This study examines the relationship of male and female high school students' attitudes toward social studies to their achievement in social studies. Graduating seniors in two New York public high schools (Queens and Nassau County) completed a questionnaire in the spring of 1995. The survey was administered to 317 seniors from the urban high school and 167 seniors from the suburban high school. Factor analysis of an attitude scale yielded four dimensions of social studies attitudes that were used in regression analysis to predict achievement. Results indicated: (1) male and female seniors in high school expressed more interest in studies compared to other subjects that contributed to achievement in social studies; (2) females who expressed greater interest in social studies reported higher social studies achievement than other females; and (3) four dimensions of social studies attitudes (general interest, values, presentation, and cooperative learning) were not associated with achievement in social studies among the male and female high school seniors sampled. (Author/EH)
Lessons from the Classroom: Male and Female High School Students' Attitudes toward and Achievement in Social Studies

by

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Abstract

The purpose of the study was to examine the relationship of male and female high school students' attitudes toward social studies to achievement in social studies. Factor analysis of an attitude scale yielded four dimensions of social studies attitudes which were used in regression analysis to predict achievement. Results indicated 1) male and female seniors in high school expressed more interest in social studies compared to other subjects which contributed to achievement in social studies, 2) females who expressed greater interest in social studies reported higher social studies achievement than other females, and 3) four dimensions of social studies attitudes were not associated with achievement in social studies among the male and female high school seniors sampled.
Research (Shaver, Davis, Jr., & Helburn, 1979; Shaughnessy & Haladyna, 1985) suggested that high school students do not like social studies. There may be several explanations for high school students' negative attitudes. One explanation suggests that the lack of interest in social studies among high school students is explained by gender. Curry and Hughes (1965), McTeer, Blanton, and Lee (1974), and Fraser (1981) found that females had more positive attitudes toward social studies than males. Although Fraser (1981) found no gender by grade level interaction effect among the high school students sampled, there was a tendency for girls to be more favorable in their attitudes toward social studies than boys irrespective of the grade level.

McTeer (1975, 1986) found that males were more positive in their attitudes toward social studies than girls. Of the high school seniors sampled (McTeer, 1986), 24.9% of the males compared to 18.6% of the females selected social studies as the most liked subject area. In addition, fewer males (16.4%) than females (23.2%) selected social studies as the least liked area. According to McTeer (1986), a possible reason for gender differences in attitudes toward social studies was the dominant role of males in subjects such as history and government. Other research (Hahn, 1982) examined the relationship between gender and achievement in economics with mixed results. She found among high school seniors that males and females did not differ significantly in achievement in 44 of 55 classes. In nine classes females had significantly higher grades than males, while in two classes males had significantly higher grades than females. Although Hahn (1982) reported gender differences in 20.0% of the classes examined, the findings may be flawed because the alpha level was not adjusted for the number of analyses performed risking a Type I error.

Other explanations provided by Witty (1961), Walberg and Weinstein (1982) suggested that attitudes toward social studies were a function of the grades received
in specific courses, while Fraser (1981) and McTeer and Beasley (1977) found that students' attitudes toward social studies deteriorated with grade level. According to Schug, Todd, and Beery (1984) high school seniors had negative attitudes toward social studies because the students considered these courses boring and complex, and tests were difficult.

When Fernandez, Massey, and Dornbusch (1976) sampled high school students in San Francisco, they found that social studies ranked last in importance when compared to English and mathematics. The research suggested that the skills taught in social studies were perceived by students as "subtle and diffuse" (p. 56) and had little relationship to students' lives in terms of initial employment opportunities, choosing or succeeding in a future occupation. More recent research (Fouts, 1987; McGowan, Sutton, & Smith, 1990; Fouts, Chan, & Biao, 1993) suggested that positive attitudes toward social studies may be more affected by classroom environmental variables such as how students are treated rather than by method of instruction.

The lack of consistent findings with respect to gender and other variables affecting high school students' attitudes toward social studies provided the major strategy for carrying out this study. However, there were other reasons for carrying out this study. First, no study with the exception of Hahn (1982) examined the relationship between attitudes toward social studies and achievement in social studies.

Second, curricular changes in social studies in the last 20 years have included increased emphasis on the role of women in history and government. Although the effect of these changes should be reflected in more positive attitudes by females toward social studies, research is lacking in this area.

Third, research cited previously suggested that social studies was among the least liked of the major high school subjects. To determine if this pattern continued,
this study sought to compare the experiences of high school students in social studies with other major subject areas and examine the influence of these experiences on achievement in social studies.

Method

Sample

The sample population in this study consisted of graduating seniors in two public high schools, one in Queens, New York and one in Nassau County, New York. Students completed a questionnaire in the spring 1995 which requested personal information and their attitudes toward social studies. The initial sample consisted of 484 students, 317 students from the urban high school and 167 students from the suburban high school. Seniors were selected as the sample population because they were completing the required four years of social studies.

Of the initial sample, 37 (11.7%) students from the urban high school and 8 (4.8%) students from the suburban high school failed to complete information specific to the subject areas of the four year social studies sequence or gender. The questionnaires of these students were eliminated from further consideration. The final sample for data analysis purposes consisted of 439 students, 280 urban students and 159 suburban students. This sample consisted of 53.3% females and 46.7% males. The majority (55.4%) of the students were white; 21.0% of the students were Hispanic; 11.8% of the students were Asian; 4.6% of the students were black; and 6.9% of the students classified themselves as other (eg, black and Hispanic, Hispanic and white).
Questionnaire

The questionnaire (see Appendix A) used to collect the data consisted of 30 questions. Questions 1-3 asked students for their gender, race, and self-perceptions of social studies achievement over four years from F (below 65) to A (95+). Questions 4-8 asked students to rate their experiences in each social studies course from least liked "1" to most liked "7". A composite score, representing the extent that students liked/disliked social studies, was the sum of the individual subject ratings divided by five.

Question 9 asked students to rate their experiences in social studies when compared to other academic subjects. This item was also a seven-point scale from "1" least liked to "7" most liked.

Question 10 asked students to assess their attitudes toward social studies using a semantic differential (Osgood, Suci, & Tanenbaum, 1957). This study used five of six bipolar adjective pairs selected by Fraser (1981) who found an internal consistency reliability of .89 for the six adjective pairs. The internal consistency reliability of the five bipolar adjectives used in this study was .86.

Based on experiences in four years of social studies, students were asked in Questions 11-30 to choose a response from 5 "strongly agree" to 1 "strongly disagree." The questions were developed following a review of the literature, discussions with social studies teachers and supervisors, and review of other attitude questionnaires in social studies, most notably the questionnaire used by Vetter (1976). The initial questionnaire consisted of 36 items designed to measure students' attitudes toward social studies teaching and strategies. An item analysis reduced the original number of items to 20 which were used to collect the data.

Responses to the 20 items were subjected to principal components analysis with a varimax rotation to identify the underlying components of the questionnaire. Five factors with eigenvalues greater than unity were produced.
Principal components analysis was also performed for males and females separately as a means of confirming the overall factor structure. The first four factors were similar for the entire sample and for the subsamples of males and females. These factors were retained. The fifth factor varied across subsamples and was omitted.

Rotated factor matrices are shown in Appendix B. For the entire sample, the first factor (F1) was clearly the most important accounting for 55.9% of the common variance in the five factor solution. The seven items of the first factor had loadings in excess of .50. The items of the factor concerned the level of interest in social studies learning related to topics, discussions, and other activities. The factor was labelled "interest in social studies."

The second factor (F2) accounted for 13.5% of the common variance and dealt with the personal benefits derived from a social studies education. The factor was called "personal values." The third factor (F3) explained 11.4% of the variance. The heavily loaded items of factor three identified the presentation goals of social studies classes and was called "social studies presentation." The fourth factor (F4) accounted for 10.5% of the variance and included items related to small group and committee work in social studies classes. The factor was labelled "cooperative learning."

The factor structures of male and female students were similar. The first factor was the same for males and females, describing students' interest in social studies and explaining the largest proportion of variance. The values factor also compared favorably for males and females, except for females an additional item loaded heavily on the second factor. The factors related to social studies presentation and cooperative learning were similar in emphasis but were reversed in order of importance for males and females, respectively. For males, factor four included only two heavily loaded items dealing with cooperative learning, while for females a third item was included.
Results

Means, standard deviations for the independent and dependent variables and the intercorrelation among independent variables for males and females are presented in Table 1. All variables are continuous and scored from low to high. The correlations on Table 1 are moderate and do not suggest a problem of multicollinearity (Lewis-Beck, 1980).

Table 2 presents the results of multiple regression analyses. Two multiple regression analyses were carried out in which male and female students' self-perceptions of achievement in social studies were regressed on four attitudinal variables. In each multiple regression analysis, the change in variance ($R^2$ change) accounted for by each independent variable was tested for significance. In the cases where missing data was present mean substitution was used. $F$-tests determined whether each independent variable added a statistically significant amount of predictive power to the total regression solution ($R^2$). The independent variables which explained a significant amount of variance in students' social studies achievement are identified with an asterisk.

Table 2 shows that attitudes related to specific social studies courses explained a significant amount of variance in the social studies achievement ($R^2$ chg. = 3.60%) of females but a lesser amount ($R^2$ chg. = .20%) for males. The zero-order correlation ($r$) suggested that females who liked their social studies courses achieved significantly higher grades than females who did not like social studies. For both males and females, general attitudes toward social studies and specific attitudes related to social studies interest, values, presentation, and cooperative learning did not explain a significant amount of variation in male and female social studies achievement.
Comparison of social studies with other major subject areas was the most important predictor of achievement in social studies both for males ($R^2$ chg. = 4.82%) and females ($R^2$ chg. = 3.91%). Males and females who liked their experiences in social studies more than their experiences in other major subjects reported higher social studies achievement than their counterparts who disliked their experiences in social studies. There were no other significant findings.

Discussion

The purpose of this study was to examine male and female high school students' attitudes toward social studies as predictors of achievement in social studies. Of the seven attitudinal variables used to explain variation in students' achievement, two may be helpful in differentiating male and female attitudes toward social studies. The major finding of this study suggested that male and female students who liked social studies more than other major subjects were more likely to report higher achievement for four years of social studies than their counterparts who did not like social studies more than other subjects. This finding suggests that teachers and administrators in high school should seek the early identification of students who like social studies, and for these students additional courses and programs should be developed. Social studies programs which incorporate a greater understanding of the predictors of social studies achievement may also influence students to choose a social studies related career such as law, teaching or law enforcement.

Contrary to the findings of research cited earlier, students in this study reported that their experiences in social studies were generally more positive than their experiences in other major subject areas. Furthermore, consistent with the findings of McTeer (1975, 1986), males reported more interest in social studies when
Table 1

Means, Standard Deviations, and Intercorrelation of Attitude Variables for Males and Females
(N ≥ 427)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male (n ≥ 191)</th>
<th>Female (n ≥ 221)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1. Courses</td>
<td></td>
<td>-.38&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>2. General Attitudes</td>
<td></td>
<td>.51</td>
</tr>
<tr>
<td>3. Interest</td>
<td></td>
<td>.51</td>
</tr>
<tr>
<td>5. Presentation</td>
<td></td>
<td>.30</td>
</tr>
<tr>
<td>6. Cooperative Learning</td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td>7. Comparison</td>
<td></td>
<td>4.47</td>
</tr>
<tr>
<td>8. Achievement</td>
<td></td>
<td>4.27</td>
</tr>
</tbody>
</table>

<sup>a</sup> For males, p < .01 = .18

<sup>b</sup> For females, p < .01 = .16
Table 2

Summary of Regression Analyses on Attitudes toward Social Studies of Achievement for Males and Females

(N = 439)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Males (n = 205)</th>
<th>Females (n = 234)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R² chg. (%)</td>
<td>F</td>
</tr>
<tr>
<td>Courses</td>
<td>0.20</td>
<td>.45</td>
</tr>
<tr>
<td>General Attitudes</td>
<td>0.80</td>
<td>1.90</td>
</tr>
<tr>
<td>Interest</td>
<td>0.42</td>
<td>.94</td>
</tr>
<tr>
<td>Values</td>
<td>0.11</td>
<td>.25</td>
</tr>
<tr>
<td>Presentation</td>
<td>0.02</td>
<td>.06</td>
</tr>
<tr>
<td>Cooperative Learning</td>
<td>0.64</td>
<td>1.45</td>
</tr>
<tr>
<td>Comparison</td>
<td>4.82</td>
<td>10.85*</td>
</tr>
</tbody>
</table>

Note: Males, R² = 12.5% (p < .01)
Females, R² = 22.7% (p < .01)

ᵃZero-order correlation coefficient between students' attitudes and achievement in social studies.

*p < .01
compared to other major subject areas than females. Thus, it may be that as concluded by McTeer (1975, 1986), social studies courses and—in particular the study of history and government is dominated by male role models.

An unanticipated result of this study was the lack of significant findings with respect to certain students' attitudes -- interest, values, presentation, and cooperative learning in social studies -- and their effects on achievement for both males and females. However, the mean scores of males and females suggested generally positive attitudes with respect to the foregoing variables. Although high school students' attitudes toward social studies instruction may be positive, they may have no significant influence on achievement. Instead, as suggested by Haladyna, Shaughnessy, and Redsun (1982), Fouts (1987), Fouts, Chan, and Biao (1993), the classroom environment created by the teacher may be an important predictor of social studies achievement.

This study was limited to one urban and one suburban high school, and therefore the results are limited in their generalizability to high schools with similar characteristics. The two high schools sampled may be considered typical of urban and suburban high schools, respectively. In addition, this study was limited in that race and SES were not included in the analysis. However, evidence was not found in the literature to suggest that attitudes toward and achievement in social studies were influenced by the foregoing variables.

Several conclusions are warranted by the results of data analysis:

1. Male and female seniors in high school expressed more interest in social studies when compared to other major subjects which contributed to their social studies achievement.

2. Female seniors in high school who expressed greater interest in their social studies courses reported higher social studies achievement than their counterparts who expressed lesser interest in social studies courses.
3. Male and female seniors in high school reported that their general attitudes as well as their interest, values, presentation, and cooperative learning in social studies did not influence their achievement in social studies.

Finally, this study must be considered exploratory. Further research is recommended to confirm the findings and to determine if male and female high school students' attitudes toward social studies remain constant over time and to determine if attitudes toward and achievement in social studies are influenced by variables not examined in this study.
References


Appendix A

Dear Senior:

The purpose of this questionnaire is to determine the success/failure of your experiences in social studies classes. Your responses to the items that follow are anonymous and confidential. When you have completed the questionnaire please return it to your teacher. Answer each item. Do not leave any item blank. Thank you.

1) Sex: Male ___ Female ___

2) Race: White ___ Black ___ Hispanic ___ Asian ___ Other ___

3) Circle your overall average for your four years of social studies:

For each of the social studies courses that follow indicate the extent that you most liked/least liked each course by placing an "X" on the appropriate line.

4) Global Studies 1 and 2 (Area Studies)
   Most Liked ___: ___: ___: ___: ___: ___: ___ Least Liked

5) Global Studies 3 and 4 (World History)
   Most Liked ___: ___: ___: ___: ___: ___: ___ Least Liked

6) Participation in Government
   Most Liked ___: ___: ___: ___: ___: ___: ___ Least Liked

7) American History
   Most Liked ___: ___: ___: ___: ___: ___: ___ Least Liked

8) Economics
   Most Liked ___: ___: ___: ___: ___: ___: ___ Least Liked

9) When compared to other academic courses (English, mathematics, science, foreign language, etc.), how would you rate your experiences in social studies classes? Place an "X" on the appropriate line.
   Most Liked ___: ___: ___: ___: ___: ___: ___ Least Liked

10) Rate your attitude toward social studies on each adjective pair by placing an "X" on the appropriate line.

   Social Studies
   Pleasant ___: ___: ___: ___: ___: ___: ___ Unpleasant
   Bad ___: ___: ___: ___: ___: ___: ___ Good
   Important ___: ___: ___: ___: ___: ___: ___ Unimportant
   Meaningful ___: ___: ___: ___: ___: ___: ___ Meaningless
   Worthless ___: ___: ___: ___: ___: ___: ___ Valuable
15. Items 11 - 30: Based on your experiences in 4 years of Social Studies, circle one of the following: strongly agree (SA), agree (A), unsure (U), disagree (D) strongly disagree (SD).

11. The learning activities in social studies classes presented information in an interesting manner.

   SA   A   U   D   SD

12. The way lessons in social studies classes were presented helped me to learn.

   SA   A   U   D   SD

13. The information in social studies classes was presented in a fair and objective manner.

   SA   A   U   D   SD

14. The learning activities in social studies classes increased my interest in the courses.

   SA   A   U   D   SD

15. I think that classroom tests and quizzes accurately measured what I learned.

   SA   A   U   D   SD

16. Social studies courses were well-planned and organized.

   SA   A   U   D   SD

17. The social studies courses I completed increased my interest in current and historical events.

   SA   A   U   D   SD

18. Films and filmstrips in social studies made it easier and more enjoyable to learn.

   SA   A   U   D   SD

19. The texts used in social studies presented information in a manner which helped me to learn.

   SA   A   U   D   SD

20. Discussions in social studies classes were interesting.

   SA   A   U   D   SD

21. Small group and committee work in social studies helped me to learn.

   SA   A   U   D   SD
22. Small group and committee work enabled me to express my opinion.

SA A U D SD

23. The topics studied in social studies were interesting.

SA A U D SD

24. The topics studied in social studies classes are of value to me in the future.

SA A U D SD

25. Social studies classes were better than I thought they would be.

SA A U D SD

26. Social studies courses helped me to better understand myself.

SA A U D SD

27. Social studies courses helped me to better understand the values that I hold.

SA A U D SD

28. Questions during discussions in social studies classes were challenging, requiring critical thinking.

SA A U D SD

29. Social studies courses helped me to appreciate other cultures.

SA A U D SD

30. Social studies courses helped me to become a more active citizen.

SA A U D SD
### Appendix B

**Varimax Rotated Factor Loadings**

<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>All Students</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
</tr>
<tr>
<td>4. The learning activities in social studies classes increased my interest in the courses.</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Social studies classes were better than I thought they would be.</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The learning activities in social studies classes presented information in an interesting manner.</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. The topics in social studies were interesting.</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The social studies courses I completed increased my interest in current and historical events.</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Discussions in social studies classes were interesting.</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The way lessons in social studies classes were presented helped me to learn.</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

- **Fl**: Factor loading for students.
- **F2**: Factor loading for males.
- **F3**: Factor loading for females.
- **F4**: Factor loading for all students.

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20
<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>All Students</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
<td>F4</td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
<td>F4</td>
<td>F1</td>
</tr>
<tr>
<td>17. Social studies courses helped me to better understand the values I hold.</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>16. Social studies courses helped me to better understand myself.</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td>.65</td>
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<tr>
<td>20. Social studies courses helped me to become a more active citizen.</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
<td>.72</td>
</tr>
<tr>
<td>14. The topics studies in social studies classes are of value to me in the future.</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td>.53</td>
</tr>
<tr>
<td>3. The information in social studies classes was presented in a fair and objective manner.</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td>.64</td>
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<tr>
<td>6. Social studies courses were well-planned and organized.</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
<td>.68</td>
</tr>
<tr>
<td>18. Questions during discussions in social studies were challenging, reassessing critical thinking.</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td>.50</td>
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<tr>
<td>19. Social studies courses helped me to appreciate other cultures.</td>
<td></td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td>.41</td>
<td></td>
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<td>Questionnaire Item</td>
<td>All Students</td>
<td>Males</td>
<td>Females</td>
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<tr>
<td></td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
<td>F4</td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
<td>F4</td>
<td>F1</td>
</tr>
<tr>
<td>11. Small group and committee work in social studies helped me to learn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Small group and committee work enabled me to express my opinion.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>8. Films and filmstrips in social studies made it easier and more enjoyable to learn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Variance explained %</td>
<td>55.9</td>
<td>13.4</td>
<td>11.4</td>
<td>10.5</td>
<td>54.9</td>
<td>13.3</td>
<td>12.4</td>
<td>10.6</td>
<td>55.6</td>
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\(^a\) Only factor loadings ≥ .40