Child: Mother's Ability Judgment</td>
<td>5.82</td>
<td>9.12</td>
<td>10.53</td>
<td>13.41***</td>
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<td>3.87</td>
<td>4.44</td>
<td>4.69</td>
<td>15.81***</td>
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</tbody>
</table>
MOTHERS

Mother's Perception of School Difficulty

R² = .12

Composite Achievement Test Scores

Child's Perception of Mother's Ability Appraisal

R² = .11

Child's Perceived Academic Competence

R² = .28

Mother's Perception of Child's Ability

R² = .09
FATHERS

Father's Perception of School Difficulty

Composite Achievement Test Scores

Father's Perception of Child's Ability

R² = .13

Child's Perceived Academic Competence

Child's Perception of Father's Ability Appraisal

R² = .13

R² = .40 (.65)

R² = .30

R² = .25 (.34)

R² = .29