Sociometric scores among high school students and their relationships to selected variables of family living

Kenneth Lynn Cannon
Iowa State College

Follow this and additional works at: https://lib.dr.iastate.edu/rtd

Part of the Family, Life Course, and Society Commons, and the Home Economics Commons

Recommended Citation
Cannon, Kenneth Lynn, "Sociometric scores among high school students and their relationships to selected variables of family living" (1954). Retrospective Theses and Dissertations. 14224.
https://lib.dr.iastate.edu/rtd/14224

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®
NOTE TO USERS

This reproduction is the best copy available.

UMI
SOCIOMETRIC SCORES AMONG HIGH SCHOOL STUDENTS AND THEIR RELATIONSHIPS TO SELECTED VARIABLES OF FAMILY LIVING

by

Kenneth Lynn Cannon

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of The Requirements for the Degree of DOCTOR OF PHILOSOPHY

Major Subject: Rural Sociology

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

Head of Major Department

Signature was redacted for privacy.

Dean of Graduate College

Iowa State College

1954
# TABLE OF CONTENTS

## INTRODUCTION

### REVIEW OF LITERATURE

- Sociometric Tests
  - Validity and reliability
  - Sociometric scores and their designation
  - Stability of social acceptance scores
- Social Acceptance and Socioeconomic Status
- Farm and Town Differences
- Implications for This Study

## INVESTIGATION

- Objectives
- Hypotheses
- Method of Procedure
  - Selection of a high school and community
  - The sociometric test used
  - Measurement of stability
  - Determination of socioeconomic status
  - Comparison of judges' ratings and Hermann scale ratings
  - Determination of residence
  - Statistical measures used

## FINDINGS

- Stability of Scores for One Year
  - Comparison of scores for 9th and 10th grades
  - Comparison of scores for 10th and 11th grades
  - Comparison of scores for 11th and 12th grades
  - Summary of stability comparisons over a period of one year
- Stability of Scores for Two Years
  - Comparison of scores for 9th and 11th grades
  - Comparison of scores for 10th and 12th grades
  - Summary of stability comparisons over a period of two years
- Stability of Scores for Three Years
- Summary of Stability Comparisons
- Relationships between Social Acceptance and Selected Independent Factors
  - Social acceptance and socioeconomic status
  - Social acceptance and level of educational maturity
iii

Social acceptance, place of residence, and sex 79
Social acceptance, residence, and sex, with socioeconomic status and level of educational maturity held constant 84
Social acceptance, socioeconomic status, and level of educational maturity by residence and sex 85

DISCUSSION OF FINDINGS 89
Stability of Social Acceptance Scores 89
Social Acceptance Scores of Farm and Town Students 92
Social Acceptance and Socioeconomic Status 95

SUMMARY 98
Method of Procedure 98
Findings 100
Discussion of Findings 101

CONCLUSIONS 103
Suggestions for Future Research 104
Other Suggestions 108

LITERATURE CITED 109

ACKNOWLEDGMENTS 113

APPENDICES 114
Appendix A 114
Appendix B 115
Appendix C 117
Appendix D 118
Appendix E 119
Appendix F 120
Appendix G 122
Appendix H 124
Appendix I 125
Appendix J 126
Appendix K 127
Appendix L 128
Appendix M 129
Appendix N 130
Appendix O 131
Appendix P 132
iv.

LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Correlation coefficients between item scores for students</td>
<td>37</td>
</tr>
<tr>
<td>Table 2</td>
<td>Ratings of socioeconomic status by individual judges</td>
<td>46</td>
</tr>
<tr>
<td>Table 3</td>
<td>Distribution of composite of judges' socioeconomic status ratings</td>
<td>47</td>
</tr>
<tr>
<td>Table 4</td>
<td>Correlation coefficients of judges' ratings</td>
<td>48</td>
</tr>
<tr>
<td>Table 5</td>
<td>Means of social acceptance scores for the 9th and 10th grades</td>
<td>51</td>
</tr>
<tr>
<td>Table 6</td>
<td>Zero order coefficients of correlation between 9th and 10th grade social acceptance scores</td>
<td>53</td>
</tr>
<tr>
<td>Table 7</td>
<td>Results of &quot;t&quot; test analysis of differences between 9th and 10th grade social acceptance score means</td>
<td>53</td>
</tr>
<tr>
<td>Table 8</td>
<td>Means of social acceptance scores for 10th and 11th grades</td>
<td>55</td>
</tr>
<tr>
<td>Table 9</td>
<td>Zero order coefficients of correlation between 10th and 11th grade social acceptance scores</td>
<td>57</td>
</tr>
<tr>
<td>Table 10</td>
<td>Results of &quot;t&quot; test analysis of difference between 10th and 11th grade social acceptance score means</td>
<td>57</td>
</tr>
<tr>
<td>Table 11</td>
<td>Means of social acceptance scores for the 11th and 12th grades</td>
<td>59</td>
</tr>
<tr>
<td>Table 12</td>
<td>Zero order coefficients of correlation between 11th and 12th grade social acceptance scores</td>
<td>61</td>
</tr>
<tr>
<td>Table 13</td>
<td>Results of &quot;t&quot; test analysis of differences between 11th and 12th grade social acceptance scores</td>
<td>61</td>
</tr>
<tr>
<td>Table 14</td>
<td>Means of social acceptance scores for the 9th and 11th grades</td>
<td>64</td>
</tr>
<tr>
<td>Table 15</td>
<td>Zero order coefficients of correlation between 9th and 11th grade social acceptance scores</td>
<td>65</td>
</tr>
<tr>
<td>Table 16</td>
<td>Results of &quot;t&quot; test analysis of differences between 9th and 11th grade social acceptance score means</td>
<td>65</td>
</tr>
</tbody>
</table>
Table 17. Means of social acceptance scores for the 10th and 12th grades 67
Table 18. Zero order coefficients of correlation between 10th and 12th grade social acceptance scores 68
Table 19. Results of "t" test analysis of differences between 10th and 12th grade social acceptance score means 68
Table 20. Means of social acceptance scores for a high school class in the 9th, 10th, 11th, and 12th grades 71
Table 21. Zero order coefficients of correlation between 9th and 12th grade social acceptance scores 71
Table 22. Results of "t" test analysis of differences between 9th and 12th grade social acceptance score means 73
Table 23. Number of farm girls, farm boys, town girls, and town boys included in this study 75
Table 24. Social acceptance score means for socioeconomic levels 77
Table 25. Social acceptance score means by grade in school 78
Table 26. Mean scores for farm and town students and boys and girls 81
Table 27. Origin of acceptance choices received by farm and town students 81
Table 28. Chi square test of differences between farm and town students with respect to the proportion of choices received from members of their own and other sex 82
Table 29. Social acceptance means for high school classes by residence and sex 83
Table 30. Social acceptance means for a high school class in 9th to 12th grades 83
Table 31. Covariance analysis of the differences between social acceptance scores by residence and sex with socioeconomic status and educational maturity level held constant 85
Table 32. Multiple and partial correlation analysis of social acceptance, socioeconomic status, and maturity level
LIST OF APPENDIX TABLES

Appendix A. Social acceptance scores for the 9th grade in 1949-50 and the 10th grade in 1950-51, for each item and total ... 114
Appendix B. Social acceptance scores for the 9th grade in 1950-51 and the 10th grade in 1951-52, for each item and total ... 115
Appendix C. Social acceptance scores for the 9th grade in 1951-52 and the 10th grade in 1952-53, for each item and total ... 117
Appendix D. Social acceptance scores for the 10th grade in 1950-51 and the 11th grade in 1951-52, for each item and total ... 118
Appendix E. Social acceptance scores for the 10th grade in 1949-50 and the 11th grade in 1950-51, for each item and total ... 119
Appendix F. Social acceptance scores for the 10th grade in 1951-52 and the 11th grade in 1952-53, for each item and total ... 120
Appendix G. Social acceptance scores for the 11th grade in 1949-50 and the 12th grade in 1950-51, for each item and total ... 122
Appendix H. Social acceptance scores for the 11th grade in 1950-51 and the 12th grade in 1951-52, for each item and total ... 124
Appendix I. Social acceptance scores for the 11th grade in 1951-52 and the 12th grade in 1952-53, for each item and total ... 125
Appendix J. Social acceptance scores for the 9th grade in 1949-50 and the 11th grade in 1951-52, for each item and total ... 126
Appendix K. Social acceptance scores for the 9th grade in 1950-51 and the 11th grade in 1952-53, for each item and total ... 127
Appendix L. Social acceptance scores for the 10th grade in 1949-50 and the 12th grade in 1951-52, for each item and total 128

Appendix M. Social acceptance scores for the 10th grade in 1950-51 and the 12th grade in 1952-53, for each item and total 129

Appendix N. Social acceptance scores for the 9th grade in 1949-50 and the 12th grade in 1950-51, for each item and total 130

Other Appendix Materials

Appendix O. Sociometric Test: Fun, Work, and Friends 131
Appendix P. Hermann Socioeconomic Status Scale 132
INTRODUCTION

In the Spring of 1949, each experiment station director in the North Central Region appointed a member of the station staff to a committee which was given the title of "Technical Committee on Farm Family Research." This committee was appointed and organized for the purpose of considering the possibility of encouraging cooperation in family life research among the stations in the Region and possibly to develop a regional cooperative study in the area of family life.

At the first meetings of the committee, members determined that the major research problem in which they shared an interest was the general problem of "the relation of factors within farm families to the personal and social development of family members." The decision was made to work toward the development of a regional study concentrating on the interest as stated.

The committee members were cognizant of some of the problems which the implementing of such a project would involve. There were various age levels to be considered and there was an apparent lack of properly developed techniques and methods for measuring (1) factors within the family, and (2) personal and social development of family members. The worth of available techniques had not been demonstrated to the satisfaction of the committee members, and there were serious questions as to whether the available techniques were suitable. Additional complications included the lack of a theoretical framework into which
the research could be fitted, and the fact that committee members had a wide variety of training, including the fields of psychology, sociology, philosophy, and several phases of home economics.

Members of the committee decided that before a regional project could be developed, various exploratory studies would have to be made to resolve some of the problems involved in the lack of a theoretical framework, techniques, and methods. The suggestion was given that such exploratory studies should be made on the state level; and a division of responsibility on a voluntary basis was developed, which made use of the personnel, the funds, the advantages of special training, and the interests of the committee members who were doing research in the area of family relations, or who felt that they could start such research. It was felt that in this way the greatest benefit could be derived from cooperation and from the resources available at the different stations.

A tentative outline of a project was developed and entitled "The relation between certain environmental factors within farm families and selected aspects of development of family members." In more recent years a theoretical framework has been developed and the title has been revised to "Family influences on personality development."

Available "pencil-and-paper" type tests were criticized by the committee members from the standpoint that the research person could

---

not really depend upon the results, as the test subjects could falsify or slant their replies, and were particularly apt to when they were able to sense the favorable answers. The committee members were in substantial agreement that the younger the children were, the more frank they would be in their answers, whereas the older the children were the greater would be the tendency to conceal that which might reflect unfavorably upon themselves or their families.

The committee members were aware that projective tests such as the Rorschach, the Thematic Apperception Test, and the Children's Apperception Test, overcame the difficulties to a great extent which faced the "paper-and-pencil" tests, but such projective tests required a highly trained clinician to administer and interpret. An additional difficulty was that projective tests had been developed primarily for clinical purposes and it was very difficult, if not impossible, to quantify the results.

In the division of responsibility agreed upon by the committee members, the Nebraska Station chose to work with young people of adolescent age. The reason for this was that work had already been done at Nebraska on this particular age level. During the years 1935 to 1945, Stott had been the first to conduct family life research with Experiment Station funds. His interests had focused to a considerable extent on adolescence. He developed three tests, completed several research projects, and published rather widely. Stott had also been interested in farm, town, and city differences in families and their children, and a good deal of his work had been focused
thereon. The present investigator had succeeded to Stott's position in 1948, and was interested in continuing the work on young people of adolescent age and in using some of Stott's tests and materials.

In designing a project, various techniques, which might be used to measure personal and social development, were considered. Among these measures were sociometric tests which seemed to overcome some of the disadvantages of the regular "pencil-and-paper" tests, yet could be easily scored. Sociometric tests ask the members of a group to indicate with whom they would choose to associate in certain situations, to have represent them, and so on. From such tests a score can be determined for each member of a group, which is simply the number of times he was chosen by other members. The individual cannot directly affect his score at the time the test is being taken, as the score represents some of the feelings of the group toward the individual. There is probably less motivation for being dishonest or falsifying on such a test, where the individual stands to not gain anything by such action.²

A review of some of the publications on sociometric tests suggested that the scores derived therefrom might be reasonably stable over a period of time. By more fully determining the stability of such scores for young people of adolescent age, it would be possible

²In a good many of the sociometric type tests the subject is requested to list the names of his best friends. Often students who are not well-accepted will list the names of students who are very well-accepted. In such cases there is probably falsification, but rather than defeating the purposes of the investigator, such listings may actually help the investigator to find what he is actually seeking— the feelings or sentiments of the group members toward each other.
to help evaluate such a technique for use in the regional study. If the scores were found to be reasonably stable, a comparison with a variety of other tests, both "pencil-and-paper" and projective, could be made and might aid in determining their worth and applicability for the purposes of the regional study. Also, the sociometric test results could be directly related to certain family variables to determine if relationships might be determined.

As a result, an exploratory project on a longitudinal basis was developed at Nebraska. The study was entitled "The relation between selected variables or rural family living and personality patterns of children." Work on this project was started in the fall of 1949, and the major objective was to gain an increased understanding of social acceptance scores and their relationship to other measures and to certain family life variables.

A part of the project was purposely developed to be a thesis study and was concentrated primarily on the stability of social acceptance scores (from sociometric tests) and the relationship of such scores to two variables: (1) place of family residence and (2) the socioeconomic status of the family. These variables had been listed in the tentative project developed by the Technical Committee and the suggestion had been made that their relation to personal and social development might be determined. Two additional variables were included because it was felt that they might affect the results. They were the educational level of maturity and the sex of the individual. Determination of place of residence,
educational level of maturity, and sex could be readily ascertained and there seemed to be available techniques which could be used to measure socioeconomic status. There was also the hope that if sociometric scores changed rather abruptly for some individuals, insights might be gained as to the reasons for such changes.
As stated in the introduction the primary purpose of this study was to gain an increased understanding of social acceptance ratings derived from sociometric tests, with emphasis upon the stability of such ratings, and their relationship to socioeconomic status and residence (farm or town), of high school students. In the review of literature an attempt was made to locate the studies which were most pertinent and which might provide general understandings, possible techniques, and suggestions for hypotheses which might be utilized in this study.

The group as a phase of sociology has been widely recognized, but its place in the framework of sociology was rather clearly indicated in a paper entitled "Rural Sociology as a Science," by Anderson, in which he presented the following:

The Field of Sociology

<table>
<thead>
<tr>
<th>Structure of Products of</th>
<th>1. Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in Relationship</td>
<td>2. Ecological entities</td>
</tr>
<tr>
<td>between Actions of</td>
<td>3. Institutions</td>
</tr>
<tr>
<td>Conditioning environmental factors influencing</td>
<td>4. Collectivities</td>
</tr>
</tbody>
</table>

The importance of the group as a part of sociology was strongly indicated in Homans' study of "The Human Group", published in 1950, which called attention to the fact that:

The study of the human group is a part of sociology, but a neglected part. From infancy onward we are members of families, childhood gangs, school and group cliques, clubs and teams—all small groups. When, as grownups, we get jobs, we still find ourselves working with a few persons and not with the whole firm, association or government department.  

In studying the human group Homans was attempting "to reach a new sociological synthesis," and he analyzed several different groups ranging from industrial workers, to a New England community, to the family in Tykopia, to a street corner gang. The analysis was largely in terms of four elements of the behavior of people in groups—activities, interaction, sentiments, and norms—and the intention was to construct from such an analysis, a theoretical system of hypotheses concerning the behavior of people in groups that would be applicable to all small groups. Homans used the case study approach, but called attention to the sociometric test "as one simple method of mapping out some of the sentiments that relate members of a group to one another." He indicated that studies were needed to relate sentiments to activities and to interaction more fully than had been done in the past. Throughout his study the mutual dependency and close interrelationships of the elements of behavior were emphasized.

Homans work suggested a hypothesis, which this study could not test, but which seemed to offer an excellent explanation of why marked changes in the acceptance of some individuals by the group might occur.

---


3Ibid., p. 42.
The tentative hypothesis would be: that a marked change in the feelings of the group toward the individual (change in social acceptance rating) would be preceded by changes in one or more of the following: (1) acceptance of the group's norms by the individual, (2) changes in the individual's interaction with the group, (3) changes in the individual's activities with the group.

Another hypothesis which Homan's analysis stimulated was: that farm students would be less well-accepted by the high school group than town students. The reasoning which suggested this hypothesis was the understanding of the importance of interaction and activity with the other group members for the development of acceptance by the group, and the realization of the more limited opportunity which farm youth have in comparison to town youth in this respect.

Inasmuch as this study was to deal with people of adolescent age, a review was made of articles in sociology on adolescence which might contribute to this study. In 1938, Reuter published an article on "The Sociology of Adolescence," in which he called attention to the lack of a body of systematic research on adolescence and particularly to the fact that "at present there is more systematic knowledge of the deviant, the maladjusted, and the delinquent than there is of the normal."\(^4\)

Among the suggestions which Reuter made was that of "a detailed examination of the nature of the adolescent world and culture to which

adjustment is made."^5

Runner made a study of the high school diaries of two college girls and indicated importance of other persons to the adolescent through her finding that a sentence by sentence analysis indicated that "over 95% of the content deals in some way with the other persons in the social environment."^6 She also made the observation "It would seem that when the factor of status in the relationship existing between individuals in contact undergoes change, emotion is concomitantly generated."^7

Other parts of Runner's work which could not be utilized in this study but which are a part of the suggestions from this project were the classifications and descriptions of "the confidante," "the intimate," "the familiar," and "the acquaintance,"^8 which could be readily utilized in the construction of a sociometric test.

Sociometric Tests

In developing the project a review of general writings on sociometric measures was made. Two books, important to sociometrists, were read: Moreno's "Who Shall Survive,"^9 and Jennings' "Leadership

^5Ibid., p. 423.
^7Ibid., p. 439.
^8Ibid., p. 428.
and Isolation," in addition to a number of sociometric studies found in Sociometry and various professional journals.

Moreno discussed sociometric tests (which he had originated in 1923), in "Who Shall Survive." In describing the sociometric test, Moreno wrote:

...It consists in an individual choosing his associates for any group of which he is or might become a member.\(^{11}\)

...Only such a test can be correctly called sociometric which attempts to determine the feelings of individual toward each other and, second, to determine these in respect to the same criterion.\(^{12}\)

A further qualification which Moreno made (which would not be carried out in this study) was that changes should be made to permit the individuals to associate with the persons they chose, otherwise "the individuals have no interest to express their likes and dislikes truthfully as no practical consequences for themselves are derivable from these."\(^{13}\)

In his book Moreno described a number of sociometric studies which he had made with school and other groups and presented the results. One of these results which appeared to be related to the possible differences between farm and town children, was obtained

---

\(^{10}\) Jennings, Helen H. Leadership and isolation. New York, Longmans, Green and Co. 1943.

\(^{11}\) Moreno, op. cit. p. 13.

\(^{12}\) Ibid., p. 15-16.

\(^{13}\) Ibid., p. 16.
in a boarding school where he conducted a study. Moreno found that the dormitory students received an average of 4.85 choices in contrast to an average of 3.32 for the day students despite the fact that the day students outnumbered the dormitory students three to one.\textsuperscript{14}

Jennings based her book "Leadership and Isolation" on a study which she made at the New York Training School for girls at Hudson, New York. She contributed much to the understanding of the application and interpretation of sociometric measures for specific groups. In Jennings' work the factor of rejection choices received attention.

In recent years a number of studies have been made by Loomis and fellow workers at Michigan State College, Lundberg and associates at the University of Washington, Northway and other individuals at the University of Toronto, Zeleny, Bonney, Bronfenbrenner, Kuhlen, Thompson, Pepinsky, and many others.

Validity and reliability

A fundamental problem in the use of a test is with respect to its validity and reliability. In connection with the validity and reliability of sociometric tests Pepinsky has developed the point of view that the problem of the validity and reliability of sociometric tests differ in certain aspects from the problems of the validity and reliability of other tests. In respect to validity she stated:

\textsuperscript{14}Ibid., p. 29.
To summarize briefly, validity is intrinsic to sociometric data, since test results are choice behavior, and the test purports to measure that choice behavior. In order to meet the remaining questions of whether subjects' stated choices may be accepted as "valid" in the sense that they are subjectively honest, this testing situation, like those in psychometric testing, should be set up in such ways as to maximize the rapport with the experimenter and the motivation for the subjects. The hypothesis has been cited that motivation of subjects in sociometric testing increases as the criteria of choice have meaning to the subjects and as this meaning includes the knowledge that changes will be made in the group structure on the basis of the choices which they express as individuals.\(^{15}\)

A method that is frequently used to determine the reliability of a measure is that of the test-retest. Two factors complicate the use of such a method for sociometric data. For a short-time interval, the memory of the subject may produce an apparent reliability, whereas on a long-time basis the factor of the actual stability of the behavior is a complication. She stated:

\[\ldots\text{fluctuations over an extended period of time might legitimately be expected in sociometric data, these variations quite possibly reflecting actual changes in behavior, rather than low reliability of the instruments themselves.}\]^{16}\]

Further emphasizing the matter of the stability of the behavior measured by sociometric tests, she made the following statement:

\[\ldots\text{If we accept sociometry as a direct measure of the behavior under study, then the relevant problem of "reliability" is one of determining the stability of that behavior, rather than that of investigating the reliability of the tests. With this kind of test instrument it is not possible to speak of test reliability independent of the influence of the stability}\]

\(^{15}\)Pepinsky, Pauline N. The meaning of "validity" and "reliability" as applied to sociometric tests. Educational and Psychological Measurements 9:41, 1949.

\(^{16}\)Ibid., p. 42.
of the choice behavior itself.\textsuperscript{17} 

Although Pepinsky concluded from her analysis that "concepts of 'validity' and 'reliability' as traditionally used...seem to have little direct meaning or application to the field of sociometry,"\textsuperscript{18} there is a very real recognition of the need to maximize the rapport with the subject and have good motivation. Her suggestion that the choice situations have meaning to the subjects and that the subjects have the knowledge that changes will be made in the group structure ties in with the suggestion of Moreno in this respect which has already been cited.

\textbf{Sociometric scores and their designation}

In the main, two different ways of scoring the results of sociometric tests have been used. In Bonney's work, five points were given for a first choice, four for a second, and so on, with the choices after the fifth receiving one point.\textsuperscript{19} The other method which was used in several studies was merely to count the number of times individuals were chosen. As Bronfenbrenner\textsuperscript{20} pointed out,

\begin{itemize}
  \item \textsuperscript{17}Ibid., p. 45.
  \item \textsuperscript{18}Ibid., p. 48.
  \item \textsuperscript{19}Bonney, Merl E. The relative stability of social, intellectual, and academic status in grades II to IV, and the inter-relationships between these various forms of growth. Journal of Educational Psychology 34:88-102. 1943.
  \item \textsuperscript{20}Bronfenbrenner, Urie. A constant frame of reference for sociometric research. Sociometry 6: 388-389. 1943.
\end{itemize}
this latter method was probably less difficult to justify. However, in both cases the decision was more or less arbitrary. There is an apparent need for a means of determining whether the differences between the first, second, third, etc., choices are meaningful in action situations. Are the possible differences in sentiments as shown by choice number related to the actions of the individual toward the different choices which he makes? If such choice position is related to differences in actions, then a system of weighting is important to the scoring of sociometric tests. Runner's concepts of "the confidante," "the intimate," would actually reflect differences in actions if used in a sociometric test.21

The ratings derived from sociometric tests have been labeled as "social status," "choice status," "social acceptance score," "sociometric score," "social preference score," and others. The two terms which seem to be the most meaningful and have become more widely used are "social acceptance or social acceptance score," and "sociometric score." Their use would cause less confusion than does use of the word "status," and probably these two terms more nearly reflect what the tests actually measure.

Northway distinguished "acceptance" as being chosen for a realistic activity by an associate in a group where one is known personally in contrast to "popularity" which involved admiration but not personal association.22

---

21Runner, op. cit. p. 428.

22Northway, Mary L. Sociometry and some challenging problems of social relationships. Sociometry 9:190. 1946.
The term "isolate" has been used to describe those individuals who are not chosen by the other members of the group. In analyzing the personalities of the isolates or near-isolates, Northway identified three different personality patterns including recessive, socially uninterested, and socially ineffective children. She also mentioned the tendency on the part of users of sociometric scales to be concerned about the isolate and to feel that those with the highest acceptance scores were the best adjusted individuals, whereas, there was no "evidence for believing that high acceptance is better than acceptance by a few friends and acquaintances."  

**Stability of social acceptance scores**

Various studies have been made of the stability of sociometric scores over different intervals of time. In Jennings' study at the New York Training School for Girls, sociometric scores received on tests given eight months apart were correlated. The correlation coefficient obtained was .65 for 133 girls, which was significant at the 1% level.

In a study which included 151 children in an experimental school at the University of Michigan, Bronfenbrenner obtained correlations for each class from the nursery to the V - VI grade class between sociometric scores on test given in the autumn and

---

23 Northway, Mary L. Outsiders: a study of the personality patterns of children least acceptable to their age mates. Sociometry 7:12, 1944.

24 Ibid., p. 17.

25 Jennings, op. cit., p. 51.
spring. The coefficients which he obtained ranged from .27 - .17 in the nursery class to .67 - .08 in the kindergarten. The second highest coefficient was .59 - .08 which was obtained for the V-Vi grade class.26

In Texas, Bonney conducted a study of the stability of social acceptance scores and obtained the following correlation coefficients: .84 - .02 between scores in the 2nd and 3rd grades for forty-eight students, .77 - .04 between scores in the 3rd and 4th grades for forty-three students, .67 - .05 between scores in the 4th and 5th grades for fifty-seven students. In Bonney's study there was a student turnover of approximately 30 per cent, but results suggest that social acceptance scores may remain rather stable even though there is a sizeable turnover in the membership of the group.

Staker correlated the sociometric scores class members received from tests given in December of the year a class was in the 4th grades with the scores the members received in December of the year they were in the 5th grade. The correlation coefficient which resulted was .68. The class was given the test in May of the year they were in the 5th grade, and the correlation coefficient between the May score and the


27 Bonney, Merl E. The constancy of sociometric scores and their relationship to teacher judgments of social success, and to personality self-ratings. Sociometry 6:413. 1943.
score for the previous December (of 5th grade) was .87.28

The investigator was unable to locate any studies which had considered the problem of stability of social acceptance scores of high school students over a period of time, but he believes that the study of Homans has implications regarding stability of social acceptance scores for high school students and others.

In Homans' analysis of various groups, he emphasized the interrelationships that exist between the elements of behavior among the members of the group: interaction, activities, sentiments, and norms. The study of Homans suggested to the investigator why social acceptance scores in general would tend to be fairly stable—yet at the same time suggesting why marked changes might occur for some individuals. Thus, for the majority of members of the group, the many interrelationships of sentiments, interaction, activities and norms would give a certain "structure" or continuity to the group due to adhering to the accepted behavior patterns, but for the individuals who change in respect to these elements of behavior—and particularly for those who change a good deal, there is apt to be a change in their acceptance by the group. This change can be toward increased or decreased acceptance, depending on the nature of the behavior which has been altered—and whether such a change is in the direction which the group approves or disapproves.

The studies concerning stability of sociometric scores and Homans' analysis suggest the hypothesis: That the group's acceptance of its members would show a tendency to remain stable over periods of one, two, and three years.

Social Acceptance and Socioeconomic Status

In speaking of the importance of socioeconomic status, Gough has written the following:

One of the fundamental problems of sociology and social psychology is to determine the effect of various social conditions on the personalities of the members of a society. The impress of social variables upon the individual can be observed and classified from a number of different aspects. One of the most important of these, especially in a mobile, industrial, and stratified society, is socioeconomic status......29

In recent years the area of social stratification has received the attention of an increasing number of American sociologists and has been a rather controversial area for research. Different terms have been used to describe the stratification structure including: "economic class," "occupational class," "social class," "prestige class," "socioeconomic status," and others. Different methods and techniques have been developed for classifying families in respect to the particular stratification structure used, and several criteria or indices for their determination have been developed.

---

The most inclusive study of stratification indices was in a project by Duncan and Artis of a community in Pennsylvania. Seven indices were used including: occupation, income, education, offices held, socio-economic status, community prestige score, and judges' prestige ratings. Interrelationships were determined between ratings on the several indices and the ratings were also related to the social participation of the families in the community. The results indicated that of the measures used, the ratings from the socioeconomic status scale (Sewell's) were the most highly correlated with social participation in the community and ratings by the judges produced the next highest correlation. This finding was particularly pertinent to the present study as both measures were used in this study.

Duncan and Artis used five residents of the community as "judges" and correlation coefficients computed between their ratings varied from .49 to .60. The correlation coefficient obtained between the ratings from the socioeconomic status scale and the judges' ratings was .57 which was statistically significant.

In a New York study, Kaufman correlated the composite ratings of fourteen judges with the results from the Sewell Socioeconomic Status Scale and obtained a correlation coefficient of .71. He also

---


Ibid., p. 32.

obtained correlations coefficients which ranged from .38 to .88 between ratings by the individual judges and the composite rating, with eleven of the fourteen ranging from .74 to .88.33

The most widely known of the socioeconomic status scales is the one developed by Sewell at Oklahoma.34 He later developed a short form of the scale,35 which has been widely used, and the studies in New York and Pennsylvania (already mentioned) have indicated that the range of applicability to which it is adapted is much wider than might have been expected.

Another scale of this type which was of interest in the present study was that of Ingersoll,36 who developed a socio-economic-cultural scale, using as a sample, farm families in Lancaster County, Nebraska. This scale was limited in its suitability due to its length and the small and limited sample of families used in its development.

In 1950, Hermann developed a socioeconomic status scale in Nebraska from a sample of the state's farm families.37 This scale

---

33 Ibid., p. 73.
36 Ingersoll, H.L. The construction of a paper-and-pencil scale for the measurement of economic, cultural, and social status of farm families in Lancaster County, Nebraska. Unpublished M.S. Thesis. Lincoln, Nebraska University of Nebraska Library. 1942.
was based on data from fifty-two items gathered in a housing study of 558 families in Nebraska, located outside the incorporated limits of towns and cities. The sample included households from 188 small areas, located in 86 of Nebraska's 93 counties, and was selected by the Statistical Laboratory at Iowa State College. Thus, the study has a unique feature in a more adequate sample than any other scale of this type. When finally completed the scale contained twenty items, but it needs to be tested and utilized more fully to determine its worth.

Neugarten studied the relationship of social class and friendship among children in the V, VI, X, and XI grades. Her findings indicated that the child from the upper class family had a definite advantage in being sought much more frequently as a friend and rejected less frequently than was the lower class child. Her comparison of the elementary and high school youngsters included in her study, led her to state: "the high school boy or girl is probably judged more on the basis of talent and personality than as a representative of his class group."38

Bonney studied the relation of socioeconomic home background and social acceptance, using the Minnesota Home Status Index by Leahy, as the measure of the socioeconomic rating. Social acceptance ratings were secured from five sociometric test situations given to the

students during a school year, and the results indicated that on the whole the students with the highest degree of social acceptance came from "homes representing relatively higher socioeconomic levels." Bonney's work was done on the elementary school level.

In a New England elementary school Dahlke analyzed the relation between "choice status" and the economic class of the child's family without finding any association between the two variables. Sherrill, working in Nebraska on a project related to the present one, obtained significant relationships between social acceptance and socioeconomic status for high school students. Similar patterns of relationship were found for the "rural" (farm and small towns under 2,500) and "urban" (towns over 2,500) students included in her study.

Reel made the following suggestion for future research in a recent thesis involving the use of sociometric tests:


Investigation as to the influence of a person's socio-economic status on the sociability score of that person is a worthy topic of further research. At present, it tends to appear that a student with higher socio-economic status achieves a higher score in comparison with a student of lower socio-economic status. This is very tentative and should be verified.42

The various studies reviewed suggested the hypothesis: that the student's acceptance by the high school group would be related to the socioeconomic status of his family.

The inference that the student's social acceptance would be related to the socioeconomic status of his family—because the status is perceived—led to the development of another hypothesis, namely, that the relation of social acceptance and socioeconomic status would be greater for town students than it is for farm students, on the basis that the socioeconomic status of the farm youngster would be less perceptible than the socioeconomic status of the town youngster's family.

Studies made by Cavan, Stott, Landis, and Nye have been in substantial agreement that the farm youths included in their studies were less well-adjusted than the city children. In marked contrast was a study conducted by Mangus in Miami County, Ohio, in which comparisons were made between the personality adjustment of 1,229 farm, village, and city children enrolled in the 3rd and 6th grades of that county. He used three criteria of adjustment: the California Test of Personality, the "Guess Who" test, and teacher ratings. The results indicated that the level of personality adjustment was significantly higher among the farm children than it was among the city children. Very few significant differences were obtained between the farm and village children included in the study.

The only study found which made direct comparisons of farm and town children (also rural non-farm) on a sociometric test was a

---

44Stott, Leland. Some environmental factors in relation to personality development in adolescents. Nebraska Agricultural Experiment Station Bulletin 106. 1938; and Personality development in farm, small-town, and city children. Nebraska Agricultural Experiment Station Bulletin 114. 1939.
study made in Michigan by Becker and Loomis on cleavage in a rural high school. The farm students were as well-accepted as the town and rural non-farm students. Actually the farm students were chosen a few more times than expected on the basis of their proportion of the high school student body.48

Two other projects indirectly compared farm and town students. In one of these studies, Little and Tate obtained results in an elementary school in Virginia which indicated that commuting students (mostly farm) were less often chosen by their classmates for association and leadership than were non-commuting (mostly town students), even though the commuting students were three times as numerous. Also, the greater the distance which the students commuted to school, the less often were they selected.49

The other study of this type was Blanchard's. He compared 103 transported (mostly farm) and 109 non-transported (mostly town) students who attended a rural secondary school in Florida on a sociometric test. The results indicated comparable isolates in both groups and no significant differences in other aspects of acceptance.50

---


The studies reviewed on the relation of social acceptance to residence have not been in agreement, however, the decision was made to test the hypothesis: that farm students would be less well-accepted by the high school group than town students.

Implications for This Study

Certain things were gained from the review of literature. The work of Moreno, Jennings, Pepinsky, and others, contributed to the investigator's knowledge of sociometric tests, their results, limitations, and the need for care in their uses.

Homans' work contributed much to an increased understanding of the group and the reasons why social acceptance scores might remain stable for the majority of group members, yet might vary markedly for some individuals.

Bonney, Bronfenbrenner, Jennings, and Staker, have pointed out the stability of social acceptance scores over periods of time, but in the main these studies have been with groups other than high school students, and have been limited to a period of one year or less. These studies have indicated a need for more extensive information and particularly where the group has a changing membership from year to year, as in a high school student body. More definitely these studies contributed the hypothesis: That the high school group's acceptance of its members would show a tendency to remain stable over periods of one, two, and three years.
The studies of Neugarten, Sherrill, Bonney, and Reel suggested the relationship of social acceptance and socioeconomic status, and the need for further testing of this relationship. These studies suggested two hypotheses which might be tested in this study, namely: That the student's acceptance by the high school group would be related to the socioeconomic status of his family and that the relation of social acceptance and socioeconomic status would be greater for town students than for farm students.

The studies of Cavan, Stott, Landis, Nye and Mangus have pointed out possible farm and town differences and possible reasons for the same. The studies of Little and Tate, Blanchard, and Becker and Loomis have been specifically concerned with farm and town social acceptance and though the results differ, the need was emphasized for an increased understanding of the differences and suggested a hypothesis for testing: That farm students would be less well-accepted by the high school group than town students.

The review of the various studies on determining socioeconomic status indicated different possible methods or techniques which could be used to measure this factor and different scales which might be used.

The investigator did not locate any studies which specifically considered differences between farm and town students in respect to the relation of social acceptance and socioeconomic status, nor which considered the differences between girls and boys in respect to acceptance scores. The definite lack of studies of the stability
of acceptance scores for high school students and the lack—for any age group of studies for periods longer than one year, suggested the opportunity for this study to make a contribution which would increase the understanding of adolescents of high school age and their acceptance by the high school group.
INVESTIGATION

When the investigator started this study, he realized in a general way what the objectives were, but through discussion with others and the reviews of studies which had been made, the objectives were more clearly defined and may now be stated more explicitly.

Objectives

The primary purpose of this study was to gain an increased understanding of social acceptance ratings of high school students in a rural high school. More specifically, answers were sought to the following questions.

1. What was the degree of stability of the high school group's acceptance of its members over periods of one, two and three years?

1 There is need at this point for clarification of the term stability as it has been used in sociometric studies. In the work of Bonney, Staker, and Jennings (discussed in the Review of Literature), stability has been measured by correlation of the sociometric scores received by members of the group from tests given at certain intervals of time—hence stability actually refers to the ratio between the scores (as correlation is essentially a measure of ratio), rather than to the fixity of the scores. Thus, a high correlation (and high degree of stability as thus defined) might be found in two rather distinct situations. In the first instance, a high correlation may be secured where the scores tend to remain rigid, with little change in the group mean or in the individual scores. In the second instance, a high correlation may be secured where the scores change substantially—if the scores change in the same direction and in about the same proportion. The interpretation that a high level of stability also means a high level of fixity or rigidity of scores is not tenable, as it represents only one of the possible situations. Stability in this study has been used in the same sense as used in the above studies, namely, to refer to the ratio or association between the scores on the tests given at certain intervals.
2. What was the relation between the student's acceptance by
the high school group and:

(a) The socioeconomic status of his family
(b) His level of educational maturity
(c) His place of residence and sex
(d) His place of residence and sex, with the level of
  educational maturity and the socioeconomic status
  held constant
(e) The socioeconomic status of his family and his level
  of educational maturity for place of residence and
  sex divisions?

Hypotheses

Theoretical considerations and results of other studies suggested
the following four positive hypotheses:

1. That the high school group's acceptance of its members would
  show a tendency to remain stable over periods of one, two
  and three years.

2. (a) That the student's acceptance by the high school group
  would be related to the socioeconomic status of his
  family.

  (b) That the relation of social acceptance and the socio-
      economic status of his family would be greater for town
      students than for farm students.
(c) That farm students would be less well-accepted by the high school group than town students.

Although the foregoing hypotheses have been stated as positive generalizations, it should be recognized that in the statistical analysis of the data collected for this study, these hypotheses will be tested as null hypotheses.

Method of Procedure

Selection of a high school and community

One of the first consideration which was faced in starting the project was to locate a high school and community where the study could be made. In making the selection the investigator realized the importance of finding a school and community where cooperation could be willingly secured and which was also rather typical of the rural schools and communities in Nebraska.

As a guide in making the selection, the following criteria were established.

1. A high school where farm students, for the most part, had attended one-room rural schools.

2. A school where the farm students comprise one-half or more of the enrollment.

3. A high school located in a community which did not have serious ethnic or religious cleavages.

4. A high school located in a community where farm and town families would be fairly comparable in socioeconomic status.
5. A high school which would have an enrollment of seventy-five to 125 students.\(^2\)

Although it was not a definite criterion, the investigator was also hopeful of locating a high school in a community located within fifty miles of the University of Nebraska at Lincoln. This was rather essential in order to keep the costs within the allotted budget.

The high school and community which were finally selected was located within fifty miles of Lincoln. The student enrollment total was approximately 100, and over one-half of the students lived on farms and had attended one-room rural schools. The farm and town families appeared to be comparable in respect to socioeconomic status. The community had three major churches, but no marked cleavages, and the individuals who would be affected by the study were most cooperative.

In 1940, the population within the incorporated limits of the community approximated 850, and by 1950, it had grown to over 1,000. All of the students attending the high school came from within the town\(^3\) or the surrounding open country. Three other high schools were located within eight miles of this town, but they were all smaller,

---

\(^2\)The high school with an enrollment of seventy-five to 125 students is quite typical of rural Nebraska, although in point of total numbers of high schools there are more schools with smaller enrollments. Also, a reasonable number of students was desired for statistical purposes.

\(^3\)According to sociological definition, the proper designation for the place where this study took place is "village." A town is a center with a population of 2,500 to 5,000. But the word village is not used much and the residents of this community do not think of their incorporated area as a village. To the residents it is a town.
and farm students traveled as far as fourteen miles to attend high
school in this community, despite the fact that in many cases other
high schools were closer to their homes. Several of the families
of the farm students attended open-country rural churches, or
churches in other nearby towns.

Many of the roads in the farming area surrounding this town
were unsurfaced and school buses were not operated. The individual
school districts paid tuition to the town school system for the high
school students who resided within their boundaries, and the students
had to provide their own transportation to and from high school. In
order to get to high school, the farm student either had to drive, or
obtain a ride with other students. Few of the farm students had
attended the elementary school in the town.

The sociometric test used

In the Spring of 1949, Dr. Ruth Staples, who was in charge of
the Child Development Laboratory at the University of Nebraska
developed a test consisting of four questions or "items" for use
in this study and other related studies. The questions included:

1. With what pupils would you most enjoy working on a committee
for putting on a school program? Write down as many names
as you wish, putting your first choice first, then your
second choice, and so on. Your choices will not be mentioned
to anyone.

4The terms, questions and items, are used interchangeably,
although the term, item, is used more frequently.
2. With what people would you most enjoy going on a picnic?

3. What pupils would you vote for to represent this school at an important state conference of schools, this school to be judged by these pupils?

4. Who are your very best friends in this school?^5

Four lines were placed below each question on the test for the listing of the names of the individuals the students selected. The test was entitled: "Fun, Work, and Friends," and in the instructions the students were asked not to sign their names to the test. However, other tests were given at the same time, and on the other tests names were required. This arrangement made possible the determination of the name of the student who had filled out the test. The sociometric tests were given the latter part of January or the first part of February during each of the four years and were administered jointly by the investigator and either the class teacher or high school principal.

In designing the test a conscious attempt was made to find situations which were essentially practical ones and closely related to the day to day lives of the students and which would be as applicable to farm students as they were to town students. There was also the intention that the questions would be sufficiently different that they would not necessarily elicit the same responses on each question. Of the four questions, the third is the least like the others. Whereas, the other three questions involve association or contemplated association, item three does not. Hence

---

^5A copy of the test will be found in Appendix 0.
the investigator expected that the relationship of the results from item three would be somewhat different from the results on the other three items.

The decision was made that the number of student choices should not be limited, on the basis that permitting the students to select as many as they desired would give a more realistic view of the actual feelings of the individuals within the group toward each other. Negative questions were omitted, such as the names of individuals that they would not like to associate with in certain situations. The reason for the omission of such items is that it is a questionable practice from the mental hygiene point of view, and in a longitudinal study where the cooperation of the students, school teachers, and parents is very important there was less chance that a complaint would be made. The suspicion on the part of a youngster (or on the part of his parent) that he might be listed as an individual with whom other students would not like to associate, might reduce the cooperation of the youngster and the good will which was essential to the completion of the study.

Social acceptance ratings (or scores) were determined by totaling the number of times each student was selected on each of the four items by the other students. Separate totals were thus established for each item, and the sum of the four item scores equalled the total social acceptance score for this test.

To determine the relationship of the four items in the sociometric test, correlation coefficients were calculated between the four item scores, and the coefficients which resulted are shown in Table 1.
The data in Table 1 indicate that item three was less closely related to the other three items than the other three items were to each other. There were other evidences that such a distinction was made by the students. Several tests were noted where the student selected his best friend on items one, two and four but omitted that friend's name on item three. Many times a student's name appeared on item three, but not on any of the other three items on a test.

Table 1. Correlation coefficients between item scores for students

<table>
<thead>
<tr>
<th>Items Correlated:</th>
<th>Number of Students Scores</th>
<th>r</th>
<th>Significance¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2 (Committee and picnic)</td>
<td>385</td>
<td>.772</td>
<td>1%</td>
</tr>
<tr>
<td>1 and 3 (Committee and to represent school)</td>
<td>385</td>
<td>.682</td>
<td>1%</td>
</tr>
<tr>
<td>1 and 4 (Committee and friends)</td>
<td>385</td>
<td>.846</td>
<td>1%</td>
</tr>
<tr>
<td>2 and 3 (Picnic and to represent school)</td>
<td>385</td>
<td>.524</td>
<td>1%</td>
</tr>
<tr>
<td>2 and 4 (Picnic and friends)</td>
<td>385</td>
<td>.835</td>
<td>1%</td>
</tr>
<tr>
<td>3 and 4 (To represent school and friends)</td>
<td>385</td>
<td>.557</td>
<td>1%</td>
</tr>
</tbody>
</table>

In the determination of the social acceptance scores, record was kept of the class, sex, and residence of the individual making the

¹Level of significance refers to the probability that such a relationship or difference – as the case might be – would be obtained from samples taken from the same population. A 1% level of significance indicates a probability of 1 in 100 that such a relationship or difference could be obtained between samples taken from the same population. The 5% levels refer to a probability of 5 in 100.
selection, in addition to the record of who received the choice.

Measurement of stability

In the studies which were reviewed on the stability of social acceptance scores, Bonney, Staker, and Jennings, had used correlation to determine stability, and it appeared to be the most suitable statistical measure for this relationship between the scores. Accordingly correlations were calculated between the social acceptance scores which students received in the 9th and 10th grades, 10th and 11th, and so on. Through the use of correlation, the results could be compared with those on stability from other studies.

However, an additional measure was used to determine if the differences between the mean scores in the 9th and 10th grades, and so on were statistically significant. The analysis used to determine the significance of the differences between means was the "t" test.

The investigator recognized from the start of the testing that the high school group (high school student body) would change each year with respect to its composition. This change would occur as 12th grade students graduated and new students entered in the 9th grade each September. Another source of change in the composition of the group was occasioned by students who left school, or who transferred to or from other schools. This change takes place year in and year out, and it seemed to the investigator that the stability of social

\[\text{footnote 1 on page 30 where it is defined.}\]
acceptance scores ought to be determined with conditions as normal as possible. Bonney's work had indicated that a 30 per cent turnover in the population of the group apparently had little effect on the stability of the social acceptance scores.7

**Determination of socioeconomic status**

During the first year of the study 1949-50, no attempt was made to measure the socioeconomic status of the families of the high school students involved in this study. At that time Hermann was working on her scale, using the sample of 558 families which had been drawn for the North Central Region Housing study, and this investigator felt that her scale, when finished, would be more applicable to Nebraska conditions than any other, and particularly for the families living outside of the corporate limits of towns and cities. Hence the decision was made to wait until the completion of Hermann's study and to determine if the scale which she developed was suitable for use in this study.8

Inasmuch as the investigator questioned whether such scales actually reflect the way in which families in a community evaluate the status of other families, he determined to use another measure and to compare the results before deciding which one should be used throughout the study.

---


8For a more complete description of Hermann's study see Chapter II, The Review of Literature, in this study.
Kaufman\textsuperscript{9} and Hollingshead\textsuperscript{10} had used the judges' rating technique to good advantage in their studies and it seemed to have possibilities for this study. Such a technique offered a means of getting at how the people in the community felt about the families living there. The investigator recognized that the judges' technique had been developed to get at prestige class or rank in a community and that this was not the same as socioeconomic status, although the two were probably related to a considerable extent. However, he thought that through defining socioeconomic status to the judges selected, this difficulty could be surmounted. Hence, the decision was made to use the judges' rating technique along with the Hermann Socioeconomic Status Scale and to compare the results from the two measures.

Criteria were set up for the selection of four or more people to act as judges to rate the families of the high school students. The criteria included:

1. A thorough acquaintance with both farm and town families
2. "Long-time" residence in the community
3. Reasonable objectivity and willingness to cooperate
4. Representative of different occupations and different religious denominations in the community.

\textsuperscript{9}Kaufman, op. cit., pp. 71-85.

\textsuperscript{10}Hollingshead, A.B. Elmtown's youth. New York, John Wiley and Sons, Inc. 1949.
Originally the investigator had hoped to have judges selected from the various social strata. However, in finding suitable judges who met the criteria, this condition could not be met. Duncan and Artis's description of a similar situation, seems particularly appropriate here:

...It would doubtless have been possible to recruit judges from a wider range of positions, but it is almost certain that the ratings would have been technically less adequate. As far as the experience with this study goes, this kind of bias is inherent in the scheme of using the judges' ratings, and is not an adventitious problem that can be handled merely by being alert to it.  

The four people selected to act as judges included:

Mr. A. He was a farmer who was active in one of the churches, a prominent Farm Bureau worker, a public spirited man, and a lifetime resident of the community, who seemed to be well-acquainted with most everyone in the community. He was a prominent farmer, and was interested in this study. He was the only member of his church among the four judges.

Mr. B. He had lived in the community all of his life, although he had only lived in the town itself, for the past fifteen years. He was active in his church group and in Masonic Lodge work and had been a former school official in the community. He resigned from his school position just prior to the war and entered a business which kept him in close contact with the farmers in the community. During the war he had been pressed by the people in the community to return

---

11Duncan and Artis, op. cit. p. 22-23.
to teaching, which he did, and carried on his business during the summer months. One of his children was a student in the high school at the time the study took place.

Mr. C. He had been a resident of the community for thirty years, was a keen observer, and through his work had close contact with the farmers in the community. Through his church and other community activities, he was well-acquainted with many of the families in town. He probably knew more about the individual families and what happened in the community than any other individual that the investigator met. Mr. C was a member of the same church congregation as Mr. B and also had a child among the high school students.

Mr. D. He was the minister of one of the three larger church congregations and had lived in the community for approximately seventeen years. He had refused the opportunity to move to other positions which would have been better professionally, due to his strong liking for the community. He had broad social insights and was acquainted with both farm and town families. He was also active in the American Legion and other community organizations.

In order to make the judges' ratings as comparable as possible with the results obtained from the socioeconomic status scale, the same definition was given to them as Chapin, and others had used in defining socioeconomic status, namely, "the position that a family occupies with reference to the prevailing standard of cultural possessions, effective income, material possessions, and participation
in the group activities of the community.\textsuperscript{12}

A typewritten list of the families with children in high school or upper grades of the town elementary school, along with a letter of instructions which gave the definition listed above, was given to each of the judges. They were asked to rate each family they knew well on a scale from "1" to "5", with "1" being low, and "5" being high. They were informed that if they desired more than five points, they could use the half points. One of the four raters said, after he had read the instructions, that he did not need five points, that three were all that he needed. Another of the raters said that he would probably use half points, and did. The four were interested, willing to take the time, and appeared to give the rating serious attention. No attempt was made to indicate to the judges what the investigator felt a "1" or a "5" family should be, or to connect a rating number with any family in the community. In making the ratings the judges worked separately and did not know who the other judges were, nor did they see any ratings but their own.

In the two succeeding years after the first ratings were made, the names of additional families were added to the lists as new students entered the high school. These revised lists were returned

\textsuperscript{12}Chapin, F. Stuart. The measurement of social status. Minneapolis. University of Minnesota Press. p. 3. The above definition differs slightly from Chapin's definition which included "individuals or family." Otherwise they were the same.

\textsuperscript{13}A copy of the Hermann Socioeconomic Status Scale is presented in Appendix P.
to the judges for the additional ratings.

A composite of the judges' ratings was made by adding the ratings together and dividing the sum thus obtained by the number of judges who had rated the family. In this way, the family who was not well-known to all four of the judges was not penalized. Ratings were omitted on four students during the four years the study was in progress. In each case, they were students who had come to the community to spend a year with relatives.

In the school year 1950-51, the Hermann Socioeconomic Status Scale was given to the high school students along with other tests. After the students had filled in the answers to the items, the copies were collected along with the other tests, then scored, and the socioeconomic rating for each family thus determined.  

Comparison of judges' ratings and Hermann scale ratings

In scoring the copies of the Hermann Socioeconomic Scales which the students had filled out, the investigator felt that they did not actually differentiate socioeconomic status in a single community, although they might when used on a much larger area, such as a state. Most of the families in the community possessed the various items which were included in the scale. He also had the feeling that the items included might be associated with higher socioeconomic status, but the mere possession did not assure the family of a high socioeconomic status, because the items did not have

---

13 A copy of the Hermann Socioeconomic Status Scale is presented in Appendix P.
a high social or economic value in the community. Objective proof to substantiate this feeling was not available. However, the investigator's research assistant who did most of the scoring was a former resident of the community and she questioned whether the ratings had much meaning in terms of socioeconomic status in the community.\(^{14}\)

The tentative decision was made not to consider the Hermann ratings any further, but to try to justify such a step, the correlation of the judges' and the Hermann ratings was computed. The correlation coefficient which was obtained was .430 which was significant at the 1% level for the 103 families whose ratings had been correlated. This coefficient was somewhat below the coefficient of .57 which Duncan and Artis obtained between the judges' ratings and the Sewell scale ratings for the families in the study which they made in Pennsylvania.\(^{14}\)

The scores from the Hermann Scale were correlated with the social acceptance scores for the students enrolled in the high school during the same year of 1950-51, and the coefficient obtained was .021 with 103 students. Thus, actually no relationship was found between the two scores. The social acceptance scores of the students were then correlated with the ratings of the judges and the coefficient obtained was .389, which was significant at the 1% level.

\(^{14}\)Duncan and Artis, \textit{op. cit.}, p. 32.
The judges' ratings seemed to more nearly reflect the feelings of the people in the community and the investigator basically felt that this was what would be of the greatest importance in a rating of socioeconomic status and so the decision was made to use the judges' ratings throughout the study.

During the time the study was in progress judges' ratings were obtained on a total of 141 families and the distribution of the ratings is presented in Table 2.

Table 2. Ratings of socioeconomic status by individual judges

<table>
<thead>
<tr>
<th>Rating</th>
<th>Number of families given rating by judge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mr. A.</td>
</tr>
<tr>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>3.5</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>1.5</td>
<td>6</td>
</tr>
<tr>
<td>Not rated:</td>
<td>14</td>
</tr>
<tr>
<td>Total:</td>
<td>141</td>
</tr>
</tbody>
</table>

The fact that the judges could rate the families on such a scale might well be taken as an evidence of the existence and recognition of discrete social classes. However, if such social classes were
Table 3. Distribution of composite of judges' socioeconomic status ratings

<table>
<thead>
<tr>
<th>Composite rating</th>
<th>Number of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.51 - 5.00</td>
<td>4</td>
</tr>
<tr>
<td>4.01 - 4.50</td>
<td>9</td>
</tr>
<tr>
<td>3.51 - 4.00</td>
<td>21</td>
</tr>
<tr>
<td>3.01 - 3.50</td>
<td>26</td>
</tr>
<tr>
<td>2.51 - 3.00</td>
<td>42</td>
</tr>
<tr>
<td>2.01 - 2.50</td>
<td>19</td>
</tr>
<tr>
<td>1.51 - 2.00</td>
<td>13</td>
</tr>
<tr>
<td>1.00 - 1.50</td>
<td>7</td>
</tr>
</tbody>
</table>

141

recognized by the residents of the community, the expectation would be that the judges ratings would be more alike. In spite of the significant correlations subsequently obtained, there were some rather startling differences. For instance Mr. A. rated thirty-six families "5", whereas Mr. B. rated fifty-eight families "2", but Mr. C. assigned a rating of "2" to only twelve families, and gave a "1" to twenty-seven families. On individual families the greatest difference in rating was for a family rated "5" by one judge and rated "1" by another judge.

The composite ratings of the families by the judges are given in Table 3, and it is of interest to note that the distribution more nearly approaches the normal curve than does the distribution of the ratings of any of the four judges.
The ratings of each judge were correlated with the ratings of the other judges and the coefficients obtained are presented in Table 4. The coefficients are quite similar in range to those obtained between judges' ratings by Duncan and Artis who obtained coefficients which ranged from .49 to .60 between the ratings by the judges in the study.\(^{15}\)

Table 4. Correlations coefficients of judges' ratings

<table>
<thead>
<tr>
<th>Judges</th>
<th>Number of families</th>
<th>r</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. A. to Mr. B.</td>
<td>123</td>
<td>.681</td>
<td>1%</td>
</tr>
<tr>
<td>Mr. A. to Mr. C.</td>
<td>120</td>
<td>.520</td>
<td>1%</td>
</tr>
<tr>
<td>Mr. A. to Mr. D.</td>
<td>121</td>
<td>.494</td>
<td>1%</td>
</tr>
<tr>
<td>Mr. B. to Mr. C.</td>
<td>126</td>
<td>.585</td>
<td>1%</td>
</tr>
<tr>
<td>Mr. B. to Mr. D.</td>
<td>131</td>
<td>.449</td>
<td>1%</td>
</tr>
<tr>
<td>Mr. C. to Mr. D.</td>
<td>125</td>
<td>.314</td>
<td>1%</td>
</tr>
</tbody>
</table>

Determination of residence

Information regarding the residence of the family (town or farm) and the occupation of the father was secured from the students each year. Two students were found in the study who lived in farm houses, but whose parents were not engaged in farming. In one case the father worked for the R.E.A. and the father of the other student was a truck driver. The students were classified as farm students on the basis that they had shared the same conditions which farm youngsters had,

\(^{15}\)Duncan and Artis, *op. cit.*, p. 25.
and that residence rather than occupation was the actual criterion. There were two students in the study who lived in town, but whose fathers farmed. These students were listed as town students on the basis of residence and because of the fact that they attended the town school and had nearby neighbors as other town youngsters. Also, their fathers traveled to and from town to their farms to work.

Statistical measures used

In addition to correlation and the "t" test, multiple and partial correlation and covariance were used in order to exercise a greater measure of control over variables which might affect the results and thus make possible more accurate determination of relationships and differences.
FINDINGS

The first objective of this study was to determine: What is the degree of stability of the high school group's acceptance of its members over periods of one, two, and three years?¹

The longitudinal nature of this study permitted a comparison of social acceptance scores with an interval of one year for the members of nine classes (three classes were compared in the 9th and 10th grades, three were compared in the 10th and 11th grades, and three were compared in the 11th and 12th grades). For a two year interval it was possible to make a comparison of the scores of the members of four classes (two classes were compared in the 9th and 11th grades, and two were compared in the 10th and 12th grades). A comparison could be made for the members of one class with an interval of three years—in the 9th grade and in the 12th grade. These comparisons were the basis for the determination of the degree of stability of the group's acceptance of its members.

Stability of Scores for One Year

Comparison of scores for 9th and 10th grades

Total social acceptance scores for the sixty-three students in the 9th grade, ranged from a low of 0, to a high of 53, with a mean of 13.27. In comparison, the total social acceptance scores

¹For the meaning of stability as used in this study consult the first footnote on page 30.
Table 5. Means of social acceptance scores for the 9th and 10th grades

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of students</th>
<th>Items and total</th>
<th>Mean scores 9th grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean scores</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9th-1949-50</td>
<td>20</td>
<td>4.75</td>
<td>3.60</td>
<td>1.40</td>
</tr>
<tr>
<td>9th-1950-51</td>
<td>29</td>
<td>4.86</td>
<td>4.07</td>
<td>1.07</td>
</tr>
<tr>
<td>9th-1950-51</td>
<td>14</td>
<td>3.36</td>
<td>1.86</td>
<td>1.36</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean:</td>
<td>4.49</td>
<td>3.43</td>
<td>1.24</td>
<td>4.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean scores 10th grade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th-1949-50</td>
<td>6.00</td>
<td>6.00</td>
<td>2.25</td>
<td>5.25</td>
<td>19.50</td>
</tr>
<tr>
<td>9th-1950-51</td>
<td>6.03</td>
<td>4.79</td>
<td>2.76</td>
<td>5.52</td>
<td>19.10</td>
</tr>
<tr>
<td>9th-1950-51</td>
<td>3.71</td>
<td>3.64</td>
<td>1.86</td>
<td>3.50</td>
<td>12.71</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean:</td>
<td>5.51</td>
<td>4.92</td>
<td>2.40</td>
<td>4.98</td>
<td>17.81</td>
</tr>
</tbody>
</table>

Difference between the mean for 9th and the mean for 10th grade: 1.02 1.49 1.16 .87 4.54
in the 10th grade ranged from a low of 0, to a high of 71, with a mean score of 17.81. Thus, the members of the three classes were chosen 4.54 times more in the 10th grade than they were in the 9th. Table 5 presents the 9th and 10th grade social acceptance score means for each of the three classes and for each item. The individual scores from which data for Table 5 were derived are given in Appendices A, B and C.

The scores, item and total, received in the 9th grade were correlated with the scores received in the 10th grade for each of the three classes and for the three classes combined. These coefficients are given in Table 6. Of the twenty correlations, fourteen were significant at the 1% level and ranged from .784 to .934. The lowest correlation for a class, .466, obtained on item 4, was nonsignificant. The next lowest, .587, was significant at the 5% level. The correlation coefficient of the total social acceptance scores for the three classes combined was .912.

To determine the statistical significances of the differences between the social acceptance score means in the 9th and 10th grades, the "t" test was used. Three of the twelve differences between the class item scores were significant at the 1% level, and two were significant at the 5% level. For the total acceptance scores the differences in means between the 9th and 10th grades was nonsignificant for one class, and significant at the 1% level for the other two classes and for the three classes combined. These data are given in Table 7.
Table 6. Zero order coefficients of correlation between 9th and 10th grade social acceptance scores

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Coefficients of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>20</td>
<td>.854**</td>
</tr>
<tr>
<td>9th 1950-51</td>
<td>29</td>
<td>.879**</td>
</tr>
<tr>
<td>9th 1951-52</td>
<td>14</td>
<td>.884**</td>
</tr>
<tr>
<td>For all:</td>
<td>63</td>
<td>.867**</td>
</tr>
</tbody>
</table>

* Significant at the 5% level.
** Significant at the 1% level.

Table 7. Results of "t" test analysis of differences between 9th and 10th grade social acceptance scores means

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>t</th>
<th>t</th>
<th>t</th>
<th>t</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th 1949-50</td>
<td>20</td>
<td>1.98</td>
<td>2.72**</td>
<td>4.14**</td>
<td>-2.25</td>
<td>2.90**</td>
</tr>
<tr>
<td>9th 1950-51</td>
<td>29</td>
<td>2.54**</td>
<td>1.71</td>
<td>4.02**</td>
<td>2.66*</td>
<td>4.14**</td>
</tr>
<tr>
<td>9th 1951-52</td>
<td>14</td>
<td>0.60</td>
<td>2.80</td>
<td>1.11</td>
<td>-0.19</td>
<td>1.29</td>
</tr>
<tr>
<td>For all:</td>
<td>63</td>
<td>3.19**</td>
<td>3.97**</td>
<td>4.00**</td>
<td>2.81**</td>
<td>4.93**</td>
</tr>
</tbody>
</table>

* Significant at the 1% level.
** Significant at the 5% level.
Thus, the statistical analysis of the 9th and 10th grade social acceptance scores for three high school classes indicated that the scores exhibited a high degree of stability in relationship to each other. A definite increase was obtained in scores from the 9th to 10th grades, with several increases being statistically significant at the 1% or 5% levels, even though the increases among the members of one class were much smaller than were the increases in the other two classes. It is also of interest to note that the two lowest coefficients obtained between item scores for the three classes were obtained in the class which had the smallest increase in social acceptance scores.

**Comparison of scores for 10th and 11th grades**

Comparisons of the 10th and 11th grade social acceptance scores were made for seventy-three students enrolled in three classes. Among these students in the 10th grade, scores ranged from a low of 0 to a high of 71, with a mean score of 18.21, whereas in the 11th grade, the range was from a low of 0 to a high of 96, with a mean score of 23.03. Thus, students were chosen 4.32 more times in the 11th grade than they were in the 10th grade. Table 8 presents data on the various means of the social acceptance scores and was derived from the individual

---

2The small number of students in the one 9th and 10th grade class might be a factor in the fact that the increase was much smaller than in the other two classes. However, another factor may have been more important than size. A new student who entered the school in the 10th grade received a total of 69 choices. If these choices had been distributed among the other students, the increase would have been much nearer to the increases found in the other two classes.
Table 8. Means of social acceptance scores for 10th and 11th grades

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Items and total Mean</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th 1949-50</td>
<td>25</td>
<td>4.88</td>
<td>4.40</td>
<td>1.88</td>
<td>5.00</td>
<td>16.16</td>
<td></td>
</tr>
<tr>
<td>10th 1950-51</td>
<td>19</td>
<td>6.16</td>
<td>6.16</td>
<td>2.32</td>
<td>5.42</td>
<td>20.06</td>
<td></td>
</tr>
<tr>
<td>10th 1951-52</td>
<td>29</td>
<td>5.93</td>
<td>4.72</td>
<td>2.76</td>
<td>5.34</td>
<td>18.76</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weighted mean</strong></td>
<td></td>
<td>5.63</td>
<td>4.99</td>
<td>2.34</td>
<td>5.25</td>
<td>18.21</td>
<td></td>
</tr>
</tbody>
</table>

|                     |    | 11th                 |    |    |    |    |       |
| 10th 1949-50        | 25 | 5.04                 | 5.08| 2.48| 5.12| 17.72|
| 10th 1950-51        | 19 | 7.16                 | 8.05| 4.16| 7.21| 26.58|
| 10th 1951-52        | 29 | 8.14                 | 6.45| 4.69| 6.00| 25.28|
| **Total**           | 73 |                      |    |    |    |    |       |
| **Weighted mean**   |    | 6.82                 | 6.40| 3.80| 6.01| 23.03|

Difference between mean for 10th and mean for 11th grades:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>10th</th>
<th>11th</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.19</td>
<td>1.41</td>
<td>1.46</td>
<td>.76</td>
<td>4.82</td>
</tr>
</tbody>
</table>
scores in Appendices D, E, and F.

The scores, item and total, received by the students in the 10th grade, were correlated with the scores they received in the 11th grade for the students in each of the three classes, and for the three classes combined. The coefficients obtained are given in Table 9 and all of the twenty coefficients were significant at the 1% level, ranging from .669 to .970. The correlation coefficients for the three classes combined on the total social acceptance score was .877 (significant at the 1% level), which was a little lower than the corresponding coefficient of .912 which was obtained between the 9th and 10th grade scores.

The "t" tests indicated that for the individual classes, differences between the means on three of the items were significant at the 1% level and for the remaining nine were non-significant. On the total social acceptance score, the difference between the means for the two grades was significant at the 1% level for one class, at the 5% level for another class, and non-significant for the third. For the seventy-three students in the three classes combined, all differences were significant at the 1% level. The "t" test results are presented in Table 10.

These results are similar to those obtained in the comparison of scores in the 9th and 10th grades, and the statistical analysis again exhibited the high degree of stability of the scores, with some significant differences between means for the two years.
Table 9. Zero order coefficients of correlation between 10th and 11th grade social acceptance scores

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>10th 1949-50</td>
<td>25</td>
<td>.797**</td>
<td>.888**</td>
<td>.970**</td>
<td>.860**</td>
<td>.906**</td>
</tr>
<tr>
<td>10th 1950-51</td>
<td>19</td>
<td>.793**</td>
<td>.744**</td>
<td>.669**</td>
<td>.875**</td>
<td>.843**</td>
</tr>
<tr>
<td>10th 1951-52</td>
<td>29</td>
<td>.871**</td>
<td>.863**</td>
<td>.878**</td>
<td>.845**</td>
<td>.910**</td>
</tr>
<tr>
<td>For all:</td>
<td>73</td>
<td>.814**</td>
<td>.815**</td>
<td>.803**</td>
<td>.849**</td>
<td>.877**</td>
</tr>
</tbody>
</table>

* Significant at the 5% level.
** Significant at the 1% level.

Table 10. Results of "t" test analysis of differences between 10th and 11th grade social acceptance score means

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>10th 1949-50</td>
<td>25</td>
<td>.28</td>
<td>1.79</td>
<td>1.43</td>
<td>.35</td>
<td>1.30</td>
</tr>
<tr>
<td>10th 1950-51</td>
<td>19</td>
<td>1.33</td>
<td>1.91</td>
<td>1.94</td>
<td>3.20**</td>
<td>2.73*</td>
</tr>
<tr>
<td>10th 1951-52</td>
<td>29</td>
<td>3.03**</td>
<td>3.19**</td>
<td>2.22</td>
<td>1.47</td>
<td>3.17**</td>
</tr>
<tr>
<td>For all:</td>
<td>73</td>
<td>2.90**</td>
<td>3.92**</td>
<td>3.22**</td>
<td>2.85**</td>
<td>4.27**</td>
</tr>
</tbody>
</table>

* Significant at the 5% level.
** Significant at the 1% level.
Comparison of scores for 11th and 12th grades

Among the sixty-nine students enrolled in three classes whose 11th and 12th scores were compared, the total social acceptance scores for the individual class members ranged from 0 to 98 in the 11th grade, with a mean of 23.09, whereas in the 12th grade, the range was from 0 to 100, with a mean of 24.44. Thus, the difference between the means was only 1.35. The mean of item 3 showed an increase of 2.78, whereas, for the other three items, the means decreased. This was in marked contrast to the changes which occurred between the 9th and 10th and the 10th and 11th grades, where all of the means, item and total, increased. Table 11 presents the means for the individual classes on each item, the total score, and for the three classes combined. Data on the individuals in these two classes are given in Appendices G, H, and I.

Seeking an explanation for the leveling off of social acceptance scores from the 11th to the 12th grades, the individual total acceptance scores were analyzed. The data indicated that the scores of thirty-four of the students had increased from the 11th to the 12th grade, the scores of two others had remained the same, while the scores of thirty-three had decreased. This was different from the changes which occurred between the 9th and 10th and the 10th and 11th grades. In the 10th grade, the scores of forty-three students were higher than they had been in the 9th, the scores of ten were the same, and the scores of ten were lower. In the 11th
Table 11. Means of social acceptance scores for the 11th and 12th grades

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Item and total Means for 11th grades</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11th 1949-50</td>
<td>29</td>
<td>7.52</td>
<td>5.66</td>
<td>5.62</td>
<td>6.41</td>
<td>25.21</td>
</tr>
<tr>
<td>11th 1950-51</td>
<td>22</td>
<td>5.50</td>
<td>5.50</td>
<td>2.73</td>
<td>5.50</td>
<td>19.23</td>
</tr>
<tr>
<td>11th 1951-52</td>
<td>18</td>
<td>6.61</td>
<td>7.28</td>
<td>3.78</td>
<td>6.72</td>
<td>24.39</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean:</td>
<td></td>
<td></td>
<td>6.64</td>
<td>6.03</td>
<td>4.22</td>
<td>6.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Item and total Means for 12th grades</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11th 1949-50</td>
<td>29</td>
<td>6.90</td>
<td>5.72</td>
<td>7.66</td>
<td>5.41</td>
<td>25.69</td>
</tr>
<tr>
<td>11th 1950-51</td>
<td>22</td>
<td>5.55</td>
<td>5.09</td>
<td>5.32</td>
<td>4.91</td>
<td>20.86</td>
</tr>
<tr>
<td>11th 1951-52</td>
<td>18</td>
<td>6.56</td>
<td>5.44</td>
<td>8.00</td>
<td>6.78</td>
<td>26.78</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean:</td>
<td></td>
<td></td>
<td>6.38</td>
<td>5.45</td>
<td>7.00</td>
<td>5.61</td>
</tr>
</tbody>
</table>

Difference between mean for 11th and mean for 12 grades: -.26 -.58 2.78 -.59 1.35
grade the scores of fifty-one students were higher than they had been in the 10th, the scores of two were the same, and the scores of twenty were lower. Thus, for a substantial part of the high school group, the social acceptance scores increased from the 11th to the 12th grades, but for approximately an equal number, scores actually decreased, accounting for the little change in the social acceptance score means between the 11th and 12th grades.³

Correlations between scores received in the 11th and 12th grades were, in the main, lower than the corresponding correlations between the 9th and 10th grades and between the 10th and 11th grades. Data in Table 12 indicate that nineteen of the twenty coefficients of correlation were significant at the 1% level and ranged from .553 to a high of .937. The other coefficient was .546 (significant at the 5% level). For the three classes combined the correlation

³In the 12th grade in high school some students seem to lose much of their interest in the high school group and its activities. They associate less often with high school students and more often with young people who are not attending high school. Such a tendency is particularly noticeable for the high school girl who is engaged to a fellow who is not in school.

The situation of the 12th grade student also differs in that students in the other grades have choices from those immediately (one year) ahead and behind them. Choices for 12th graders must come from students in their own grade or in the grades below.

These explanations may account for many of the students whose social acceptance scores decrease from the 11th to the 12th grade.
Table 12. Zero order coefficients of correlation between 11th and 12th grade social acceptance scores

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1 r</th>
<th>2 r</th>
<th>3 r</th>
<th>4 r</th>
<th>Total r</th>
</tr>
</thead>
<tbody>
<tr>
<td>11th 1949-50</td>
<td>29</td>
<td>.844**</td>
<td>.887**</td>
<td>.937**</td>
<td>.673**</td>
<td>.913**</td>
</tr>
<tr>
<td>11th 1950-51</td>
<td>22</td>
<td>.577**</td>
<td>.553**</td>
<td>.761**</td>
<td>.607**</td>
<td>.706**</td>
</tr>
<tr>
<td>11th 1951-52</td>
<td>18</td>
<td>.639**</td>
<td>.801**</td>
<td>.702**</td>
<td>.546**</td>
<td>.718**</td>
</tr>
<tr>
<td>For all:</td>
<td>64</td>
<td>.741**</td>
<td>.751**</td>
<td>.854**</td>
<td>.611**</td>
<td>.825**</td>
</tr>
</tbody>
</table>

* Significant at the 1% level.
** Significant at the 5% level.

Table 13. Results of "t" test analysis of difference between 11th and 12th grade social acceptance score means

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1 t</th>
<th>2 t</th>
<th>3 t</th>
<th>4 t</th>
<th>Total t</th>
</tr>
</thead>
<tbody>
<tr>
<td>11th 1949-50</td>
<td>29</td>
<td>-1.00</td>
<td>.18</td>
<td>2.26</td>
<td>-1.82</td>
<td>.26</td>
</tr>
<tr>
<td>11th 1950-51</td>
<td>22</td>
<td>.06</td>
<td>.51</td>
<td>2.62*</td>
<td>-1.00</td>
<td>.67</td>
</tr>
<tr>
<td>11th 1951-52</td>
<td>18</td>
<td>-.06</td>
<td>-2.20</td>
<td>2.12</td>
<td>.05</td>
<td>.62</td>
</tr>
<tr>
<td>For all:</td>
<td>69</td>
<td>-.59</td>
<td>-1.53</td>
<td>3.92**</td>
<td>-1.40</td>
<td>.92</td>
</tr>
</tbody>
</table>

* Significant at the 1% level.
** Significant at the 5% level.
of the total sociometric scores had a coefficient of .825, (significant at the 1% level).

The "t" test indicated that only two of the differences in means between the 11th and 12th grades were significant. The difference between the means on the third item for one of the classes was significant at the 5% level, and the difference between the means on the third item for the three classes combined was significant at the 1% level. The lower number of significant differences was expected in view of the small change between the 11th and 12th grade social acceptance score means. Data on the "t" test results are given in Table 13.

Summary of stability comparisons over a period of one year

In the nine comparisons of social acceptance scores of classes with an interval of one year, correlation coefficients for total social acceptance scores ranged from .706 to .934 for the individual classes and all were significant at the 1% level. Of the thirty-six correlations of scores on the individual items for the nine classes, thirty-three were significant at the 1% level, two at the 5% level, and one was non-significant. The correlation coefficients of the total social acceptance scores received were: .912 for sixty-three students in the 9th and 10th grades, .877 for seventy-three students in the 10th and 11th grades, and .825 for sixty-nine students in the 11th and 12th grades. In each case these coefficients were much higher than was necessary for significance at the 1% level, and evidenced a high level of stability among social acceptance scores.
Stability of Scores for Two Years

Comparison of scores for 9th and 11th grades

During the four years the study was in progress, comparisons between scores received in the 9th and 11th grades were made for two classes involving a total of forty-seven students. In the 9th grade the forty-seven students were chosen a mean number of 14.52 times on the sociometric test, whereas, in the 11th grade they were chosen a mean number of 26.12 times, or 11.60 more times than in the 9th grade. The means are presented in Table 14 and are based on the individual scores given in Appendices J and K.

Vreeland found a reduction in the correlation of social acceptance scores of fraternity members from .35 for an interval of one year to .18 for a two year interval.\(^4\) In view of Vreeland's work and the greater length of time involved, the assumption that correlations would be substantially lower with an interval of two years than the correlations of social acceptance scores with an interval of one year, seemed very reasonable. Actually the correlation was much higher than had been anticipated. The five correlations for each class were significant at the 1% level in addition to the five correlations for the combined classes. The fifteen coefficients ranged from .716 to .927. The correlation coefficient for the forty-seven students in the two classes between the total social acceptance scores in the 9th and 11th grades was

\(^{4}\)Vreeland, Francis M. Social relations in the college fraternity. Sociometry 5:154. 1942.
Table 14. Means of social acceptance scores for the 9th and 11th grades

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Items and total</th>
<th>Means for 9th grades</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>19</td>
<td>4.89</td>
<td>3.63</td>
<td>1.47</td>
</tr>
<tr>
<td>9th 1950-51</td>
<td>28</td>
<td>5.00</td>
<td>4.21</td>
<td>1.11</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean</td>
<td>47</td>
<td>4.96</td>
<td>3.98</td>
<td>1.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Means for 11th grades</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th 1949-50</td>
<td>19</td>
<td>7.16</td>
<td>8.05</td>
<td>4.16</td>
<td>7.21</td>
</tr>
<tr>
<td>9th 1950-51</td>
<td>28</td>
<td>8.36</td>
<td>6.57</td>
<td>4.86</td>
<td>6.04</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean</td>
<td>47</td>
<td>7.87</td>
<td>7.17</td>
<td>4.57</td>
<td>6.51</td>
</tr>
<tr>
<td>Difference between the mean for 9th and the mean for the 11th grades</td>
<td>11.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 15. Zero order coefficients of correlation between 9th and 11th grade social acceptance scores

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-r</td>
<td>2-r</td>
<td>3-r</td>
<td>4-r</td>
<td></td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>19</td>
<td>.812**</td>
<td>.842**</td>
<td>.716**</td>
<td>.834**</td>
<td>.850**</td>
</tr>
<tr>
<td>9th 1950-51</td>
<td>28</td>
<td>.836**</td>
<td>.846**</td>
<td>.925**</td>
<td>.870**</td>
<td>.927**</td>
</tr>
<tr>
<td>For all:</td>
<td>47</td>
<td>.818**</td>
<td>.823**</td>
<td>.800**</td>
<td>.839**</td>
<td>.897**</td>
</tr>
</tbody>
</table>

* Significant at the 5% level.
** Significant at the 1% level.

Table 16. Results of "t" test analysis of differences between 9th and 11th grade social acceptance score means

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-t</td>
<td>2-t</td>
<td>3-t</td>
<td>4-t</td>
<td></td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>19</td>
<td>3.70**</td>
<td>5.74**</td>
<td>2.98**</td>
<td>4.55**</td>
<td>5.33**</td>
</tr>
<tr>
<td>9th 1950-51</td>
<td>28</td>
<td>3.95**</td>
<td>3.93**</td>
<td>3.32**</td>
<td>3.74**</td>
<td>4.67**</td>
</tr>
<tr>
<td>For all:</td>
<td>47</td>
<td>5.20**</td>
<td>6.51**</td>
<td>4.37**</td>
<td>5.76**</td>
<td>6.92**</td>
</tr>
</tbody>
</table>

* Significant at the 5% level.
** Significant at the 1% level.
.897, which far surpassed the level needed to be significant at the 1% level.

The "t" test analysis of the differences in means between the 9th and 11th grades indicated that the increases were significant between the 9th and 11th grade means at the 1% level for each of the fifteen "t" tests made. These data are presented in Table 16.

Comparison of the scores for 10th and 12th grades

Comparisons were also made between the social acceptance scores received in the 10th and 12th grades by thirty-nine students in two classes. In the 10th grade the mean number of times the thirty-nine students were chosen was 18.28, whereas, in the 12th grade they were chosen an additional 5.36 times, for a mean of 23.64. Actually 4.41 of the increase of 5.36 choices came from item 3. There are, however, marked differences between the two classes. For the members of the 10th grade class in 1949-50 the mean number of times chosen increased from 17.41 in the 10th grade to 20.86 in the 12th grade, whereas for the 10th grade class in 1950-51 the mean number of times chosen increased from 19.41 in the 10th grade to a score of 27.23 in the 12th grade. The means are presented in Table 17 and are derived from the individual scores given in the Appendices L and M.

Of the fifteen correlation coefficients computed between social acceptance scores in the 10th and 12th grades, thirteen of them—ranging from .446 to .706—were significant at the 1% level. Of the remaining two, one was significant at the 5% level with a coefficient of .520, whereas, the other with a coefficient of .384 was non-
Table 17. Means of social acceptance scores for the 10th and 12th grades

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Item and total Means for 10th grades</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th 1949-50</td>
<td>22</td>
<td>5.32</td>
<td>4.77</td>
<td>2.14</td>
<td>5.18</td>
<td></td>
<td>17.41</td>
</tr>
<tr>
<td>10th 1950-51</td>
<td>17</td>
<td>5.94</td>
<td>6.00</td>
<td>2.47</td>
<td>5.00</td>
<td></td>
<td>19.41</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted mean</td>
<td></td>
<td>5.59</td>
<td>5.31</td>
<td>2.28</td>
<td>5.10</td>
<td></td>
<td>18.28</td>
</tr>
</tbody>
</table>

| Means for 12th grades |
|-----------------------|-----------------|-----------------|-----------------|-----------------|
| Item                  | 1               | 2               | 3               | 4               |
| 10th 1949-50          | 22              | 5.55            | 5.09            | 5.32            | 4.91            | 20.36 |
| 10th 1950-51          | 17              | 6.53            | 5.41            | 8.47            | 6.82            | 27.23 |
| Total                 | 39              |                 |                 |                 |                 |       |
| Weighted mean         |                 | 5.97            | 5.23            | 6.69            | 5.74            | 23.63 |

Difference between mean for 10th and mean for the 12th grades

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.38</td>
<td>-.08</td>
<td>4.41</td>
<td>.64</td>
</tr>
</tbody>
</table>
Table 18. Zero order coefficients of correlation between 10th and 12th grade social acceptance scores

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( r )</td>
<td>( r )</td>
<td>( r )</td>
<td>( r )</td>
<td></td>
</tr>
<tr>
<td>10th 1949-50</td>
<td>22</td>
<td>.577 ( \star \star )</td>
<td>.594 ( \star \star )</td>
<td>.572 ( \star \star )</td>
<td>.384</td>
<td>.607 ( \star \star )</td>
</tr>
<tr>
<td>10th 1950-51</td>
<td>17</td>
<td>.680 ( \star \star )</td>
<td>.700 ( \star \star )</td>
<td>.625 ( \star \star )</td>
<td>.520 *</td>
<td>.706 ( \star \star )</td>
</tr>
<tr>
<td>For all:</td>
<td>39</td>
<td>.635 ( \star \star )</td>
<td>.641 ( \star \star )</td>
<td>.604 ( \star \star )</td>
<td>.446 ( \star \star )</td>
<td>.670 ( \star \star )</td>
</tr>
</tbody>
</table>

\* Significant at the 5% level.
\** Significant at the 1% level.

Table 19. Results of "t" test analysis of difference between 10th and 12th grade social acceptance score mean

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( t )</td>
<td>( t )</td>
<td>( t )</td>
<td>( t )</td>
<td></td>
</tr>
<tr>
<td>10th 1949-50</td>
<td>22</td>
<td>.29</td>
<td>.45</td>
<td>2.59 ( \star )</td>
<td>-.38</td>
<td>1.52</td>
</tr>
<tr>
<td>10th 1950-51</td>
<td>17</td>
<td>.59</td>
<td>-.54</td>
<td>2.64 ( \star )</td>
<td>1.61</td>
<td>1.91</td>
</tr>
<tr>
<td>For all:</td>
<td>39</td>
<td>.61</td>
<td>-.13</td>
<td>3.64 ( \star \star )</td>
<td>.98</td>
<td>2.29 ( \star )</td>
</tr>
</tbody>
</table>

\* Significant at the 5% level.
\** Significant at the 1% level.
significant statistically. For the thirty-nine students in the two classes combined, the correlation coefficient for the total social acceptance score was .670, which was significant at the 1% level. This was somewhat lower than the corresponding coefficient of .897 for the 9th to the 11th grade correlations. Table 18 gives the correlation coefficients computed between scores in the 10th and 12th grades. These coefficients are well below those found between the 9th and 11th grades.

The "t" test analysis of the difference between the means for the 10th and 12th grades found significant differences on item 3— at the 5% level for each of the two classes, and at the 1% level for the thirty-nine members of the two classes combined. The only other significant difference between means was on the total social acceptance score for the students in the two classes combined, which was significant at the 5% level. Table 19 presents the results of the "t" tests.

**Summary of stability comparisons over a period of two years**

In this study comparisons between four classes were made on social acceptance scores with an interval of two years. Correlation coefficients for the individual classes for total social acceptance scores ranged from .607 to .927, and all were significant at the 1% level. Of the sixteen correlations for the individual classes between item scores, fourteen were significant at the 1% level, one at the 5% level, and one was non-significant. The correlation coefficients found were .897 between the 9th and 11th grade social acceptance scores for forty-seven students, and .670 between the 10th and 12th
grade scores for thirty-nine students. The coefficients were considerably higher than necessary to be significant at the 1% level and evidence a high level of stability of the social acceptance scores for a period of two years.

Stability of Scores for Three Years

This study followed the students who were in the 9th grade in 1949-50 — the year this investigation was started — throughout the four years of their high school work and thus made possible the comparison of 9th and 12th grade social acceptance scores for seventeen students.

The means of the social acceptance ratings which the seventeen members of this class, who remained in school, received in each of the four grades are given in Table 20. From the 9th to the 10th, and from the 10th to the 11th grades, there were substantial changes in social acceptance scores. However, from the 11th to the 12th grades, the mean scores increased only on the item 3 and the total, while the mean scores on the other three items decreased. The average number of times the seventeen students were chosen increased from 14.29 in the 9th grade to 27.23 in the 12th grade, an increase of 12.93. The change in the score on item 3, 6.88, accounted for over one-half of the increase in the total social acceptance score.

A possible reason for the greater increase on item 3 may be found in the nature of this item. The other three items asked to
Table 20. Means of social acceptance scores for a high school class in the 9th, 10th, 11th, and 12th grades.

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Grade</th>
<th>Items and total Means for social acceptance scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>17</td>
<td>9th</td>
<td>4.94</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>10th</td>
<td>5.94</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>11th</td>
<td>7.00</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>12th</td>
<td>6.53</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>6.10</td>
</tr>
</tbody>
</table>

Difference in averages between 9th and 12th grades

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.59</td>
<td>1.76</td>
<td>6.88</td>
<td>2.70</td>
<td></td>
<td>12.93</td>
</tr>
</tbody>
</table>

Table 21. Zero order coefficients of correlation between 9th and 12th grade social acceptance scores

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r</td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>17</td>
<td>.883</td>
<td>.792</td>
<td>.655</td>
<td>.781</td>
<td>.835</td>
</tr>
</tbody>
</table>

* Significant at 5% level.
** Significant at 1% level.
students for their preferences in situations where associations were involved—on committees, on picnics, and as friends. On item 3 the students were asked to list the names of the individuals they would like to have represent the school. Thus, item 3 was much more concerned with special abilities than were the other three items, and there is a good possibility that the student's abilities reach their highest point—on the average—during the senior year. They are older, have had more time for development, and as a result students have their greatest increase on this particular item.

The correlation coefficients of the social acceptance scores on the individual items, which ranged from .655 on item 3, to .883 on item 1, are presented in Table 21. The correlation coefficient of .835 for the total social acceptance score was substantially above that of .670 which was obtained between scores in the 10th and 12th grades. Actually the correlation coefficient of .835 between the social acceptance scores in the 9th and 12th grades for this class was greater than the correlation of .706 (Table 18), between the 10th and 12th grades scores for the same class, and just slightly below the coefficient of .850 (Table 15), which was obtained between the scores for class members in the 9th and 11th grades. The number of students—seventeen—involved is rather small, but for this class social acceptance scores remained highly stable over the period of three years.
Summary of Stability Comparisons

The correlations obtained for item and total social acceptance scores over periods of one, two, and three years, surpassed the values required for significance at the 1% level. Hence the null hypothesis must be rejected that the high school group's acceptance of its members would not tend to be stable over periods of one, two and three years.

Table 22. Results of "t" test analysis of differences between 9th and 12th grade social acceptance score means

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>9th 1949-50</td>
<td>17</td>
<td>2.89*</td>
<td>2.93**</td>
<td>2.87*</td>
<td>3.35**</td>
<td>3.68**</td>
</tr>
</tbody>
</table>

* Significant at the 5% level.
** Significant at the 1% level.

Evidence from this study supports the hypothesis; "That the high school group's acceptance of its members would show a tendency to remain stable over periods of one, two, and three years." This significant degree of stability was maintained throughout the time period during which significant changes took place in the acceptance scores.5

5For definition of the meaning of stability as used in this study, read the first footnote on page 30.
Relationships between Social Acceptance and Selected Independent Factors

Having completed the part of the study on stability of social acceptance scores, attention was focused next on the relationships between social acceptance and the selected factors to be considered. The second objective of this study was to determine; What is the relation between the student's acceptance by the high school group and:

(a) the socioeconomic status of his family
(b) his level of educational maturity
(c) his place of residence and sex
(d) his place of residence and sex, with the level of educational maturity and the socioeconomic status held constant.
(e) the socioeconomic status of his family and his level of educational maturity for place of residence and sex divisions.

Up to this point social acceptance scores had been considered for each item, as well as for the total. However, as the major concern of this study was actually with the total social acceptance score rather than with the scores made on the individual items, the decision was made to limit further analysis primarily to the total scores. The correlations between the scores on the separate items were determined and have been given in Table 1. The coefficients were significant at the 1% level and ranged from .524 between scores on items 2 and 3, to .846 between scores on items 1 and 4. These correlations
involved 385 student scores, the total for the study.

The desired statistical analysis of the relationships between social acceptance scores and the selected factors was accomplished through the use of multiple and partial correlation and covariance. The objectives also required that the students be divided into four groups on the place of residence and sex. When the students were divided in this way, the number in each category varied from seventy-nine to 114. The number of students is presented in Table 23.

Table 23. Number of farm girls, farm boys, town girls, and town boys included in this study

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm Girls</th>
<th>Farm Boys</th>
<th>Town Girls</th>
<th>Town Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949-50</td>
<td>25</td>
<td>32</td>
<td>20</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>1950-51</td>
<td>32</td>
<td>27</td>
<td>20</td>
<td>26</td>
<td>105</td>
</tr>
<tr>
<td>1951-52</td>
<td>28</td>
<td>25</td>
<td>18</td>
<td>18</td>
<td>89</td>
</tr>
<tr>
<td>1952-53</td>
<td>29</td>
<td>19</td>
<td>21</td>
<td>18</td>
<td>87</td>
</tr>
<tr>
<td>Total</td>
<td>114</td>
<td>103</td>
<td>79</td>
<td>85</td>
<td>381</td>
</tr>
</tbody>
</table>

The total number of students differs in this table from the total of 385 in Table 1. The difference is explained on the basis that four students spent a year in the community living with relatives or friends. The residence was not determinable nor was the family socioeconomic status for these four students.

The total of 381 actually represented 381 student scores of social acceptance, rather than the same number of individual students. The difference is explained on the basis that students have a social acceptance score for each year they were included in the study.
The use of covariance and multiple correlation was simplified by making the number of students in each category equal. In order to do this sampling was necessary. The reduction was accomplished by numbering each of the student social acceptance scores, and using a table of random numbers to select the ones to be eliminated. The total number of student scores was thus reduced to 316 (4 x 79).

Social acceptance and socioeconomic status

The 316 individual social acceptance scores were classified according to the socioeconomic status ratings of their families, and the results are presented in Table 24. The scores, thus classified, show a general relationship which is consistent for the six socioeconomic status classification levels used. The higher the socioeconomic status level, the higher are the social acceptance score means. The means ranged from a low of 12.1 for the students whose family socioeconomic status was between 1.00 and 2.00, to a high of 43.8 for the students whose family socioeconomic status was between 4.01 and 5.00.

Zero order correlations were computed between social acceptance and socioeconomic status in order to make a preliminary test of the relationship, realizing that other possibly significant variables
would not be controlled. The coefficient which resulted was .313 (significant at the 1% level with 314 degrees of freedom). Additional correlations were computed between the item social acceptance scores and socioeconomic status. The zero order coefficients varied from .318 for item 4, to .393 for item 1, and all were significant at the 1% level. The similarity of the coefficients for the individual items gave additional justification for not considering item analysis further.

Social acceptance and level of educational maturity

Data given in Tables 5, 8, 11, 14, 17, and 20 indicate the general trend upward of social acceptance scores as the pupils advance through the high school grades. As an additional measure, the 316 student social acceptance scores were tabulated by level of educational maturity. These data are given in Table 24.
social acceptance scores were classified by grade, the scores were totaled, means were determined, and the information obtained is presented in Table 25. The pattern was similar to that which was found in the comparison of classes on the tables listed above.

From the 9th to the 11th grades there was a marked increase in social acceptance score means, whereas from the 11th to the 12th grades, the mean score remained approximately the same.

Table 25. Social acceptance score means by grade in school

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of students</th>
<th>Total of social acceptance scores</th>
<th>Mean social acceptance score</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>77</td>
<td>1,110</td>
<td>14.4</td>
</tr>
<tr>
<td>10th</td>
<td>78</td>
<td>1,408</td>
<td>18.1</td>
</tr>
<tr>
<td>11th</td>
<td>85</td>
<td>2,134</td>
<td>25.1</td>
</tr>
<tr>
<td>12th</td>
<td>76</td>
<td>1,887</td>
<td>24.8</td>
</tr>
<tr>
<td>Total</td>
<td>316</td>
<td>6,539</td>
<td></td>
</tr>
</tbody>
</table>

Weighted mean 20.7

In order to get a preliminary test of the significance of the relationship, zero order correlation was used between the variables of social acceptance and level of educational maturity. The coefficient obtained was .223 (significant at the 1% level with 314 degrees of freedom), which was somewhat lower than the coefficient

\[^2\text{In the correlation analysis, values of one, two, three and four were assigned to the 9th, 10th, 11th and 12th grades.}\]
of .393, which was obtained for the relationship between social acceptance and socioeconomic status.

**Social acceptance, place of residence, and sex**

A comparison of the social acceptance means for the 158 farm students and the 158 town students indicated a substantial difference. The mean number of times the farm students were chosen was 16.9, in comparison to the town students whose mean number of times chosen was 24.5. That the differences were probably not accounted for by differences in family socioeconomic status and educational maturity level was indicated by Table 26, where the data presented show the two groups to be almost equal in respect to socioeconomic status and educational maturity level.³

Social acceptance scores for the girls and boys included in this study indicated that the girls were chosen more often than boys were, with a mean of 21.8 for the girls, and 19.6 for the boys. Differences in socioeconomic status and maturity level were probably not the explanation, as the boys were slightly higher than the girls on both of these measures. The sex differences were consistent for both the farm and town students, as the boys in each case received lower mean scores than the girls, although the difference between the town girls and town boys was less than one acceptance per student.

³Statistical analysis of the differences was not made at this point as covariance was to be included in the next section.
In order to determine more fully the nature of the differences in acceptance, an analysis was made of the acceptance choices which the members of each of the four categories received. The analysis showed that farm girls were chosen a total of 1,929 times, and of this total 351 (18.2%), came from boys. In contrast, town girls received 1,961 choices of which 514 (26.2%), came from boys. A similar condition was found for the farm boys, where a smaller proportion of their total choices were received from girls, than were received by the town boys. Data are presented in Table 27 on the origin of the acceptances which the students in the four divisions received.\(^4\)

Chi square was used to test these differences statistically by assuming the null hypothesis — that is, that the farm and town students would not differ in the proportion of their acceptance choices which they received from the opposite sex. The chi square values which resulted were significant at the 1% level. They are presented in Table 28, and are the basis for the rejection of the null hypothesis. Thus, farm students were found to have received a smaller proportion of their acceptance choices from members of the opposite sex, than town youngsters.

A reasonable common sense expectation might be that the differences between farm and town students with respect to social acceptance would decrease as the students advance through high school. In order to determine whether this was actually the case, social acceptance means

\(^4\)At this point it was necessary to return to consideration of the entire 381 student social acceptance scores, as the data in this particular analysis was available for the entire group only.
### Table 26. Mean scores for farm and town students, boys and girls

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Social acceptance score mean</th>
<th>Family socio-economic status rating mean</th>
<th>Maturity&lt;sup&gt;a&lt;/sup&gt; mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm students</td>
<td>158</td>
<td>16.9</td>
<td>3.07</td>
<td>2.6</td>
</tr>
<tr>
<td>Town students</td>
<td>158</td>
<td>24.5</td>
<td>3.08</td>
<td>2.4</td>
</tr>
<tr>
<td>Girls</td>
<td>158</td>
<td>21.8</td>
<td>2.99</td>
<td>2.5</td>
</tr>
<tr>
<td>Boys</td>
<td>158</td>
<td>19.6</td>
<td>3.16</td>
<td>2.6</td>
</tr>
<tr>
<td>Farm girls</td>
<td>79</td>
<td>18.8</td>
<td>3.05</td>
<td>2.6</td>
</tr>
<tr>
<td>Farm boys</td>
<td>79</td>
<td>15.0</td>
<td>3.09</td>
<td>2.5</td>
</tr>
<tr>
<td>Town girls</td>
<td>79</td>
<td>24.8</td>
<td>2.93</td>
<td>2.3</td>
</tr>
<tr>
<td>Town boys</td>
<td>79</td>
<td>24.1</td>
<td>3.23</td>
<td>2.6</td>
</tr>
</tbody>
</table>

<sup>a</sup>As mentioned previously one, two, three and four were used in place of the actual grades.

### Table 27. Origin of acceptance choices received by farm and town students

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of students</th>
<th>Total times chosen</th>
<th>Times chosen by boys</th>
<th>% of choices by boys from boys</th>
<th>Times chosen by girls</th>
<th>% of choices by girls from girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm girls</td>
<td>114</td>
<td>1929</td>
<td>351</td>
<td>18.2</td>
<td>1578</td>
<td>81.8</td>
</tr>
<tr>
<td>Town girls</td>
<td>79</td>
<td>1961</td>
<td>514</td>
<td>26.2</td>
<td>1447</td>
<td>74.8</td>
</tr>
<tr>
<td>Farm boys</td>
<td>103</td>
<td>1553</td>
<td>1224</td>
<td>78.8</td>
<td>329</td>
<td>21.2</td>
</tr>
<tr>
<td>Town boys</td>
<td>85</td>
<td>1997</td>
<td>1315</td>
<td>65.8</td>
<td>682</td>
<td>34.2</td>
</tr>
<tr>
<td>Total</td>
<td>381</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 28. Chi square test of differences between farm and town students with respect to the proportion of choices received from members of their own and the other sex

<table>
<thead>
<tr>
<th></th>
<th>No. of choices observed</th>
<th>No. of choices expected</th>
<th>Chi square</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choices received by farm girls:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From boys</td>
<td>351</td>
<td>429</td>
<td>14,182</td>
<td></td>
</tr>
<tr>
<td>From girls</td>
<td>1578</td>
<td>1500</td>
<td>4,056</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1929</td>
<td>1929</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Choices received by town girls:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From boys</td>
<td>514</td>
<td>436</td>
<td>13,954</td>
<td></td>
</tr>
<tr>
<td>From girls</td>
<td>1447</td>
<td>1525</td>
<td>3,990</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1961</td>
<td>1961</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Chi Square</strong></td>
<td>36.182</td>
<td></td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

| **Choices received by farm boys:** |                         |                         |            |                      |
| From boys                | 1224                    | 1111                    | 11,493     |                      |
| From girls               | 329                     | 442                     | 28,889     |                      |
| **Total**                | 1553                    | 1553                    |            |                      |
| **Choices received by town boys:** |                         |                         |            |                      |
| From boys                | 1315                    | 1428                    | 8,942      |                      |
| From girls               | 682                     | 569                     | 22,441     |                      |
| **Total**                | 1997                    | 1997                    |            |                      |
| **Total Chi Square**     | 71.765                  |                         | 1%         |                      |
Table 29. Social acceptance means for high school classes by residence and sex

<table>
<thead>
<tr>
<th>Grade</th>
<th>Farm Girls N</th>
<th>Farm Girls mean</th>
<th>Town Girls N</th>
<th>Town Girls mean</th>
<th>Difference</th>
<th>Farm Boys N</th>
<th>Farm Boys mean</th>
<th>Town Boys N</th>
<th>Town Boys mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>28</td>
<td>13.2</td>
<td>25</td>
<td>17.7</td>
<td>4.5</td>
<td>20</td>
<td>9.1</td>
<td>19</td>
<td>15.7</td>
<td>6.6</td>
</tr>
<tr>
<td>10th</td>
<td>26</td>
<td>17.0</td>
<td>19</td>
<td>20.1</td>
<td>3.1</td>
<td>26</td>
<td>12.6</td>
<td>20</td>
<td>22.2</td>
<td>9.6</td>
</tr>
<tr>
<td>11th</td>
<td>34</td>
<td>17.6</td>
<td>19</td>
<td>35.6</td>
<td>18.0</td>
<td>29</td>
<td>18.3</td>
<td>26</td>
<td>25.5</td>
<td>7.2</td>
</tr>
<tr>
<td>12th</td>
<td>26</td>
<td>20.0</td>
<td>16</td>
<td>28.2</td>
<td>8.2</td>
<td>28</td>
<td>18.4</td>
<td>20</td>
<td>29.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Totals</td>
<td>114</td>
<td>79</td>
<td>103</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 30. Social acceptance means for a high school class in 9th to 12th grades

<table>
<thead>
<tr>
<th>Grade</th>
<th>Farm Girls N</th>
<th>Farm Girls mean</th>
<th>Town Girls N</th>
<th>Town Girls mean</th>
<th>Difference</th>
<th>Farm Boys N</th>
<th>Farm Boys mean</th>
<th>Town Boys N</th>
<th>Town Boys mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>6</td>
<td>12.2</td>
<td>3</td>
<td>15.3</td>
<td>3.1</td>
<td>4</td>
<td>9.7</td>
<td>4</td>
<td>21.0</td>
<td>11.3</td>
</tr>
<tr>
<td>10th</td>
<td>6</td>
<td>19.5</td>
<td>3</td>
<td>19.0</td>
<td>-0.5</td>
<td>4</td>
<td>10.0</td>
<td>4</td>
<td>29.0</td>
<td>19.0</td>
</tr>
<tr>
<td>11th</td>
<td>6</td>
<td>22.3</td>
<td>3</td>
<td>22.0</td>
<td>-0.3</td>
<td>4</td>
<td>24.2</td>
<td>4</td>
<td>34.0</td>
<td>9.8</td>
</tr>
<tr>
<td>12th</td>
<td>6</td>
<td>24.8</td>
<td>3</td>
<td>28.7</td>
<td>3.9</td>
<td>4</td>
<td>16.7</td>
<td>4</td>
<td>38.5</td>
<td>21.8</td>
</tr>
</tbody>
</table>
were computed for each of the four divisions for the four grades and the differences were determined. These data are presented in Table 29, and it is apparent that there is no consistent trend toward a decrease in the difference. In fact, the comparison of town boys and farm boys is fairly close to a consistent trend toward increasing differences from the 9th to the 12th grades. In Table 30, data are presented for the seventeen students who were included in the four years the study was in progress. Again, there is no apparent trend toward a decrease in the differences as the students advanced from the 9th to the 12th grades.

Social acceptance, residence, and sex, with socioeconomic status and level of educational maturity held constant

To test statistically the significance of the differences between farm and town students and boys and girls with respect to social acceptance, covariance was used. This permitted consideration of the differences while holding constant socioeconomic status and maturity level. The results are given in Table 31. For the differences between farm and town, the F value obtained through covariance was 17.790, which was significant at the 1% level. The difference between boys and girls yielded an F value of 4.829, which was significant at the 5% level. The interaction between residence and sex was virtually non-existent as measured by covariance.

The F value obtained through covariance provides a definite basis for rejecting the null hypothesis: "That farm and town students do
not differ in regard to social acceptance," and thus, indicated that the difference between farm and town students in respect to social acceptance scores was a significant difference. There was also justification for the rejection of the null hypothesis: "That boys and girls do not differ in social acceptance;" as girls have higher scores than boys in this study, and the difference is significant statistically, as evidenced by the F value obtained.

Table 31. Covariance analysis of the differences between social acceptance scores by residence and sex with socioeconomic status and educational maturity level held constant

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Degrees of freedom</th>
<th>Residuals</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sum of squares</td>
<td>Mean squares</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td>1</td>
<td>4966.06</td>
<td>4966.06</td>
<td>17.790**</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>1348.00</td>
<td>1348.00</td>
<td>4.829*</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>1</td>
<td>1.09</td>
<td>1.09</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>310</td>
<td>86535.00</td>
<td>279.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 5% level.
** Significant at 1% level.

Social acceptance, socioeconomic status, and level of educational maturity by residence and sex

Zero order correlation coefficients had already indicated that socioeconomic status and educational maturity level were related to social acceptance, when these variables were considered individually. In order to determine the relationship in greater detail, multiple
correlation coefficients were computed for social acceptance with socioeconomic status and maturity level as independent variables for the 316 students. The coefficient obtained was .439, which was significant at the 1% level. Following this, multiple correlation coefficients were computed for each of the four divisions: farm girls, farm boys, town girls, and town boys, between social acceptance, socioeconomic status, and educational maturity level. The results are presented in Table 32, and show some rather striking differences. The coefficients ranged from .223 (significant at 5% level), for the farm girls, to .607 (significant at 1% level), for the town girls, with the coefficient for the farm boys being .335 (significant at 5% level), and .543 (significant at the 1% level), for the town boys.

The most striking differences found in this dissertation, were the differences between farm and town students in respect to the relationship of social acceptance and socioeconomic status. When partial correlation was used to hold the maturity level constant, the relationship between social acceptance and socioeconomic status was found to be significant at the 1% level for both town girls and boys, the coefficients being .575 and .501 respectively; but the same relationship produced coefficients of .056 and .127, which were both well below the levels needed for statistical significance, for the farm boys and farm girls. The effect here of residence is very marked and must not be ignored. The null hypothesis that the student's acceptance by the high school group is not related to the
Table 32. Multiple and partial correlation analysis of social acceptance, socioeconomic status, and maturity level

<table>
<thead>
<tr>
<th>Variables</th>
<th>N =</th>
<th>Total sample</th>
<th>Farm girls</th>
<th>Farm boys</th>
<th>Town girls</th>
<th>Town boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple correlation of social acceptance, socioeconomic status, and maturity level</td>
<td>.439**</td>
<td>.223*</td>
<td>.335*</td>
<td>.607**</td>
<td>.543**</td>
<td></td>
</tr>
<tr>
<td>Zero order correlation of social acceptance and socioeconomic status</td>
<td>.393**</td>
<td>.045</td>
<td>.139</td>
<td>.593**</td>
<td>.486**</td>
<td></td>
</tr>
<tr>
<td>Zero order correlation of social acceptance and maturity level</td>
<td>.223**</td>
<td>.216</td>
<td>.312*</td>
<td>.239*</td>
<td>.243*</td>
<td></td>
</tr>
<tr>
<td>Partial correlation of social acceptance and socioeconomic status with maturity level held constant</td>
<td>.388**</td>
<td>.056</td>
<td>.127</td>
<td>.575**</td>
<td>.501**</td>
<td></td>
</tr>
<tr>
<td>Partial correlation of social acceptance and maturity level with socioeconomic status held constant</td>
<td>.213**</td>
<td>.219</td>
<td>.306**</td>
<td>.162</td>
<td>.277*</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 5% level.
** Significant at 1% level.
socioeconomic status of his family was rejected for the town students, there is no basis for its rejection for the farm students.

For the total high school group of 316, the null hypothesis is rejected, as the partial regression coefficient of .388, was significant at the 1% level, between social acceptance and socioeconomic status with the maturity level held constant.

The partial correlation analysis of the relationship between social acceptance and maturity with socioeconomic status held constant, obtained a coefficient of .213 (significant at the 1% level), for the 316 students, which was in line with the correlation coefficients obtained between social acceptance and maturity level of .223, without socioeconomic status being considered. The partial correlation analysis yielded a coefficient of .308 (significant at the 1% level), between social acceptance of farm boys and maturity level, and a coefficient of .277 (significant at the 5% level), for town boys. The coefficients for the farm girls and town girls were non-significant.
DISCUSSION OF FINDINGS

Stability of Social Acceptance Scores

The substantial correlation coefficients which were found in this study between social acceptance scores over periods of one, two, and three years, give evidence of the stability of the group's acceptance of its members under the conditions such as prevailed in this study.

A factor which may have contributed substantially to the stability of the social acceptance scores was the size of the rural community and school where the study was conducted. Such a community approaches the "primary community", which Fessler has defined and described in the following terms:

A primary rural community was defined for the purposes of this study as an organized concentration of individuals providing most of the basic institutions of life, but one small enough so that the majority of personal contacts afforded within this institutional framework were of an intimate, face-to-face nature.¹

Practical considerations and experience in the field, rather than theoretical arguments, set the maximum population limits of the sample of primary rural communities in the Iowa study at two thousand for the community as a whole, or an average of one thousand for the trade center and a thousand for the outlying farm area. In Iowa such a ratio of farm to village population has been found to exist........²

¹Fessler, Donald R. The development of a scale for measuring community solidarity. Rural Sociology 17:144-152. p. 144.

²Ibid., p.p. 55-56.
The community where this study was conducted, approximated the population limits which Fessler suggested. Such a community and its school would more nearly approach the concept of the primary group than would a larger community and school, and would tend to have more of the characteristics of the primary group, such as described in the following quotation:

1. Face to face association.
2. Unspecialized character of that association.
3. Relative permanence.
4. The small number of persons involved.
5. The relative intimacy among the participants.³

Thus, it seems reasonable that in a rural high school of 100 students—other things being equal—the relationships and sentiments, which sociometric tests attempt to measure, would be more stable than such relationships and sentiments in a larger school or a school in a larger community.

The fact that the sociometric test which was used contained four items and permitted unlimited number of preferences, may have contributed to the greater stability of these results, in comparison with studies where a single item was used (Jennings for example).⁴

A comparison of the correlation coefficients for the combined classes in Tables 2, 5, 8, 11, and 14, indicate that in almost every case

⁴See chapter II for description of Jennings work.
the correlation coefficients for the total social acceptance scores were higher than the coefficients for any of the item scores.

The use of the entire high school student body as the group, rather than the high school grade, may have helped to increase the stability, as well as to give a more realistic picture of the relationships and sentiments within the high school as they affect the lives of the students. Choices of students in grades other than that of the chooser were frequent on the sociometric tests and limiting the choices to members of the same grade — as is often done — seems to be a rather artificial restriction, which might tend to reduce the stability of scores over a period of time. In respect to the effect of the size of the group on correlation coefficients, Bronfenbrenner has written the following:

It will be noted that the smallest coefficients occur in the groups with the least number of cases. This is not surprising inasmuch as in sociometric situations the number of cases determines the range of scores, and with a wider range it is well known that higher coefficients may be obtained. 5

The finding that social acceptance scores of high school students are stable over periods of one, two, and three years, may help to increase the worth of such a measure to the regional study. The fact that the individual can do little to affect his own score at the time the test is being taken, adds to its value for comparison and analytical purposes in connection with results from "pencil-and-paper" tests.

5 Bronfenbrenner, Part II, p. 48-49.
Here is a hypothetical reason for the drop in choices at 12th grade. All other grades have choices from those immediately (one year) ahead and behind them. Choices for 12th all come from below. The increase in the number of choices received as students advance from the 9th to the 11th grades, and perhaps, through the 12th, evidences the need for a "correction term", if the scores of a youngster in one grade are to be compared to the scores of another youngster in a different grade.

In spite of the high correlation coefficients obtained in this study between social acceptance scores of individuals in different grades, the Appendix Tables give ample evidence of the abrupt changes that can and do occur in a period of a year in the acceptance of some individuals. The application of an analysis in terms of Homans' elements of behavior might help to explain why these changes have occurred.

Social Acceptance Scores of Farm and Town Students

When the town students in a high school receive approximately eight more choices per individual than the farm students do, the difference may well be socially important, as well as statistically significant.

An obvious reason for the difference is that the town students have already had eight years of association in grade school together before they enter high school, whereas, of the farm students who start high school in the 9th grade and come from rural schools, not
more than one or two come from the same rural school. Thus, at the start the farm youngster faces a different situation than that faced by the town youngster.

The more limited social experience and opportunity for association with his age mates in the rural school, may be a handicap to the farm student, reflected in the difference between social acceptance scores of the farm and town students.

The comparison of social acceptance scores of students attending a rural high school located in a consolidated district, where the students have attended the same school together throughout the elementary grades and high school, would help in arriving at the proper explanation for the difference. In such a situation, the advantage of previous association, which town students had in this study, would be largely removed.

An explanation which might be equally relevant, or even more so, is that farm students have less opportunity for interaction with other members of the high school group during out-of-school hours than town students. The fact that the data did not indicate a trend in regard to the difference in social acceptance scores between farm and town students as they advanced through high school, may well support this explanation of less opportunity for interaction.

In connection with this explanation a finding of Moreno is pertinent. Comparing the boarding and day pupils attending a boarding school, Moreno found the boarding students were chosen an average of 4.85 times and the day students an average of 3.32 times.\(^6\) In

\(^6\) Moreno, op. cit. p. 29.
both the day students and the farm students, a common limiting factor would be a smaller opportunity for out-of-school interaction with other members of the group.

Along with interaction, there is the possibility that farm youngsters participate less frequently in high school activities than do town youngsters. If correct, this could be an additional factor to help explain the differences in social acceptance between farm and town students. If farm students do have less opportunity for interaction outside of school with other members of the group and participate less in activities, Homans' analysis of the group elements might suggest that these elements would influence the sentiments which sociometric tests measure.\(^7\)

The difference between farm and town youngsters in respect to the proportion of their choices which come from members of the opposite sex suggests that farm students are more lacking in development of their ability to get along with and be acceptable to the opposite sex than town students. It may also reflect that there is still some difference between the two groups in appearance, standards of dress, and conduct, even though the modern farm family has most of the conveniences which their town cousins have. Additional studies might determine whether the difference here noted in the proportion of choices coming from the opposite sex is a difference generally found between farm and town students.

\(^7\)Homans, op. cit.
Social Acceptance and Socioeconomic Status

When Hermann's Socioeconomic Status Scale was used, the ratings from it were significantly related to the ratings by the judges, but were not significantly related to the social acceptance scores of the students. This difference between the two techniques suggests the need for further exploration to determine what might account for the difference between the relationships, as it might have important implications for the worth of the two measuring techniques.

Perhaps the most important finding in this study was the difference in the relationship of social acceptance and socioeconomic status between farm and town students, in that social acceptance scores and socioeconomic status were significantly related for town students, but were not for farm. This study did not attempt to find out the reason, but merely to establish the differences in relationships between the facts involved. The most obvious reason may readily be the correct one, merely, that the family socioeconomic status is more evident to the group for the town youngster than it is for the farm youngster. It seems reasonable that the farm youngster would leave his home and family "behind" to a much greater extent when he attends the high school, than the town youngster does who attends the same high school in his home town. Thus, the awareness of socioeconomic status or lack of awareness may be the important factor which explains the difference. Such an explanation could readily be tested among college students away from home, where if the same
difference was found, other explanations would probably be needed. However, the possibility that awareness of socioeconomic status is the responsible factor for the difference seems to be suggested in the following footnote in Kuhlen's book.

A preliminary study done under the direction of Dr. G.C. Thompson of Syracuse University showed an increasing correlation between social acceptance and socioeconomic status for girls between grades five and twelve, but a decreasing correlation for boys. These contrasting trends may reflect the greater freedom of movement boys possess, which would permit them to "escape" the economic status of their homes, whereas girls have greater need for clothes and are called for at home and thus are more closely associated with the economic status of their homes. 8

The possibility exists that the differences between the children of families of high and low socioeconomic status are greater — with respect to the personal qualities and achievements that make for social acceptance — for town residents than they are for farm residents. This might readily be the case, as success among town families and concomitant high socioeconomic status may depend more on skills in personal relationships than high socioeconomic status among farm families, where the work is more with things than it is with people. If this is correct, awareness of the family socioeconomic status of the individual would probably have little effect, although it is possible that both factors, and perhaps others, may be involved in the difference between farm and town students. Included among the young people in this study were town students of lower socioeconomic status who achieved a high measure of social

---

acceptance, and town students from families of high socioeconomic status who were virtual isolates. The same was found among farm families. These exceptions did not, however, do away with the general relationship.

Whatever the cause of the difference between farm and town students in respect to the relationship between social acceptance and socioeconomic status, the cause appears to be equally important to both town and farm students. For the 316 students, correlations were determined between socioeconomic status and social acceptance scores (1) derived entirely from the choices of farm students, and (2) derived entirely from the choices of town students. The coefficients obtained, were .365 (significant at 1% level), for the social acceptance scores derived from farm student preferences, and .380 (significant at 1% level), for the social acceptance scores derived from town student preferences. Thus, the similarity of the two correlation coefficients would indicate that whatever the reason, it is important to both residence groups.
SUMMARY

This is the report of an exploratory study of the sociometric scores of high school students and their relationship to selected variables of family living. The study was designed to contribute to the development of a North Central Region Cooperative Project on "Family influences on personality development."

In this research answers were sought to specific questions, including: (1) what is the degree of stability of the high school group's acceptance of its members over periods of one, two, and three years; (2) what is the relation between the student's acceptance by the high school group and: (a) the socioeconomic status of his family, (b) level of education maturity, (c) place of residence and sex, (d) place of residence and sex with socioeconomic status and level of educational maturity held constant, (e) socioeconomic status and level of educational maturity by place of residence and sex.

Method of Procedure

The study was conducted in a rural high school located in a small town in Eastern Nebraska, which had been selected on the basis of criteria designed to insure the typicality of the school and community. The student enrollment in the high school approximated 100, and the town population, 1,000. Slightly over one-half of the students lived on farms and had attended the first eight grades in one-room rural schools.
A four-item sociometric test developed by Staples was used to measure the group's acceptance of the students. The number of choices on each item was not limited. The test was given at yearly intervals during four consecutive school years, 1949-50 to 1952-53.

The family socioeconomic status rating was the composite of the ratings made by four residents of the community selected to act as judges. The Hermann Socioeconomic Status Scale was used for one year, but was found unsuitable for the purposes of this research. A zero order correlation coefficient between the ratings by the judges and the Hermann Scale produced an \( r \) of .430 \((N = 103, 1\% \text{ level})\). The \( r \) obtained between the Hermann ratings and social acceptance scores of 103 students was .021. Coefficients ranging from .314 to .681 were obtained between ratings by the individual judges, \((N = 125, 1\% \text{ level})\). The \( r \) obtained between the composite of the judges' ratings and social acceptance scores was .389 \((N = 103, 1\% \text{ level})\).

To measure the degree of stability of social acceptance scores zero order correlation was used. The significance of the changes in mean scores between the various grades was determined through the use of the "t" test.

Statistical analysis was simplified by dividing students into four sub-groups: farm girls, farm boys, town girls, and town boys, and the number in each group was reduced to 79 through sampling \((\text{the number of students in the sub-groups ranged from 79 to 114})\). Other statistical measures used included partial and multiple correlation, chi square, and covariance.
Findings

In spite of a general tendency for social acceptance scores to increase as students progressed through the high school (several of the differences between class means were statistically significant), the degree of stability of the acceptance scores was high as measured by zero order correlation. Scores received by the members of nine classes on tests given a year apart produced r's which ranged from .706 to .934. For an interval of two years, the r's ranged for four classes from .607 to .907. The r obtained for one class between scores on tests given three years apart was .835.

Social acceptance scores and family socioeconomic status were positively and significant related for the total student group when level of educational maturity was held constant through partial correlation. The r equaled .388 (N = 316, 1% level). However, distinct differences were found between farm and town students with respect to this relationship which were significant for farm students but not for town students. The r values were town students .575, town boys .501, farm boys .127, and farm girls .056 (N = 79 for each sub-group).

The acceptance scores averaged for the 158 farm students 16.9, for the 158 town students 24.5, for 158 girls 21.8, and for 158 boys 19.6. Covariance was used to hold socioeconomic status and level of educational maturity constant. The differences between the scores received by farm and town students and boys and girls were statisti-
Farm girls received a smaller proportion of their acceptance choices from boys than town girls, and farm boys received a smaller proportion of their acceptance choices from girls than town boys. Chi square analysis produced significant differences.

Social acceptance and level of educational maturity were significantly related for the total group, farm boys, and town boys, but not for farm and town girls. Partial correlation was used to hold socioeconomic status constant. The r's were: total group .223, farm boys .308, town boys .277.

The relationship between social acceptance, socioeconomic status, and level of educational maturity was determined through the use of multiple correlation. The R's obtained were statistically significant for the total group .439, town girls .607, town boys .543, farm boys .335, and farm girls .223.

Discussion of Findings

The substantial relationship found between the social acceptance scores for periods of one, two, and three years may reflect the effect of the size of the high school and the community, on the basis of the extent to which the school and community approach the concept of the primary group. The apparent paradox of significant changes in the means of class scores between grades and the high degree of stability as measured by correlation is resolved when it is realized that correlation is essentially a measure of ratio of two variables and
that scores can increase proportionally from one year to the next and hence maintain a high stability in the sense of relatedness of scores, even though substantial changes have occurred in the actual social acceptance scores. The unlimited number of choices allowed students on the tests and the fact that the test contained more than one or two items may have contributed to the degree of stability found.

The difference between boys and girls with respect to social acceptance is statistically significant but the actual difference is so small that it probably lacks social significance. The substantial difference between farm and town students illustrates the difference in their situation when they enter high school. This difference may also reflect the more limited opportunity which farm students have for association with their age mates in the rural school.

The distinct differences between farm and town students with respect to the relationship of social acceptance and socioeconomic status suggests the possibility that the farm student is more on his own in the high school and that awareness or lack of awareness of the farm student's family socioeconomic status may be the factor which accounts for the difference.
CONCLUSIONS

The conclusions directly apply to the students, the high school, and the community included in this study. The possibility that similar results would be discovered in additional studies conducted under like conditions is suggested by the fact that the high school and rural community where this study was made are typical of high schools and rural communities of comparable size and composition in Nebraska and other parts of the Middle West. Each conclusion is supported by statistical findings of the study. The four hypotheses suggested in Chapter III have all been supported by the data and are included in the conclusions.

1. The acceptance scores of high school students increase as the students progress through high school. In spite of the changes over time, the stability of the group's acceptance of its members persists for periods of one, two, and three years.

2. The acceptance of town students by the high school group is positively related to the socioeconomic status of their families.

3. The acceptance of farm students by the high school group is not related to the socioeconomic status of their families.

4. Farm students are less well-accepted by the high school group than town students.

5. Boys are less well-accepted by the high school group than girls.

6. Farm students received a smaller proportion of their acceptance choices — than did town students — from members of the opposite sex.
7. The acceptance of students by the high school group, the socioeconomic status of their families, and their level of educational maturity were positively related. This relationship was also found for the sub-groups of farm girls, farm boys, town girls, and town boys.

Suggestions for Future Research

Results of this study on "Sociometric scores among high school students and their relationships to selected variables of family living" indicate that adequate further research on this problem awaits the perfection of measures of socioeconomic status as differentiated from levels of living and prestige status, and the improvement of measures of social acceptance and methods for their analysis.

If the investigator were to repeat this study he would make a number of changes. He would modify the method of handling the sociometric data and would endeavor to utilize profile analysis and to determine types of acceptance profiles which could be related to the variables of place of residence and socioeconomic status.

Furthermore, Sewell's Socioeconomic Status Scale would be included as a measuring device of this variable. The results obtained would be compared with the judges' ratings and related to the sociometric profiles developed. With respect to the use of the judges' ratings, he would have the name of each family typed on a separate card and would ask the judges to place the cards in the order of the status of
the families. Such a method would avoid the use of arbitrary numbers and the family socioeconomic status would be indicated by the position of the family's card in the array. A composite rating could thus be derived from the cards as arrayed by each of the judges.

A sociometric test, which would request the students to list their choices of friends under the defined classifications of "the confidante," "the intimate," "the familiar," and "the acquaintance," using Runner's definitions of these concepts, might reveal much more concerning the relationships of the individuals with others in the groups to which he belongs. Such a test might obviate to a considerable degree the problem of the weighting of first, second, and third choices, and so on, and might facilitate the analysis of sociometric profiles.

As far as the investigator knows, this is the first study that has considered the problem of the stability of the high school group's acceptance of students for periods of one, two, and three years. This study offers the first results — as far as he knows — concerning differences between farm and town students with respect to the relationships between social acceptance and socioeconomic status, and is one of the very few studies that have considered differences between farm and town students with respect to acceptance. Hence, the first suggestion which he would like to make is the need for additional studies to determine whether such differences are apt to be general. Without additional confirmation there is little point in endeavoring to
explore the reasons for the differences and the stability which were obtained in this study. The suggestions which follow are largely predicated upon the hope that additional research may take place and that it will support the findings of this study.

An explanation offered for the high degree of stability of the social acceptance scores in this study was that of the primary group nature of the school and the community where this investigation was made, on the basis that a characteristic of primary groups is stability of relationships. Such a suggested explanation concerning the relationship between the primary group nature of the school and community and the stability of acceptance scores might be tested in future research.

The degree of stability of the scores derived from sociometric tests suggests their worth to the regional study for the purposes of comparison with, and analysis of the results from "pencil-and-paper" and projective type tests. The fact that sociometric scores are essentially a measure of the feelings of the other individuals within the group toward the test subject should add to their value in the above connection.

An additional use of sociometric tests in the regional study might be as a means of identifying types such as the "isolate," the "star," and the "in-between," for purposes of comparison with respect to the interaction and interrelationships within the families in which they have been raised. Thus, making a possible contribution to the increased understanding of "Family influences on personality development."
The social acceptance scores of some of the students in this study changed rather abruptly from one year to the next. Homans' work suggested a hypothesis which seemed to offer an excellent explanation of why marked changes in the acceptance of some individuals by the group might occur. The tentative hypothesis would be "that a marked change in the feelings of the group toward the individual (change in social acceptance rating) would be preceded by changes in one or more of the following: (1) acceptance of the group's norms by the individual, (2) changes in the individual's interaction with the group, (3) changes in the individual's activities with the group. This hypothesis could not be tested in this study, but the investigator would like to suggest that it deserves further consideration as a possible explanation.

This study established the fact that social acceptance and socioeconomic status were positively related for town students, but are not for farm students, without attempting to identify the reason other than to offer explanations in terms of (1) awareness or lack of awareness of the student's family socioeconomic status and (2) possible differences between farm and town students with respect to the relationship of socioeconomic status and personal qualities and achievements that make for social acceptance. Further research might test these explanations and possible others in attempting to identify the causes.
A conclusion of this study is that farm students are less well accepted by the high school group than the town students. Possible explanations offered included the more limited opportunity which farm students have: (1) for association with others of their own age during the first eight years of school, (2) for interaction with other members of the high school group and participation in extracurricular activities during out of school hours. Additional research could be carried on under conditions which would permit the testing of each of these explanations.

Other Suggestions

The investigator would like to suggest and encourage the use of sociometric tests in the guidance programs for elementary and high school students. Information may be secured from these tests with respect to how the other members of the group feel toward the individual student, and in this way some of the problems and needs of the youngsters may be ascertained. A sociometric test with defined categories for "confidants", "intimates," "familiars", and "acquaintances," should be particularly applicable to a school guidance program.

Certainly, much more needs to be known concerning sociometric analysis and what the results obtained actually mean in the life of the individual.
LITERATURE CITED


Bonney, Merl E. The relative stability of social, intellectual, and academic status in grades II.to IV, and the inter-relationships between these various forms of growth. Journal of Educational Psychology 34:88-102. 1943.


Chapin, F. Stuart. The measurement of social status. Minneapolis, University of Minnesota Press. 1933.


Fessler, Donald R. The development of a scale for measuring community solidarity. Rural Sociology 17:144-152. 1952.


Hermann, Esther P. The construction of a scale for the measurement of socioeconomic status of Nebraska farm families. Unpublished M.S. Thesis, Lincoln, Nebraska, University of Nebraska Library. 1950.


Ingersoll, H.L. The construction of a paper-and-pencil scale for the measurement of economic, cultural, and social status of farm families in Lancaster County, Nebraska. Unpublished M.S. Thesis, Lincoln, Nebraska, University of Nebraska Library. 1942.


—. Outsiders: a study of the personality patterns of children least acceptable to their age mates. Sociometry 7:10-25. 1944.


Reel, W.D. The use of a sociometric scale in the measurement of change in sociability of a group of high school students. Unpublished M.A. Thesis, Lincoln, Nebraska, University of Nebraska Library. 1952.


——. A short form of the farm family socioeconomic status scale. Rural Sociology 8:161-170. 1943.

Sherrill, Helen E. Relationship between social acceptance ratings of high school students and ratings of self-reliance, security-insecurity, and family socioeconomic status. Unpublished M.A. Thesis. Lincoln, Nebraska, University of Nebraska Library. 1950.


Stott, Leland. Some environmental factors in relation to personality development in adolescents. Nebraska Agricultural Experiment Station Bulletin 106. 1938.
Personality development in farm, small-town, and city children. Nebraska Agricultural Experiment Station Bulletin 114. 1939.

Vreeland, Francis M. Social relations in the college fraternity. Sociometry 5:151–162. 1942.
ACKNOWLEDGMENTS

The writer wishes to express his deep appreciation for the assistance which he has received in connection with this study from other individuals. To Dr. Ray E. Wakeley, Dr. David M. Fulcomer, Dr. James E. Wert, and Dr. Charles Neidt he desires to express his gratitude for their generosity of time and attention which they have given in making suggestions and criticisms and encouragement in this study. To Mrs. Ruby Gingles he is deeply indebted for the statistical calculations and the many hours she spent in assisting with the study and the data obtained.

He also wishes to express his thanks for the fine cooperation which the superintendent of schools, the high school principal, the teachers and the students contributed to this study. Without their help this study could not have been carried through to completion.

The writer wishes to acknowledge the financial assistance of the Agricultural Experiment Station at the University of Nebraska who financed the project upon which this study was based.

Last, but not least, he wishes to express his appreciation to Dr. Doretta Schlaphoff for her encouragement, and to his wife, Ruth Cannon, and daughters, Ruth Lynne, Connie Sue, Jeraldine Ann, and Nancy Jane who have "put up" with him during the trying hours which this study has involved.
APPENDICES

Appendix A

Social acceptance scores for the 9th grade in 1949-50 and the 10th grade in 1950-51, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance score 9th grade 1949-50</th>
<th>Social acceptance score 10th grade 1950-51</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1F</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2F</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>3M</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4F</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5F</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6M</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8M</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>9M</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10M</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>11F</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>12F</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>13F</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15F</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>16M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17M</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>18F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20M</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>72</td>
</tr>
</tbody>
</table>

N 20

Average 4.75 3.60 1.40 4.10 13.35 6.00 6.00 2.24 5.25 19.50

21F 7 3 2 6 18 (Moved to another community)

22F (Started 1950-51) 1 1 0 2 4
Appendix B

Social acceptance scores for the 9th grade in 1950-51 and the 10th grade in 1951-52, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance score 9th grade 1950-51</th>
<th>Social acceptance score 10th grade 1951-52</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1F</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2F</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3F</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4F</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>5M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6F</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7M</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>8M</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>9M</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>10F</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>11F</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>12M</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13F</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>14F</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15F</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>16M</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>17F</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>18M</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>19M</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>20M</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>21F</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>22F</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>23M</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>24F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25F</td>
<td>11</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix B continued

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance score 9th grade 1950-51</th>
<th>Social acceptance score 10th grade 1951-52</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26F</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>27F</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>28M</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>29F</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

| Total                  | 141 | 118 | 31  | 126 | 416   | 175 | 139 | 80  | 160 | 554   |

N. 29

<table>
<thead>
<tr>
<th>Average</th>
<th>4.86</th>
<th>4.07</th>
<th>1.07</th>
<th>4.34</th>
<th>14.34</th>
<th>6.03</th>
<th>4.79</th>
<th>2.76</th>
<th>5.52</th>
<th>19.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>30M</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>(Moved to another community)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31F</td>
<td>9</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td>23</td>
<td>(Moved to another community)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Started 1951-52)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Social acceptance scores for the 9th grade in 1951-52 and the 10th grade in 1952-53, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 1951-52</th>
<th>Social acceptance scores 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 Total</td>
<td>1 2 3 4 Total</td>
</tr>
<tr>
<td>1M</td>
<td>2 1 0 6 9 0 2 0 2 4</td>
<td></td>
</tr>
<tr>
<td>2M</td>
<td>1 3 0 3 7 3 3 1 4 11</td>
<td></td>
</tr>
<tr>
<td>3M</td>
<td>6 2 1 4 13 9 5 1 4 19</td>
<td></td>
</tr>
<tr>
<td>4M</td>
<td>3 2 1 5 11 2 5 0 1 8</td>
<td></td>
</tr>
<tr>
<td>5F</td>
<td>9 5 6 6 26 14 12 10 12 48</td>
<td></td>
</tr>
<tr>
<td>6F</td>
<td>0 1 0 1 2 0 0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>7F</td>
<td>3 1 1 1 6 1 2 0 2 5</td>
<td></td>
</tr>
<tr>
<td>8F</td>
<td>3 0 1 3 7 2 3 0 1 6</td>
<td></td>
</tr>
<tr>
<td>9F</td>
<td>4 0 1 5 10 7 5 0 5 17</td>
<td></td>
</tr>
<tr>
<td>10F</td>
<td>3 3 4 3 13 3 1 5 3 12</td>
<td></td>
</tr>
<tr>
<td>11M</td>
<td>2 1 0 3 6 3 2 1 2 8</td>
<td></td>
</tr>
<tr>
<td>12F</td>
<td>7 5 3 5 20 7 6 7 8 28</td>
<td></td>
</tr>
<tr>
<td>13F</td>
<td>3 2 1 4 10 0 2 0 0 2</td>
<td></td>
</tr>
<tr>
<td>14M</td>
<td>1 0 0 2 3 1 3 0 3 7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>47 26 19 51 143</td>
<td>52 51 26 49 178</td>
</tr>
<tr>
<td>N. 14</td>
<td>3.36 1.86 1.36 3.64 10.21</td>
<td>3.71 3.64 1.86 3.50 12.71</td>
</tr>
</tbody>
</table>

(Dropped out of school)
(Moved to another community)
(Started 1952-53)
(Started 1952-53)
Appendix D

Social acceptance scores for the 10th grade in 1950-51 and the 11th grade in 1951-52, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 10th grade 1950-51</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Social acceptance scores 11th grade 1951-52</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Total</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Total</td>
</tr>
<tr>
<td>2F</td>
<td>14</td>
<td>15</td>
<td>4</td>
<td>11</td>
<td>44</td>
<td>12</td>
<td>13</td>
<td>6</td>
<td>11</td>
<td>42</td>
</tr>
<tr>
<td>3M</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>4F</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>16</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>5F</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6M</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>17</td>
<td>10</td>
<td>13</td>
<td>8</td>
<td>4</td>
<td>35</td>
</tr>
<tr>
<td>7M</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>8M</td>
<td>11</td>
<td>16</td>
<td>1</td>
<td>13</td>
<td>41</td>
<td>14</td>
<td>18</td>
<td>4</td>
<td>15</td>
<td>51</td>
</tr>
<tr>
<td>9M</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td>4</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>10M</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td>8</td>
<td>23</td>
<td>14</td>
<td>20</td>
<td>6</td>
<td>16</td>
<td>56</td>
</tr>
<tr>
<td>11F</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12F</td>
<td>18</td>
<td>19</td>
<td>15</td>
<td>10</td>
<td>62</td>
<td>15</td>
<td>10</td>
<td>24</td>
<td>15</td>
<td>64</td>
</tr>
<tr>
<td>13F</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>14F</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>15F</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>17</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>16M</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>17M</td>
<td>13</td>
<td>14</td>
<td>2</td>
<td>14</td>
<td>43</td>
<td>10</td>
<td>15</td>
<td>7</td>
<td>12</td>
<td>44</td>
</tr>
<tr>
<td>18F</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>19M</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>20M</td>
<td>15</td>
<td>13</td>
<td>15</td>
<td>8</td>
<td>51</td>
<td>10</td>
<td>10</td>
<td>4</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td>117</td>
<td>44</td>
<td>103</td>
<td>381</td>
<td>136</td>
<td>153</td>
<td>79</td>
<td>137</td>
<td>505</td>
</tr>
</tbody>
</table>

N 19

Average  6.16  6.16  2.32  5.42  20.06  7.16  8.05  4.16  7.21  26.58

1F  3  3  1  2  9  (Moved from town and married)
21F  1  1  0  2  4  (Moved back to own home)
22F  (Moved to the community)  0  2  0  3  5
Appendix E

Social acceptance scores for the 10th grade in 1949-50 and the 11th grade in 1950-51, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 10th grade 1949-50</th>
<th>Social acceptance scores 11th grade 1950-51</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1F</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2F</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3F</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4M</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5M</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6F</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>7M</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>8M</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>9M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10F</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>11M</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12F</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>13F</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>14M</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>15M</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>16M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17F</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>18M</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19F</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>20M</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>21F</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>22M</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>23M</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>24M</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>25M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td>110</td>
</tr>
<tr>
<td>N 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>4.88</td>
<td>4.40</td>
</tr>
<tr>
<td>26M</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix F

Social acceptance scores for the 10th grade in 1951-52 and the 11th grade in 1952-53, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 10th grade 1951-52</th>
<th>Social acceptance scores 11th grade 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1   2   3   4   Total</td>
<td>1   2   3   4   Total</td>
</tr>
<tr>
<td>1F</td>
<td>6    1    6    19</td>
<td>1    4    0    7    12</td>
</tr>
<tr>
<td>2F</td>
<td>4    2    1    11</td>
<td>7    2    1    3    13</td>
</tr>
<tr>
<td>3F</td>
<td>0    0    1    1</td>
<td>2    1    0    2    5</td>
</tr>
<tr>
<td>4F</td>
<td>4    1    5    14</td>
<td>6    10   2    8    26</td>
</tr>
<tr>
<td>5F</td>
<td>1    0    5    6</td>
<td>1    0    1    1    3</td>
</tr>
<tr>
<td>6M</td>
<td>0    0    0    0</td>
<td>1    2    0    2    5</td>
</tr>
<tr>
<td>7M</td>
<td>6    0    5    14</td>
<td>8    5    1    7    21</td>
</tr>
<tr>
<td>8M</td>
<td>1    1    1    2</td>
<td>2    1    0    2    4</td>
</tr>
<tr>
<td>9M</td>
<td>1    1    5    17</td>
<td>4    4    3    2    13</td>
</tr>
<tr>
<td>10F</td>
<td>12   10   11   15   49</td>
<td>19    16   24    15    74</td>
</tr>
<tr>
<td>11F</td>
<td>12   9    7    3    36</td>
<td>14    8    3    9    34</td>
</tr>
<tr>
<td>12M</td>
<td>0    0    1    1</td>
<td>0    0    1    1    1</td>
</tr>
<tr>
<td>13F</td>
<td>11   8    2    8    29</td>
<td>4    6    3    5    18</td>
</tr>
<tr>
<td>14F</td>
<td>0    0    2    2</td>
<td>6    4    0    4    14</td>
</tr>
<tr>
<td>15F</td>
<td>7    6    1    5    19</td>
<td>13    6    5    5    29</td>
</tr>
<tr>
<td>16M</td>
<td>1    3    1    2    7</td>
<td>3    2    3    1    9</td>
</tr>
<tr>
<td>17F</td>
<td>22   15   18   16   71</td>
<td>29    20   31    16    96</td>
</tr>
<tr>
<td>18M</td>
<td>2    1    3    2    8</td>
<td>1    3    3    2    9</td>
</tr>
<tr>
<td>19M</td>
<td>9    7    6    11   33</td>
<td>15    9    1    9    34</td>
</tr>
<tr>
<td>20M</td>
<td>7    7    0    7    21</td>
<td>15    10   1    8    34</td>
</tr>
<tr>
<td>21M</td>
<td>12   16   9    12   49</td>
<td>17    13   18    14    67</td>
</tr>
<tr>
<td>22F</td>
<td>3    1    4    9</td>
<td>1    1    0    3    5</td>
</tr>
<tr>
<td>23M</td>
<td>7    4    3    7    21</td>
<td>13    10   17    9    49</td>
</tr>
<tr>
<td>24F</td>
<td>2    1    0    1    4</td>
<td>1    2    0    3    6</td>
</tr>
<tr>
<td>25F</td>
<td>8    6    4    6    24</td>
<td>16    14   10    10    50</td>
</tr>
</tbody>
</table>
### Social Acceptance Scores

<table>
<thead>
<tr>
<th>Student Identification</th>
<th>Social Acceptance Scores 10th Grade 1951-52</th>
<th>Social Acceptance Scores 11th Grade 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26F</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>27F</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>29M</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>32F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>137</td>
</tr>
</tbody>
</table>

**N 29**

**Average**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>26F</td>
<td>5.92</td>
<td>4.72</td>
<td>2.76</td>
<td>5.34</td>
<td>18.76</td>
<td>8.14</td>
<td>6.45</td>
<td>4.69</td>
<td>6.00</td>
<td>25.28</td>
</tr>
<tr>
<td>27F</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>15</td>
<td>(Changed to another high school)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix G

Social acceptance scores for the 11th grade in 1949-50 and the 12th grade in 1950-51, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 11th grade 1949-50</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
<th>Social acceptance scores 12th grade 1950-51</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1M</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>2M</td>
<td>19</td>
<td>19</td>
<td>9</td>
<td>17</td>
<td>64</td>
<td>15</td>
<td>20</td>
<td>17</td>
<td>11</td>
<td>63</td>
</tr>
<tr>
<td>3F</td>
<td>14</td>
<td>9</td>
<td>9</td>
<td>14</td>
<td>46</td>
<td>10</td>
<td>14</td>
<td>10</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td>4F</td>
<td>22</td>
<td>9</td>
<td>53</td>
<td>14</td>
<td>98</td>
<td>20</td>
<td>8</td>
<td>62</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>5F</td>
<td>12</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>30</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>6M</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>7M</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>8F</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>9F</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>10M</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>18</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>11F</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>12M</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>10</td>
<td>33</td>
<td>19</td>
<td>15</td>
<td>9</td>
<td>13</td>
<td>56</td>
</tr>
<tr>
<td>13F</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>14F</td>
<td>23</td>
<td>10</td>
<td>37</td>
<td>14</td>
<td>84</td>
<td>15</td>
<td>10</td>
<td>37</td>
<td>7</td>
<td>69</td>
</tr>
<tr>
<td>15M</td>
<td>17</td>
<td>16</td>
<td>20</td>
<td>13</td>
<td>66</td>
<td>12</td>
<td>12</td>
<td>14</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>16F</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>17M</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>18F</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>19M</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>20F</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>20</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>21M</td>
<td>9</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>23</td>
<td>13</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>48</td>
</tr>
<tr>
<td>22M</td>
<td>2</td>
<td>9</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>23F</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>24M</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>11</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>25M</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>
Appendix G continued

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 11th grade 1949-50</th>
<th>Social acceptance scores 12th grade 1950-51</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26F</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>27M</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>28F</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>29F</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>218</td>
<td>164</td>
</tr>
<tr>
<td>N</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>7.52</td>
<td>5.66</td>
</tr>
<tr>
<td>30M</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>31M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>32F</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>33M</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
### Appendix H

Social acceptance scores for the 11th grade in 1950-51 and the 12th grade in 1951-52, for each item and total

<table>
<thead>
<tr>
<th>Student Identification</th>
<th>Social acceptance scores 11th grade 1950-51</th>
<th>Social acceptance scores 12th grade 1951-52</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2F</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>3F</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4M</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>5M</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6F</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>7M</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>9M</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10F</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>11M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12F</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>13F</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>14M</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>15M</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>16M</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>17M</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>18M</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>19F</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>20M</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>21M</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>22M</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>23M</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>121</td>
</tr>
</tbody>
</table>

N = 22

Average: 5.50 5.50 2.73 5.50 19.23 5.55 5.09 5.32 4.91 20.86

| (Moved to another community) | (Moved to another community) |
| 1F                         | 3 | 3 | 1 | 3 | 10 |
| 8M                         | 5 | 2 | 0 | 7 | 14 | (Left school) |
Appendix I

Social acceptance scores for the 11th grade in 1951-52 and the 12th grade in 1952-53, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 11th grade 1951-52</th>
<th>Social acceptance scores 12th grade 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2F</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>3M</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>4F</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>5F</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6M</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>7M</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>8M</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>10M</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>11F</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12F</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>13F</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>14F</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>15F</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>16M</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>18F</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>19M</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>20M</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>22F</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

| Total                  | 119 | 131 | 68  | 121 | 439  | 118 | 98  | 144 | 122 | 482  |

N - 18
Average 6.61 7.28 3.78 6.72 24.39 6.56 5.44 8.00 6.78 26.78

| 9M                     | 7   | 9   | 4   | 7   | 27    | (Left school) |
| 17M                    | 10  | 15  | 7   | 12  | 44    | (Graduated and went to college at mid-year) |
| 23                     | (Moved into community) 5   4   3   6   18 |
Appendix J

Social acceptance scores for the 9th grade in 1949-50 and the 11th grade in 1951-52, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 9th grade 1949-50</th>
<th>Social acceptance scores 11th grade 1950-51</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  Total</td>
<td>1  2  3  4  Total</td>
</tr>
<tr>
<td>2F</td>
<td>14 10  8 10  42</td>
<td>12 13  6 11  42</td>
</tr>
<tr>
<td>3M</td>
<td>5  4  0  3  12</td>
<td>5  8  4  9  26</td>
</tr>
<tr>
<td>4F</td>
<td>4  1  0  3  8</td>
<td>6  4  1  6  17</td>
</tr>
<tr>
<td>5F</td>
<td>1  0  0  0  1</td>
<td>0  1  0  0  1</td>
</tr>
<tr>
<td>6M</td>
<td>8  8  1  7  24</td>
<td>10 13  3  4  35</td>
</tr>
<tr>
<td>7M</td>
<td>2  1  0  2  5</td>
<td>6  6  1  3  16</td>
</tr>
<tr>
<td>8M</td>
<td>6  3  2  3  24</td>
<td>14 18  4  15  51</td>
</tr>
<tr>
<td>9M</td>
<td>2  3  2  2  7</td>
<td>7  9  4  7  27</td>
</tr>
<tr>
<td>10M</td>
<td>6  8  1  8  23</td>
<td>14 20  6  16  56</td>
</tr>
<tr>
<td>11F</td>
<td>1  0  0  1  2</td>
<td>0  0  0  0  0</td>
</tr>
<tr>
<td>12F</td>
<td>13  6  9 10  38</td>
<td>15 10  24 15  64</td>
</tr>
<tr>
<td>13F</td>
<td>3  2  0  1  6</td>
<td>5  5  0  4  14</td>
</tr>
<tr>
<td>14F</td>
<td>2  1  3  3  6</td>
<td>5  4  1  4  14</td>
</tr>
<tr>
<td>15F</td>
<td>6  2  0  5  13</td>
<td>7  5  3  10  25</td>
</tr>
<tr>
<td>16M</td>
<td>0  0  0  0  0</td>
<td>2  2  1  2  7</td>
</tr>
<tr>
<td>17M</td>
<td>7  4  1  7  19</td>
<td>10 15  7  12  44</td>
</tr>
<tr>
<td>18F</td>
<td>2  1  0  1  4</td>
<td>5  7  5  7  24</td>
</tr>
<tr>
<td>19M</td>
<td>2  1  0  1  4</td>
<td>3  3  0  2  8</td>
</tr>
<tr>
<td>20M</td>
<td>9  9  6  7  31</td>
<td>10 10  4  10  34</td>
</tr>
</tbody>
</table>

Total: 93 69 28 79 269 136 153 79 137 505

N = 19

Average: 4.89 3.63 1.47 4.16 14.15 7.16 8.05 4.16 7.21 26.58
Appendix K

Social acceptance scores for the 9th grade in 1950-51 and the 11th grade in 1952-53, for each item and total

<table>
<thead>
<tr>
<th>Student Identification</th>
<th>Social acceptance scores 9th grade 1950-51</th>
<th>Social acceptance scores 11th grade 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1   2   3   4   Total</td>
<td>1   2   3   4   Total</td>
</tr>
<tr>
<td>1F</td>
<td>2    3    0    4    9</td>
<td>1    4    0    7    12</td>
</tr>
<tr>
<td>2F</td>
<td>3    2    0    6    11</td>
<td>7    2    1    3    13</td>
</tr>
<tr>
<td>3F</td>
<td>0    1    0    0    1</td>
<td>2    1    0    2    5</td>
</tr>
<tr>
<td>4F</td>
<td>7    2    1    4    14</td>
<td>6    10   2    8    26</td>
</tr>
<tr>
<td>5M</td>
<td>2    1    0    1    4</td>
<td>1    0    1    1    3</td>
</tr>
<tr>
<td>6F</td>
<td>0    0    0    0    0</td>
<td>1    2    0    2    5</td>
</tr>
<tr>
<td>7M</td>
<td>4    2    0    3    9</td>
<td>3    5    1    7    21</td>
</tr>
<tr>
<td>8M</td>
<td>1    3    1    0    5</td>
<td>2    1    1    0    4</td>
</tr>
<tr>
<td>9M</td>
<td>6    6    0    3    15</td>
<td>4    4    3    2    13</td>
</tr>
<tr>
<td>10F</td>
<td>15   15   7    11   48</td>
<td>19   16   24   15    74</td>
</tr>
<tr>
<td>11F</td>
<td>10   8    1    7    26</td>
<td>14   8    3    9    34</td>
</tr>
<tr>
<td>12M</td>
<td>0    1    0    0    1</td>
<td>0    0    0    1    1</td>
</tr>
<tr>
<td>13F</td>
<td>5    5    0    6    16</td>
<td>4    6    3    5    18</td>
</tr>
<tr>
<td>14F</td>
<td>0    0    0    1    1</td>
<td>6    4    0    4    14</td>
</tr>
<tr>
<td>15F</td>
<td>4    2    0    5    11</td>
<td>13   6    5    5    29</td>
</tr>
<tr>
<td>16M</td>
<td>3    2    0    2    7</td>
<td>3    2    3    1    9</td>
</tr>
<tr>
<td>17M</td>
<td>18   13   9    13   53</td>
<td>29   20   31   16    96</td>
</tr>
<tr>
<td>18M</td>
<td>3    1    1    1    6</td>
<td>1    3    3    2    9</td>
</tr>
<tr>
<td>19M</td>
<td>4    4    0    3    11</td>
<td>15   9    1    9    34</td>
</tr>
<tr>
<td>20M</td>
<td>3    5    0    7    15</td>
<td>15   10   1    8    34</td>
</tr>
<tr>
<td>21M</td>
<td>10   9    4    12   35</td>
<td>17   18   18   14    67</td>
</tr>
<tr>
<td>22F</td>
<td>1    1    0    3    5</td>
<td>1    1    0    3    5</td>
</tr>
<tr>
<td>23M</td>
<td>6    5    1    5    17</td>
<td>13   10   17   9    49</td>
</tr>
<tr>
<td>24F</td>
<td>2    1    0    2    5</td>
<td>1    2    0    3    6</td>
</tr>
<tr>
<td>25F</td>
<td>11   7    3    7    23</td>
<td>16   14   10   10    50</td>
</tr>
<tr>
<td>26F</td>
<td>12   10   1    10   33</td>
<td>15   13   2    8    38</td>
</tr>
<tr>
<td>27F</td>
<td>2    4    1    2    9</td>
<td>2    2    1    3    8</td>
</tr>
<tr>
<td>29M</td>
<td>6    5    1    6    18</td>
<td>18   11   5    12    46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>140</strong></td>
<td><strong>118</strong></td>
</tr>
<tr>
<td><strong>N = 28</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>5.00</td>
<td>4.21</td>
</tr>
</tbody>
</table>
Appendix L

Social acceptance scores for the 10th grade in 1949-50 and the 12th grade in 1951-52, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 10th grade 1949-50</th>
<th>Social acceptance scores 12th grade 1951-52</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2F</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3F</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4M</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5M</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6F</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>7M</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>9M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10F</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>11M</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12F</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>13F</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>14M</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>15M</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>16M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18M</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19F</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>20M</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>21F</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>22M</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>23M</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>24M</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>25M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td>105</td>
</tr>
<tr>
<td>Average</td>
<td>5.32</td>
<td>4.77</td>
</tr>
</tbody>
</table>

1F                     | 0   | 0   | 0   | 1   | 1     | (Moved to another community) |
| 8M                     | 0   | 3   | 0   | 3   | 6     | (Moved to another community) |
| 17F                    | 5   | 2   | 0   | 7   | 14    | (Moved to another community) |
| 26M                    | 2   | 1   | 1   | 2   | 6     | (Moved to another community) |
Appendix M

Social acceptance scores for the 10th grade in 1950-51 and the 12th grade in 1952-53, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 10th grade 1950-51</th>
<th>Social acceptance scores 12th grade 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2F</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>3M</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4F</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5F</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6M</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>7M</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>8M</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>10M</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>11F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12F</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>13F</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14F</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>15F</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>16M</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>18F</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>19M</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>20M</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>102</td>
</tr>
<tr>
<td>N</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>5.94</td>
<td>6.00</td>
</tr>
</tbody>
</table>
Social acceptance scores for the 9th grade in 1949-50 and the 12th grade in 1952-53, for each item and total

<table>
<thead>
<tr>
<th>Student identification</th>
<th>Social acceptance scores 9th grade 1949-50</th>
<th>Social acceptance scores 12th grade 1952-53</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2F</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>3M</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4F</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5F</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6M</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8M</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>10M</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>11F</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>12F</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>13F</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15F</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>16M</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18F</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19M</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20M</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>62</td>
</tr>
<tr>
<td>N</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>4.94</td>
<td>3.65</td>
</tr>
</tbody>
</table>
1. With what pupils would you most enjoy working on a committee for putting on a school program? Write down as many names as you wish, putting your first choice first, then your second choice, and so on. Your choices will not be mentioned to anyone.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

2. With what people would you most enjoy going on a picnic?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

3. What pupils would you vote for to represent this school at an important state conference of schools, this school to be judged by these pupils?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

4. Who are your very best friends in this school?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
### ADDRESS

I LIVE: On a farm _____ In town _____ Other ____________

My Father's Occupation

---

### I. Our house has the following: (encircle the right answer, yes or no)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>hot or cold running water yes no</td>
</tr>
<tr>
<td>b</td>
<td>electricity yes no</td>
</tr>
<tr>
<td>c</td>
<td>a telephone yes no</td>
</tr>
<tr>
<td>d</td>
<td>central heating yes no</td>
</tr>
<tr>
<td>e</td>
<td>fly-tight screens yes no</td>
</tr>
<tr>
<td>f</td>
<td>a wool rug on the living room yes no</td>
</tr>
<tr>
<td>g</td>
<td>a desk yes no</td>
</tr>
<tr>
<td>h</td>
<td>a kitchen sink with a drain yes no</td>
</tr>
<tr>
<td>i</td>
<td>sewage disposal either sewer system, septic tank, or cesspool yes no</td>
</tr>
<tr>
<td>j</td>
<td>a gas or electric range, or a coal range combined with gas or electricity yes no</td>
</tr>
<tr>
<td>k</td>
<td>a mechanical refrigerator yes no</td>
</tr>
<tr>
<td>l</td>
<td>a pressure canner yes no</td>
</tr>
</tbody>
</table>

### 2 My father and/or mother carry life insurance yes no

### 3 We have insurance on our household furnishings yes no

### 4 Mother attends church, and one, or more non-church organizations yes no

### 5 Mother is an officer in an organization yes no

### 6 Father attends church, and one, or more, non-church organizations yes no

### 7 Father is an officer in an organization yes no

ONLY STUDENTS LIVING ON FARMS NEED TO ANSWER THE FOLLOWING:

### 8 We have a gravel drive leading into the farmstead yes no

### 9 We entertain adult farm groups in our home yes no