

GENDER AND AGE DIFFERENCES IN CHILDREN'S ACHIEVEMENT
SELF-PERCEPTIONS DURING ELEMENTARY SCHOOL

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ABSTRACT

In this study we examined gender and age differences in children's competence perceptions and valuing of academic, social, and physical skills activities, and also their general self-esteem. The analyses reported here are part of a four year longitudinal study of the development and socialization of children's achievement beliefs and attitudes across the elementary school years. We report results from the second year of the longitudinal study. 850 first, second, and fourth grade children completed questionnaires assessing their competence perceptions and valuing of mathematics, reading, sports activities, social activities, music, computer activities, and also their general self-esteem. Results showed that self-esteem did not differ by sex or across grade. Boys had significantly higher ability perceptions for math, sports, and computer activities than did girls. Girls had significantly higher ability perceptions than did boys for music and social activities. Girls thought music and reading was significantly more important than did boy, and liked each of those activities better than boys did. Boys liked sports activities more than did girls, and also thought sports activities were more important.. Younger children's (particularly the first graders) ability perceptions tended to be more positive than those of the older children, especially in math and reading. Younger children thought math and reading were significantly more important than did older children, and liked reading more. Older children liked sports activities more than did the younger children. These results show that gender differences in children's achievement self-perceptions emerge quite early during the elementary school years. As others have found, these results also show that younger elementary school aged children are more positive in their beliefs than older elementary school aged children.

Gender and Age Differences in Children's Achievement

Self-Perceptions During Elementary School

Different investigators (Eccles, Adler et al., 1983; Harter, 1982, 1985) have begun to identify the key dimensions of children's self-perceptions for different activities, and how those self-perceptions relate to children's performance on the different activities. Harter(1982, 1985) primarily has focused on children's perceptions of competence as the key dimension of self-evaluation. She has developed scales to assess children's competence perceptions for academic, sports, and physical skills activities, and has shown that children distinguish between these different kinds of competence perceptions even during the early elementary school years. Eccles and her colleagues have focused on competence perceptions, expectancies for success, and also on the value children attach to different tasks. They have argued that children's choices of which activities to do are based on their expectancies for succeeding on those activities along with how valuable the activities are to them. They have distinguished (both conceptually and empirically) different aspects of children's values for different tasks: Values consist of children's interest in the activity, the importance of the activity, and how useful the activity will be in the future (Eccles et al., 1983; Eccles, Wigfield, & Chambers, 1989).

In two studies of fifth through twelfth grade children, (Eccles, Adler et al., 1983; Wigfield, 1984) they have found that children's perceptions of their ability and valuing of mathematics become more negative across the fifth through twelfth grade years. Children's ability perceptions and valuing of English do not change in quite as negative a way. In a large-scale study of how children's achievement-related beliefs change across the transition to junior high (Eccles, Wigfield, et al., in press; Wigfield, Eccles, et al., 1989) they have found that like children's beliefs about math, during sixth and seventh grade children's ability perceptions and valuing of sports activities also become more negative. Children's perceptions of their ability and valuing of social

activities become more negative across sixth and seventh grade as well, though these changes are less strong than those in the sports and mathematics domains.

Eccles and her colleagues also have found sex differences in children's achievement self-perceptions. During the late elementary school and secondary school years boys' ability perceptions about mathematics and sports are more positive than girls' ability perceptions in those areas. Boys and girls value math similarly, but as would be expected boys value sports activities much more than do girls. Girls have higher ability perceptions and values for English than do boys, and value social activities more than boys do (Eccles et al., 1983; Eccles et al., in press; Wigfield, 1984; Wigfield et al., 1989).

In this study we build on Eccles' and Harter's work by looking at the early development of children's competence perceptions and valuing of several different activities: math, reading, sports activities, social activities, computer activities, and music. We also look at gender differences in these self-perceptions to determine if younger boys' and girls' self-perceptions show the same kinds of differences that the self-perceptions of early adolescent and adolescent boys and girls show. This study is part of a large four-year longitudinal project being conducted by Jacquelynne Eccles, Phyllis Blumenfeld, Allan Wigfield, and Rena Goldsmith that is investigating the early development and socialization of children's achievement self-perceptions and activity choices. The project is assessing issues such as :1) How do children's beliefs, attitudes, and values for different activities change over the elementary school years; 2) How do these achievement beliefs relate to children's performance on different activities, and their choice of which activities on which to spend time; 3) How do these achievement beliefs for specific activities relate to children's general self-esteem, and 4) How do teachers and parents socialize children's achievement related beliefs? In this paper, we address the first issue, using the initial cross-sectional data we have collected from children about their achievement self-perceptions for the different activities.

The project began in the spring of 1987, when the participating children were in kindergarten, first, and third grades. The data we report here come from the second year of the project when children were in first, second, and fourth grades. Children first completed questionnaires during the second year of the project. Approximately 850 children completed questionnaires assessing their competence perceptions, values, and other beliefs about the different activities in the academic, social, and physical skills domains. Children also completed three items from Harter's (1982) general self-esteem scale.

In accordance with earlier work (e.g., Nicholls, 1979), we predicted that younger children generally would have more positive ability perceptions and values for the different activities than would the older children, particularly for the academic activities. Based on our previous findings with adolescent children, boys were expected to have higher ability perceptions and values for math and sports activities than were girls, whereas girls' ability perceptions and values for reading and social activities were expected to be higher than those of boys. For the new activities assessed in this study, we predicted that boys would have higher ability perceptions and values than would girls for computer activities, whereas girls would have more positive beliefs for music. We anticipated that these sex differences would increase across grade.

Method

Participants

The participants are approximately 850 first, second, and fourth grade children. They attend 10 elementary schools in southeastern Michigan. The children are from lower middle class to middle class backgrounds, and over 95% are white. The children agreed to participate in the study, and also received parental permission to participate. In the larger project, many of the children's parents also are participating, so that we can examine how parents influence children's beliefs, attitudes, and activity choices. In addition, children's teachers completed individual assessments of each student's skills,

interests, motivation, and personality characteristics, and a questionnaire assessing their perception of their classroom environment, so that we can examine how children's school experiences influence their beliefs and attitudes. In this report we focus only on children's self-perceptions. For discussion of the parent questionnaire see Eccles, Harold-Goldsmith, and Miller (1989), and for discussion of the teacher assessments of each student see Harold-Goldsmith et al. (1989).

Measures

The children completed questionnaires tapping their beliefs about academic activities, social activities, and physical skills activities, as well as their sex-role beliefs, perceptions of their personality characteristics, the rule structure in their families, and many other constructs (see Eccles, Wigfield, Blumenfeld, and Harold-Goldsmith, 1984, for a complete description of the constructs assessed). In this report, we focus on children's beliefs about the specific activity domains listed above. In the academic area, the questionnaires assessed children's beliefs about mathematics, reading, computers, and music. In the social domain, children's beliefs about their popularity and friendship-making skills were assessed. In the physical skills area, children answered questions about sports in general, tumbling, and throwing and catching a ball. The beliefs assessed included children's perceptions of ability for each activity, their expectancies for current and future success on the items, their valuing of those activities (including perceptions of how interesting each activity is, how important the activity is to the child, and how useful the activity will be in the future), the difficulty of each activity, the amount of effort exerted by the child in each activity, and how worried the child was about doing poorly on the activity. Each of these constructs was assessed by two or three items.

The questions tapping children's beliefs about specific activities were modified from earlier questionnaires developed by Eccles and her colleagues (1983, 1988) to assess children's beliefs about mathematics, English, sports, and social activities.

Similar questions were developed to assess children's perceptions about computers and music. These questions have been used in the studies of early adolescents' and adolescents' self-perceptions discussed in the introduction, and have excellent psychometric properties (see Eccles, 1988). Because the children in the current study were younger than children in the earlier studies, great care was taken to ensure that the children understood the constructs being assessed. The questions were piloted on 100 children in first and second grade in order to refine them for use with younger children. The 1 to 7 answer scales were illustrated with stars or bars so that children would understand them. Examples of questions and their corresponding number scales are shown in Table 1. In the analyses reported here, we assessed children's perceptions of their ability for the different activities, their valuing of those activities (the importance they attach to each activity and how much they like each activity), their worries about the activity, and their test anxiety. In these analyses single-item indicators of each construct were assessed.

Along with these specific self-perceptions, children's self-esteem was assessed using three items from Harter's (1982) scale. These items were chosen based on our previous work with that scale with late elementary and junior high school students. The items chosen assessed whether children wanted to change or stay the same, how happy they are with themselves, and how happy they are about the way they do things.

Results

Children's responses to the items tapping their self-perceptions were analyzed with 2 (Sex) x 3 (Grade) analyses of variance. Significant grade-level effects were followed up with Tukey's (1953) HSD tests to assess the significance of the difference between each pair of means. The .01 level of significance was adopted for these paired comparisons.

Sex Differences

There were no sex by grade interactions on any of the variables included in the analyses, indicating that observed sex differences between boys and girls did not vary across age. The gender differences in children's ability perceptions are presented in Figure 1. For mathematics, as Eccles has found with adolescents, boys had significantly higher ability perceptions than did girls, $F(1, 839) = 14.48, p < .001$. The same pattern of sex differences occurred for computers, $F(1, 842) = 12.89, p < .001$. Girls had significantly higher perceptions of their music ability and social ability than did boys, $F(1, 842) = 51.20, p < .001$, and $F(1, 845) = 16.94, p < .001$, respectively. For sports activities in general and throwing ability, as expected boys had higher ability perceptions than did girls, $F(1, 841) = 138.04, p < .001$, and $F(1, 841) = 36.68, p < .001$, respectively. However, for tumbling ability, girls had much higher ability perceptions than did boys, $F(1, 844) = 78.43, p < .001$.

The importance children attach to being good at each activity is shown in Figure 2. Girls rated ability in math, reading, and music as significantly more important to them than did boys, $F(1, 843) = 8.83, p < .01$, $F(1, 845) = 9.01, p < .01$, and $F(1, 846) = 32.43, p < .001$, respectively. Boys and girls gave similar importance ratings for computer activities and social activities. And boys thought sports ability was significantly more important to them than did girls, $F(1, 14.42), p < .01$.

Children's liking of each activity is shown in Figure 3. There were no sex differences in boys' and girls' liking of mathematics or computers. Girls liked reading significantly better than did boys, $F(1, 845) = 21.61, p < .001$, and the same pattern occurred for music, $F(1, 841) = 46.30, p < .001$. Boys reported liking sports activities much more than did girls, $F(1, 845) = 44.67, p < .001$.

Children's worry about each activity is shown in Figure 4. Girls reported somewhat more worry about math than did boys, $F(1, 848) = 4.52, p < .05$. There

were no sex differences in worries about doing poorly in reading, computer activities, or sports activities. For social activities, girls reported being more worried about being disliked and worried about hurting others' feelings than did boys, $F(1, 840) = 12.37$, $p < .01$, and $F(1, 840) = 23.38$, $p < .001$, respectively.

Boys' and girls' self-esteem did not differ at any of the three grade levels.

Grade Level Differences

Figure 5 presents the first, second, and fourth grade children's ability perceptions for the different activities. First graders had more positive math ability perceptions than did second graders, who had higher ability perceptions than did fourth graders, $F(2, 839) = 3.58$, $p < .03$. The difference between the first and fourth graders was significant at the .01 level. For reading, the age differences were somewhat stronger, $F(2, 847) = 15.30$, $p < .001$. First and second grade children rated their ability in reading significantly higher ($p < .01$) than did the fourth grade children. There was a significant grade level effect for children's ability perceptions for both computer activities and music, $F(2, 842) = 4.98$, $p < .01$, and $F(2, 842) = 7.04$, $p < .01$, respectively. In both cases, first grade children's ability perceptions were significantly higher ($p < .01$) than those of the fourth graders. There were no grade differences in children's ability perceptions for social activities or sports activities.

The importance children attach to doing well in each activity is shown in Figure 6. There were no grade-related differences for math or reading. For computer activities, the overall grade-level effect was significant, $F(2, 842) = 7.69$, $p < .01$. First and second graders judged computer ability equally important, and each group though computer ability was significantly more important ($p < .01$) than did the fourth graders. For music, the overall grade level effect was significant, $F(2, 846) = 27.28$, $p < .001$, and the means indicate that at each successive grade level students thought music was less important. However, none of the paired comparisons were significant at

the .01 level. There were no grade-related differences in children's ratings of the importance of social or sports activities.

Children's liking of each activity is shown in Figure 7. There were no grade differences in liking of math, but there were in children's liking of reading, $F(2, 845) = 10.33, p < .001$. The paired comparisons showed that both first and second graders liked reading significantly more than did fourth graders. All grade groups reported liking computers quite well. There was a decline in liking of music across grades, $F(2, 841) = 3.90, p < .05$, with the difference between the first and fourth graders significant. Children's liking of sports increased at each successive grade, $F(2, 845) = 13.28, p < .001$. The differences between the first and fourth graders and first and second graders both were significant ($p < .01$).

Children's worry about doing poorly in each activity is shown in Figure 8. There were no differences in math worry. For reading, fourth graders reported the most worry, whereas first and second grade children's scores were similar, $F(2, 845) = 3.41, p < .05$. However, none of the paired comparisons were significant at the .01 level. Younger children were more worried about computers than the fourth grade children, $F(2, 842) = 7.92, p < .01$, with the differences between the first and fourth grade children significant ($p < .01$). There were no grade-related differences for sports activities or social activities. Finally, on the item assessing children's anxiety about tests, the overall grade effect was significant, $F(2, 842) = 6.19, p < .01$. The paired comparisons showed that fourth graders were significantly more anxious ($p < .01$) about tests than were either first or second graders.

Discussion

These results show that the sex differences in important achievement self-perceptions found in Eccles' and her colleagues previous work with early adolescents and adolescents also are obtained with children in elementary school. Gender differences in children's beliefs and attitudes about different school subjects and other activities

emerge during the very early elementary school years, if not earlier. As we predicted, boys' ability perceptions are higher than those of girls for math, computers, and sports activities, whereas girls' ability perceptions are higher than those of boys for social activities and music. And though girls thought they were less able in sports in general, their ability perceptions for tumbling were much higher than those of boys. This result illustrates the importance of looking at beliefs about specific activities within a domain rather than at domains in general.

Boys liked sports activities and thought them more important than did girls, whereas the opposite pattern occurred for reading and music. Girls thought social activities were more important than did boys, but both groups liked them equally well. Interestingly, girls also thought math ability more important than boys did, despite having lower perceptions of their ability in math. Girls also were more worried about doing poorly in math. This discrepancy between girls' ability perceptions in math and the importance they attach to it could have implications for their continuing participation in math courses (see below).

Boys' and girls' relative perceptions of ability across all of the different activities also are quite different. Boys' perceptions of ability are highest for sports, followed closely by math and reading, and their ability perceptions are lower for social activities, music, and tumbling. In contrast, girls' ability perceptions are highest for reading, then music and social activities, followed by tumbling, math, and sports in general. These different patterns further indicate the magnitude of the gender differences in ability perceptions. The rank-orderings for the importance of the activities is more similar across activities for boys and girls. Both groups think math and reading are most important, and music least important. The only difference for the two groups is the relative importance of sports versus social activities, with sports ranked after reading and math for boys, and social activities following reading and math for girls. Liking of the activities shows some differences across sex: boys like sports a

great deal, and the other activities much less well. Girls like reading, sports, and music equally well, and math somewhat less. It is quite interesting that girls like sports as well as any of the other activities we asked them about, despite feeling sports are less important, and not feeling particularly competent at sports.

There are fewer sex differences in children's worries about doing poorly on the different activities than differences in girls' and boys' ability perceptions and values. With older children we have found that girls express more negative affective reactions to math (Wigfield & Meece, 1988). In this study we found that girls are more worried than boys about doing badly in math. Even though girls often do better than boys in math during the elementary school years, these results show that early on they begin to worry about doing poorly in math. As math becomes more difficult later in elementary school and through junior and senior high school, this worry (along with girls' lower perceptions of their ability in math, and their negative affective reactions) could interfere with girls' performance in math, even though many of the girls have the skills to do well in math. We will assess how girls' ability perceptions and worry about math relate to their performance in math, to see if those self-perceptions are accurate, or if girls are underestimating their ability and overestimating fears of doing poorly.

The sex differences in worries in the social domain point to the importance of that domain to girls. They express more concern about being disliked, and also more concern about hurting others' feelings than do boys; hence they are concerned about prosocial things (others' feelings) as well as their general acceptance by others. These worries, along with the importance girls attach to social activities, show how concerned girls are about their social lives, even early in elementary school. Some (e.g., Hill & Lynch, 1983) have postulated that during the early adolescent years many girls become increasingly concerned about social activities and devote much of their time to those activities to the detriment of participation in other activities, including academic

activities. Our results suggest that for girls these social concerns begin much earlier than adolescence.

Contrary to our prediction, the gender differences did not change in magnitude or type from first through fourth grade. We had anticipated that the differences might increase from the earlier to later grades, and that more differences might emerge later in elementary school, after children have had more experience with the different activities. Perhaps the differences emerged early on because children at first and second grade have fairly rigid views about what is appropriate for boys and girls to do, because of their recently-formed notions of gender constancy (see Huston, 1983). Given this lack of change in the sex differences across age and the fact that the study included children as young as first graders, these results suggest that children's home environments are greatly influencing boys' and girls' beliefs about different activities, and which ones are more appropriate for girls and which for boys. As we begin to explore how children's beliefs about different activities relate to their parents' perceptions of the activities both for themselves and their children, we will be able to test this possibility more directly.

We also are interested in looking at how the differences in beliefs about specific activities influences children's choice of which activities to do. For instance, girls think math ability is quite important, yet do not feel they are as competent in math as boys feel. This difference between the girls' importance ratings and ability perceptions could create problems for them later on, particularly as math gets more difficult, and may help explain why girls tend to stop taking math more than do boys when that option becomes available. Such differences between ability perceptions and importance ratings also could have consequence for children's self-esteem. Though we observed no differences in self-esteem in this study, we would predict that over time if children believe certain activities are quite important and do not feel they are particularly good at those activities, this discrepancy could have a negative impact on their self-esteem.

Boys do not have a similar discrepancy in their ability perceptions and importance ratings for any of the activities, except perhaps for social activities.

As Nicholls has reported for children's ability perceptions for reading, we found that younger elementary school-aged children, particularly first graders, are more optimistic than fourth graders about their abilities at different activities, and value certain of those activities more. This pattern is true particularly for the academic subject areas. Though there are some differences between first and second graders and second graders and fourth graders, most of the differences are between the first and fourth graders. These differences could be due to the increasing pessimism of the older children, or perhaps increasing realism or accuracy on their part. Nicholls (1978, 1979) reports that the correlations between children's assessments of their reading ability and their performance in reading increases across the elementary school years. We will see whether this pattern occurs for the academic and non-academic activities we have assessed by looking at how children's self-perceptions relate to the different indicators we have obtained of children's actual performance on the activities.

Along with the issue of whether children's achievement self-perceptions become more accurate as they get older, we will assess whether there are differences in the accuracy of children's self-perceptions across activity domains. For instance, will the correlation between children's math grades and self-concepts of ability in math be stronger than the correlation between performance in sports and sports self-concepts of ability? Perhaps the feedback children receive about their school performance is clearer than that about their physical skills, and so children's academic self-perceptions will correlate more highly with their school grades. We will do these comparative analyses across the different activity areas we have assessed.

Children's valuing of the different activities showed fewer differences across grade levels, particularly for the academic subject areas. For instance, there were no grade differences in children's ratings of the importance of math or reading ability.

Though fourth grade children's ability perceptions are not as positive as those of the younger children, they still regard math and reading as quite important to them. And although the dominant pattern across all activities was for younger children to give higher ratings of their ability and valuing of the different activities, the one exception was children's liking of sports, which increased across age. This result may indicate a shift in emphasis from academic to non-academic activities in the middle elementary school years, at least in terms of activity preference.

The patterns of children's beliefs across activities seems more similar at the different grade levels than it did for boys and girls, despite the observed grade-level differences for many of the individual activities. The rank-orderings of children's self-concepts of ability for the different activities is quite similar across grade, as are children's ratings of the importance of different activities. Children's liking of different activities showed the most discrepancies in ranks across grade, particularly comparing the fourth graders with the other two groups. For instance, first and second graders like reading more than math, whereas fourth graders' like math more than reading. However, in all the age groups children like math and reading much less than computers and sports activities. In fact, first and second graders like math the least of all the activities we assessed. If that pattern continues, it could have serious consequences for their continued involvement with math.

Children from first through fourth grade do not differ in their general self-esteem, despite the differences in their beliefs about the specific activities that they do. This result could have occurred because children feel competent enough about certain activities (or value those activities enough) so that their general self-esteem is not affected by differences in beliefs about certain of the activities we assessed. One interesting issue we hope to address is how the different activities predict to children's general self-esteem, to see if there are certain activities critical for self-esteem maintenance. We would anticipate that the academic activities may be the key ones, but

sports (especially for boys) and social activities (especially for girls) also may play important roles.

The information we have reported here is our first look at how boys and girls at different elementary grade levels differ in their self-perceptions of ability and valuing of different activities that they frequently do. In subsequent reports as more data becomes available, we will examine how these beliefs change longitudinally, and how they relate to children's performance on the different activities. We also are very interested in how these beliefs relate to children's choices about which activities to spend their time and energy on both in and out of school. And we will look carefully at the impact parents and teachers have on children's beliefs, and how their influence may change over time.

References

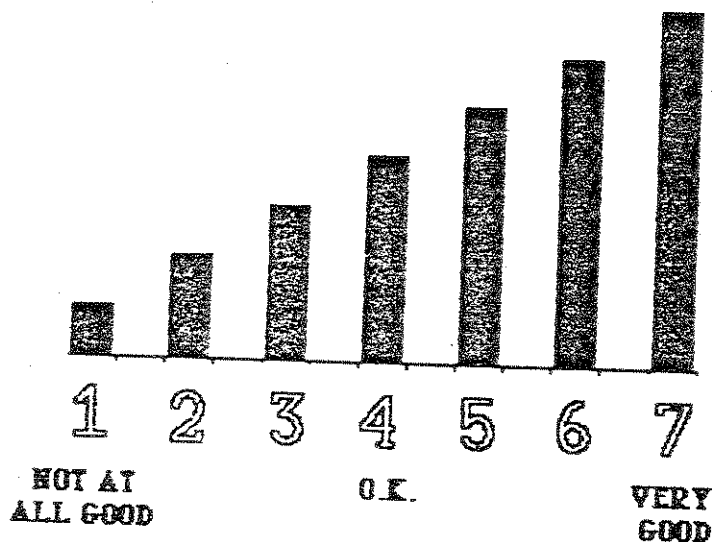
- Eccles, J. (1988). Psychological and behavioral underpinnings of performance. Final report for grant HD17296 to the National Institute for Child Health and Human Development.
- Eccles, J., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J., & Midgley, C. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), Achievement and achievement motives. (pp. 75-146). San Francisco: W. H. Freeman.
- Eccles, J., Harold-Goldsmith, R., & Miller, C. (1989, April). Parents' stereotypic beliefs about gender differences and adolescence. Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.
- Eccles, Wigfield, A., & Chambers, B. (1989). Modeling relationships among children's achievement-related expectancies, ability perceptions, and task values. Unpublished manuscript, University of Michigan.
- Eccles, J., Wigfield, A., Flanagan, C., Miller, C., Reuman, D., & Yee, D. (in press). Self-concepts, domain values, and self-esteem: Relations and changes at early adolescence. Journal of Personality.
- Harold-Goldsmith, R., Eccles, J., Jacobs, J., Blumenfeld, P., & Wigfield, A. (1989, April). In the eye of the beholder: Teachers as perceivers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Harter, S. (1982). The perceived competence scale for children. Child Development, 53, 87-97.
- Harter, S. (1985). Manual for the self-perception profile for children. Denver: University of Denver Press.
- Hill, J. P., & Lynch, M. E. (1983). Intensification of gender related role expectations during early adolescence. in J. Brooks-Gunn & A. C. Petersen (Eds.), Girls at puberty (pp. 201-228). New York: Academic Press.

- Huston, A. (1983). Sex typing. In P. H. Mussen(Ed.), Handbook of child psychology (Vol. IV, 3rd ed., pp. 387-467). New York: Wiley.
- Nicholls, J.. G. (1978). The development of the concepts of effort and ability, perceptions of academic attainment, and the understanding that difficult tasks require more ability. Child Development, 49, 800-814.
- Nicholls, J. G. (1979). Development of perception of own attainment and causal attributions for success and failure in reading. Journal of Educational Psychology, 71, 94-99.
- Tukey, J. W. (1953). The problem of multiple comparisons. Unpublished manuscript, Princeton University.
- Wigfield, A. (1984, April). Relations between ability perceptions, other achievement-related beliefs, and school performance. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Wigfield, A., Eccles, J., Mac Iver, D., Reuman, D., & Midgley, C. (1989). Changes in children's self-concepts of ability, achievement values, and general self at early adolescence: Effects of the transition to junior high school. Unpublished manuscript, University of Michigan.

Table 1

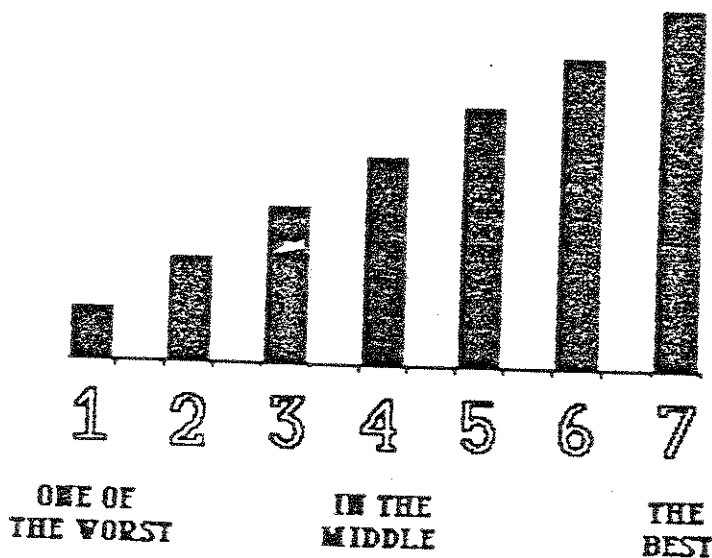
Sample Items From the Student Questionnaire

1. How good at **math** are you?



1:17

2. If you were to list all the students in your class from the worst to the best in **math**, where would you put yourself?



1:18

Figure Captions

Figure 1. Grade differences in children's ability perceptions for different activities.

Figure 2. Grade differences in children's ratings of the importance of different activities.

Figure 3. Grade differences in children's liking of different activities.

Figure 4. Grade differences in children's worries about doing poorly on different activities.

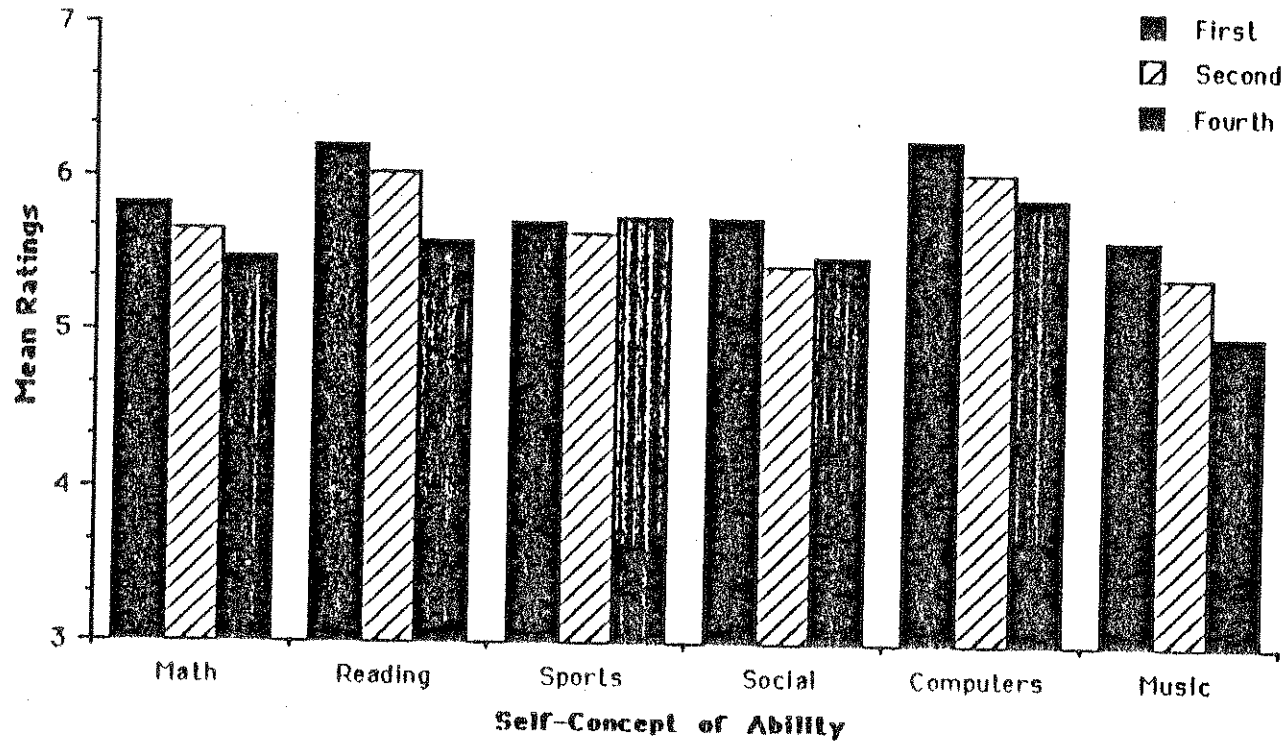
Figure 5. Sex differences in children's ability perceptions for different activities.

Figure 6. Sex differences in children's ratings of the importance of different activities.

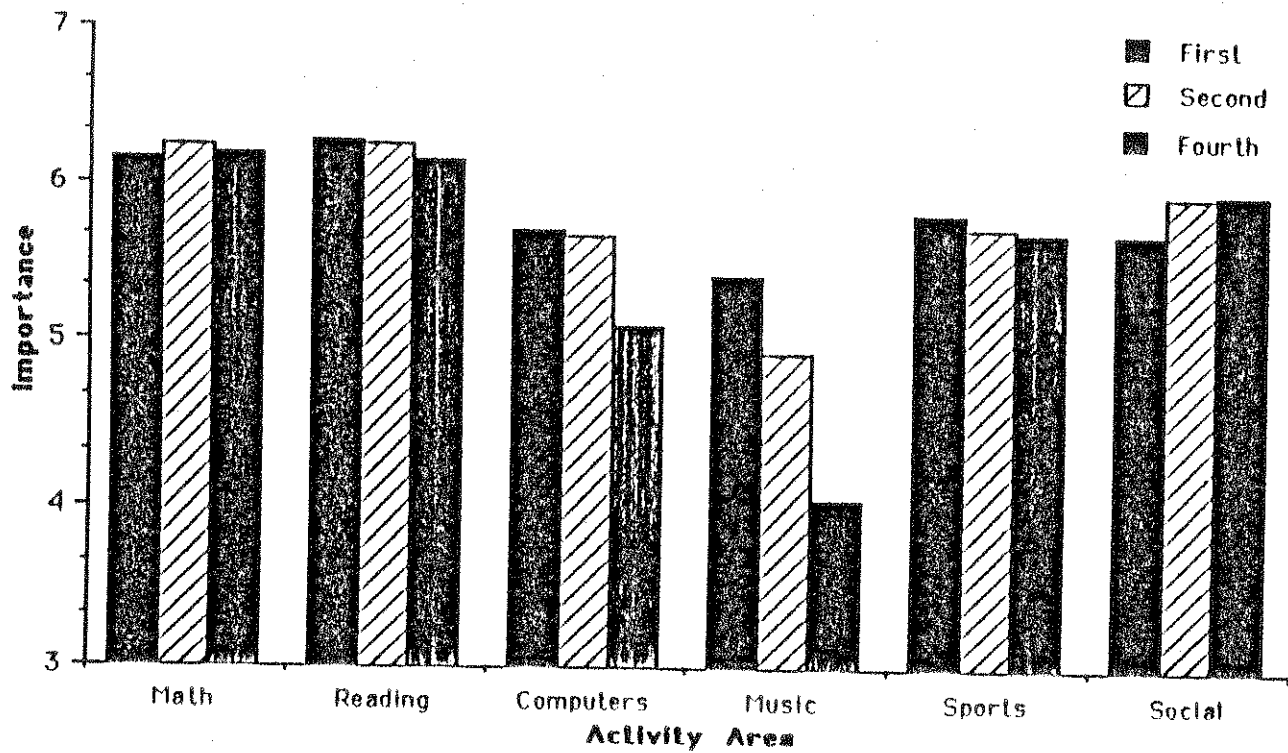
Figure 7. Sex differences in children's liking of different activities.

Figure 8. Sex differences in children's worries about doing poorly on different activities.

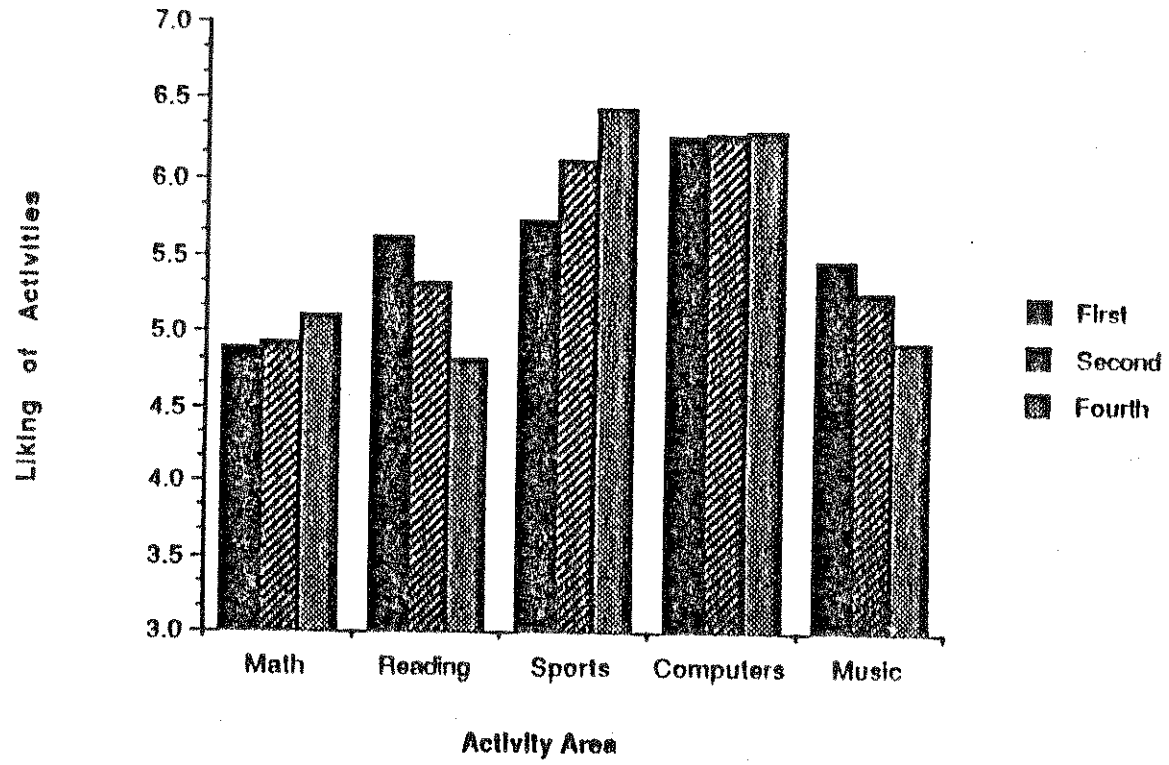
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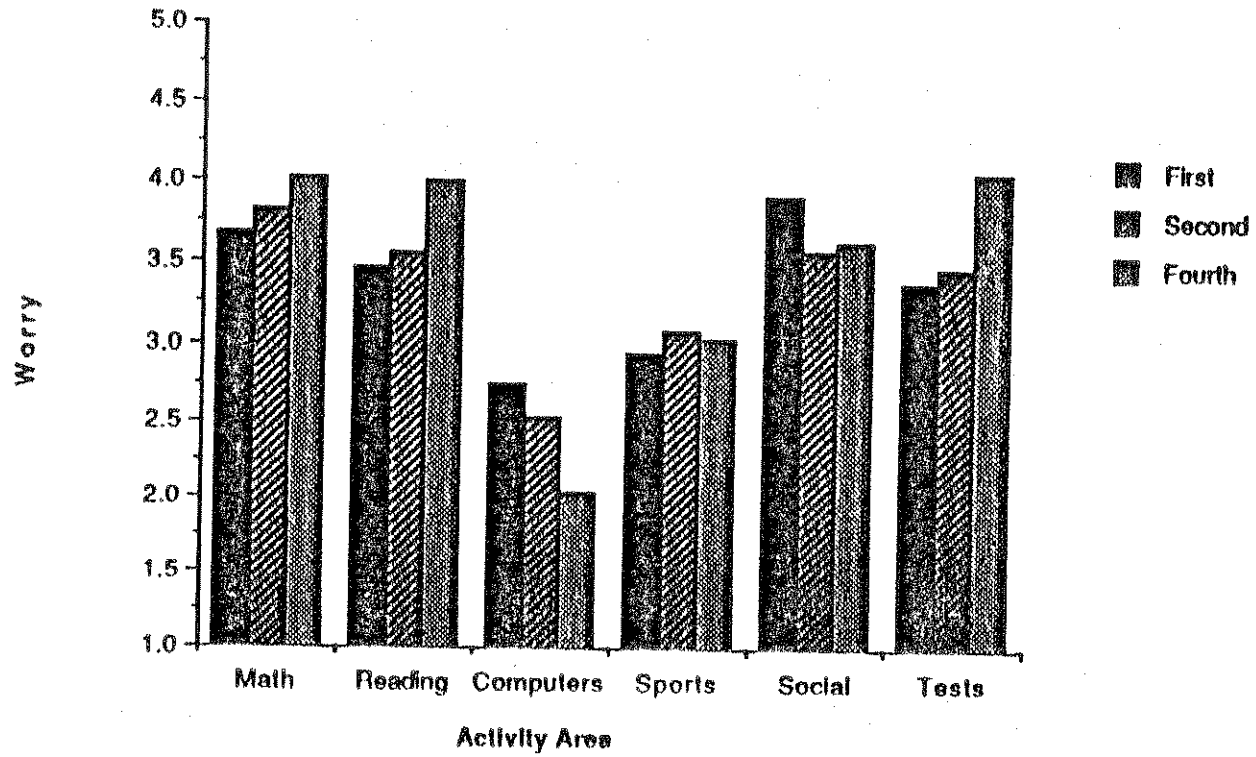
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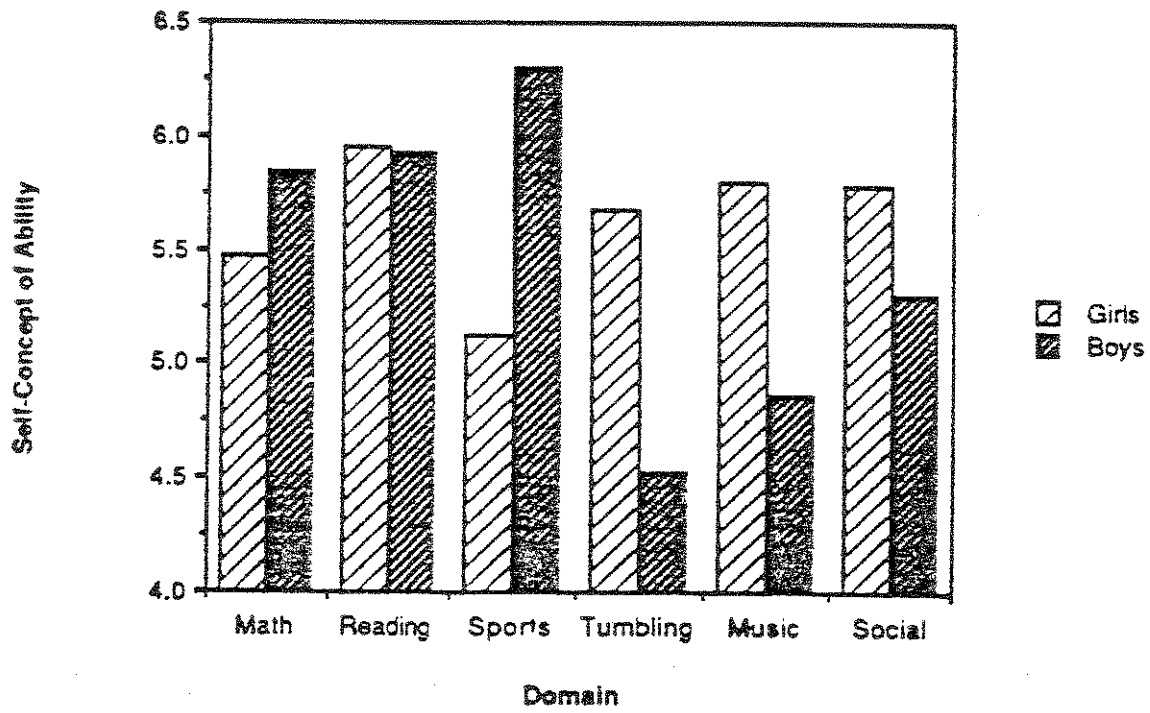
LIKING OF DIFFERENT ACTIVITIES



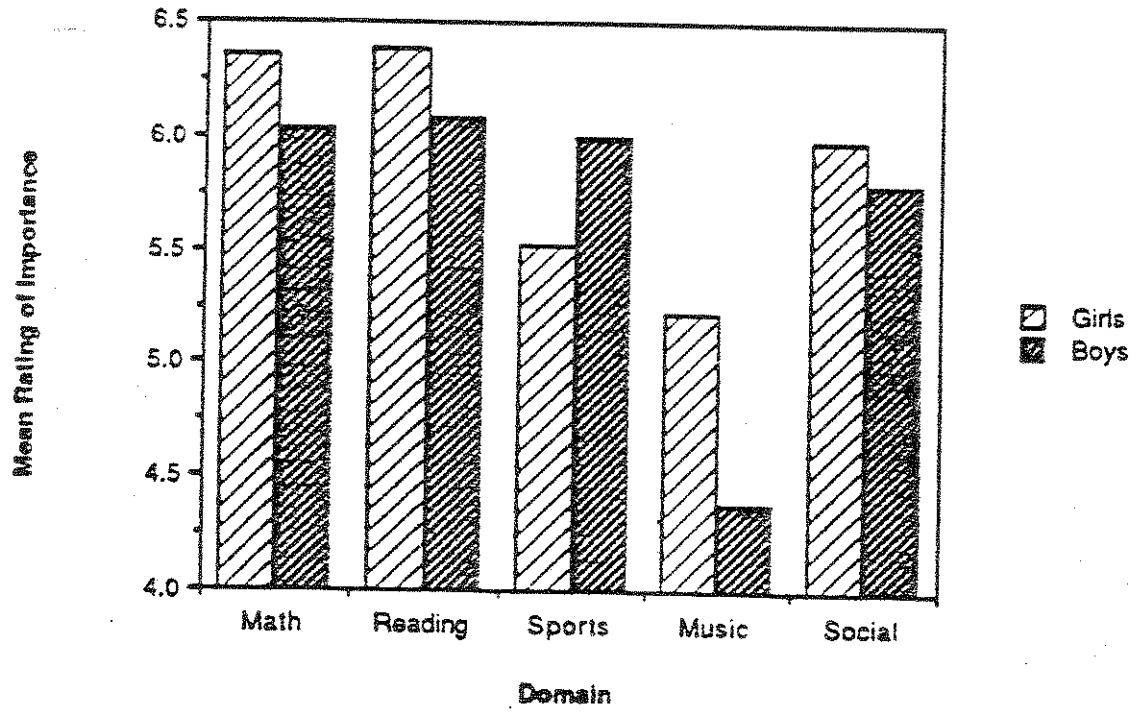
WORRIES ABOUT DIFFERENT ACTIVITIES



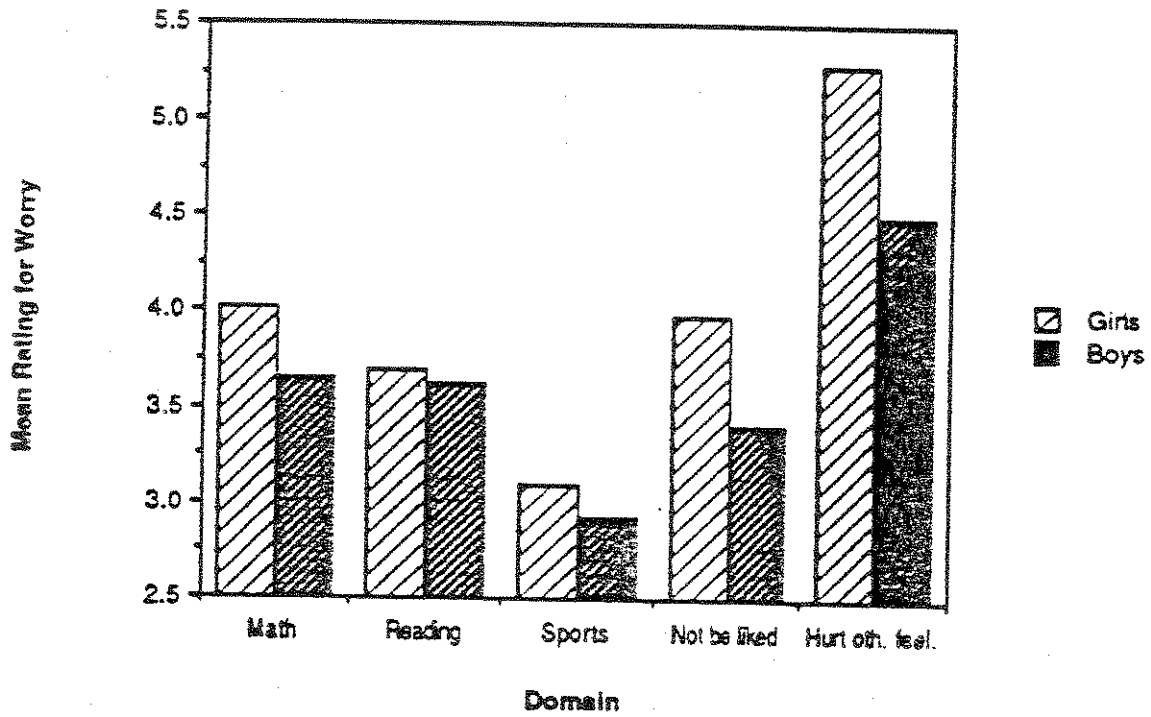
SELF-CONCEPT OF ABILITY IN DIFFERENT DOMAINS



IMPORTANCE OF ABILITY IN DIFFERENT DOMAINS



WORRY ABOUT PERFORMANCE ACROSS DOMAINS



Enjoyment of Different Domains

