ABSTRACT

The goal of this study was to investigate the relationship between an adolescent's socioeconomic status (SES) and selected variables of the sub-systems of the River City High School senior class social system during the 1974-75 academic year. Variables for study were selected from each of the three sub-systems of the senior class social system: grade point average of the subjects was selected from the formal sub-system; amount of cocurricular activities participated in by the subjects was selected from the semiformal sub-system; such family and community characteristics as sex, SES, and residence (town or farm) of the best friend of the subjects were selected from the informal sub-system. Although more variables showed significant correlations with SES for girls than for boys, the boys showed higher correlations on those variables that did reach significance. It was concluded that the social behavior of adolescents in the sub-systems of the River City High School senior class social system appears to be related functionally to the positions their families occupy in the social structure of the community. (Author/ND)
SOCIAL SYSTEM OF RIVER CITY HIGH SCHOOL SENIOR CLASS:

Socio-Economic Status (SES)

by

Richard F. Daly
ABSTRACT

The goal of the present study was to investigate the relationship between an adolescent's socio-economic status (SES) and selected variables of the sub-subsystems of the River City High School senior class social system during the 1974-1975 academic year. Variables for study were selected from each of the three sub-subsystems of the senior class social system (formal, semi-formal, and informal): grade-point average of the study subjects was selected from the formal sub-subsystem; amount of cocurricular activities participated in by the study subjects was selected from the semi-formal sub-subsystem; such family and community characteristics as sex, SES, and residence, town or farm, of the best friend of the study subjects were selected from the informal sub-subsystem. Although more variables showed significant correlations with SES for girls than for boys, the boys showed higher correlations on those variables that did reach significance. These sex differences, however, do not conflict with the summary statement of this study: The social behavior of adolescents in the sub-subsystems of the River City High School senior class social system appears to be related functionally to the positions their families occupy in the social structure of the community.
A great deal of research has been done on the class system of the United States; indeed, this field of inquiry is a favorite among sociologists. One reason for its popularity is the fact that the stratification system ties together many facets of society. Thus, a study of a particular American community, or even American society as a whole, that uses stratification as its focus provides an integrated and comprehensive view of social life. (1)

Most research that has used social class as its unifying theme has been confined to small communities. From "Middletown" to "Elmtown" the American town after another from the early 1930's through the late 1960's, has revealed to the investigator that the family characteristic that is the most reliable indicator of school performance is socio-economic status (SES); the higher the SES of the student's family, the higher his academic achievement. It holds, particularly, when the powerful variables of ability and past achievement are controlled. (2)

In his classic 1940's study of the "Elmtown" community and its adolescents A. B. Hollingshead developed the hypothesis that: "The social behavior of adolescents appears to be related functionally to the positions their families occupy in the social structure of the community." After empirically testing this directional hypothesis he concluded that clique relationships, dating patterns, and personal reputation among peers were explained to an extraordinary degree as flowing from family prestige class membership. (3)

In 1972, G. Rockswold examined the relationship between social class status and selected student leadership roles of the Madison High School during the academic years 1960-61 through 1969-70. He found that a statistically significant relationship existed between social class status and selected leadership roles of the semi-formal organization (student council officer, basketball co-captain, football co-captain, cheerleader, homecoming court member, and honor society member) in the high school of Madison, Minnesota, 1960-1970. (4)

THE RESEARCH PROBLEM

Any school social system is really a subsystem within the community and the still larger complex we crudely label American Society. High school pupils are involved in three "sub-subsystems," (a) the formal scheme of things which includes administration, faculty, curriculum, textbooks, classrooms, grades, rules, and regulations; (b) a semi-formal set of sponsored organizations and activities, such as athletics, dramatics, departmental clubs; and (c) the informal, half-world of usually nonrecognized and nonapproved cliques, factions, and fraternities. In his 1950's
study, C. W. Gordon found the latter sub-subsystem to be particularly powerful in controlling adolescent behavior, not only in such matters as dress and dating, but also in school achievement and deportment. (5)

The goal of the present study was to investigate the relationship between an adolescent's socio-economic status (SES) and selected variables of the sub-subsystems of the River City High School senior class social system during the 1974-1975 academic year. (6) The present study was part of a more comprehensive study of the senior class conducted under a faculty research grant from Mankato State University. In light of the goal of this study the following research questions were constructed: Is there a significant relationship between an adolescent's socio-economic status and his or her: (a) grade-point average? (b) amount of participation in curricular activities? (c) selection of best school friend in terms of such family and community peer group characteristics as socio-economic status? sex? and place of home residence, town or farm? It is in the informal social sub-subsystem that the family and community social systems most clearly interpenetrate the school social system.

These research questions were used to empirically test relationships in the total senior class group, boys and girls combined, boys' group, and girls' group respectively.

Although there has been a great deal of research done on the class system of the United States, per se, sociologists with notable exceptions have contributed little empirical research directly focusing on the role of social class in the school system of the high school. Consequently, there is an insistent need to research the continuing role of social class in the social system of the high school during this decade.

Superintendents, secondary school administrators and teachers need an understanding of the relationship of the educational system to the larger social system of which it is a part. Educators must base their school and classroom policy judgments on an objective understanding of social reality in general and the social behavior of the adolescent in particular.

METHOD

Subjects

As seen in Table 1, this study involved 229 white adolescents, 108 boys and 121 girls, comprising the total membership of the 1975 senior class of River City High School.

The results of the SES indexing procedure as shown in Table I reveals that no adolescent was classified as a member of the upper SES; 23 adolescents were categorized as members of the upper-middle SES, 13 boys and 10 girls; 108 adolescents were classified as members of the lower-middle SES, 52 boys and 56 girls; 79 adolescents were classified as members of the lower-lower social class, 10 boys and 9 girls.

Table 1 shows that of the 229 adolescents involved in this study 162 adolescents resided in the town, 75 boys and 87 girls; 67 adolescents resided in the surrounding farm area, 33 boys and 34 girls.

The results of the SES indexing procedure, regarding the town adolescent population, as shown in Table 1, reveals that no adolescent residing in the town was classified as a member of the upper SES; 21 adolescents were classified as members of the upper-middle SES, 12 boys and 9 girls;
TABLE 1

SOCIO-ECONOMIC STATUS (SES), RESIDENCE (TOWN OR FARM) AND SEX POPULATION DISTRIBUTION OF THE RIVER CITY HIGH SCHOOL SENIOR CLASS SOCIAL SYSTEM

<table>
<thead>
<tr>
<th>SES</th>
<th>TOWN</th>
<th>FARM</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BOYS</td>
<td>GIRLS</td>
<td>BOYS</td>
</tr>
<tr>
<td>Upper</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Upper-Middle</td>
<td>12</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Lower-Middle</td>
<td>30</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>Upper-Lower</td>
<td>23</td>
<td>38</td>
<td>10</td>
</tr>
<tr>
<td>Lower-Lower</td>
<td>10</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>75</td>
<td>87</td>
<td>33</td>
</tr>
</tbody>
</table>
61 adolescents were categorized as members of the lower-middle SES, 30 boys and 31 girls; 61 adolescents were classified as members of the upper-middle SES, 23 boys and 38 girls; 19 adolescents were categorized as members of the lower-lower SES.

The results of the SES indexing procedure regarding the farm adolescent population, as shown in Table 1, reveals that no adolescent residing in the surrounding farm area was classified as a member of the upper SES; 2 adolescents were categorized as members of the upper-middle SES, 1 boy and 1 girl; 47 adolescents were classified as members of the lower-middle SES, 22 boys and 25 girls; 18 adolescents were categorized as members of the upper-lower SES, 10 boys and 8 girls; no adolescent residing in the surrounding farm area was classified as a member of the lower-lower SES.

Procedure

The purpose of this study was to investigate the relationship between an adolescent's socio-economic status (SES) and selected variables of the sub-subsystems of the River City High School senior class social system during the 1974-1975 academic year.

Variables for study were selected from each of the three sub-subsystems of the senior class social system. Grade-point average of the study subjects was selected from the formal sub-subsystem of the senior class social system. These data were obtained from school records. Amount of co-curricular activities participated in by the subjects of this study was selected from the semi-formal sub-subsystem of the senior class social system. These data were obtained from the school yearbook. And finally, such family characteristics as the sex, SES, and residence (the farm-town dimension) of the best school friend of the subjects of this study were selected from the informal sub-subsystem of the senior class social system. These data were obtained from school records, informants, a socio-metric device constructed by the investigator, and the two-factor ISP.

The two factor ISP (index of social position) developed by Hollingshead and Meyers was used by the investigator to determine the SES of the subjects of this study. The two-factor technique uses the same educational and occupational scales as their three-factor technique, but the residential factor is omitted. For the two-factor technique, the weight of education is four, the weight for occupation, seven. The ISP score is determined in the same way, by multiplying the educational category by four and the occupational category by seven, and adding the products obtained. If the result is less than 17, the subject falls in the highest class; if the sum is greater than 64, the subject falls in the lowest socio-economic class. The intervening classes fall at roughly equal intervals on the scale between. (7)

Data obtained from the two-factor ISP scale technique appear in Table 1. Although the Hollingshead technique was used by the investigator, Warner's classification system was followed for Table 1. Hollingshead numbered the socio-economic classes with Roman numerals: I corresponded to Warner's upper SES; II to Warner's upper-middle SES; III to lower-middle SES; IV to upper-lower SES; and V to the lower-lower SES. (8)

A set of research questions (previously cited in the statement of the problem of this study) were formulated to guide the research process. Data gathered pertinent to the research problems and questions of this study were tabulated on IBM cards and submitted to the Mankato State
University Computer Center to determine the Pearson Product-Moment Correlation Coefficients \((r)\) and the level of significance \((s)\). (9)

The .05 level of significance was determined to be sufficiently exacting for this investigation.

RESULTS

The purpose of this study was to examine the relationship between an adolescent's socio-economic status (SES) and the selected variables of the sub-subsystems of the River City High School senior class social system during the academic year 1974-1975.

Correlation coefficients and levels of significance showing the relationship between an adolescent's SES and selected variables of the sub-subsystems of the River City High School senior class social system are presented in Table 2.

For the total group, boys and girls combined, all but one of the selected variables was significantly correlated with SES; for boys, three of the five selected variables were significantly correlated with SES; for girls, all the variables were significantly correlated with SES.

DISCUSSION

Is there a significant relationship between an adolescent's SES and his or her grade-point average? For the total group, boys and girls combined, the SES and GPA showed a correlation of .48 which was significant at the .001 level; for boys, the SES and GPA showed a correlation of .58 which was significant at the .001 level; for girls, the SES and GPA showed a correlation of .38 which was significant at the .001 level. The correlation was stronger for boys \((r = .58)\) than for girls \((r = .38)\). These data indicate that there is a highly significant relationship between an adolescent's SES and his or her grade-point average. Higher SES students tend to have higher GPA's to a degree that could be due to chance less than one time in a thousand.

Is there a significant relationship between an adolescent's SES and the amount of his or her participation in co-curricular activities? For the total group, boys and girls combined, the SES and the amount of their participation in co-curricular activities showed a correlation of .42 which was significant at the .001 level; for boys, the SES and the amount of their participation in co-curricular activities showed a correlation of .55 which was significant at the .001 level; for girls, the SES and the amount of their participation in co-curricular activities showed a correlation of .27 which was significant at the .002 level. The correlation was stronger for boys \((r = .55)\) than for girls \((r = .27)\). These data indicate that there is a highly significant relationship between an adolescent's SES and the amount of his or her participation in co-curricular activities. Higher SES adolescents, as a group, and boy subjects in particular tend to participate in more co-curricular activities than low SES boys to a degree that could be due to chance less than one time in a thousand. Higher SES girls tend to participate in more co-curricular activities than low SES girls to a degree that could be due to chance less than two times in a thousand.
### TABLE 2

**SIGNIFICANCE OF THE RELATIONSHIP OF AN ADOLESCENT’S SOCIO-ECONOMIC STATUS (SES) AND SELECTED SUB-SUBSYSTEM VARIABLES OF THE RIVER CITY HIGH SCHOOL SENIOR CLASS SOCIAL SYSTEM**

<table>
<thead>
<tr>
<th>Selected Sub-subsystem</th>
<th>Pearson Product Moment Coefficient</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables of the Senior Class Social System</td>
<td>or Correlation (r)</td>
<td></td>
</tr>
</tbody>
</table>

#### Boys and Girls

SES Correlated with:
- Best Friend's Sex: .11
- Best Friend's SES: .58
- Best Friend's Residence (Town or Farm): .10
- Grade-Point Average: .48
- Amount of Participation in Co-Curricular Activities: .42

#### Boys

SES Correlated with:
- Best Friend's Sex: .07
- Best Friend's SES: .71
- Best Friend's Residence (Town or Farm): .05
- Grade-Point Average: .58
- Amount of Participation in Co-Curricular Activities: .55

#### Girls

SES Correlated with:
- Best Friend's Sex: .23
- Best Friend's SES: .43
- Best Friend's Residence (Town or Farm): .15
- Grade-Point Average: .38
- Amount of Participation in Co-Curricular Activities: .27

**NS** not significant

- significant at .05 level
- significant at .01 level
- significant at .001 level

df = 227 boys and girls

| boys | df = 106 |
| girls | df = 119 |
Is there a significant relationship between an adolescent's SES and the SES of his or her best friend? For the total group, boys and girls combined, the SES of the adolescent and the SES of his or her best friend showed a correlation of .58 which was significant at the .001 level; for boys, the SES of a boy and the SES of his best friend showed a correlation of .71 which was significant at the .001 level; for girls, the SES of a girl and the SES of her best friend showed a correlation of .43 which was significant at the .001 level. The correlation was stronger for boys ($r = .71$) than for girls ($r = .43$). These data indicate that there is a highly significant relationship between an adolescent's SES and the SES of his or her best friend. Adolescents tend to select a best friend from their own SES group to such a high degree that there is only one chance in a thousand that this is due merely to chance selection.

Is there a significant relationship between an adolescent's SES and the sex of his or her best friend? For the total group, boys and girls combined, the SES of the adolescent and the sex of his or her best friend showed a correlation of .11 which was significant at the .05 level; for boys, the SES of the adolescent and the sex of his best friend showed a correlation of .07 which was not significant at the .05 level; for girls, the SES of the girl and the sex of her best friend showed a correlation of .23 which was significant at the .005 level. Although the correlation for the total group, boys and girls combined, was significant at the .05 level, it was low ($r = .11$). Nevertheless, these data reveal that higher SES students tended to select boys as their best friend and lower SES students tended to select girls. There was a sharp difference between sexes: the boys' correlation failed to reach statistical significance; however, the girls' correlation did reach significance revealing that higher SES girls select a boy for a best friend and lower SES girls select a girl for a best friend. The girls' correlation of .23 was highly significant at the .005 level indicating that there is only five chances in a thousand that this is due merely to chance selection.

Is there a significant relationship between an adolescent's SES and the residence, town or farm, of his or her best friend? For the total group, boys and girls combined, the SES of the adolescent and the residence of his or her best friend, town or farm, showed a correlation of .10 which was not significant at the .05 level; for boys, the SES of the boy and the residence, town or farm, of his best friend showed a correlation of .15 which was not significant at the .05 level; for girls, the SES of the girl and the residence, farm or town, of her best friend showed a correlation of .19 which was significant at the .05 level. This indicates that higher SES girls show a tendency to select their best friend from the farm, and lower SES girls tend to select their best friend from town. At first glance this finding appears inconsistent with an earlier finding: for girls, the SES of a girl and the SES of her best friend showed a correlation of .43 which was significant at the .001 level. However, when the adolescent SES population distribution patterns as seen in Table 1 are considered, for example, the large number of farm adolescents classified as lower-middle SES, the small number of farm adolescents classified as upper-lower SES, and no farm adolescents categorized as lower-lower SES, this finding is therefore not inconsistent with the earlier finding. Higher class SES girls tend to reside in the farm community while lower class SES girls tend to reside in town. (10)
On the basis of the significant findings of this study, certain directional hypotheses can be formulated regarding the sub-subsystems of the River City High School senior class social system and recommended for further empirical testing at other high schools of a similar social and community structure. They are as follows:

1. The higher the SES of an adolescent the higher his or her grade-point average.
2. The higher the SES of an adolescent the higher the amount of his or her participation in co-curricular activities.
3. The higher the SES of an adolescent the higher the SES of his or her best friend.
4. Higher SES girls tend to select a boy for a best friend and lower SES girls tend to select a girl for a best friend.
5. Higher SES girls (who tend to be from farm homes) tend to select a best friend from the farm and lower SES girls (who tend to be from town) tend to select a best friend from town.

Although more variables showed significant correlations with SES for girls than for boys, the boys showed higher correlations on those variables that did reach significance (see Table 2). These sex differences, however, do not conflict with the summary statement of this study: The social behavior of adolescents in the sub-subsystems of the River City High School senior class social system appears to be related functionally to the positions their families occupy in the social structure of the community.
NOTES


6. The actual name of the high school and the academic year was changed for publication purposes. These changes were made at the request of the school administration. "River City High School" is located in a small Minnesota community.


10. Additional statistical evidence can be presented to justify the finding: A correlation of .27 was found between residence, town or farm, and SES. This is significant at the .001 level, and indicates that higher class SES girls tend to live in the farm community, while lower class SES girls tend to live in town.