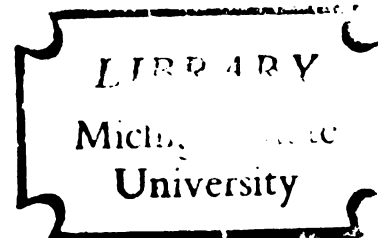PEER GROUP FRIENDSHIPS IN ONE CLASS
OF HIGH SCHOOL GIRLS:
CHANGE AND STABILITY

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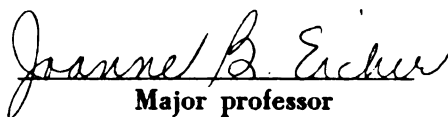MICHIGAN STATE UNIVERSITY
Eleanor Ann Kelley
1966

This is to certify that the

thesis entitled

PEER GROUP FRIENDSHIPS IN ONE CLASS OF
HIGH SCHOOL GIRLS:
CHANGE AND STABILITY

presented by

Eleanor A. Kelley

has been accepted towards fulfillment
of the requirements for

____Ph.D____ degree in _Sociology_

Joanne B. Eicher
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ABSTRACT

PEER GROUP FRIENDSHIPS IN ONE CLASS OF
HIGH SCHOOL GIRLS:
CHANGE AND STABILITY

by Eleanor A. Kelley

The purpose of this study was to investigate change and stability

longitudinally in informal adolescent peer groups within the formal

school organization, and the influence of family social class ranking

in forming informal adolescent peer groups. An entire population of

adolescent girls at a suburban Midwestern high school was traced from

their ninth grade entrance in the school through their senior year.

The majority were daughters of highly educated, geographically mobile

white collar residents. However, a few were the daughters of less

educated blue collar workers, creating a comparative situation in which

to study the interaction, or lack of interaction, of social class extremes.

Data were obtained from the responses to two instruments, a

background questionnaire and an interview schedule. The adolescents

were ranked according to the social class rank of their parents using

Warner's Index of Status Characteristics. Peer group social acceptance,

defined as a mutual awareness and desire for interaction among the

respondents, was operationally defined by using the near-sociometric

information, the girls' best friend choices. A classification, includ-

ing two categories of acceptance, or lack of acceptance, reciprocal

friendship structures and isolates, was established.

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While extensive change was evident at all levels of the structural analysis, four definable sub-system complexes emerged as they split and recombined longitudinally. The sub-systems showed a definite town and university split which reflected parental social class placement as follows:

The "social elite" was a closed sub-system composed predominantly of girls whose fathers were stable resident town professionals. The members ranked higher in social class, were most often listed as "most popular" and "best dressed," but were not the highest academic achievers.

The second town closed sub-system, a polarity to the social elite, was composed of girls whose fathers were blue collar workers. These girls ranked low in social class, were often named as "not dressed right," and were low academic achievers. This sub-system contained five of the eight known school dropouts for the entire study.

The third and fourth sub-systems contained the majority of girls whose parents were university affiliated and some town girls. Both open sub-systems, with interaction between them as well as with mutual pairs and isolates, were closely parallel in characteristics. However, one enjoyed a little more prestige than the other, ranking somewhat higher in social class and academic achievement, and receiving a few popularity and dress choices. It also contained the structure which emerged as the "intellectual elite."

A comparative analysis of the data from two social acceptance perspectives, aggregate numbers based exclusively on choice status and reciprocated structured groups, revealed that different response patterns

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emerged for the two types of questions. Responses to the friendship question which establishes an interaction framework in the respondents' minds were distributed throughout the four sub-system complexes; whereas responses to the choice status questions concerning popularity and dress, which were not designed to elicit interaction answers, were directed to girls in selected sub-systems whether or not the respondent perceived herself as a member of the sub-system.

The perceptive awareness by the respondents of the social class related group sub-systems was also evident in the unreciprocated choices. Respondents chose, or were chosen by, sub-system members who reflected their own social class characteristics.

To summarize, the study traced the developing informal peer friendship structures of an entire class of high school girls from ninth through twelfth grades with their unique historical features undistorted by sociometric manipulation, and revealed that the structures continued to reflect parental social class placement. Furthermore, friendship interaction among the girls at a polarity in social class ranks was highly limited.

PEER GROUP FRIENDSHIPS IN ONE CLASS OF

HIGH SCHOOL GIRLS:

CHANGE AND STABILITY

by

Eleanor Ann Kelley

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Sociology

1966

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As a portion of a longitudinal project, this research has involved a number of persons who contributed to its culmination. The following persons are acknowledged for their specific contributions:

Dr. Joanne Eicher, the project initiator and my thesis advisor for her contributions throughout the study and her insightful suggestions in the preparation of the manuscript.

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The previous researchers whose specific contributions are acknowledged in text footnotes. They include: Betty Wass, Madelyn Williams, Arlene Bjorngaard Ostermeier, and Suzanne Hendricks. Each previous researcher acknowledged specific individuals who contributed to her phase of the longitudinal study. Additional contributers to the data analysis include Hazel Ogilvee Baxter and Barbara Gibson.

The Department of Clothing, Textiles, and Related Arts, College of Home Economics which conducted the longitudinal project, especially Dr. Mary Gephart,the department chairman,who enthusiastically supported the project.

The Michigan State University Experiment Station which furnished the funds to conduct the project.

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The high school which participated in the study, especially the principal, counselor, teachers, and the girls who graciously gave their time and opinions to the interviewers.

Last, but far from least, my friends and family, especially my parents, who have continually encouraged and assisted me throughout the graduate program.

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CHAPTER I

INTRODUCTION

Statement of Problem

The research presented in this paper is a four year longitudinal study of the change in informal adolescent peer friendship groups within the formal school organization. The study investigated three facets of peer group changes, structural patterns, size of social acceptance categories, and membership positions.

Conceptual Orientation

Every society is concerned with self-perpetuation beyond a single generation; thus the socialization process which molds a new born individual into a social being is crucial for societal survival.[1] In a small, stable society this process can be accomplished adequately through informal adult-child associations, whereas in a complex, changing society, rapidly changing roles tend to make parental norms somewhat obsolete as models for their children.

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[1]A number of sociologists have discussed this process, including: Kingsley Davis, _Human Society_ (New York: The Macmillan Co., 1949), Chapter VIII, pp. 195-233; Kingsley Davis, "The Sociology of Parent Youth Conflict," _American Sociological Review_, V (1940), pp. 523-532; and Talcott Parsons, "Age and Sex in the Social Structure of the United States," _American Sociological Review_, VII (1942), pp. 604-611.

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The socialization process is especially relevant in training the young to assume roles functionally requisite for the societal maintenance process. In this situation a formal educational system becomes increasingly important especially in American society due to the increasingly complex training requirements of some work roles. Highly specialized roles demand that youths remain longer in the educational system. When the facts of larger numbers of adolescents and longer training periods are considered together, the magnified importance of the school as a key socialization institution becomes apparent.

Although the school has assumed primary responsibility to orient youths to the larger society, the family still remains an important socializing agent. And a third extremely important agent has evolved, especially during the adolescent period. Informal age-peer group associations have been described as tied to both the family and the school.[1]

According to Parsons, peer associations perform two psychological functions.

> On the one hand, the peer group may be regarded as a field
> for the exercise of independence from adult control . . . .
> But another very important function is to provide the
> child a source of non-adult approval and acceptance.[2]
> . . . .
> The importance of the peer group for socialization in our
> type of society should be clear. The motivational

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[1]Talcott Parsons, Social Structure and Personality (Glencoe, Ill.: The Free Press, 1964), p. 138.

[2]Ibid., p. 139.

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foundations of character are inevitably first laid down through identification with parents, who are generation-superiors, and the generation difference is a type example of a hierarchical status difference. But an immense part of the individual's adult role performance will have to be in association with status-equals or near-equals. In this situation it is important to have a reorganization of the motivational structure so that the original dominance of the hierarchical axis is modified to strengthen the egalitarian components. The peer group plays a prominent part in this process.[1]

Elementary school peer groups, characterized by boundary fluidity and sharp sex segregation, are tied more closely to the child's resident neighborhood.[2] As the adolescent period emerges, associations become more diverse. The child is exposed to a wider range of age-peers because the school structure shifts due to increased size, wider geographic origins of the school population, and diverse class participation resulting from elective subjects. Due to the shifting structure, Parsons' impression is that "the transitions to Junior High School and Senior High School are apt to mean a considerable reshuffling of friendships."[3]

Researchers have studied friendship patterns effectively through sociometric techniques. In fact, "the result of the sociometric development has been that the investigation of the smallest social aggregates has become more interesting than the larger ones; and that pint-sized revolutions, for instance social change produced in the classroom,

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[1] Ibid., p. 139- 140.

[2] Ibid.

[3] Ibid., p. 150.

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[3] Ibid.,

[4] Ibid.,

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have become more interesting than efforts at a world wide revolution."[1]

Sociologists recognize well the importance of social change. MacIver and Page noted that "society exists only as a time sequence. It is a becoming, not a being; a process, not a product."[2] When social change is referred to as a process, the idea of continuity is introduced:

> A process means continuous change taking place in a definite manner through the operation of forces present from the first within the situation. Thus we speak of the group process, or the manner in which the relations of the members of a group, once brought together, acquire a certain distinctive character. . . . In studying a process we observe a series of transitions between one state of being and another. There is no necessary implication as to the relative quality of the two states of being, or as to the direction followed.[3]

Numerous change processes occur simultaneously in every society.[4]

The latter idea is supported by Parsons, Bales,and Shils. Using a social system scheme, they stated:

> The system operates through the interaction of its member units. Every change or state in one unit, i.e., in its location in relation to any or all of the dimensions, in its energy change, etc. will affect all the other units in the systems and in turn the effects of these on the other units will "feed back" to the original unit.[5]

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[1]J. L. Moreno, "Sociometry, Comtism and Marxism," Sociometry. VIII (1945), p. 118.

[2]Robert MacIver and Charles Page, Society: An Introductory Analysis (New York: Holt, Rinehart and Winston, 1949), p. 511.

[3]Ibid., p. 522.

[4]Ibid., p. 523.

[5]Talcott Parsons, Robert F. Bales,and Edward A. Shils, Working Papers in the Theory of Action (Glencoe, Ill.: The Free Press, 1953), p. 167.

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[5]Ibid.

The change processes occur in a temporal order, therefore the systems and their unit processes must be treated as changing over time. In addition to differentiating the processes which change, the researcher must differentiate the patterns which remain relatively constant through time.[1] Differentiation is also necessary between total system change and change in the units comprising the system. "Phases of system state are. . . to be regarded as resultants of phase changes in the units which are also systems."[2] The action schema from which the above ideas have been drawn "can be extended from the microscopic study of small groups. . . for short periods to large scale phenomena over longer periods of time."[3]

Simmel also recognized that group interaction occurs at varied societal levels. In his discussion of the isolated individual, the dyad, the triad, and complex structures, he suggested that "our relationships thus develop upon the basis of reciprocal knowledge and this knowledge upon the basis of the actual relations. Both are inextricably interwoven."[4] Placing the interaction process in the larger societal context he emphasized, "If society is conceived as interaction among individuals, the description of the forms of this interaction is the task of the science of society in its strictest and most essential sense."[5]

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[1] Ibid.

[2] Ibid., p. 168.

[3] Ibid., p. 170.

[4] Georg Simmel, The Sociology of Georg Simmel, Trans. and ed. K. H. Wolff (Glencoe, Ill.: The Free Press, 1950), p. 309.

[5] Ibid., pp. 21-22.

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Although sociologists recognize the importance of dynamic social change, they often neglect it in sociological research. Yet, as Homans stated, "The study of dynamics opens a whole new range of problems; it also puts in our power a more convincing method of exposition than any we have had up to now, though we may not be able to use the method for all it is worth."[1] Perhaps one of the major problems inherent in studying social change can be found in C. W. Mills' discussion of the Marxian concept of "historical specificity:"

> Even if we are concerned with some limited area of one national social structure—we need historical materials. Only by an act of abstraction that unnecessarily violates social reality can we try to freeze some knife-edge moment. . . . Knowing that what we are studying is subject to change, on the simplest descriptive levels, we must ask: What are the salient trends? To answer that question we must make a statement of "from what" and "to what".[2]

Thus the longitudinal study will "freeze a series of knife-edge moments"as a means of establishing the scope of "'from what' and 'to what'."

Orientation of the Present Study

The reported longitudinal investigation studied adolescent acceptance in informal peer friendship groups within the formal school organization from two perspectives, social class and social acceptance.[3]

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[1]George Homans, The Human Group (New York: Harcourt, Brace and Company, 1950), p. 335.

[2]C. Wright Mills, The Sociological Imagination (New York: Grove Press, Inc., 1961), p. 151.

[3]Infra, pp. 32-33 for definitions of social class and social acceptance.

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The first objective evolved from one factor which is considered in-
fluential in adolescents' friendship choices. Sociologists have char-
acterized adolescent peer groups as coinciding with their parents'
social class stratification rankings.[1] This characterization was
empirically demonstrated by Coleman: Social class was found to be
a consideration in status evaluation; however, its importance did
vary from school to school.[2] Warner stated that insufficient at-
tention has been given to social class interrelations.[3] The first

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[1]Barber stated that "adolescence is a period of intensive
socialization, a period of learning to be an adult in the fashion de-
fined by one's social class." Bernard Barber, Social Stratification
(New York: Harcourt, Brace and World, Inc., 1957), p. 281. Other
authors discussing the relationship of adolescent peer groups to family
social stratification patterns include: Joseph A. Kahl, The American
Class Structure (New York: Rinehart and Company, Inc., 1960), p. 135
and Allison Davis, "Socialization and Adolescent Personality," Read-
ings in Social Psychology (New York: Henry Holt and Co., 1952), pp.
520-531. Research studies supporting this idea include: Mapheus
Smith, "Some Factors in Friendship Selections of High School Students,"
Sociometry, VII (1944), pp. 303-313 and August B. Hollingshead, Elm-
town's Youth (New York: Wiley, 1947), pp. 212-215.

[2]Social class seemed to be an important value governing a
number of the respondents' choices. It was a criterion influencing
membership in the "leading crowd." While social class emphasis varied
from school to school, there seemed to be a direct variation according
to the proportion of the upper social class students. Support for the
"privileged class" theory of leadership seemed present in all except
one school. James Coleman, Adolescent Society (Glencoe, Ill.: The Free
Press, 1961), pp. 103-110.

[3]W. Lloyd Warner, "The Study of Social Stratification," Review
of Sociology, Joseph B. Gittler, ed. (New York: John Wiley and Sons,
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study objective, therefore, was to investigate the possible influence

social class has on the friendship choices, as one measure of social

acceptance, among one population of high school girls over a four-

year period.

The second study objective concerns peer group social acceptance

per se. Previous studies considered adolescent peer group acceptance

in the school situation; but their mode of establishing peer group

acceptance has been inconsistent, using diverse versions of the socio-

metric techniques and yielding diverse findings.[1] Many earlier stud-

ies, including longitudinal studies, incorporated sociometric technique

variations which measured individual's acceptance in the total group

yet did not include the reciprocity of relationships or patterns of

interaction within the group.[2] They are therefore not relevant for

this study which adheres more closely to the assumptions underlying

"true" sociometry.

Basic to sociometry is the assumption of interpersonal relation-

ships. Within this broad assumption, a number of requirements are

necessary to administer a "true" sociometric test:

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[1]The technique is "employed today in almost all studies of
group functioning, very often in accompaniment with whatever other
techniques particularly interest an investigator." Michael S. Olmsted,
The Small Group (New York: Random House, 1959), p. 97.

[2]The Cannon longitudinal investigation used this type technique.
Students were asked to name thier friends. Each individual was given
a rank in the class based exclusively on number of times chosen. This
rank did not include reciprocity of relations, i.e., the returned
choice to those who chose him, or the creation of ties. Kenneth L.
Cannon, "Stability of Sociometric Scores of High School Students,"
Journal of Educational Research, LII, 2 (October, 1958), pp. 43-48.

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[3]Ibid.

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1) The limits of the group should be indicated to the subjects.

2) The subjects should be permitted an unlimited number of choices or rejections.

3) The choices or rejections should be made in terms of specific criteria.

4) Test results should be used to restructure the group.

5) Choices and rejections should be made privately.

6) The questions should be gauged to the subjects' level of understanding.

Sociometric tests which fail to meet all six requirements are termed near-sociometric.[1] Relatively few of the total given were true sociometric tests. Often the criterion of restructuring the group is omitted. In fact, Bjernstedt found in investigating 100 sociometric studies that only 11 percent met the criterion of restructuring the group.[2] Yet many school-focused studies of associational patterns had the social therapy, or group restructuring, purpose. In fact, Coleman stated that associational patterns in the school situation without the assumption of restructuring the group have been studied only infrequently.[3,4]

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[1]Gardner Lindzey and Edgar F. Borgatta, "Sociometric Measurement," Handbook of Social Psychology, ed. Gardner Lindzey (Reading, Mass.: Addison-Wesley Publishing Company, Inc., 1954), p. 407.

[2]Ake Bjernstedt, Interpretations of Sociometric Choice Status (Lund, Sweden: CWK Gleerup, 1956), p. 49.

[3]Ibid.

[4]Many school oriented studies focused on elementary or kindergarten groups, or situations in which a wide age range was present. Moreno, Jennings, Neugarten, and Northway are a few sociometrists conducting classroom oriented studies. An often cited social therapy

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[2]Wilbur B.
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[3]Ibid., p.

[4]Carter V.
New York: Appleto

Associational patterns constituted one phase of the Coleman

study embracing nine high school adolescent social systems. He sum-

marized their importance:

> These associations help reinforce certain values; under-
> cut others, pull energies in the direction of some activit-
> ies and away from others; strengthen the prestige of some
> persons, weaken that of others. They are, in part, a
> source of the culture, and in part are determined by it.[1]

Brookover and his associates concluded from an associational

pattern study with a longitudinal perspective that variations in inter-

action patterns appeared.[2] Using the cited study to support their

ideas, they concluded that, while many longitudinal studies have cited

high but varying levels of stability, "there is decidedly more evidence

of change than stability in the structures." [of the cited study].[3]

Wider use of longitudinal methods, following a particular group

through repeated measurements has been recommended.[4] Thus the second

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study was conducted by Jennings using a wide age range sample of New
York Training School girls, a relatively "closed" situation. Helen
Jennings, Leadership in Isolation (New York: Longmans, Green Co., 1950).
In contrast, Cook used the social therapy technique in an "open"
high school situation. Lloyd Allen Cook, "An Experimental Socio-
graphic Study of a Stratified 10th Grade Class," American Sociological
Review, X (1945), pp. 250-261.

[1]Coleman, op. cit., p. 173.

[2]Wilbur B. Brookover, Orden C. Smucker and John Fred Thaden,
Sociology of Education (New York: American Book Company, 1955), p. 213.

[3]Ibid., p. 218. Bracket insert is this writer's addition.

[4]Carter V. Good and Douglas E. Scates, Methods of Research
(New York: Appleton-Century-Crofts, 1954), p. 805.

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study objective was to investigate the peer group friendship changes
among one population of high school girls over a four year time period.

Several assumptions underlie the study design:

1) Peer groups exert an important influence on adolescent be-
   havior.

2) The sociometric test can be used to index an individual's
   peer group acceptance or rejection.

3) The sociogram can be used graphically to present the at-
   tractions in a sociometrically tested group.

4) Adolescents share their families' social class position.

Summary

The importance of adolescent peer groups in the socialization
process has been established. Adolescent acceptance in informal
peer groups within the formal school organization was the topic of
numerous research projects, each using many sociometric technique
variations. Associational patterns, including reciprocated relation-
ships, were infrequently the research focus; longitudinal associational
pattern studies were even more infrequent. Yet associational patterns
are an important aspect of the informal adolescent social system in
the school, and longitudinal methods are useful to obtain a picture
of group change or stability. Thus, the major focus of this study
was to consider group interaction patterns and membership change and
stability longitudinally, utilizing a near-sociometric question to
establish friendship choices in one population of adolescent girls.

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of Findings Pertaining to How the Groups Changed; Chapter VIII, Sum-
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CHAPTER II

REVIEW OF LITERATURE

The two objectives of the study were the investigation of 1) the influence of family social class ranking in the formulation of peer group friendships and 2) stability and change in adolescent peer friendship patterns. The literature has been investigated with these objectives in mind.

Researchers interested in American adolescent behavior generally accept the idea that adolescent subcultures do exist.[1] Yet the methods used to study their subcultural behavior have been varied in design and the findings, while indicating high stability of group acceptance patterns, tend to vary over time.[2]

The majority of classroom studies have included sociometric technique variations not directly applicable to this study.[3] In fact, a literature investigation revealed only three studies which directly focused on associational patterns in a natural situation without the assumption of using the research findings to restructure the group. The three studies are: Hallworth's "Sociometric

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[1]David Gottleib and Jon Reeves, Adolescent Behavior in Urban Areas (East Lansing, Michigan: Bureau of Research and Publications, Michigan State University, College of Education and Cooperative Extension, 1962), pp. III-4.

[2]Supra, p.10, footnote 2.

[3]Supra, pp. 7-8 for the variations cited.

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3James Col
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Relationships Among Grammar School Boys and Girls Between the Ages of

11 and 16 Years,"[1] Gordon's The Social System of the High School,[2]

and Coleman's Adolescent Society.[3]   The first is a journal article

encompassing one year's findings from a three year longitudinal study;

the others are monographs coverning only one year.

Grammar School Sociometric Relationships--Hallworth

The Hallworth study was conducted in a suburban London, England,

coeducational grammar school between June, 1947, and June, 1950.

Respondents included three hundred students in eleven forms (classes);

however, the journal article reported case studies of only four forms

(one each, first, second, third, and fourth) which contained 150

subjects and spanned only one year. Seven hypotheses relating to

group structure were formulated and the general summary statement

concerning them noted that "substantiation of these hypotheses would

imply that sociometric rank is a function not only of personality but

also of group structure and development, and that although constant

over a short period of time, it would be subject to change over longer

periods."[4]

Sitting together, working together, and friendship were the

basic criteria for the sociometric tests. Choices were limited to

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[1]H. J. Hallworth, "Sociometric Relationships Among Grammar
School Boys and Girls Between the Ages of 11 and 16 Years," Sociometry,
XVI (1953), pp. 39-70.

[2]Wayne C. Gordon, The Social System of the High School (Glencoe,
Ill.: The Free Press, 1957).

[3]James Coleman, The Adolescent Society (Glencoe, Ill.: The Free
Press, 1961).

[4]Hallworth, op. cit., p. 40.

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[1] Ibid., p

[2] Ibid.

[3] Ibid., p

[4] Ibid.

[5] Ibid., p

[6] Ibid.

three within-form choices and rejections were allowed but not re-
quired. Case study discussions of the various girls' and boys' form-
groups disclosed differential structural patterning and change. Hallworth
concluded that the hypotheses relating to group structure and
development "were generally substantiated by the findings which
resulted from the sociometric case studies of the groups."[1] Specific
conclusions which seem currently relevant are:

1. "The existence of relatively stable groups inside each
   form was shown by means of sociograms, and these groups
   were at any one time much the same on the three criteria
   used."[2]

2. "The distribution of sociometric choices was almost
   positively skewed, and the values of the groups ap-
   peared to be centered upon those individuals who were
   over-chosen on the sociometric tests."[3]

3. "There was a tendency to make progressively larger and
   better-integrated groups."[4]

4. ". . . When attention had been centred upon nuclear
   group and upon one individual in particular, the
   nuclear group continued to attract still more choices
   whilst the one individual received fewer."[5]

5. "All of the large, stable groups reported above did, in
   fact, form slowly over a period of one year or more,
   and persisted for a further period of one or two years.
   There were cases, however, in which development took place
   much more rapidly in response to a specific stimulus
   from the environment. In these instances the group was
   centred around values which were of immediate but less
   permanent significance to its members, and the group it-
   self generally had a shorter life history."[6]

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[1]Ibid., p. 69.

[2]Ibid.

[3]Ibid., p. 68.

[4]Ibid.

[5]Ibid., p. 69.

[6]Ibid.

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[1] Ibid., p.

[2] Gordon, c

A limiting factor, from the viewpoint of a possible current com-
parison, is the wide age range (11 through 16 years) in the study-
forms. Hallworth stated additional study limitations:

> Wider investigation would be necessary to establish whether
> the generalizations drawn from the study of this limited
> number of children's groups can be considered to apply also
> to other groups. Further, the acceptance of these hy-
> potheses would raise many other questions, concerning, for
> example, the variations of the normal process of development,
> the conditions under which secondary modes or organization
> are develop, and the means whereby group integration may be
> preserved without the formation of too rigid a hierarchical
> structure.[1]

The Social System of the High School--Gordon

This monograph discussed the findings from a case study en-
compassing the social system formed by 576 students in a single Mid-
western suburban high school. Specifically, the study was designed to
explore "the theory that the dominant motivation of the high school
student is to achieve and maintain a general social status within the
organization of the school."[2] The research focused on three sub-systems
within the school organization as a composite general social status:

"1. The formal organization of the school which prescribes

learning achievement;

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[1]Ibid., p. 70.

[2]Gordon, op. cit., p. 1.

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2. The sytem of student organizations usually referred to as extracurricular activities; and

3. The network of interpersonal relationships defined by friendship choices."[1]

Only the third, the network of interpersonal relationships, applies directly to the study under discussion.

The network of interpersonal relationships was determined through the respondents' school-wide choices in response to a sociometric question. Both boys and girls were included, but sex and grade were separated in the analysis. Only the findings regarding girls are directly apropos to this discussion.

The ninth grade girls had relatively low group orientation as reflected by both out-of-school and up-grade choices. High mobility aspirations left large numbers of unchosen individuals. Influence integration seemed to be around individuals rather than cliques. Relative status equality among the cliques minimized individual clique influence. Girls were chosen as friends; boys as date objects.[2]

In the tenth grade group, the girls exhibited the highest in-school orientation. Apparently there was a low cross-sex interest. Two prominent cliques, a "social elite" and an "intellectual elite"

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[1]Ibid., p. 3.

[2]Ibid., p. 14.

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[1]Ibid., p

[2]Ibid., p

[3]Ibid., p

emerged as group-dominating. An increased tendency for structural closure accompanied the increased clique status awareness.[1]

Eleventh grade group influence was competitive among a number of cliques rather than dominated by two. The dominant cliques reflected value differences, and the tendency for closed structures emerged. Excessive clique closure stemming from competition left many unchosen members. In-school orientations were still relatively high and cross-sex friendship choices continued low. Cross-sex interest was high, but as romantic idealization rather than friendship choices.[2]

Cross-sex interest was primarily instrumental in low twelfth grade group integration. Out-of-school friendships also reflected the breakup of the social system. Absence of potential up-grade choices led to more in-group choices. Mutual pairs absorbed potential isolates. Intense honors competition led to broken clique solidarity and influence reintegration around personal leaders.[3]

To summarize, Gordon found that group interaction patterns varied both between grades and within grades. A strength of the study is the inclusion of all four grades, or the entire school population. Especially currently relevant is the finding that 85 percent of all friendship choices were made toward members of the same grade and sex group; thus "these groups each constituted virtually

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[1]Ibid., p. 16.

[2]Ibid., p. 18.

[3]Ibid., p. 20.

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[1] Ibid.

[2] Ibid.

[3] Ibid.

[4] Ibid.

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independent sub-systems of informal organization within the

school."[1]

Two of Gordon's general implications are pertinent to ques-

tions currently under consideration:

> Clique structures have remarkable stability and most of
> the dominant cliques were those which have been formed in
> grade school as early as the 6th grade. Nevertheless,
> modifications took place; old members dropped out and new
> members were incorporated.[2]
> . . . .
> The size and structure of small groups seem to be a
> function of their position in the prestige structure,
> and therefore, significantly related to the social class
> position of the members' families in the community.[3]

In addition, Gordon's comments on longitudinal investigation

are apropos:

> The variations in group structure as represented in the
> profiles manifest an organization-disorganization cycle
> in the process of group development. Since each group
> has certain unique features in its history affecting its
> development, we are not able to determine the exact varia-
> tions in the configurations of the structure without a time-
> sequence analysis.[4]

Adolescent Society--Coleman

Coleman obtained fruitful research suggestions from the above

studies.[5] However, his monograph reported a study which was much

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[1]Ibid., p. 80.

[2]Ibid., p. 106.

[3]Ibid., p. 134.

[4]Ibid., p. 81.

[5]Coleman, op. cit., p. 335.

larger in scope. The study included the entire value systems of ten high schools' social systems.[1] Only a very small portion of the monograph, the discussion of associational patterns, is currently apropos and, unfortunately, limited in value because the discussion was largely confined to smaller school associational patterns. The larger, urban school situations, more parallel to the current research setting, were treated in other discussion facets, but very little in discussing associational patterns.

The smallest sociometric unit appearing on Coleman's sociogram was a two person mutual choice structure. Thus, the omission of isolates and unreciprocated choices constitutes a limitation. But special focus on cliques with a basic nucleus of four or five as well as focus on the larger structures is a strength.[2]

Boys' and girls' cliques were recorded separately, and Coleman noted that the girls' clique structures were far more complex than the boys' structures. Both sexes exhibited differential complexity and membership between the large and small schools and between grades in each school, i.e., there seemed to be more mutual pairing and a lower proportion of total group members in definite cliques in the large schools than in the small schools. Also, large school complex structural patterns differed. Between two of the large schools, Coleman

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[1]A tenth school was briefly mentioned by Coleman; however, only nine were discussed extensively. Ibid., p. 56.

[2]Ibid., p. 174 and p. 183.

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attributed this difference to factors such as: the differential

ages of the schools, community solidarity, and differential social

class bases. The parents in the predominantly upper middle class

school displayed greater school interest and participated in more

community functions and after school activities.[1]

The remaining associational patterns in Coleman's discussion

evolved around the smaller schools; yet a few reflections regarding

differential structural dominance patterns between the smaller

schools seem fruitful for the current study. The influence of family

social class ranking was recognized by Coleman:

> The leading crowd must be in some fashion "in touch with"
> the student body as a whole, although not fully represent-
> ative of it. The higher the proportion of white-collar,
> high-educational background students in the school, the
> more likely that the leading clique will be a predominantly
> white collar one--which in these schools means one more
> oriented to adult goals, a college education, and to school
> activities and interests. Yet these white-collar dominant
> cliques may not be particularly interested in learning.[2]

A second set of factors influencing the emergence of a middle class

oriented clique was the less tangible adult community actions, the

school administration, and the teachers. This emergence was due

largely to middle class domination of the school program through

influence gained in organizational participation in activities such

as the PTA.[3]

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[1]Ibid., p. 185.

[2]Ibid., p. 215.

[3]Ibid.

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In sum, a direct relationship seemed to exist between the proportion of white-collar families in a community and the middle class clique domination within the adolescent in-school groups. Yet status upsets were apparent in some grades within two school systems. Coleman explained the upsets: some middle class cliques were non-school oriented, while the working class cliques were school oriented. Teacher and administrative recognition and rewards led to peer recognition and prestige for the lower class cliques and fostered a situation in which school oriented and non-school oriented groups shared an unstable systemic dominance.[1]

Summary

Adolescent behavior researchers generally accept the idea that adolescent subcultures exist in American society. Yet the numerous adolescent behavior studies have used diverse methodological consider-ations and yielded inconsistent findings. The majority utilized sociometric technique variations which do not coincide with the cur-rent technique focusing on associational patterns derived from reciproc-ated relations. Therefore, only three studies which are directly applicable have been discussed. Neither monograph included a longitud-inal perspective and, while the journal article reported research which was conducted with a longitudinal perspective, only a one-year time span is reported. All three samples were wider in scope than the

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[1]Ibid., p. 217.

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current population; the journal report also had a wider age-range.

The three research projects found grade-to-grade variation in the associational patterns, and the Coleman monograph reported variations from school to school. Findings which seem especially crucial for current methodological considerations include: the separate analysis of boys' and girls' groups, low-cross-sex friendship orientations, high within-grade choices, the influence of social class ranking on peer group formation, and the recognized need for a longitudinal research design to enable accurate comparisons of between-grade changes in structural patterns. The researchers recognized that some cited changes in a single time focus could be due to differential group characteristics rather than age-grade changing.

In view of the above findings, the present study scope, limited to following longitudinally one class of girls in one high school, is a manageable research design. The longitudinal emphasis is a special strength of the research design. Specific points regarding research findings from the three reviewed articles were elaborated to give possible reference points for comparison in the subsequent chapters. Because diverse sociometric approaches exist, the next chapter will define the terms and state the hypotheses which have been developed to guide this research.

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CHAPTER III

DEFINITION OF TERMS AND STATEMENT OF HYPOTHESES

The terminology used in adolescent peer group acceptance research is as diverse as the sociometric techniques used to measure peer group acceptance. Therefore, this chapter will clarify current research terms and discuss the development and statement of the hypotheses which guided the research.

Definition of Terms

Intricate group friendship interactions can be tied together in different patterns, structures or configurations. In fact, the three terms are used interchangeably in the literature to describe inter-personal reciprocated relationships. Moreno described a configuration as an aggregate of individuals; or consisting of two, or multiple, ways of interaction. "They are social wholes."[1] His definition will be modified and extended to embrace not only the term configuration but also the terms patterns and structure and used in the following discussions. The modification is necessary to distinguish between a

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[1]J. L. Moreno, Sociometry Reader (Glencoe, Ill: Free Press, 1960), pp. 17 and 19.

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structured group and a simple aggregate of individuals who may not

be mutually amenable to engaging in interaction. An aggregate may be

a collectivity without mutual awareness forming a structured group

based upon shared norms and behavior. For this research a "social

whole" which forms a structured group is considered to be formed by

individuals engaged in mutually accepted interaction based upon an

awareness of shared norms and behavior.

In his Sociometry Reader, Moreno noted that group dynamicists

also have studied structural patterns and "two newer volumes set out

to provide a much needed link between sociometry and group dynamics."[1]

Group dynamicists have presented relationship patterns graphically and

named the various configurations; but they studied small experimental

groups.[2] The most frequent experimental group size seems to be five

men and the researcher is usually task oriented. Generally the

group dynamicists concluded that groups with the most complete inter-

action networks perform most efficiently due to a high cohesion factor.

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[1]Moreno, op. cit., p. 716.

[2]Bavelas and his colleagues are credited with setting the ground
work for small experimental group research. In fact, an interesting
analogy was drawn between the communication patterns in a circle and
a wheel and larger societal patterns. The circle has been related to
the "open", or democratic society and the wheel to the "closed", or
authoritarian society. Michael S. Olmsted, The Small Group (New York:
Random House, 1959), p. 104. One could conclude that insights gained
in studying small groups might be related usefully to the larger society.

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Terms describing the various configurations include: Y, Wheel, circle,

chain, star, slash, comcon, and all-channel.[1]

Leavitt's often cited study stated that his criterion for de-

signing the different patterns was:

> if two patterns cannot be bent into the same shape without
> breaking a link, they are different patterns. A more pre-
> cise definition of unique patterns would require the use of
> a complex topological concept.[2]

He also stated that members of a group may be linked together

by communication networks in numerous ways. "It is enough, in some

cases, if they are each touched by some part of a network of com-

munication which also touches each of the others at some point."[3]

A more complete presentation of unique structural patterns than

the Leavitt discussion related the group interaction patterns to

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[1]Ideas incorporated in presenting configurational patterns
graphically may be found in: D. Krech, R. Crutchfield and E. Ballachy,
Individual in Society (New York: McGraw-Hill Book Company, Inc., 1962),
pp. 468-471; and Olmsted, op. cit., pp. 102-104. Specific research
studies whose research designs used the communication nets, or con-
figurational patterns include: Marvin Shaw, Gerard Rothschild and John
Strickland, "Decision Processes in Communication Nets Upon Organiza-
tion and Performance in Task Oriented Groups," Management Science, I
(1954), pp. 233-250; Harold J. Leavitt, "Some Effects of Certain Com-
munication Patterns on Group Performance," Readings in Social Psychology,
Eleanor E. Maccaby, Theodore H. Newcomb and Eugene L. Hartley, eds.
(New York: Holt, Rinehart and Winston, Inc., 1958), pp. 546-563. Be-
cause most of the previous research describing communication nets has
been conducted with 5-man groups, the described configurational pat-
terns are limited to patterns within the scope of 5-man interactions.

[2]Ibid., p. 39.

[3]Ibid., p. 38.

mathematical graph theory concepts.[1] For example, the term <u>line</u>

in graph theory seems to be related to the term <u>tie</u> or reciprocated

<u>relationship</u> used in the present research. Graph theory seems to offer

a wide scope of knowledge which may be utilized to define terms des-

cribing interpersonal relationships.

The terms describing the various structural relations in this

study were derived from ideas gleaned from various sources reporting

small group research. Yet the operational definitions are unique to

the study, having been developed for the larger project.[2] Williams

used a number of the terms first developed for the larger project,[3]

however, the current research includes some revised definitions and

newly defined terms. The terms constitute a social acceptance classi-

fication containing categories of the different reciprocated relation-

ships, or lack of reciprocation.

Basic to the idea of reciprocated relationships is the concept

dyad which refers to reciprocated relations between two individuals.[4]

Examples of a two person group include friendship pairs, marital pairs,

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[1]Frank Haray and Robert Z. Norman, <u>Graph Theory as a Mathematical Model in Social Science</u> (Ann Arbor, Mich.:University of Michigan, 1953).

[2]Joanne B. Eicher and Eleanor Kelley, "Adolescent Girls' View-points From Ninth Through Twelfth Grades Concerning Dress, Social Acceptance,and Related Factors," Michigan State Experiment Station project #743, research in progress.

[3]Madelyn Williams, "Opinions on Clothing, Appearance and Social Acceptance As Factors in Group Cohesion of Ninth Grade Girls" (Unpublished Master's thesis, Michigan State University, 1963).

[4]The concept stems from Simmel's group relationships dis-cussions. See the previously cited reference. Simmel, <u>op. cit.</u>, p. 309.

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business partners, and parent-child dyads.[1] An exclusive two person

relationship will be defined in this research as a mutual pair; the

terms dyad, or dyadic relationship, will be used to describe any two

person reciprocated relationship either within a complex structure

or in an exclusive pair. This distinction is necessary in order to

trace the shifting ties present in the longitudinal population and

to separate two person exclusive dyads from any dyad.

The term clique traditionally describes a configuration with

reciprocated relations or ties, usually limited to four or five per-

son groups.[2] Because so many of the current structures were more com-

plex than the usual clique pattern, a unique term has been developed,

the term reciprocal friendship structure, abbreviated as RFS, which

is defined as <u>a sociometric diagram of individuals whose choices of</u>

<u>friends were returned</u>. Reciprocal friendship structures include the

following types:

1. Mutual Pair: An exclusive two person reciprocated dyad.[3]

2. Triangle: Three individuals whose choice of each other

forms a cohesive unit.

3. Chain: An open series of reciprocated choices.

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[1]Howard Becker and Ruth H. Useem, "Sociological Analysis of the Dyad," <u>American Sociological Review</u>, VII (1942), p. 13.

[2]See the Coleman clique definition which essentially utilizes this criterion. James Coleman, <u>The Adolescent Society</u> (Glencoe, Ill.: The Free Press, 1961), p. 183.

[3]The researchers recognize that an exclusive dyad contains only one chance for group continuity. In other words, members of a group which contains three or more persons have more opportunity for group continuity, whereas loss of one person in a mutually exclusive dyad leads to group disintegration. For this reason, the mutual pairs will be treated in the following chapters as a separate category rather than discussed within the framework of the RFS category <u>per se</u>.

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4. Wheel: Two chains which have a central common member.

5. Square: Four individuals whose basic arrangement forms a square; additional internal ties may criss-cross between corners.

6. Complex structures: Consist of a cluster of dyadic relationships which may be arranged in a number of different patterns; including all, or some, of patterns 1 through 5.

Because the entire group's associational patterns are to be traced as they change, it is necessary to consider the isolates as a category. A complete picture of the associational patterns in a population cannot be presented without including unchosen individuals, or individuals who do not choose, who represent a specific population segment characterized by a lack of ties. They are still group members and function in a specific manner, _i.e._, a state of isolation. Various isolation patterns may emerge; thus categories were developed to describe them. An isolate, defined as an individual who had no reciprocated friendships, may be one of four types:

1. Isolate 1: A "true" isolate, or an individual who made no choices and received none.

2. Isolate 2: An "ignored" isolate, or an individual who made choices but received none.

3. Isolate 3: A "self" isolate, or an individual who made no choices but received some.

4. Isolate 4: A "confused" isolate, or an individual who made choices and received some, but the choices made and received do not match.[1]

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[1]Williams, _op. cit._, p. 33.

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In addition to the terms developed to describe structural categories, terms also have been developed to describe various types of individual positions in the structures. They are:

1. Accurate perceiver: An individual who had all choices reciprocated, or who neither chose nor was chosen.

2. Pivot: An individual who had four or more ties to other RFS members.

3. Peripheral member: An individual who was drawn into the RFS by a single tie and thus had a fringe position in relation to the integrated dyadic clusters.

4. Connector: An individual who linked two segments of a larger RFS or had a single tie to both cohesive segments.

A second type of individual measure was developed for the research. Choice status describes the individuals' ranking on the sociometric questions when reciprocity is excluded. Choice status was operationally defined as the total number of choices received by an individual whether or not she reciprocated them.

The writings of group dynamic oriented researchers were studied for ideas concerning the concept cohesion which also must be defined. An article by Schachter and his associates divided the concept into two orientations: cohesiveness as measured by the morals, efficiency or spirit of the group and cohesiveness as measured by the attractiveness of the group.[1] In the same publication, Cartwright and Zander

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[1]S. Schachter, N. Ellertson, D. McBride and G. Gregory, "An Experimental Study of Cohesiveness and Productivity," Group Dynamics, Research and Theory, D. Cartwright and A. Zander, eds. (Evanston, Ill: Row Petersen and Co., 1960), p. 152.

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cited a frequently quoted definition of cohesion developed by Festinger and his associates: "The cohesiveness of a group is the resultant of all the forces acting on all the members to remain in the group."[1] There may be diverse sources for individual attraction to a group, i.e., it may be due to the group itself as the object of the individual's need, or due to the fact that being in a group may be a means for the individual to satisfy needs outside the group. Because different individuals may have different needs, the individual sources of group attraction may vary.[2]

Various cohesion measures have been developed according to specific research interests. They include: a comparison of the relative number of remarks in which the respondents used "I" vs. "We", a comparison of number of within-group friendship ties with the number of out-group friendship ties to the larger community, a friendship index based on a ratio of number of actual within-group selections to total possible number, determining the degree to which members share the same behavior and belief norms and standards, and an ingenious picture-projective test.[3]

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[1]Darwin Cartwright and Alvin Zander, "Introduction: Group Cohesiveness," Group Dynamics, Research and Theory, D. Cartwright and A. Zander, eds. (Evanston, Ill: Row Petersen and Co., 1960), p. 74.

[2]Ibid., pp. 74 and 76.

[3]Ibid., pp. 70-71.

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None of the above measures is suited entirely to the current

research because they do not include reciprocated relations; thus a

cohesion measure including reciprocity was developed. The con-

cept was operationally defined as follows: $C = \dfrac{X}{N\ (N-1)}$ where the

symbol C indicates cohesion, X the total number of in-group choices,

and N the number of individuals in the group. An individual can choose

everyone but himself; thus each individual can make N-1 choices where

N represents the group and -1 represents self; N-1 choices for each

individual times N individuals in the group gives the total number

group choices possible if everyone chose everyone else. X is the total

number of **actual** group choices, accounting for both the within-group

unreciprocated choices and the **reciprocated** within-group choices. This

formula includes reciprocity which many other social acceptance measures

omit.[1]

An additional measure was developed to split the cohesive seg-

ments of the larger RFS's for more detailed study: the segments were

split at the point of a connector.[2] In addition to the reciprocated

within-segment choices, the within-segment unreciprocated choices were

considered. They were used to determine the direction to place the

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[1]The formula first appeared in: Suzanne Hendricks, "Opinions
on Clothing and Appearance as Related to Group and Non-group Member-
ship of Twelfth Grade Girls" (Unpublished Master's thesis, Michigan
State University, 1965), p. 110.

[2]For a definition of a connector see **supra**, p. 30.

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connector, i.e., the connector was placed in the segment into which

her unreciprocated choices were made. The unreciprocated choices also

were used to determine how many segmental splits should be made, i.e.,

if the unreciprocated choices were predominantly to a given cluster,

the cluster was considered to be a cohesive segment. Provided the seg-

ment was sufficiently cohesive to contain pivotal individuals,[1] they

also were utilized to determine central sections of a segment.[2]

Social class, one of the major variables, was operationally

defined using Warner's Index of Status Characteristics. According to

Warner, complex societies which service large populations always

possess some kind of status system "which by its own values places

people in higher or lower positions."[3] Therefore, for this study,

social class is defined as the status system which orders individuals

in higher or lower positions in their social structure.

Social acceptance, the second major variable, is based upon

the mutual choice among group members to engage in interpersonal re-

lationships stemming from an awareness of shared norms and behavior.

From this viewpoint, social acceptance is more than a simple aggregate

or collectivity of individuals; social acceptance depends upon the

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[1]For a definition of a pivot see supra, p. 30.

[2]Hendricks, op. cit., p.45.

[3]W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social
Class in America (Chicago: Science Research Associates, Inc., 1949), p. 8.

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creation of interpersonal structures with communication routes among
the individuals filling specific positions in the structures.[1] The
individual positions create links which coordinate, or tie together,
aggregates into structured groups.[2] Social acceptance was oper-
ationally defined through the sociometric configurations developed
from the girls' friendship choices, i.e., the dyadic relations either
within a mutual pair, or clustered in RFSs, and the isolates who
represent lack of reciprocation. The operational definitions will be
elaborated in the following chapter after the hypotheses developed to
guide the research are presented.

Hypotheses

In keeping with the idea presented by Parsons, Bales, and Shils
that the effect of change is reciprocated between the various unit
levels in a social system,[3] a series of hypotheses were developed to
guide the investigation of change at the various structural levels.
Underlying the hypotheses development was the attempt to account for
the relatively high correlations cited in many longitudinal peer group

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[1]Ideas leading to the definition of social acceptance were
gleaned from a structural approach to considering small groups found
in: Donald Olmsted, Social Groups, Roles, and Leadership (East
Lansing, Michigan: Institute for Community Development and Services,
Michigan State University, 1961), pp. 12-16.

[2]For some specifically defined group positions used in this
research, supra, pp. 29-30.

[3]Supra, p. 4 for a discussion of their ideas.

associational studies. Possibly the correlations have been high be-

cause a total group acceptance measure was obtained from individual

choice scores excluding reciprocity of relationships. Thus an in-

dividual can have a relatively stable sociometric choice score over

time, but the choices may be entirely different individuals;[1] or

individual scores could change so that a total acceptance score for

the entire group could be deceptive, i.e., the increased acceptance

of one individual could balance the decreased acceptance of another.[2]

However, when reciprocity is considered, the group structures could

exhibit marked changes, while the group acceptance measure obtained

by an aggregate total of choices could remain highly stable. Perhaps

Brookover and his associates were referring to something of this nature

when they stated "clearly there is more evidence of change than

stability."[3]

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[1]A closely related idea is: "As we have stated elsewhere, al-though a great deal of value has come out of the development of a scoring system in sociometry, the interest which has resulted in socio-metric status has often obscured the essence of sociometry, namely that its focus is on relationships. 'Scores which are statistically identi-cal are rarely sociometrically equivalent'." Mary Northway, "A Plan for Sociometric Studies in a Longitudinal Programme of Research in Child Development," Sociometry, XVII (1954), p. 273.

[2]The Cannon study contains this discrepancy. He stated, "In the cases of some individuals, rather marked changes occurred in their scores." Yet, describing some representative types of sociometric statuses, two scores appeared which seem to balance one another in pattern, i.e., student E ranked 4th in the 9th grade and dropped to 11th in the 12th grade. "The only ones who chose him in his last year were two buddies and his girl friend." Student F was cited as an example of increased acceptance rank over the four year study, but no specific rank change was given for her. Kenneth Cannon, "Stability of Sociometric Scores of High School Students," Journal of Educational Re-search, LII, 2 (October, 1958).

[3]Brookover, Smucker, and Thaden, op. cit., p. 218.

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This research emphasizes structure; therefore, individual respondents are considered only as they fill places in a category in the social acceptance classification. Two distinctions in category placement are made. In the number hypothesis the individuals are considered only as occupants creating the size of a specific social acceptance category. In other words, position within the category is ignored.

The second distinction, necessary in the membership hypothesis, concerns individual position, or location, in the structures. The positions in informal structures do not remain consistent, having automatic replacement when one person leaves the system, or sub-system; nor do new persons entering the system, or sub-system, automatically assume a previously vacated position; nor must a position be vacated before a new person may assume a position in the informal structures. For these reasons, the membership hypothesis was developed to explore shifting structural positions as the configurations evolved over the four years. The assumption was made that, in an emergent informal open system in which adolescents are characterized as searching for a self identity,[1] there would be a continued "jockeying for positions," rather than jockeying only in the early stages of group development. In sum, the individuals are

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[1] The ideas concerning adolescent searching for identity were drawn from two sources as follows: Irene M. Josselyn, "The Older Adolescent," Values and Ideals of American Youth, ed. Eli Ginsberg (New York: Columbia University Press, 1961), pp. 31 and 32. Murray Wax, "Themes in Cosmetics and Grooming," American Journal of Sociology, LXII (1957), p. 591.

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considered impersonally as members filling structural positions in the population configurations,[1] not as specific individuals.

To summarize, membership refers to structural position and number to occupants creating the size of a category in the social acceptance classification, disregarding position within the category. The RFSs, composed of members with reciprocated friendship choices, are a category in which membership and number may change. The isolate category, although comprised of individuals with no structural ties, is also considered as a category in which membership as well as size may change longitudinally and thereby affect the population positions. Therefore the isolates are included in discussing membership as well as number.

The following hypotheses were formulated from the overall hypothesis that structural patterns will change more when membership reciprocity is considered and change less when only the size, or aggregate number, in a given category is considered excluding reciprocity leading to specific positional placement. In addition, other hypotheses were formulated relating to previous research. Where literature exists to support the hypothesis, it is cited.

The major hypotheses are presented in the following order which does not infer a hierarchical ordering of importance:

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[1]Some specifically defined positions in this study include connector, pivot and peripheral member. Supra, pp. 29-30.

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I. <u>Parental social class rank will influence an adolescent's socio-</u>

<u>metric position.</u>

   A. There will be more RFS's with a homogeneous social class
composition than RFS's with a mixed social class com-
position;[1] and

   B. of the mixed social class RFS's, the differences will be
"variations around the mean" rather than sharply dif-
ferentiated social class rankings.[2]

II. <u>The populations' peer group friendship patterns will exhibit more</u>

<u>change than stability over a four year time span,</u> and they will

change as follows:

   A. Some RFS's will completely disappear between the 1962 ninth and
1965 twelfth grades, and

   B. some new RFS's will appear between the 1962 ninth and 1965
twelfth grades; therefore,

   C. few RFS's will remain in the 1965 twelfth grade which were
RFS's in the 1962 ninth grade.

   D. The RFS's will become larger between the 1962 ninth and the
1965 twelfth grades,[3] therefore,

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[1]According to the cited stratification literature, adolescents
tend to stratify in peer groups according to their family's social
class rank. See Kahl, Allison Davis, Barber, Mapheus Smith, and Hol-
lingshead, <u>loc. cit.</u>

[2]This idea was gleaned from Lloyd Warner's ideas: "For purposes
of clarity, the lines on the chart depicting the place of each class
indicate sharp divisions. Actually, each class merges into the class
above and the one below it. A class system where there is movement up
and down by individuals and families in an open social system where
there is territorial as well as social movement necessarily makes no
sharp distinctions between one class and contiguous ones." W. Lloyd
Warner, <u>American Life Dream and Reality</u> (Chicago: The University of
Chicago Press, 1962), p. 79. The idea is especially relevant in a
highly geographically mobile population like the current population.

[3]These hypotheses were derived from Hallworth's finding that
his groups tended to become larger, fewer in number, and more inte-
grated over the three year time span. Hallworth, "Sociometric Relation-
ships Among Grammar School Boys and Girls Between the Ages of 11 and
16 Years," <u>Sociometry</u>, XVI (1953).

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E. fewer RFS's will be present in the 1965 twelfth grade than in the 1962 ninth grade.[1]

F. The RFS's configurational patterns will change between the 1962 ninth and 1965 twelfth grades; therefore,

G. few configurational patterns will be present in the 1965 twelfth grade which were present in the 1962 ninth grade.

H. The individual RFS's will become more cohesive from the 1962 ninth through the 1965 twelfth grades;[2] therefore,

I. the RFS category will be more cohesive in the 1965 twelfth grade than in the 1962 ninth grade.

J. Each year, the smaller RFS's will be more cohesive than the larger RFS's.[3]

III. The number of respondents in each reciprocal friendship category will exhibit little change over a four year time span[4] as follows:

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[1]Ibid.

[2]Ibid.

[3]This hypothesis was derived from a statement made by Kretch and associates that group size affects the functioning of a group, i.e., "Thus group cohesiveness and member satisfaction tend to be greater in smaller groups; there is evidence that larger groups inhibit participation of some members; style of leadership varies with group size; the relation between group size and effectiveness is complex and variable." Kretch, Crutchfield and Ballachy, Individual in Society (New York: McGraw-Hill Book Company, Inc., 1962), p. 470. Note the contradiction this poses to the last segment of the Hallworth statement on page 38. If the Kretch statement is true, then the hypothesis formulated from Hallworth's statement will not be supported. Recognizing this, the hypothesis was still formulated according to Hallworth's finding since it was the only empirical study available for a guideline. However, the Hallworth study is recognized as a case study discussion excluding statistical analysis.

[4]This hypothesis was formulated following Gordon's findings that the number of respondents in cliques and the number of isolates remained stable with the exception of a breakdown of cliques in the eleventh grade. In order to develop general hypotheses for all four years, little change each year was hypothesized. This will not prevent a checking for parallelism with Gordon's eleventh grade findings. Supra, p. 18 for Gordon's findings.

A. There will be little change in the total number of isolate, mutual pair, and RFS members each year; therefore,

B. there will be little change in the number of isolate, mutual pair, and RFS members in the 1965 twelfth grade from the number in the 1962 ninth grade.

IV. The individual respondents' choice status excluding reciprocated choices will not coincide with position in a structured group based upon reciprocated choices[1] in two areas as follows:

A. There will be a difference in individual choice status as measured by friendship choices received and population position as measured by reciprocated friendship choices, and

B. there will be a difference in individual choice status as measured by popularity and dress choices received and population position as measured by reciprocated friendship choices.

V. The membership in each reciprocal friendship category will exhibit more change than stability over a four year time period[2] as follows:

A. There will be more change than stability in isolate membership each year; therefore,

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[1]The choice status vs. reciprocated relationships hypothesis is a direct outgrowth of the overall hypothesis underlying the development of the hypotheses. Supra, p. 34. Furthermore, the researchers perceived in the interview situation an interaction definition of the friendship role by the girls as exhibited in their responses. A statement by Lazersfeld and Barton reflects the researcher's position concerning classification with an interaction framework. "The classification should present as clearly as possible the respondent's own definition of the situation--his focus of attention, his categories of thought." Lazersfeld and Barton, "Qualitative Measurement in the Social Sciences: Classification, Typologies and Indices." The Policy Sciences, Recent Developments in Scope and Method, Lenner and Lasswell eds. (Stanford, Calif.: Stanford University Press, 1951), p. 157.

[2]The rationale underlying the development of the membership hypothesis is incorporated in the discussion defining the term membership. Supra, p. 36.

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B. there will be few isolate members in 1965 twelfth grade
    who were also isolates in 1962 ninth grade.

C. There will be more new dyads created each year than dyads
    remaining stable from the previous year; therefore,

D. there will be few dyads remaining in 1965 twelfth grade
    which were dyads in 1962 ninth grade.

E. There will be more mutual pairs which exhibit membership
    change each year; therefore,

F. there will be more change than stability in mutual pair
    membership in 1965 twelfth grade from mutual pair member-
    ship in 1962 ninth grade.

G. There will be more internal shifts than stability of ties
    among the members who have reciprocated choices within the
    individual RFS's each year; and,

H. there will be more internal shifts than stability of un-
    reciprocated choices within the individual RFS's each year;
    and,

I. there will be more shifting memberships from one RFS to
    another than membership stability in the same RFS's each
    year, occurring at two levels:

    1) single individuals and
    2) dyadic clusters.

<h3 align="center">Summary</h3>

This chapter discussed and defined the unique terms developed
to guide the research and presented the working hypotheses developed
to guide the research. The next chapter will elaborate the methodology
utilized operationally to define the major variables, social class and
social acceptance, and will discuss the research setting and population.

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CHAPTER IV

METHODOLOGY

The project which provided the data for this study was designed
to investigate adolescent girls' opinions concerning dress, social ac-
ceptance, and related factors.[1] The researchers used a number of
controls, but recognized the limitations inherent in the study design.
Yet, limitations in some areas have led to strength in other areas.
This chapter will include the recognized limitations and strengths in
discussing: 1) the selected community, 2) the selected population,
3) the major variables, 4) the instrument development, 5) the in-
strument administration, 6) the methods used to operationalize var-
iables, and 7) the methods of analysis.

Selection of Community

The study chose a Midwestern suburb of 30,198 residents, includ-
ing college students.[2] The presence of a large university affects the
level of education, age, geographic mobility, types of occupations, and
income of the population, creating an atypical study setting.

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[1]Joanne Bubolz Eicher and Eleanor Kelley," Adolescent Girls'
Viewpoints From Ninth Through Twelfth Grade Concerning Dress,
Social Acceptance, and Related Factors," Michigan Experiment Station
project #743, research in progress.

[2]The following community description was drawn from: Betty
Wass, "Clothing as Related to Role Behavior of Ninth Grade Girls"
(Unpublished Master's thesis, Michigan State University, 1962).

According to the 1960 census information, community residents who were twenty-five years old, or older, had attained a median educational level of 15.8 years compared to 10.8 for the state. The median population age for the community was 22.2 years, whereas the median state population age was 28.3 years. Geographic mobility was high for the population; 50.7 percent moved into their present homes after 1958. The population atypicality is especially notable in occupations. Seventy-one and nine-tenths percent of the employed residents were white collar, whereas only seven percent were blue collar. As one would expect in a predominantly white collar community, only 12.2 percent had incomes under $3,000, while 31.7 percent had incomes over $10,000. The median community income was $7,152, compared to the $6,256 state median.

Although the chosen community is atypical of the state's communities, it represents an emerging national trend. The 1960 national census trends included an increased level of education, a higher proportion of white collar than blue collar employees, more young adults, and increased residential mobility. Therefore, a white collar suburb whose residents are highly educated and mobile may be a forerunner of United States community trends. The suburb has only one high school, a co-educational public school, which brings students from all areas of the community together in one situation. The incorporation of a low income working class area in the school district two years prior to the project initiation created social class extremes. This served as a major criterion for selecting the project's setting because it offered a situation for a comparative study of the interaction, or lack

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of interaction among social class extremes. In other words, it brought

together residents of two types of suburbs based upon positive and

negative honor in terms of the current life style norms.[1,2] An addi-

tional criterion which has been valuable during the longitudinal con-

tinuation is easy access over time, an important consideration for

several reasons. Accessibility has enabled a control over the time

of instrument administration each year. It also has given the re-

searchers access to the larger community in order to make the ratings

comprising the chosen social class index.

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[1]Research reported after the initiation of this study seems to strengthen the importance of the current research setting. Drawing together information from a number of studies conducted in large cities, Farley summarized the trends concerning demographic dispersion in suburban areas. He noted that suburbs retained the general sociological characteristics which they had in early developmental stages as far back as the 1920's. In other words, upper middle class suburbs remained predominantly populated with well-educated white collar residents, whereas lower social class suburbs retained their residential characteristics as less-educated blue collar communities. Contrary to popular opinion, all suburbs do not exhibit upper middle class characteristics.

Because the current study population contains social class extremes, it offered a situation for comparative analysis of friendship interactions in a setting which draws together residents from suburbs at a polarity in life styles. Moreover, the study taps an emergent dimension cited by Farley, the proportionally greater increase in population of higher socio-econmic status. A large proportion of the respondents were not lower class neighborhood residents. The Farley article was drawn from the following source: Reynolds Farley, "Suburban Persistence," in Kimball Young and Raymond Mack, eds. Principles of Sociology (3rd edition) (New York: American Book Co., 1965), pp. 228-239.

[2]The idea of positive and negative honor as related to style of life was gleaned from: Gregory Stone and William Form, "Instabilities in Status: The Problem of Hierarchy in the Community Study of Status Arrangements," Kimball Young and Raymond Mack eds., Principles of Sociology (3rd edition) (New York: American Book Co., 1965), p. 113.

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The school situation which offered small population N's enabled the researchers to impose certain additional controls which might have been less manageable in a different situation: using the same researchers in administration and data analysis, controlled age, grade, community, school, and sex. Age and grade do change each year; but they are held constant within each data collection period.

Population Selection

The respondents included all girls in one high school class of 1965. The population was first studied as entering ninth graders in 1962, and restudied each year when the girls were tenth, eleventh, and twelfth graders. The population N's were 154 girls in 1962, 155 in 1963, 143 in 1964, and 138 in 1965. Considering loss and replacement each year, 196 girls were included, and 105 of the original 1962 population remained in 1965. Only girls were included.[1] The study population represents an entire segment of the larger school population which ranged from 1,103 in 1962 to 1,271 in 1965.

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[1]Although Coleman had data for both sexes he separated the boys and girls for sociometric analysis, noting the complexity of trying to integrate the two groups, and stating "the techniques for analyzing such data are in their infancy and until they are better developed, large-scale analysis will continue to have serious omissions." Coleman, op. cit., p. 184.

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Variables

The background variables from the larger project in progress, social class, social acceptance and time, are of present concern.[1] Social acceptance is dependent, and time the independent variable when structural stability or change is the major consideration. Social acceptance is an independent variable when the main focus is social class interrelationships.

Instrument Development

Responses to the first part of a two part questionnaire developed for an earlier phase[2] furnished the currently used data. The questionnaire incorporated questions designed to elicit both social class information and the near-sociometric information. The sociometric information is near-sociometric because the question did not meet all the criteria for a true sociometric question.[3] It was developed around the idea of a best friend, defined as "one with whom we spend time and share our secrets."[4] This coincides with Jennings' suggestion that a sociometric question must have reality for the tested group.[5] It also is within Parson's conceptual scheme relating action

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[1]Eicher and Kelley, op. cit.

[2]Wass, op. cit.

[3]Supra, p. 8 for a discussion of the requisites of a true sociometric question.

[4]See instrument, Appendix B.

[5]Helen Jennings, Leadership in Isolation (New York: Longmans, Green Co., 1950), p. 28.

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to roles,[1] _i.e._, the girls were asked to make choices based on one

important adolescent role, a best friend.[2] The question allowed

unlimited choices in the respondent's grade, within other grades in

the school, and in other schools, creating a somewhat broader base

than many sociometric tests which limit the sociometric response ex-

clusively to the interviewed population.[3] The extension was deemed

especially relevant in a highly mobile population.

In addition to the near-sociometric questions, the question-

naire included questions about the respondent's family and selected

personal characteristics. Several questions were used to develop

family social class ratings for each individual. The remaining ques-

tions have been used in earlier project phases and will be discussed

only in summary fashion as they relate to current findings. Additional

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[1]Parsons, Bales, and Shils. See especially the discussion of role differentiation and goal specification; _op. cit._, pp. 250-254. Highly relevant is the statement that in the early stages of group interaction there is a process of "jockeying for position" and other- wise settling questions of role status. _Ibid._, p.250.

[2]A statement made in discussing dyads is: "for many dyads there are extensive cultural definitions of the roles to be played by each member." Other dyads have few specifications. For example, "expected norms of conduct are fewer and more informal among friends," while the rights and privileges of spouses are regulated extensively by customs and laws. Becker and Useem, _op. cit._, p. 17. Yet, although there are fewer explicit norms for the friendship role, this study assumed that, among the girls, there are recognizable norms governing the friendship role and regulating behavior in the role.

[3]When a consideration of the isolates is desired, unlimited choices afford a more accurate picture of group structure. Choice limitation distorts a true picture of the isolates. Lindzey and Borgotta, _op. cit._, p. 408.

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data from the school files were used to cross check and supplement the questionnaire.

Instrument Administration

The questionnaire was administered initially as the first part of a two part questionnaire to the ninth grade girls in the high school cafeteria during an assembly period in February, 1962.[1,2] Because the questionnaire sought personal information, the girls were told that no one would be allowed to see their answers. To fulfill this pledge, each respondent was assigned a number and the findings are reported anonymously.

One hundred and forty of the 154 ninth grade girls were present for the initial instrument administration. The absentees were given the questionnaire at a later date. The questionnaires were collected from the girls as they were sitting in the cafeteria, and numbers were assigned from 001-154, according to the order of the stacked questionnaires. From the close proximity of numbers in the reciprocal friendship structures, apparently many girls sat in their friendship groups.

The same questionnaire was readministered in February, 1963, 1964, and 1965 when the girls were tenth, eleventh, and twelfth graders; such administration created a similar pattern of student loss and replacement each year, i.e., at the beginning of the second school term. It was administered in their homerooms by twelve researchers, rather than in the 1962 cafeteria situation. Each year the absentees were

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[1]Wass, op. cit.

[2]See questionnaire, Appendix B.

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given the questionnaire at a later date. This administrative situation proved to be more satisfactory than the 1962 situation.

A few modifications in question ordering were made between 1962 and 1963. Because the sociometric question was the key question, it was placed near the first rather than last as it was in 1962. This placement was not crucial in 1962 when the questionnaire was the first portion of the entire battery of questions for which the girls were allowed a seventy minute period; but it was subsequently a major consideration when the girls had only a single 15 minute homeroom period to complete the three page questionnaire. Some of the information on the final page was easily obtainable from school files if omitted by the girls. Respondents who joined the population after the initial 1962 instrument administration were assigned numbers as follows: The 200 numbers indicate girls entering in the tenth grade; the 300 numbers, eleventh grade; and the 400 numbers, twelfth grade. Considering loss and replacement, a total of 196 girls were respondents during the four year period.

Operational Definitions

Some data have been analyzed yearly, but this study represents the first longitudinal analysis. The variables were operationally defined as follows:

The first variable, social class, was operationally defined by assigning family social class ratings to each girl according to Warner's

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Index of Status Characteristics,[1] which is considered appropriate

for small cities.[2] Warner initially used four indices to obtain

his social class rankings, but he indicated that modifications may

be advisable in some communities.[3] Two types of modifications were

made. First, only three indices were used: occupation of father,

house type, and dwelling area. Source of income, the fourth in-

dex originally used by Warner, was omitted because the girls prob-

ably would not have known this information.[4] Second, modification

also was made in rating certain educational occupations due to the

atypical community educational structure.[5]

Each individual's family was ranked on each of the three in-

dices which were then individually weighted and totalled, giving

a total social class rank for each individual respondent's family.

This rank included a re-ranking from a previous year when house or

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[1]W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social
Class in America (Chicago: Science Research Associates, Inc., 1949),
pp. 140-151.

[2]Martindale refers to the Warner method as applicable to
small cities. Don Martindale, American Society (Princeton, New
Jersey: D. Van Nostrand Company, Inc., 1960), p. 397.

[3]Warner, Meeker and Eells, op. cit., p. 158.

[4]The Warner method of determining income is very complex,
including factors such as inherited or earned wealth, profits and
fees, and salary or wages. Ibid., p. 142. Income and education
were used in the original I.S.C., but in a revised I.S.C. they
proved unnecessary. Ibid., p. 154.

[5]The modifications were first developed and used by Arlene
Bjorngaard in "The Relationship of Social Class and Social Accept-
ance to Clothing and Appearance of a Selected Group of Ninth
Grade Girls" (Unpublished Masters thesis, Michigan State Univer-
sity, 1962).

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[1] Ibid

[2] Ibid

[3] Ibid

father's occupation changed between the administration of instruments, as well as ranking new population additions each year. The individual indices for obtaining a total social class score were ranked as follows:

Each girl was asked to list and describe her father's occupation. In addition to her questionnaire information, cross-checks were made in school files and in the city directory. When uncertainity arose concerning an individual occupation, resource people were consulted to obtain a reasonable ranking according to other similar community occupations. The occupational index was based on a seven point scale with "1" indicating high rating and "7" indicating low rating.[1]

The residential areas were ranked on a seven point scale from a high of "1" to a low of "7". The seven point ratings for dwelling areas were established around Warner's suggested criteria by a real estate agent, an economist, the project leader (a sociologist), and a member of the initial research team.[2] All ratings have been based on the initial rankings assigned to the dwelling areas in 1962.

The respondents' houses also were rated by two or more individuals each year. The researchers established the initial criteria for judging the houses in 1962 using Warner's suggested evaluative criteria.[3] Each subsequent year a check was made of a

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[1] Ibid., p. 140-141.

[2] Ibid., p. 153-154.

[3] Ibid., p. 149-150.

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[2]Ibid

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cross-sectional representation from the previous year's ratings to reorient the researchers to each ranking, scaled from a high of "1" to a low of "7".

The composite social class score for each respondent was obtained by weighting the three individual indices scores. Occupation was multiplied times five, dwelling area times three, and house type times four.[1] The computed sum was the total family I.S.C.[2] A low numerical score indicates high social class rank. All ratings have been made by the same researchers with the exception of one replacement in 1965.

Social acceptance, the second variable, was established by a near-sociometric question for each individual each year. The near-sociometric information was used to draw a matrix chart and construct a sociogram for each year. Reciprocal friendship structures, mutual pairs, and isolates were determined for each sociogram.[3] The researchers recognize that a criticism of the sociograms has been the lack of a standard method for sociogram construction.[4] This problem was controlled during the current study: with the exception of replacing

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[1]Ibid., p. 124.

[2]Ibid., p. 185.

[3]See definition of terms, supra, p. 27-29.

[4]Lindzey and Borgatta, op. cit., p. 411.

one researcher in 1965, all matrix charts and sociograms have been developed by the same team according to the same method selected for the initial project phase.

In developing the matrix chart, an N by N table was constructed and each girl's choices were recorded as an X. When a choice made by one girl was reciprocated by another girl, each X was circled and a line drawn to connect the two. After all choices had been connected, each group structure was "read" off the matrix by tracing the lines indicating reciprocated ties until there were no more connections.

These structures were diagrammed on sociograms, such as the example of the 1962 ninth grade configuration, RFS 107 shown in Figure 1. A circle indicates each girl and lines joining circles indicate reciprocated choices. Each girl's assigned number was recorded in her circle. This method governed the construction of each sociogram. The RFS's were given numbers arbitrarily in the ninth grade but in following years, the numbers were assigned according to the individuals remaining in the RFS from the previous year. The first number indicates year and the other two numbers indicate individual structure. For example, as shown in Figure 2, 107, 207, 307, and 407 indicate the continuity of 107 from ninth through twelfth grades.

Some structures split between years; therefore, they were assigned numbers to denote this split, with the larger remaining segment carrying the initial number and the smaller segment assigned a number which indicated its derivation. For example, Figure 2 again shows that RFS 407 and RFS 427 were derived from RFS 107. Because it split, the number 27 was chosen for the less-dominant segment
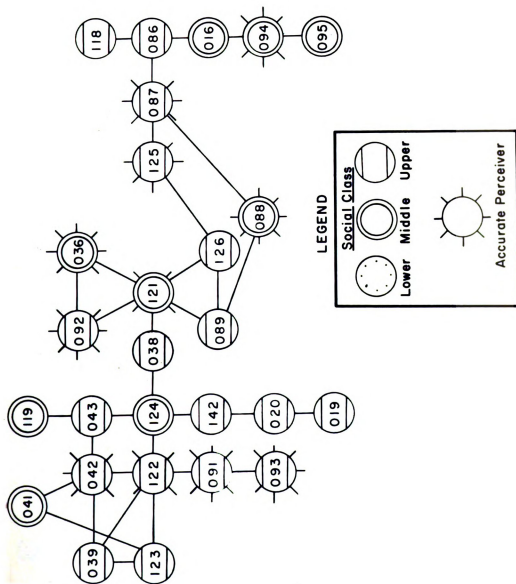
Figure 1. RFS 7, the "Leading Crowd" Among the Ninth Grade Girls in One High School Class Which Became the Senior Class of 1965
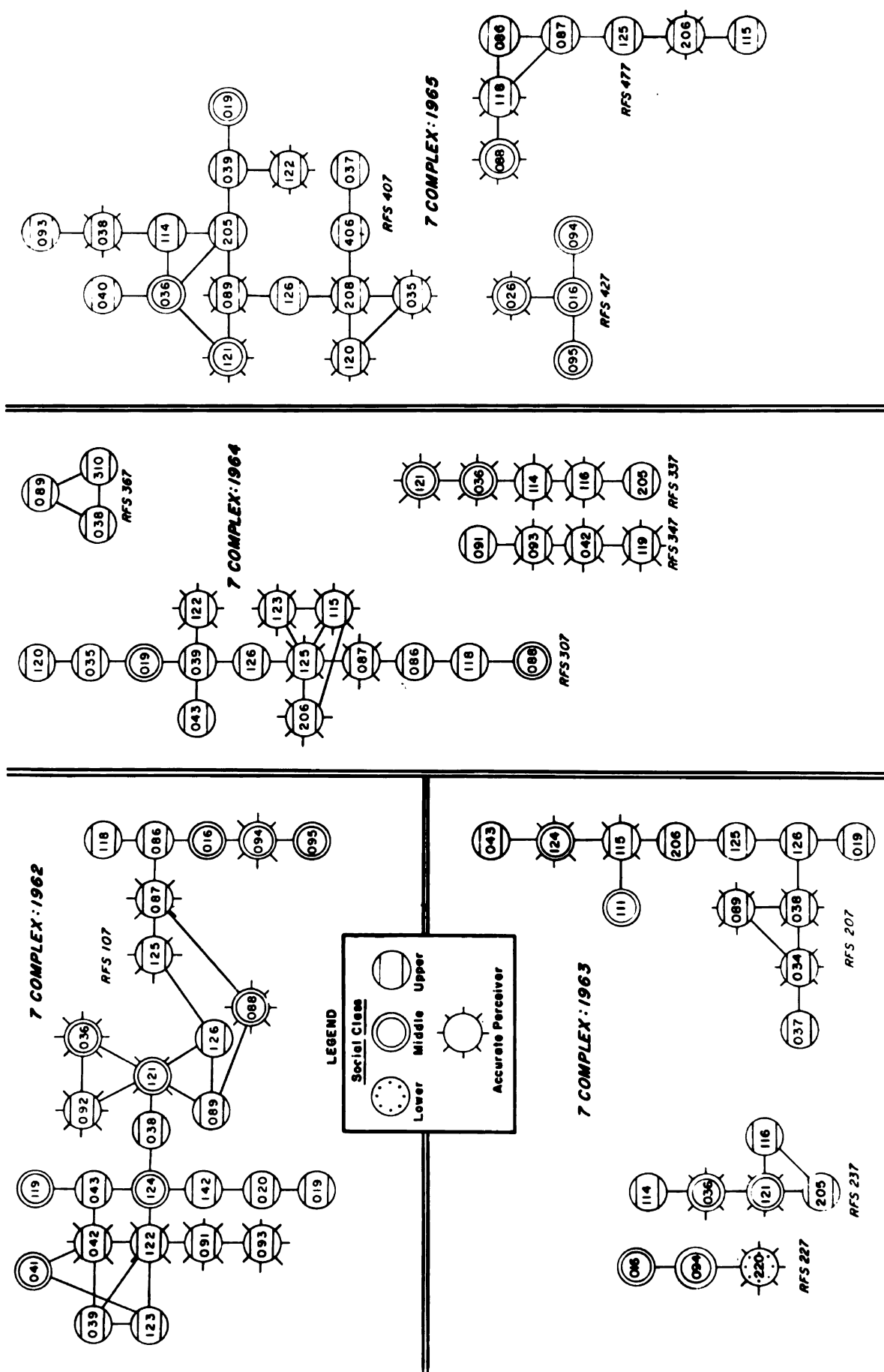
Figure 2. Four Year Summary of the Evolving Splits and Recombinations as the RFS 7 Complex Developed Among the Girls in One High School Class Which Became the Senior Class of 1965

since it did not correspond to a number used in a previous year but still contained the number 7. The number 27 indicates that this split of 107 occurred in the tenth grade (1963). Because RFS 107 split many times, the middle number does not indicate year of split consistently for RFS 107, but it is consistently an indicator for the other RFS's. An RFS ending in 0 indicates an entirely new structural formation. For example, RFS 450 was formed anew in the twelfth grade.[1] RFS's 330 and 340 were formed in the eleventh grade and therefore constitute a second deviation from the pattern of middle number indicating year of formation. The RFS's with "teen" numbers in the ninth grade (111-117) either remained intact or completely disappeared; thus they did not present an additional numbering problem. In other words, there is no confusion that RFS 427 could be derived from 117 or 107.

This portion of the data was hand coded and tabulated on working copies of the sociograms. Lindzey and Borgatta noted that if the N is small, more time may be spent in preparing for machine analysis than other methods might require to complete the analysis.[2] Therefore, hand coding and tabulation were chosen as the most expedient means to accomplish the task.

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[1]The yearly sociograms are presented in the population description, Chapter V, _Infra_, pp. 73-76.

[2]Lindzey and Borgatta, _op. cit._, p. 419.

Usable statistical techniques were limited by the group's nature and size. Because all girls present in each grade were studied, thus constituting entire populations, statistical techniques were limited to descriptive measures. Because the individual RFS's varied in size from 3 to 34, the data cannot satisfy the assumptions of a normal distribution or random sample. In fact, sociometry is a highly purposive sampling technique, and only a statistic which does not require these assumptions, such as a rank order non-parametric correlation, is usable.

Several statistical sources were explored to determine the factors governing the current use of statistics. Hays noted that "In some practical applications the methods developed using normal theory work quite well even when this assumption is not met, despite the fact that the problem can be given a formal solution only when a normal population distribution is assumed."[1] Blair explained why the assumption of a normal curve often cannot be met in social data:

> The major difficulty in applying the analysis of the normal curve to social data is that in this field the three basic logical principles on which the normal curve is based are not entirely true. A coin or die when freely thrown has an equal chance to fall either way, but in human and social relationships one is not fully free either in heredity or environment.--Certain biases, traits, characteristics, "bents", prejudices, handicaps, and peculiarities tend to persist and to determine the lives of many succeeding generations.

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[1]William L. Hays, Statistics for Psychologists (New York: Holt, Rinehart and Winston, 1963), p. 226.

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These traits and biases tend to crystallize into customs,
traditions, and institutions which are imposed on children
from birth and mold and color their thinking, characters,
and lives in spite of even strong individual tendencies
to "fall" some other way.[1]

Although inferential statistics are used when the assumption of a
normal distribution is not met, the current RFS distribution (3-34)
was extremely skewed. For this reason, the researchers decided to
omit correlations for which the data could not meet the assumptions.

The present study was designed to measure interaction pat-
terns of adolescent friendships; therefore, it constituted a highly
purposive sampling technique. Blair defined a purposive sampling
technique as "one selected to measure some particular phase of a
population. A definite purpose or result is in mind. To attain this
result, specific controls are required."[2] He continued, "Of course,
within the limits of the strata and purposes, the sampling is still
to be taken at random and without bias."[3] Because all possible sam-
ples of peer friendship groups are included, his last statement does
not influence the current data analysis, i.e., bias of the nature
Blair described is not present.

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[1]William Myers Blair, Elementary Statistics (New York: Henry
Holt Co., 1952), pp. 364-365.

[2]Ibid., p. 370.

[3]Ibid., p. 371.

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Chi-square, as a basis for the contingency coefficient of correlation, is often included as a non-parametric statistic. It does not, however, have the distribution free character, having instead a unique family of distributions. Two special Chi-square considerations investigated for this study merit attention. First, expected theoretical frequencies could be established from the 1962 population characteristics, since all hypotheses pose change from the original population characteristics. Thus, when tested in the null, the hypothesis would be no change, or same as in 1962. This method for obtaining expected theoretical frequencies stems from a discussion by Wert in which he stated that study hypotheses offer one source of available information usable to establish theoretical frequencies.[1] Yet this method asks a different question. It asks how the same population changes over repeated measures. Due to the open character of the social system in the current study, a single population is not present. Rather, there are four populations which are neither totally independent nor totally related.

The second current Chi-square consideration stems from a cautionary note by Hays concerning the pooling of categories. "This has been done routinely for many years, and many statistics texts advise this as a way out of the problem. [i.e., cells with small

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[1]Ibid., p. 371.

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theoretical expected frequencies]. When one starts pooling cate-

gories into which observations may fall after the data are seen he

is doing something to the randomness of the sample, with unknown

consequences for his inferences."[1] In the current study unpooled

categories would be difficult to obtain because some RFS's contain

only three members, whereas the size ranges up to 34. Thus, the

small samples and overlapping population membership led to the re-

jection of Chi-square as usable with the current data as a basis

for contingency coefficient correlations. In fact, most of the

analysis relied entirely on ratios and percentages as the best

descriptive statistics available.

Reliability and Validity as Related to Sociometry

The reliability and validity of the sociometric technique are

accepted on the basis of previous researchers' statements. Pepinsky

stated that reliability and validity do not mean the same thing in

sociometry as in other social science techniques. In fact, she con-

tinued, traditional conceptual usage seems to have little direct

meaning or application to sociometry. Yet this does not mean that a

test-retest measurement is not valuable, only that the purposes for

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[1]J. E. Wert, C. O. Neidt, and J. S. Ahmann, Statistical Methods in Educational and Psychological Research (New York: Appleton-Century-Crofts, Inc., 1954), pp. 146-147. Bracket insert is this writer's addition.

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which the retest is designed should be defined clearly. Statistical

devices should be chosen carefully and factors such as the number of

criteria involved in the choices, the number of choices permitted,

the number and types of retest situations, and the type sociometric

approach should be considered carefully in setting up the methodology

for analyzing choice stability.[1]

While reliability and validity questions may differ somewhat

in sociometry, several authors cited studies which indicated that,

although individual choices may vary, the patterns of group inter-

action remained relatively stable.[2] Investigation revealed various

analysis factors which seem to make the references questionable as

suitable to establish the instruments' usability in a "natural" setting.

To illustrate: many studies were conducted with a relatively "captive"

group and the findings were used to restructure the group. Their

findings stated that choices remained stable although restructuring

occurred. Could the restructuring have introduced an intervening

variable which somewhat invalidates the findings for application to

a "normal" population? Loomis and Pepinsky raised an additional ques-

tion when they stated, "It is regrettable that none of these writers

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[1]Pauline N. Pepinsky, "The Meaning of Validity and Reliability
As Applied to Sociometric Tests," Journal of Educational and Psy-
chological Measurements, IX (1949), p. 45.

[2]Selltiz, et. al.,and Goode and Hatt cite the Jennings study,
Leadership and Isolation, which was conducted in a girls' training
school. Claire Selltiz, Marie Jahoda, M. Deutsch, and S. W. Cook,
Research Methods in Social Relations (New York: Henry Holt and Com-
pany, Inc., 1960), p. 269; and William Goode and Paul Hatt, Methods
in Social Research (New York: McGraw-Hill Book Company, 1952), p. 255.

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has explicitly stated the extent to which assumptions underlying the use of correlation techniques have been satisfied."[1]

Jennings introduced a further cautionary note. She stated that high, long-term, test-retest correlations could indicate that "the test was invalid in that it had not caught the flux of psychological relations between individuals which are ever in the process of development."[2]

Lindzey and Borgatta stated that "the user of the sociometric measures seems bound to accept the probability of change over time in the variables he is interested in studying."[3] Thus, the issue becomes more a question of test sensitivity than reliability; because, if one accepts the assumption that human groups are constantly undergoing change, only an insensitive test could give a consistent measurement from widely spaced time intervals.[4] They considered three issues necessary in examining sociometric technique validity:

"1. The possibility of limiting one's measurement interest to verbal, interpersonal choice, in which case no validity demonstration is necessary.

2. The possibility of specifying a large number of variables which it is intended the test shall measure, in which case the job of relating sociometric response to independent measures becomes relatively unending.

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[1]Charles P. Loomis and Harold B. Pepinsky, "Sociometry, 1937-1947: Theory and Methods," Sociometry, XI (August, 1948), p. 278.

[2]Jennings, op. cit.

[3]Lindzey and Borgatta, op. cit., p. 421.

[4]Ibid.

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3. The difficulty of interpreting failure of sociometric measures to show a high relationship to independent measures of the variable of interest."[1]

Northway discussed the relationship of three common measures

of reliability and validity to sociometry:

"1. The more usual psychological tests assume that they are measuring a trait which remains constant and that if the scores vary this reflects inadequacies of the test rather than changes in the characteristics. . . . Sociometry is based on the assumption that social preferences change. . . .

2. Another measure of reliability on usual tests is obtained by intercorrelating the scores on different test items. . . . Sociometry, however, does not assume apriori that a person chosen on one criterion will be chosen on another. . . .

3. An individual's score on sociometric tests could be the same on two tests and yet his relationships [in the sociometric structure] might have changed completely."[2]

The conclusion may be drawn from the above discussion that the

reliability and validity of sociometric techniques cannot be considered

in a traditional fashion, but must be approached from a perspective

suitable to the assumptions underlying sociometry and the purposes

of a particular study design.[3] Since this study primarily focuses on

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[1]Ibid.

[2]Mary L. Northway, A Primer of Sociometry (Toronto: University of Toronto Press, 1952), pp. 16-17. Bracket insert is this writer's addition.

[3]Face validity, one traditional method for considering the validity question, can be applied to sociometry, i.e., the assumption is made that the girls did name their friends. The concept of face validity is discussed in Selltiz, et. al., op. cit., p. 165.

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change in interpersonal relationships, the fact that change in choice

status is an expected outgrowth of repeated sociometric measures merits

consideration in choosing an instrument suited to its purpose. The

purpose is to study how group change takes place, as well as whether

change occurs.

Reciprocity of change in the internal and external aspects

of a system are recognized. And little control of factors external

to the current study situation was attempted. Parental social class

has been considered ,and researchers recognize it as influential in

adolescent peer group friendship choices.[1] The larger project con-

sidered variables such as ecological correlates, academic achieve-

ment, popularity and dress, and affiliation of the girls' fathers

with either town or university occupations, as influencing change in

the internal school situation; however, they are not included in

this phase. They are recognized, however, as variables which may

influence interaction patterns and will be cited where applicable to

the discussion. To reiterate, patterns of interaction and membership

change are the main study focus.

Summary

The project which furnished the data for this study was de-
signed to investigate adolescent girls' opinions concerning dress,
social acceptance, and related factors. The variables considered
in this portion are social class, social acceptance, and time,
the background variables from the larger project.

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[1]Supra, p. 7.

Each year, from the 1962 ninth grade through the 1965 twelfth grade, a questionnaire designed to obtain social class and sociometric information was administered. The near-sociometric question was developed around the idea of a best friend. It allowed for unlimited choices in the respondent's grade, within other grades, and other school choices, which gives a somewhat broader base than the many sociometric tests limiting sociometric response exclusively to the intereview population.

The study setting was a high school in an atypical Midwestern suburb. Respondents included all girls in the high school class of 1965. The population was studied initially when the respondents were entering ninth graders in 1962. Including the restudies each year, the overall N was 196, with yearly population N's of 154 girls in the 1962 ninth grade, 155 in the 1963 tenth grade, 143 in the 1964 eleventh grade, and 138 in the 1965 twelfth grade.

The following methods operationally defined the variables: Social class ratings were determined according to Warner's Index of Status Characteristics. Three indices were used: occupation of father, house type, and dwelling area. Source of income, the fourth index originally used by Warner, was excluded because it was doubtful that all girls would know this information. The seven point ratings for house type and dwelling area were established using Warner's suggested evaluative criteria. Sociometric position was established through a near-sociometric question included in the questionnaire. A matrix chart was drawn from each data collection and a sociogram constructed.

Usable statistical techniques were limited by the nature and size of the groups. Since all girls in each grade were studied, statistical techniques were limited to descriptive measures including correlation techniques which are usable with a population. Because the purposive sampling technique of sociometry yielded diverse sized RFS's, the assumptions underlying certain correlation statistics cannot be met; therefore, the statistical strength was limited predominantly to ratios and percentages.

Reliability and validity of the sociometric technique are accepted on the basis of previous researchers' statements. The fact that change in choice status is an expected outgrowth of repeated sociometric measures is a pertinent consideration in choosing an appropriate instrument. Patterns of interaction and membership change in peer group interaction are the main study focus, i.e., it investigated how change takes place as well as whether change takes place in the peer group friendships.

This chapter has discussed the methodology incorporated in studying change in the adolescent girls' peer groups. The following chapters will discuss the findings. The question of whether change takes place is basic to the research design; therefore this question also will be answered during the discussion of the findings concerning the hypotheses developed to check where, i.e., at what levels of group complexity, change does occur. Obviously if change has not occurred, then the question of how change occurred has no meaning. The next chapter will describe the four year populations, followed by chapters reporting whether, where, and how change occurred.

CHAPTER V

LONGITUDINAL POPULATION DESCRIPTION

The longitudinal population composition shifted over the four

years from three perspectives, population size, social class com-

position, and social acceptance structural composition. This chapter

will describe the population from the three cited perspectives.

Population Size

The population changes in size are a result of out-migration[1]

of some members and in-migration of others, not an unexpected finding

in an open social system.

A complete breakdown of the population changes in size from

1962 through 1965 is presented in Table I. There were 154 girls in

the 1962 ninth grade. In 1963 there were 155 tenth grade girls. How-

ever, 20 ninth graders migrated from the social system and 21 new

girls migrated into the social system.

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[1]Because the subsequent discussion will include a tracing of
movement between the sub-structures, or RFS's, within the social system
as well as movement from and into the system per se, the term migra-
tion will be used to denote residence change which either places the
girl in the social system (in-migration) or removes her from the
social system (out-migration), whereas the term shifting will be used
to denote within-system movement from one RFS or RFC to another.

Table I.[a] Four year numerical summary of the stability and change in the population of girls in one high school senior class,1965

Stability and Change	1962 Ninth Grade N	1963 Tenth Grade N	1964 Eleventh Grade N	1965 Twelfth Grade N
Stability:				
Longitudinal stability (N respondents remaining from 1962)		134*[b]	116*	108*
Between year stability (N respondents added after 1962 who remained in population)		21*	14*	22*
Total stability per year		155	120	127
Change:				
N out-migrants from 1962		20	19	10
N new migrants into each year's population (after 1962)		21	13*	8*
N out-migrants from previous year		--	7	5
Total yearly change (loss and re-placement)		41	39	23
Total N's	154	155[b]	143[b]	138[b]

[a]The summary tables in the text are indicated by Roman numerals and the detailed tables in Appendix B by Arabic numerals.

[b]Total N derived by adding * numbers each year. The discrepancies in the eleventh and twelfth grade columns are due to ninth grade respondents who migrated out in a between year and later returned to the population, i.e., in the eleventh grade, 116 remaining + 19 lost = 135, not 134 as stated in the tenth grade column. Also, in the twelfth grade, 108 + 10 = 118, not 116 as presented in the eleventh grade column.

In 1964, the eleventh grade population decreased to 143 girls, twelve less than the 1963 tenth grade group. From the original 154 1962 ninth grade social system, 116 members remained. Twenty-six tenth grade population members were no longer present in the eleventh grade. Of these, seven were new girls in the tenth grade and thus were respondents only one year. Thirteen eleventh grade respondents migrated into the social system as eleventh graders.

By 1965 the twelfth grade population decreased to 138. One hundred and eight remained from the initial 1962 ninth grade social system. This includes three girls who migrated out in a between year and returned later. Fifteen migrated from the eleventh grade population and eight new girls migrated into the social system when they were 1965 seniors. Five eleventh grade additions migrated out before the twelfth grade study and thus were in the social system only one year. In summary, considering loss and replacement, the longitudinal study included 196 respondents who were members of the social system some of the time between the 1962 ninth grade study and the 1965 twelfth grade study.

Longitudinal Social Class Composition

As stated in the methodology chapter,[1] the social class ranking was made for each girl each year, including re-ranking when appropriate. Re-rankings included both changes in father's occupations and changes in addresses. However, the predominant number of changes resulted in

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[1]Supra, p. 50 .

movement within a social class category rather than markedly differ-
ent social class scores leading to a change from one social class
category to another.

Only five social class re-rankings resulted in a change from
one social class category to another; all five occurred in the eleventh
grade study, and resulted from occupational changes. Three of the
five changes involved girls who listed their mothers as the main
sources of income. Four resulted in downward mobility from upper
to middle social class, whereas the fifth resulted in upward mobility
from lower to middle class. Contrary to the between category re-
rankings, the within category re-rankings included changes in residence
as well as changes in occupations.

Table II summarizes the social class composition by year and
grade. In the 1962 ninth grade there were 16 lower social class mem-
bers, 48 middle social class members,and 90 upper social class mem-
bers, creating a skewed distribution along the social class variable.
By the 1965 twelfth grade study, the distribution became more distinctly
skewed by the lower social class category. Only five lower social
class respondents remained. The middle and upper social classes re-
mained fairly stable at 45 and 88 respectively. Thus, the predominant
change from an N of 154 in the ninth grade to an N of 138 in the
twelfth grade is due to lower social class loss, not an unexpected
finding in light of school dropout literature. This point is reinforced
by a check of the school files which revealed that five of the eight

known "true" dropouts[1] were lower social class. There were two upper

social class and one middle social class dropouts.

Social class rankings ranged from 12 to 84, with low score

indicating high rank. Appendix B contains yearly tables (Tables 1 - 4)

with the complete population distributions by reciprocal friendship

categories and individual RFSs. Tables 5 - 8, also in Appendix B, con-

tain a complete distribution of the scores by individual indices.

Table II. Four year summary by percentage and number of the social
class distribution among the girls in one high school
senior class, 1965

	Year and Grade							
	1962 Ninth Grade		1963 Tenth Grade		1964 Eleventh Grade		1965 Twelfth Grade	
Social Class	N	%	N	%	N	%	N	%
Upper	90	59	94	61	93	66	88	64
Middle	48	31	48	31	43	29	45	32
Lower	16	10	13	8	7	5	5	4
Total	154	100	155	100	143	100	138	100

Williams found, in analyzing the individual indices for the

1962 ninth grade population, that more isolates and mutual pairs had

lower ranked dwelling area scores than RFS members. However, gener-

ally the dwelling area scores ranked higher than house type scores

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[1]Defined as one who withdrew from school without entering
another school system, or "quit" school.

for the population as a whole. When a composite ISC score weighting

and totalling the three indices was drawn, there were fewer mutual

pair members from upper social class backgrounds than isolates or

RFS members.[1]

Paralleling William's ninth grade findings, Hendricks also

found in the 1965 senior class that the dwelling area scores were

higher than individual house type scores.[2] Thus the girls continued

to live in areas superior to their individual residence. However,

by the twelfth grade Hendricks found that the isolates ranked lower

on all social class individual indices, indicating an apparent relation-

ship between social class status and group membership.[3]

Longitudinal Social Acceptance Structural Composition

Group membership, or acceptance, in this study is based upon

reciprocated friendship choices. The choices were used to construct

sociograms according to the method described in Chapter IV.[4] The

yearly sociograms, presented in Figures 3 - 6, show that the popula-

tion composition shifted in number, size, and shape of configurations.

As previously stated, the population N's shifted from 154 in the ninth

grade to 138 in the twelfth grade. The yearly N's are distributed

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[1]Madelyn Williams, op. cit., p. 56.

[2]Suzanne Hendricks, op. cit., p. 30.

[3]Ibid.

[4]Supra, pp. 53-57.
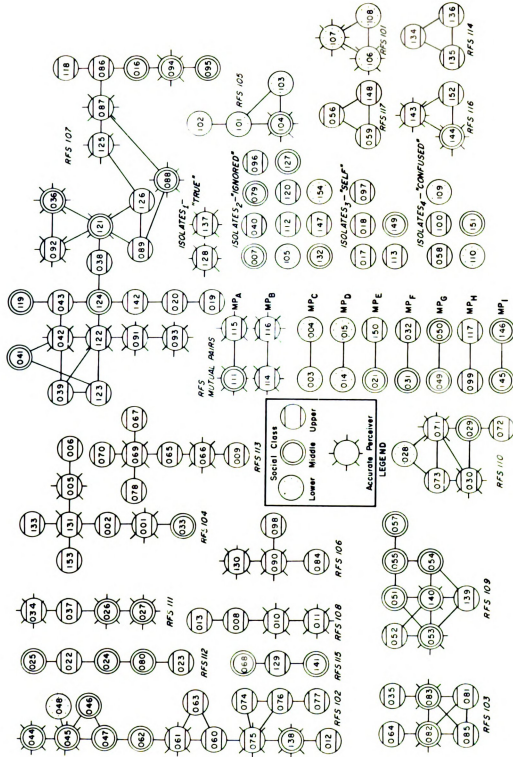
Figure 3. Reciprocal Friendships of the Ninth Grade Girls in One High School Class Which Became the Senior Class of 1965

Figure 4. Reciprocal Friendships of the Tenth Grade Girls in One High School Class Which Became the Senior Class of 1965
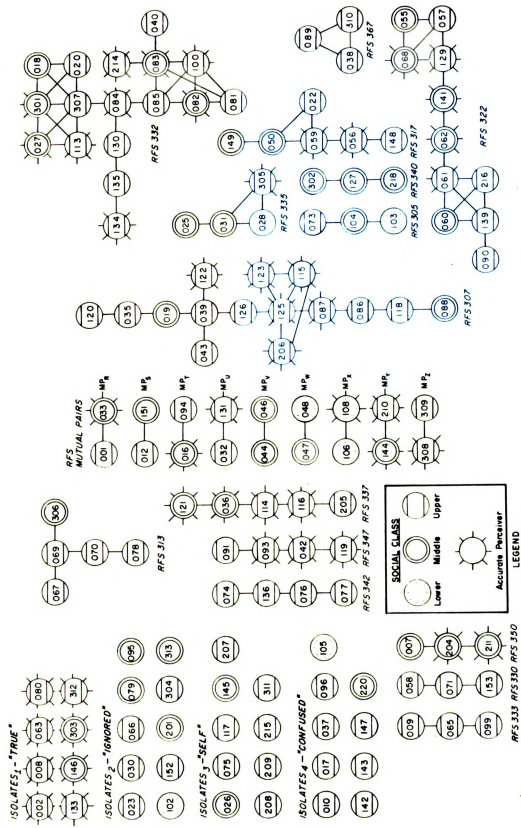
Figure 5. Reciprocal Friendships of the Eleventh Grade Girls in One High School Class Which Became the Senior Class of 1965

Figure 6. Reciprocal Friendships of the Twelfth Grade Girls in One High School Senior Class of 1965
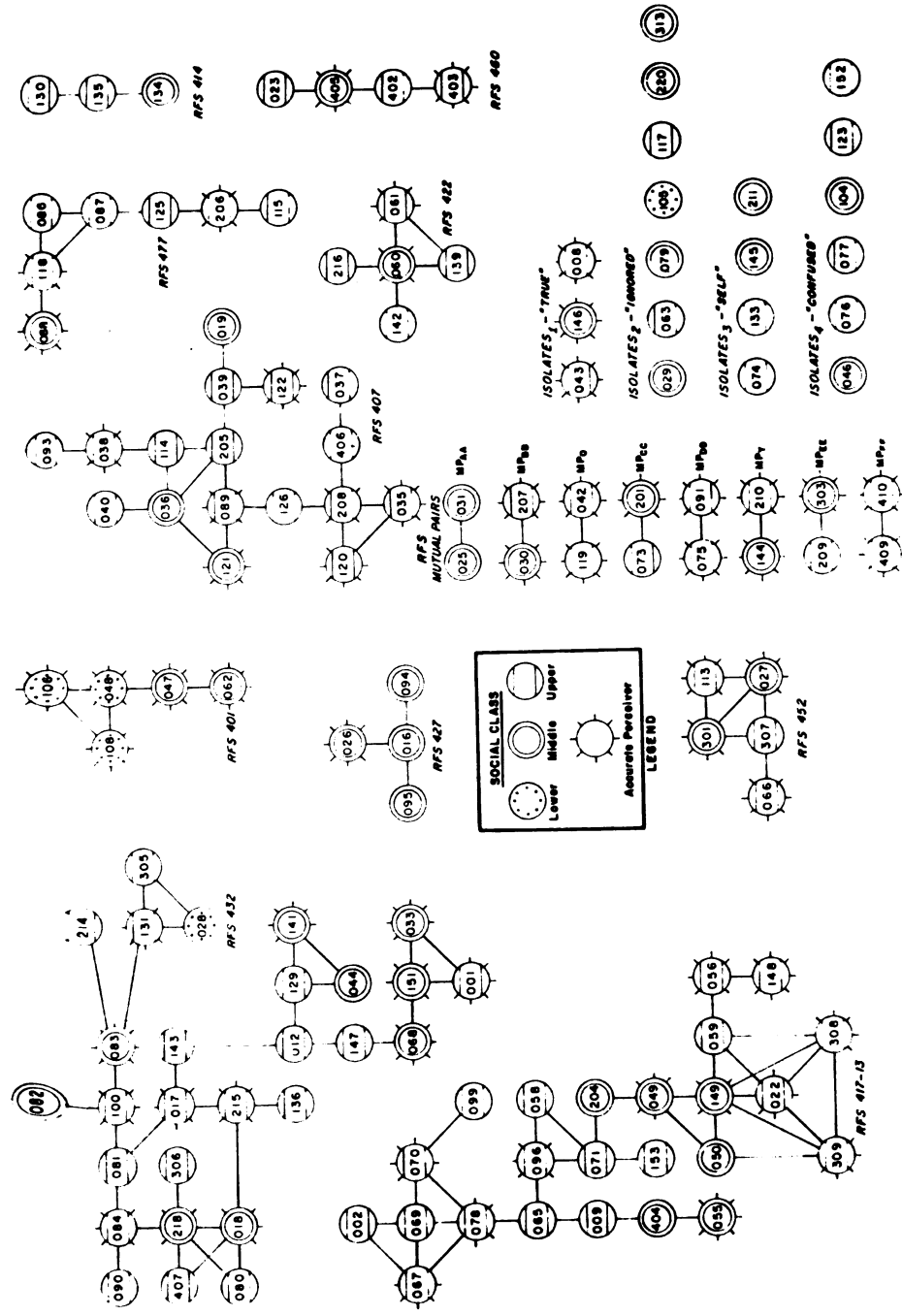
among the reciprocal friendship categories in the following structural

patterning presented in Table III.

Table III.   Four year numerical summary of the population structural
             composition in the reciprocal friendship categories formed
             by the girls in one high school senior class, 1965

Structural Composition	Year and Grade			
	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
Number of isolates	23	27	36	20
Number of MP's	9	8	9	8
Number of RFS structures	17	13	15	10
Total number of structures[a]	26	21	24	18
(Total number of dyads in the structures)[a]	(131)	(128)	(103)	(124)

[a]MP's and RFS's

As shown, the category N's remained fairly stable with the ex-

ception of the eleventh grade when there are more isolates and fewer

dyads, indicating fewer ties among the eleventh grade population.

The number of dyads in the senior class was almost the same as the

number in the ninth grade when there were more structures and a larger

population N. Thus, there is an apparent increased integration in

larger, more complex structures by the twelfth grade, a reversal of

the eleventh grade trend to more, smaller groups. A scanning of the

yearly sociograms in the previously introduced figures, Figures 3 - 6,

will facilitate visual comparison of the shifting compositions. A

more complete discussion of the population composition along the social

acceptance variable will follow in Chapters VI and VII which trace

change and stability of the reciprocated relationships formed by the

girls.

CHAPTER VI

DISCUSSION OF FINDINGS: WHETHER AND WHERE
POPULATION FRIENDSHIP CHANGES OCCURRED

The hypotheses formulated to investigate population change guided

the analysis. The first concern was parental social class ranking as

a possible factor influencing peer group formation. Next, three as-

pects of adolescent girls' peer group change were studied: structural

patterns, membership positions, and category sizes. This chapter,

organized around the five general hypotheses presented in the previous

chapter, will report the findings obtained concerning whether and

where change occurred.

Social Class Composition

The first series of hypotheses was developed to explore whether

parental social class rank will influence an adolescent's sociometric

position. As stated in Chapter IV, social class extremes served as

one of the major criteria in selecting a population to study.[1] The sub-

hypotheses, following stratification literature, predicted that more

RFS's would be homogeneous and, of the mixed groups, the differences

would be "variations around the means" rather than sharply different-

iated social class rankings. A five point difference in social class

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[1]Supra, p.43 .

score from high into middle, or low into middle, was considered "var-
iation around the mean." The homoegneity of an RFS was determined by
raw scores. A scanning of the individual RFS mean scores revealed
that some groups' means were pulled up, or down, into homogeneity by
the extremely high, or low, scores of other members. To establish
homogeneity by mean scores would, therefore, distort a true picture
of social class differentiation.

The individual RFS's from 1962 through 1965 exhibit homogeneity,
"variation around the mean," and distinctly different social class
compositions. In the ninth grade, presented in Table IV, there were
six homogeneous RFS's, three "variations around the mean," and eight
with distinctly different social class rankings. But, six of the
eight with distinctly different social class compositions were "skewed"
by one individual. They include RFS's 107, 109, 110, 111, and 112,
each containing five or more members, and 116 which had only three
members. The two RFS's containing a wide range of social class
scores, RFS's 105 and 115, were small, three or four member groups.
The mean score of RFS 105 was low enough to pull the group into the
low social class category although two girls had middle social class
scores.

Table V shows that by the tenth grade the number of RFS groups
had decreased from 17 to 13. Considering this decrease in number,
essentially the same proportion of groups as in ninth grade fall in
each of the three designated social class composite classifications:
four homogeneous, two "variations around the mean," and six distinctly
different social class compositions. Three of the groups with

Table IV. Summary by reciprocal friendship structures of the 1962 ninth grade social class composition among the girls in one high school senior class, 1965

RFS Number	Social Class Scores Range	Mean	Number in Social Class Upper	Middle	Lower	Social Class Homogeneity
101	60-70	64			3	-[a]
102[b]	26-68	39.6	7	7	1	*
103	12-43	32.5	4	2		*
104	29-43	35.7	7	1		*
105	45-75	64.0		1	3	+
106	19-35	25.5	4			-
107	16-49.5	31.1	17	10		+
108	19-35	27.1	4			-
109	33-47	40.5	6	2		+
110	26-50	42.1	3	2	1	+
111	12-48	34.0	2	2		+
112	27.5-51	37.2	2	3		+
113	21-32	27.9	7			-
114	37.5-22	28.5	3			-
115	19-54	41.0	1	2		+
116	19-41	31.0	2	1		+
117	27.5-36.5	31.8	3			-

Mean social class score: 43.5

[a]Key: - Homogeneous social class group ·
* Social class composition "variation around the mean."
+ Composed of distinctly different social classes.

[b]Note: RFS's 102, 107, 109, 110, 111, 112 skewed by one person's markedly different score. Social class homogeniety was established by individual social class scores, not group mean. Variation around the mean was determined by a 5 point range within the middle social class score range at either end of the scale.

Table V. Summary by reciprocal friendship structures of the 1963 tenth
grade social class composition among the girls in one high
school senior class, 1965

| RFS Number | Social Class Scores | | Number in Social Class | | | Social Class Homogeneity |
	Range	Mean	Upper	Middle	Lower	
201	58-72	66.5		1	3	*[a]
202	12-50	34.3	18	16		+
204	16-41.5	29.86	3	1		*
205	24-75	51.5	4	3	5	+
207[b]	12-43	27.9	10	2		+
213	12-35	26.9	18			-
216	33-41	35.7	2	1		*
217	25-61	34.5	4		1	+
219	22-33	27.3	3			-
220	32-35	34.3	3			-
222	26-35	19.7	6			-
227	39-66	50.3		2	1	+
237	26-49.5	35.7	3	2		+

Mean social class score: 33.05

[a]Key: - Homogeneous social class group.
        * Social class composition "variation around the mean."
        + Composed of distinctly different social classes.

[b]Note: RFS's 207, 217, and 227 skewed by one person's markedly
          different social class score.

distinctly different social class composition were skewed by one person: RFS's 207, 217, and 227. All three groups have mean scores which fall within the social class range of the dominant membership. Two groups which had more than one member in distinctly different social class rankings, RFS's 237 and 202, also had sufficiently large, or small, scores to pull their mean scores into the dominant group. But RFS 205 continued to exhibit a wide range of social class scores which becomes more pronounced in the tenth grade with increased membership from a four person to a twleve person group.

The eleventh grade social class data are summarized in Table VI. The eleventh grade increased number of RFS's with fewer members per group continues to be reflected in the social class data. Seven RFS's were homogeneous, two exhibited "variation around the mean," and six were distinctly different in social class composition. Only one, RFS 332, was skewed by one person. She represents a rank change from upper to middle and probably continued to be perceived as upper by her peer mates. The remaining five groups were widely distributed to the extent that only one RFS, 337, was sufficiently high to pull the mean RFS score into the upper social class range. Thus, more RFS's appeared with diverse composition than in previous years. Perhaps this diversity tends to reflect Gordon's idea of "clique" breakdown due to competition for positions - a different idea from the Parsonian thesis of jockeying for position in the early stage of group formation, unless it is considered as a reformation around changing group interests. The dating age may explain the shifts, or as Gordon stated, competition for honors.[1]

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[1]Supra, p. 18 for a discussion of Gordon's findings.

Table VI. Summary by reciprocal friendship structures of the 1964 eleventh grade social class composition among the girls in one high school senior class, 1965

RFS Number [*]	Social Class Scores		Number in Social Class			Social Class Homogeneity
	Range	Mean	Upper	Middle	Lower	
350	38-48.5	43.2		3		-[a]
305	26-70	47	1	1	1	+
342	29	4				-
307	12-41	26.4	13	2		*
313	21-38	29.2	4	1		*
317	27.5-57	37.5	4	2		+
322	19-56	38.2	6	5		+
330	25-34	29.7	3			-
332[b]	19-45	31.0	13	4		+
333	26-33	30.3	3			-
335	34-72	49.3	1	2	1	+
337	26-49.5	35.7	3	2		+
340	45-55	49		3		-
347	21-35	28	4			-
367	16-33	25.7	3			-

Mean social class score: 25.72

[a]Key: - Homogeneous social class group.
       * Social class composition "variation around the mean."
       + Composed of distinctly different social classes.

[b]Note: RFS 332 skewed by one person's markedly different score. She was initially an upper social class person whose rank changed in the eleventh grade.

The final social class table, Table VII, contains the distribution of social class ranks for the 1965 twelfth grade RFS's. The distribution shows that only one homogeneous RFS emerged, a derivation from RFS 107, RFS 427. Three RFS's, 414, 452, and 477, contained scores which are merely "variations around the mean." Of the six RFS's with distinctly different social class compositions, four are skewed by one person: RFS's 401, 407, 422,and 460. The deviant score in RFS 422 represents a second example of the few social class changes from one category to another in the four year study. She was initially an upper social class person and probably continued to be perceived as such by her peers. Both of the RFS's with diverse social class scores, RFS's 417 and 432, continued to have a mean score in the upper social class range.

The total RFS mean scores for each year show an increase in mean social class ranks[1] over the longitudinal study, reflecting the loss of all except four of the initial 17 lower social class members. Five were known "true" school dropouts, that is to say, students who withdrew from school and remained in the community without entering another school. The remainder of the low social class respondents lost from the population moved and their later school status is unknown. It seems reasonable to assume,in view of school dropout literature, that additional low social class members became dropouts from the school system into which they migrated. The five low social class dropouts represent two-thirds of the total dropouts over the

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[1]Low numerical score indicates high social class rank.

Table VII. Summary by reciprocal friendship structures of the 1965 twelfth grade social class composition in one high school senior class, 1965

RFS Number	Social Class Scores		Number in Social Class			Social Class Homogeneity
	Range	Mean	Upper	Middle	Lower	
401	46-76	62.6		2	3	+a
407[b]	12-49.5	26.2	14	3		+
414	26-37.5	30.2	2	1		*
417	21-57	34.1	18	6		+
422	12-56	31.4	4	1		+
432	12-72	33.1	18	9	1	+
460	26-50	36.0	3	1		+
452	18-43	31.4	3	2		*
477	16-40	25.0	6	1		*
427	38-46	41.5		4		-

Mean social class score: 33.26

[a]Key: - Homogeneous social class group.
    * Social class composition "variation around the mean."
    + Composed of distinctly different social classes.

[b]Note: RFS's 401, 407, 422, and 460 are skewed by one person's markedly different score. The single middle class person in RFS 414 is actually on the break with a score of 37.5. The deviant score in RFS 422 represents a social class change. She was initially an upper social class person and therefore is probably still perceived the same by her peers.

longitudinal study, not an unexpected finding in a population which has an expectation that approximately 95 to 98 percent of the membership will attend college.

The mean social class rank for the eleventh grade RFS's is higher than any other year, although there are fewer total population members in the twelfth grade. The factor of large isolate numbers and fewer RFS members in the eleventh grade group has been repeatedly established as influencing all aspects of the findings. A higher RFS mean social class score when there are fewer RFS members could foster a tentative hypothesis that there is a relationship between social class score and group membership. Specifically, the fewer the group members, the higher the incidence of upper social class group members in proportion to the total number of upper social class respondents in the population.

A comparison of the four years' social class distributions by RFS's shows that approximately one-third to one-half of the RFS's each year contained diverse social class scores. Yet a more detailed comparison reveals that the majority are skewed by the lower or higher score of one member only. Therefore, very little interaction between distinctly different social classes existed in the four year longitudinal study. The assumption seems to follow logically that the data tend to support the stratification literature stating that adolescents form their peer groups along parental social class rankings. The

data also tend to support Warner's idea that social classes tend to

merge into contiguous classes along certain interaction dimensions.[1,2]

<div align="center">Change in Peer Group Friendship Patterns</div>

The second set of hypotheses was developed to determine where

change occurred in the patterns of peer group relationships. Specific-

ally, the hypothesis stated that the populations' peer group friend-

ship patterns will exhibit more change than stability over a four

year time span. Change in the RFS's present longitudinally was

hypothesized as resulting from loss of ninth grade structures and

creation of new structures in subsequent years. Table VIII traces

the continuity and change of the structures from the ninth through the

twelfth grade.[3]

Of the 17 structures present in the initial ninth grade popu-

lation, seven,or 40 percent, remained in the twelfth grade, including

several small structures, RFS's 103, 106, and 116, which united in

RFS 432. The three structures, plus RFS 114, joined the initial RFS

102 structure to form the large, 34 person, RFS 202 in the tenth

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[1]Supra, p. 38.

[2]A formal acceptance or rejection of the hypotheses by the
data is not possible without the formal testing with inferential
statistics. As stated in Chapter IV, the distribution of the popu-
lations within the study framework limits statistical usages largely
to percentages and ratios. Supra, pp. 58-59 . This factor governs
the acceptance or rejection of all subsequently discussed hypotheses.

[3]Supra, p.53 and 56 for a statement of the rationale used in
numbering the structures, and p. 38 for the hypotheses developed to
guide the analysis.

Table VIII. Four year longitudinal continuity of the reciprocal friend-
ship structures among the girls in one high school senior
class, 1965

	Year and Grade								
1962 Ninth Grade	1963 Tenth Grade			1964 Eleventh Grade			1965 Twelfth Grade		
	Cᵃ	L	F	C	L	F	C	L	F
101	201	-	-	-	201	-	401	-	-
102	202[b]	-	-	-	202	-	-	-	-
103	202	-	-	332	-	-	432	-	-
104	204	-	-	-	204	-	-	-	-
105	205	-	-	305	-	-	-	305	-
106	202	-	-	-	106	-	-	-	-
107	207	-	-	307	-	-	407	-	-
108	-	108	-	-	-	-	-	-	-
109	-	109	-	-	-	-	-	-	-
110	-	110	-	-	-	-	-	-	-
111	-	111	-	-	-	-	-	-	-
112	-	112	-	-	-	-	-	-	-
113	213	-	-	313	-	-	417	-	-
114	202	-	-	332	-	-	414	-	-
115	202	-	-	332	-	-	432	-	-
116	216	-	-	-	216	-	-	-	-
117	217	-	-	317	-	-	417[c]	-	-
	-	-	219	-	219	-	-	-	-
	-	-	220	-	220	-	-	-	-
	-	-	222	322	-	-	422	-	-
	-	-	227	-	227	-	427	-	-
	-	-	237	337	-	-	-	337	-
	-	-	-	-	-	330	-	330	-
	-	-	-	-	-	342	-	342	-
	-	-	-	-	-	340	-	340	-
	-	-	-	-	-	347	-	347	-
	-	-	-	-	-	333	-	333	-
	-	-	-	-	-	335	-	335	-
	-	-	-	-	-	367	-	367	-
	-	-	-	-	-	350	-	350	-
	-	-	-	-	-	-	-	-	452
	-	-	-	-	-	-	-	-	460
	-	-	-	-	-	-	-	-	477

[a]Key: C = continued, L = lost, F = newly formed.

[b]The numbers are traced by the dominant number into which the
small RFS's moved. In the case of RFS 202, there are an equal
number from RFS 102 and RFS 103. The two derivations were
chosen to eliminate confusion with RFS 113 which continued.
RFS 112 was lost in 1963.

[c]RFS 417 is actually a coalition of RFS 117 and RFS 113 members
in the 1965 population.

grade. In the eleventh grade, most of the initial membership of RFS 102 disintegrated into isolates and mutual pairs, leaving RFS 332 essentially composed of the small structures which joined the group in the tenth grade. One of the small structures, RFS 114, split from the group again in the twelfth grade as a three-person chain with two members from RFS 114 and one member from RFS 106, which also joined RFS 202.

In tracing the loss of ninth grade RFS's by years, Table VIII again shows that 5 structures, or 29 percent were lost by the tenth grade, and 10 structures, or 60 percent were lost by the eleventh grade. The continuity of 60 percent loss in the twelfth grade stems from a balancing loss of RFS 302 and regaining of RFS 401, one of the two low social class structures present in the longitudinal study.

Fifteen new structures were formed between the tenth and twelfth grades, representing the equivalent of 88 percent of the initial 17 ninth grade RFS's. One factor which explains a large proportion of the newly created groups is the splitting and recombining of some ninth grade structures. Table VIII again shows that many of the subsequently created structures carry numbers indicating derivation from RFS's 102, 107, and the 117-113 union. The Figure 6 sociogram for the twelfth grade reveals that they were the larger senior class structures.[1] Only five entirely new structures, the RFS's ending in 0 numbers, were formed between the tenth and twelfth grades.

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[1]Supra, p. 76.

When the findings of the above paragraphs are summarized, a picture of structural change and stability emerges as follows. Forty percent of the initial ninth grade structures remained in the twelfth grade, sixty percent of the twelfth grade structures were not present in the ninth grade. Therefore, the hypothesis that there would be more change than stability in the RFS's from the 1962 ninth grade through the 1965 twelfth grade is supported.

Statements made by the respondents seemed to indicate their accurate perception of a highly structured sub-system within their school population. They used the term "clique" frequently. A number of the girls stated that a new person found it difficult to gain acceptance in a "clique" or group because many of their groups had formed in elementary school and carried over into the high school setting. One factor which may explain the acceptance of some "new" girls (as denoted by 200, 300, and 400 numbers in their configurational circles) is the fact that many are returnees and not entirely new to the population. This circumstance stems from the educational structure of the population, in which many fathers earn sabbatical leaves, or are away for one or two years on research, or consultant positions outside the community. Information available through the other school choices made by the respondents seems to indicate, however, a return to structures other than those to which they previously belonged. Perhaps this shift may be explained by changing interests through new experiences away from the school population and shifting interests of their former peer-mates while they were gone. Because only a few

girls were added as re-entering rather than new girls each year, no specific cases will be mentioned.

An awareness of the ecological correlate as an important factor influencing the acceptance of a new girl was reflected in the statement of one respondent. When asked what factors were important for a new girl to get in with the popular girls, she replied, "Get in the right car pool." Thus it would seem that movement into the "leading crowd" may be easier for a new girl moving into the "right" neighborhood, whose past pattern of living is unknown, than for a girl whose family mobility occurred geographically within the community.

After establishing that the RFS's did change between the ninth and twelfth grades, the second set of hypotheses relates to change in size. Following Hallworth's findings, it was hypothesized that the RFS's would become larger in size and therefore fewer RFS's would be present in the twelfth grade than in the ninth grade. The two hypotheses seem to follow one another logically if they are related to the Parsonian idea that changes in one sub-system must be balanced by change in another.[1]

Table IX contains a complete distribution of the longitudinal population's RFS's, giving number and size of each configuration from ninth through twelfth grades. Seventeen RFS's appear in the ninth grade and only 10 in the twelfth grade, giving a 41 percent decrease in number. Between year comparison shows a finding similar to Gordon's findings.[2] The pattern reversed between the tenth and eleventh grades,

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[1]Supra, pp. 4-5   for a discussion of Parson's idea.

[2]Supra, p. 18   for a discussion of Gordon's findings.

Table IX. Four year numerical summary according to membership size of the reciprocal friendship structures among the girls in one high school senior class, 1965

Number of Members in Group	Year and Grade			
	1962 Ninth Grade Number of Such Groups	1963 Tenth Grade Number of Such Groups	1964 Eleventh Grade Number of Such Groups	1965 Twelfth Grade Number of Such Groups
3	5	4	6	1
4	4	2	3	2
5	1	2	2	3
6	2	1	1	
7	1			1
8	2			
11			1	
12		2		
15	1		1	
17			1	1
18		1		
24				1
27	1			
28				1
34		1		
Total N of groups	17	13	15	10
Total N of members	13	112	89	102
Mean size:	6.65	9.54	5.93	10.2
Median size:	4	2	3	3
Mode:	5	4	6	3

i.e., numbers increased from 13 to 15 RFS's. The finding supports

Gordon not only in an increased number of structures, but also in a

decreased number of respondents in structures.

The between year reversal of patterns also carried over into

mean group sizes, not an unexpected finding when a sub-unit systemic

balanced relationship is considered. Obviously, with fewer respondents

and more structures, the mean size per group will decrease. A com-

parison of the ninth and twelfth grade mean group sizes shows an

increase from 6.65 to 10.2, or a difference of 3.35 persons per

group.[1] Thus, the mean size in the twelfth grade represents an in-

crease of 53 percent over the ninth grade size, supporting the hy-

potheses formulated from Hallworth's findings. The group sizes in-

creased and the groups became fewer in number. This becomes a rather

interesting finding when the ages of the two populations are con-

sidered. Hallworth's study included more elementary pupils, whereas

this study encompassed only high school age students. Perhaps the

finding also supports the respondents' accurate perceptions of elemen-

tary school groups continuing as peer groups in the current high school

situation.

If the groups become larger in size and fewer in number, then

logically, the configurational patterns will change, as the hypotheses

posited. Table X includes not only the RFS configurations but also

the mutual pairs and isolates; however, only the RFS's are considered

in the hypothesis. Table X lists six general configurational classif-

ications, but each complex structure represents a different pattern.

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[1]This is based on absolute means, recognizing that one cannot
actually have a third of a person.

Table X. Four year numerical summary of the structural patterns formed
by the reciprocated friendships among the girls in one high
school senior class, 1965

Structural Patterns	Year and Grade							
	1962 Ninth Grade		1963 Tenth Grade		1964 Eleventh Grade		1965 Twelfth Grade	
	IN[a]	SN	IN	SN	IN	SN	IN	SN
Isolates	23	-	27	-	36	-	20	-
Mutual Pairs	18	9	16	8	18	9	16	8
Chains	16	4	23	6	28	8	7	2
Triangles	16	5	-	-	7	2	-	-
Triangle-chain	-	-	9	2	6	1	12	2
Wheels (including broken wheel)	19	3	-	-	5	1	9	2
Square	-	-	4	1	-	-	5	1
Complex structures	62	5	76	4	43	3	69	3
Total N:	154		155		89		138	
Total Structures:		17		13		15		10

[a]Key: IN: Individual Number
SN: Structure Number

Eight patterns were present in the ninth grade, including five complex

structures. In the twelfth grade only four of the initial patterns

were present, giving a 50 percent difference in the comparative 1962

and 1965 sociometric sub-unit patterns. Most of the difference is

due to the shifted patterns in the complex structures. Two new basic

structural patterns appeared in the twelfth grade and only one ninth

grade pattern was missing, the three person triangle. This omission

reflects the factor of increased mean size per group as the groups de-

creased from freshman to senior year. The eleventh grade reversal

of pattern is also evident in configurations: three complex structures

with fewer respondents in each and more small structures.

According to Hallworth, as the structures increase in size and

become fewer in number, they also become more cohesive. Hypotheses

were posited in this relationship although it directly opposes Kretch,

Crutchfield, and Ballachy's statement that high cohesion and small

size correlate. The data supported the latter statement and not the

posited hypotheses.

Table XI includes a complete longitudinal distribution of all

RFS's and segments of RFS's ranked according to cohesion.[1] The data

in Table XI are combined in Table XII to present yearly mean cohesion

scores. The decision was made to check the correlation between size

and cohesion first, because if no relationship exists, then logically

a comparison between years would be of little value. Spearman rho

correlations[2] revealed high correlations of .88, .85, and .65 for

ninth, tenth, and eleventh grades, respectively. But in the senior

year the correlation is only .28. This correlation seems to reflect

the increased mean group sizes which leads to lower cohesion. However,

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[1]Supra, p. 32 for the formula used to obtain the cohesion scores.

[2]See Sidney Siegel, Nonparametric Statistics (New York: McGraw-Hill, 1956), p. 209, for the formula used.

Table XI. Four year summary of cohesion scores distributed by individual reciprocal friendship structures among the girls in one high school senior class, 1965

Year and Grade											
1962 Ninth Grade			1963 Tenth Grade			1964 Eleventh Grade			1965 Twelfth Grade		
RFS[a]	RFS S	RFS C	RFS	RFS S	RFS C	RFS	RFS S	RFS C	RFS	RFS S	RFS C
101	3	100	201	4	92	367	3	100	427	4	75
114	3	100	204	4	83	305	3	83	422	5	70
116	3	100	216	3	83	340	3	83	414	3	66
117	3	100	219	3	66	350	3	83	452	5	65
105	4	83	220	3	66	335	4	66	460	4	60
110	6	66	227	3	66	333	3	66	401	5	50
115	3	66	237	5	60	330	3	66	477	7	47
108	4	66	217	5	45	342	4	58	407	17	18
103	6	60	222	6	43	313	5	55	417	24	13
106	4	58	205	12	27	347	4	50	432	28	12
112	5	55	207	12	20	317	6	47			
109	8	55	213	18	17	337	5	40			
111	4	50	202	34	9	322	11	30			
113	7	33				332	17	21			
104	8	27				307	15	20			
102	15	18									
107	33	12									
[b]102A		53	205A		43	322A		70	407A		29
102B		32	205B		40	322B		57	407B		50
107A		28	213A		65	332A		66	417A		31
107B		22	213B		47	332B		66	417B		50
			213C		43	332C		52	417C		44
			202A		24	307A		40	432A		20
			202B		36	307B		39	432B		100
			202C		27				432C		50

[a]Key: RFS: Identifying number of RFS.
RFS S: Number of members in RFS, i.e., size.
RFS C: Cohesion score for RFS, based on a possible total of 100.

[b]Segmental breakdowns of larger RFS's with cohesion scores for the segment.

some of the difference originates in more out-system choices, a factor

supporting Gordon's finding concerning group weaknesses as the end of

high school education approaches.[1]

Table XII. Four year mean cohesion scores of the individual reciprocal
friendship structure cohesion scores among the girls in
one high school senior class, 1965.

	Year and Grade			
$\overline{X}$ Cohesion Scores	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
Total RFS's $\overline{X}$ cohesion	61.71	52.08	57.87	47.60
Small RFS's $\overline{X}$ cohesion	84.10	76.00	72.78	67.00
Large RFS's $\overline{X}$ cohesion	40.75	31.57	35.67	39.29
r_s between size and cohesion	.88	.85	.65	.28

Although a large difference in the correlations appeared be-

tween freshman and senior year, only a small mean cohesion score

difference occurred. The freshman mean of 61.7 differs only 22 per-

cent from the senior mean of 47.6, but in the opposite direction from

the hypothesized relationship of increased size and increased cohesion.

Thus, apparently an inverse relationship exists between size and co-

hesion, as stated by Kretch, Crutchfield, and Ballachy.

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[1]*Supra*, p. 18 for a discussion of Gordon's findings.

It was also hypothesized, to correlate with Kretch, Crutchfield, and Ballachy, that the smaller RFS's would be more cohesive than the larger RFS's each year. The mean cohesion scores between large and small RFS's each year show some support for the hypothesis, although the percent difference was less in the twelfth grade than in the ninth, 41 percent and 52 percent respectively. This smaller percentage reflects the skewed senior year scores previously substantiated by the low correlation between size and cohesion. The between year mean cohesion differences were approximately 50 percent for both years.

Although a hypothesis was not developed concerning the comparative difference of small group means between ninth and twelfth grades and large group means between ninth and twelfth grades, they were checked. A 20 percent difference appeared in the ninth and twelfth grade small group means, but only a 4 percent difference in the large group means. Therefore, most of the total difference between populations was in the small groups, directly reflecting fewer small groups in the senior year and more out-group choices leading to lowered cohesion within the three and four person groups. Thus, the small groups' cohesion scores also tend to refute Hallworth's findings of increased group cohesion in a longitudinal perspective.

Change in Size of Social Acceptance Categories

Basic to this research is the difference in studies basing social acceptance on number of choices and studies formulated around acceptance based on reciprocated relationships creating structures. One factor automatically tending to refute high correlations in an open social system is change in number of respondents. School dropouts in a relatively closed social system lead to some alteration in number, unless of course a single classroom is studied. Most school systems establish a basic pupil-per-teacher system which creates relatively comparable numbers in a single classroom. Yet an assumption of static numbers in any open social system seems unreasonable.

The third set of hypotheses was developed to explore the stability of size, or number of respondents, in each reciprocal friendship category; isolates, mutual pairs, and RFS's. It was hypothesized that, given a small overall number, the number of respondents in each reciprocal friendship category will exhibit little change over a four year time span. Table XIII contains a complete breakdown of the categories, giving raw numbers and percentages of the 1962 category N's represented in each subsequent year. Part of the yearly differences are attributable to the varying population N's: 154, 155, 143, and 138 from ninth through twelfth grades respectively. Yet Table XIII reveals two changes in the between year data which cannot be attributed to shifting population N's. In the tenth grade the percentage in

mutual pairs and isolates shifted although the total population N varied

only by one person from the previous year. The percentage of isolates

increased 17 percent in the tenth grade. The trend continued in the

eleventh grade when 56 percent more isolates appeared although the

population decreased from 154 to 143. This trend continued to support

Gordon's finding of structural breakdown in his eleventh grade group.[1]

The theoretical idea of changes in one sub-unit balancing changes in

another is also empirically demonstrated by the decrease in RFS mem-

bers which compensates for the increased number of isolates.

Table XIII. Four year summary by number and percentage of the size, or number of occupants, in the reciprocal friendship categories among the girls in one high school senior class, 1965

	Year and Grade			
Structural Categories:	1962 Ninth Grade (N)	1963 Tenth Grade (N)	1964 Eleventh Grade (N)	1965 Twelfth Grade (N)
Isolates	23	27	36	20
Mutual Pairs	18	16	18	16
RFS's	113	112	89	102
% of 1962 N:				
Isolates		117	156	87
Mutual Pairs		89	100	89
RFS's		99	79	90

[1]Supra, p. 18 for a discussion of Gordon's findings.

The data did not support Gordon's finding that twelfth grade

isolates were fewer, having been absorbed in mutual pairs.[1] When the

decreased population N in the twelfth grade (from 154 to 138) is con-

sidered, 20 isolates in the twelfth grade as compared to 23 in the

ninth grade does not constitute change.

To summarize, three changes in the number of occupants, or size

of social acceptance categories, tend to refute the hypotheses which pre-

dicted little change in number: isolates in the tenth and eleventh grades,

and RFS members in the eleventh grade. In addition, the decrease in

population N's from the ninth to twelfth grades automatically introduces

some change.

Individual Choice Status vs. Reciprocated Relationships

The above hypotheses were formulated considering interaction

through reciprocation of choices, whereas the refuted studies were based

only on number of choices. Therefore a fourth hypothesis was developed

to explore the difference in social acceptance as measured by choice

status, and social acceptance based upon reciprocated choices, creat-

ing structures. The hypothesis stated that <u>the individual respondent's</u>

<u>choice status excluding reciprocated choices, will not coincide with</u>

<u>position in a structured group based upon reciprocated choices</u>. Two

checks were made to see whether or not choices disregarding interaction

coincided with choices including reciprocation. Figures 7 and 8 contain

the number of choices made to each individual[2] on the friendship ques-

tion which by its design[3] automatically establishes a reciprocity

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[1]<u>Supra</u>, p. 18 for a discussion of Gordon's findings.

[2]Choice status is indicated by small numbers attached to each
individual.

[3]Lines indicate reciprocated choices between individuals.
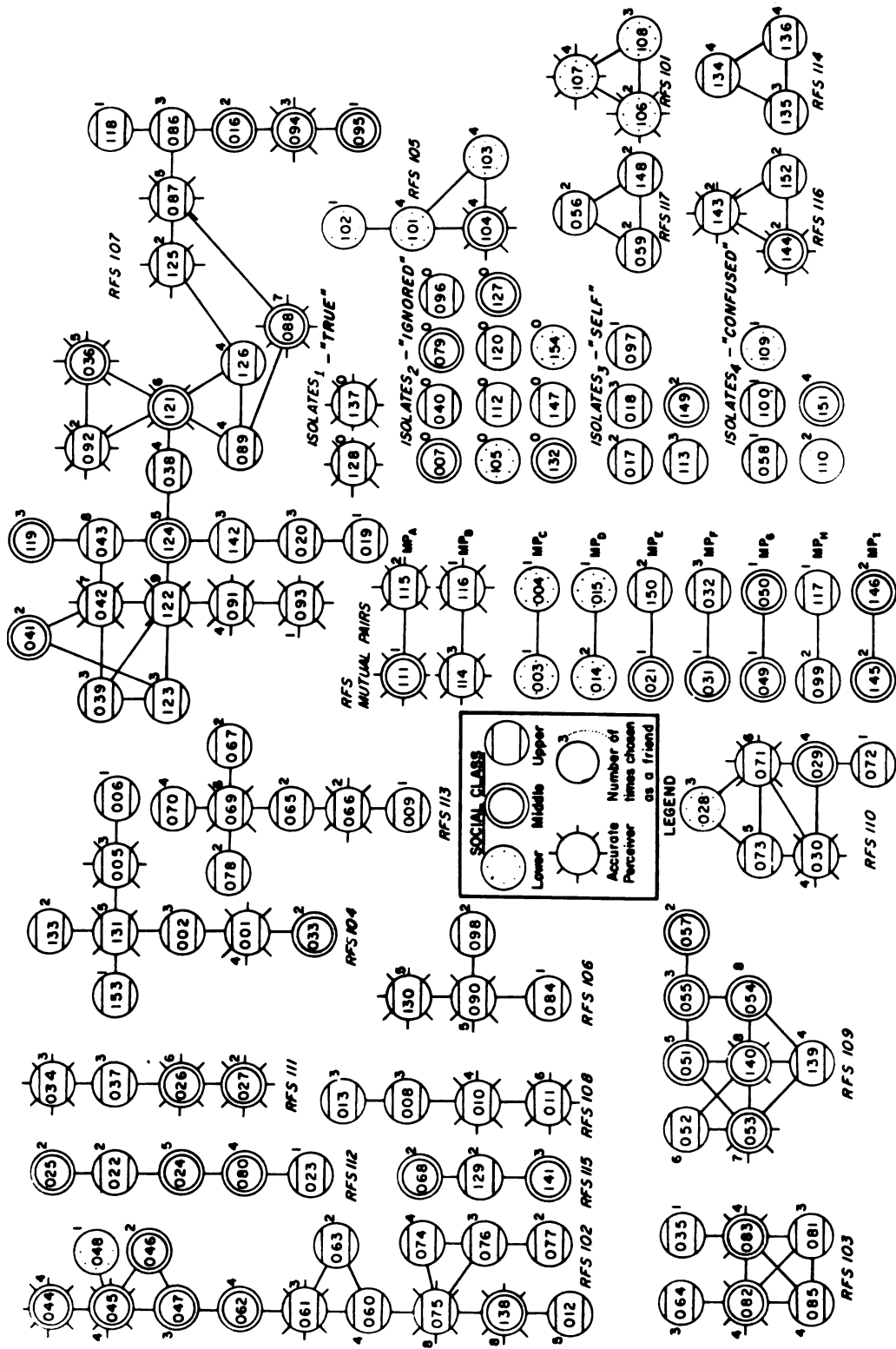
Figure 7. Reciprocal Friendships of the Ninth Grade Girls in One High School Class Which Became the Senior Class of 1965 With Individual Choice Status Indicated for Each Girl
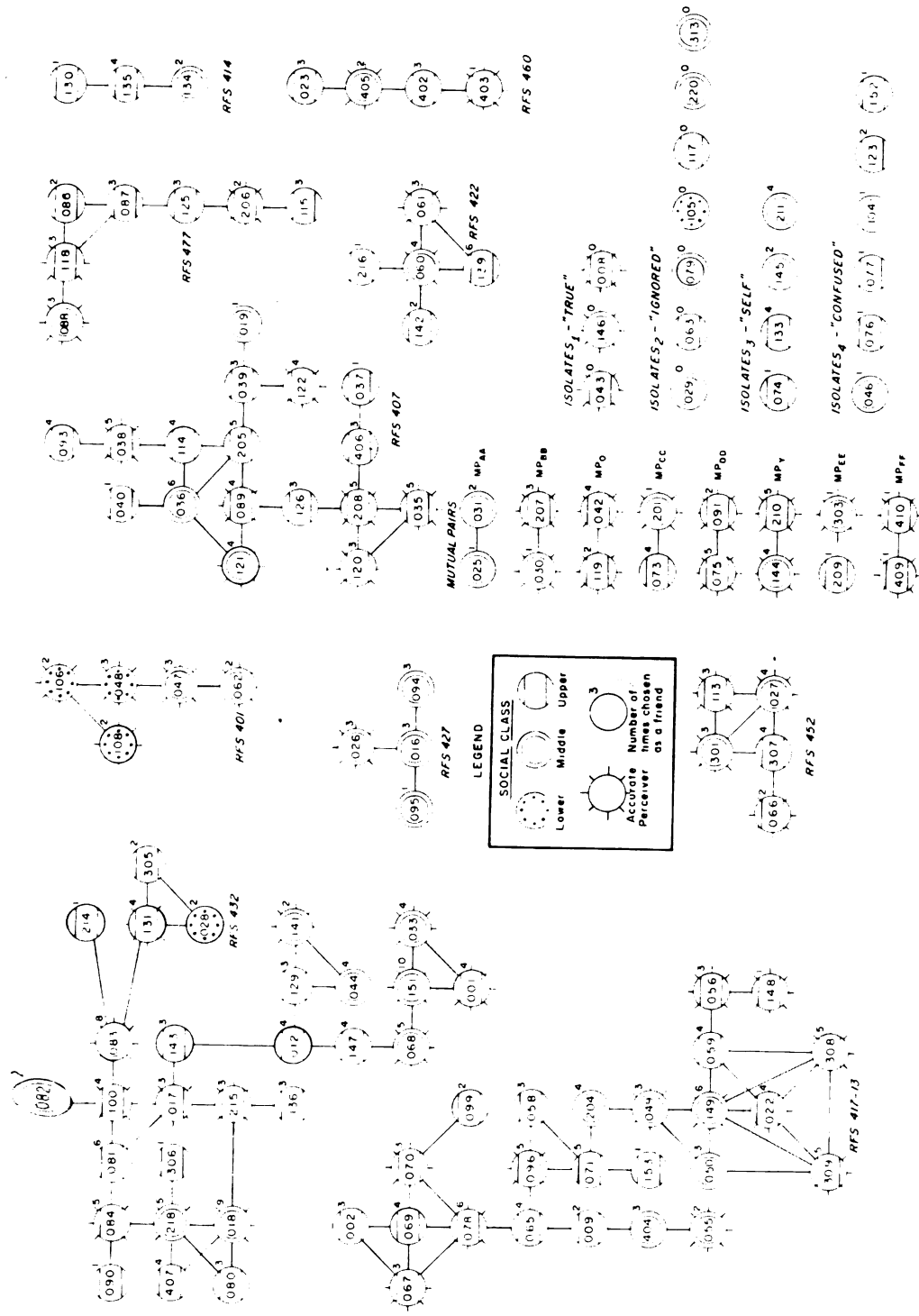
Figure 8. Reciprocal Friendships of the Twelfth Grade Girls in One High School Senior Class of 1965 With Individual Choice Status Indicated for Each Girl

framework in the respondents' minds. As seen in Figures 7 and 8, the

choices ranged from 0 to 9 in the ninth and 0 to 10 in the twelfth

grade. In both years the choices were distributed throughout the RFS's

and isolate categories in a manner which directed more choices to some

isolates than were received by some of the RFS members, clearly demon-

strating that social acceptance based exclusively on number of choices

does not give an accurate picture of the girls' responses on an inter-

action question.

Figures 9 and 10 contain the number of choices made to each

individual on three sociometric-type questions designed to elicit

social visibility answers concerning the "most popular," "best dressed,"

and "not dressed right" girls in the 9th and 12th grade populations.[1]

A comparison of these choices with the friendship choices on Figures

7 and 8 shows that choice status disregarding reciprocity does not

coincide with choices based on reciprocity, neither in the friend-

ship question designed to elicit reciprocity answers, nor in the

popularity and dress questions designed to elicit visibility answers.

Three RFS's may be cited as illustrations of differential popu-

lation evaluation. RFS 111, as shown in Table XIV, apparently possessed

characteristics closely aligned to dominant group norms, whereas RFS

101 was evaluated as not exhibiting the dominant norms. Both of the

RFS's contained members whose choice statuses on the friendship question

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[1]The questions are contained in the interview schedule, Appendix
B.
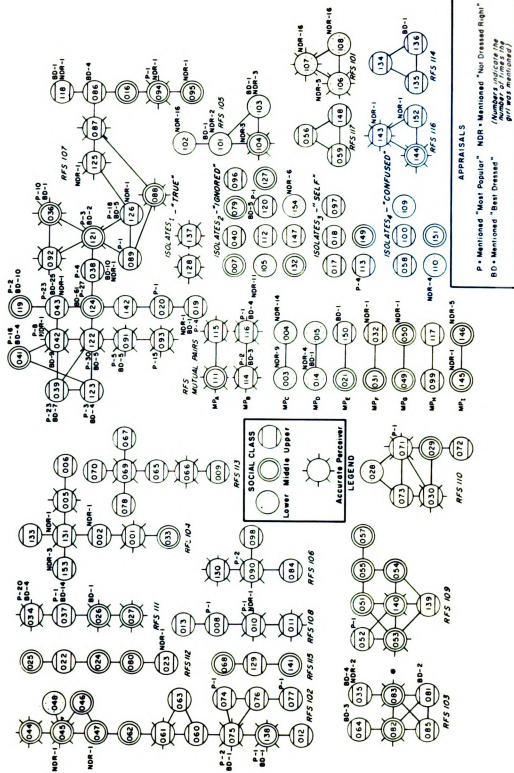
Figure 9. Reciprocal Friendships and Appraisal of Popularity and Dress of the Ninth Grade Girls in One High School Class which Became the Senior Class of 1965
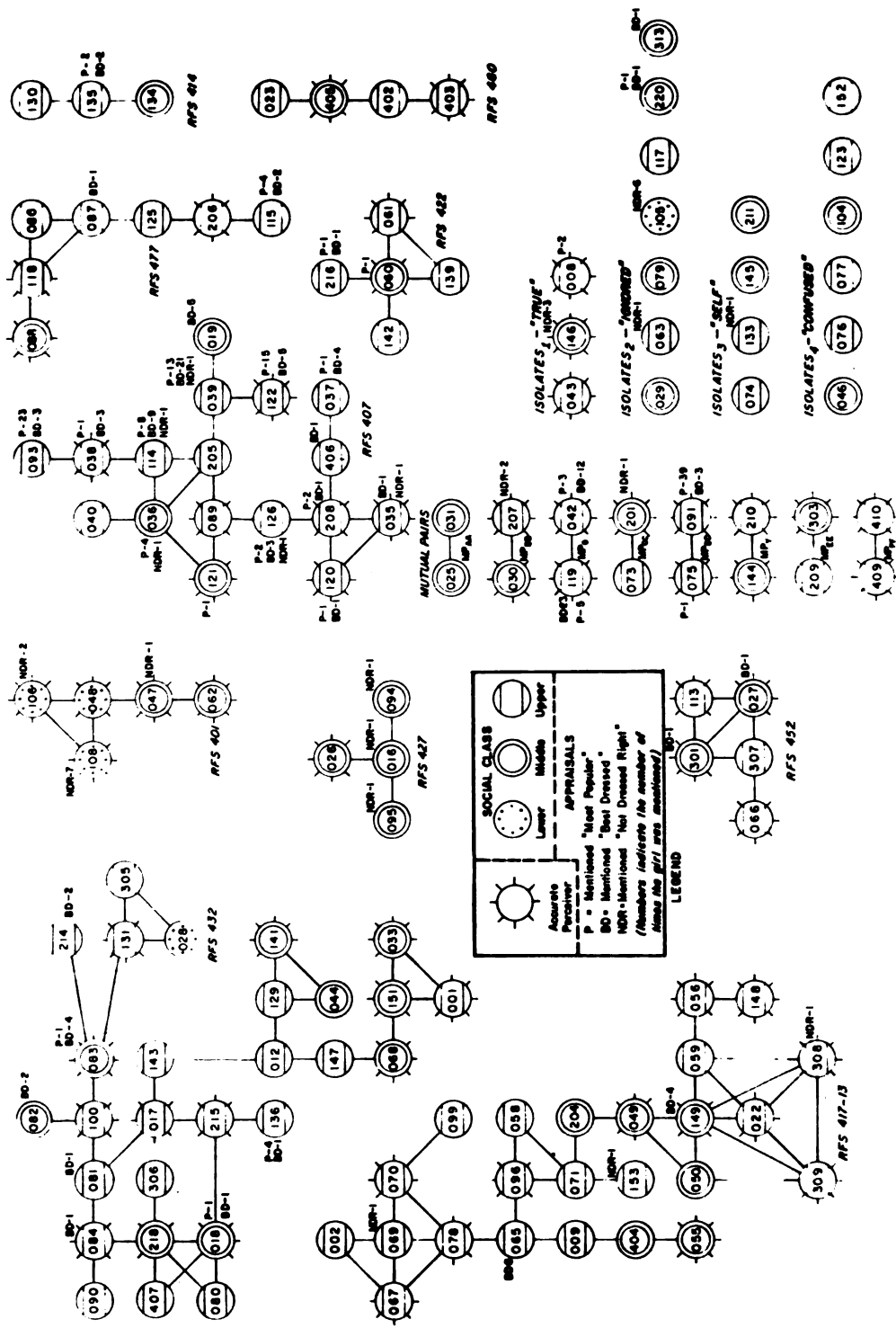
Figure 10. Reciprocal Friendships and Appraisal of Popularity and Dress of the Twelfth Grade Girls in One High School Senior Class of 1965

did not match their reciprocated friendship choices, nor did their popularity and dress choice statuses match their reciprocated friendship choices.

Table XIV. Numerical comparison of reciprocated choices and choice status among the girls in three ninth grade reciprocal friendship structures in one high school senior class, 1965

RFS Number	Respondent Number	Friendship Question		Popularity and Dress Question		
		RC[a]	CS	CS,MP	CS,BD	CS,NDR
111	026	2	6		1	
	027	1	2			
	034	1	3	20	4	
	037	2	3	1	14	
101	106	2	2			5
	107	2	4			16
	108	2	3			16
117	056	2	2			
	059	2	2			
	148	2	2			

[a]Key: RC = Reciprocated choices, friendship question.
CS = Choice status, friendship question.

CS,MP = Choice status, "most popular" question.
CS,BD = Choice status, "best dressed."
CS,NDR = Choice status, "not dressed right."

The third RFS presented in Table XIV, RFS 117, is an example of a group whose members had the same choice status number and number of reciprocated choices, but only on the friendship question. They were ignored on popularity and dress choices. For a complete population distribution of reciprocated friendship choices and choice statuses for the friendship question and the popularity and dress choices see Tables 10 (ninth grade) and 11 (twelfth grade), Appendix B.

Many answers reflected the respondents' accurate perception of the social situation. For example, in the twelfth grade interview schedule, the students were asked if the "not dressed right" girls had many friends, and if their friends were also "not dressed right." Hendricks found a number of similar answers: "In their own group" and "They all dress alike." Her comparison of the data for the "not dressed right" girls and their friends revealed a high measure of accuracy in the interviewees' responses.[1]

Accuracy of self-placement in the group situation was reflected by the girls' responses to other questions. One freshman said, "I'd say I'm one of the 'best dressed girls,' and then accurately added the names of her membership group friends in RFS 107. A senior respondent accurately established self and group in answering the question "What should a new girl do to get in with the popular group?" She said, "It depends on her personality, if she has the same interests <u>we</u> do."[2]

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[1]Suzanne Hendricks, "Opinions on Clothing and Appearance as Related to Group and Non-Group Membership of Twelfth Grade Girls" (Unpublished Master's thesis, Michigan State University, 1965), p. 62.

[2]Ibid., p. 94.

Answers to situation stories developed to elicit opinions con-
cerning varied undesirable dress characteristics revealed perceptual
accuracy concerning one's own group ideals. Many girls said, "Some
groups would accept her, but I don't think mine would." Others said,
"My group would accept her if we liked her, but I don't think other
groups would."

The social visibility questions also revealed some social dis-
tance, creating blind spots at both ends of the social class categories.
Some upper class girls said there were "not dressed right" girls,
but added, "I've seen them around, but I don't know their names."[1]
Some lower class girls could give a very accurate description of the
"best dressed" and "most popular" girls but had difficulty in recalling
names. Yet, in most instances, with a little thought, they could remem-
ber the names. With the upper social class girls, little effort to
recall names led to empty responses for the question. Comments by the
twelfth grade girls tend to correlate with the fact that most of the
"not dressed right" girls were lower social class girls. (See Figures
9 and 10 again) The girls said, "There were some, but they are gone
now." Or, "There are some in lower grades, but none left in our grade."
An analysis of the social class data revealed that, by their senior
year, only four lower social class members remained of the initial 17
in the freshman class.[2]

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[1]Ibid., p. 97.

[2]See Table II, supra, p. 71.

One upper social class isolate accurately established her position in the social system by stating, "I have many friends, but none I consider my best friend." She was often named as "best dressed" and "most popular," but was not chosen as a friend, nor did she choose a friend in the twelfth grade.[1] Her answer seemed to indicate a high degree of self-confidence which seemed lacking in the "not dressed right" isolates who named friends, but were not chosen. Thus, there were girls in the isolate category, based on lack of reciprocated choices, who clearly were perceived differently by their peers. There were also RFS's which contained a near-equal number of choices, but were based on different normative group values. RFS's 101 and 105 in the ninth grade and RFS 401 in the twelfth grade received many of the "not dressed right" choices made by the social system. Clearly they were evaluated differently from RFS 107 and RFS 407 which received "most popular" and "best dressed" choices.

Dress was established as an important group value although the reasons for assigning it importance were highly diverse.[2] Moreover, the citing of dress as a basis for friendship choice was low in the ninth grade[3] and completely disappeared by the twelfth grade.[4] Perhaps

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[1]Hendricks, op. cit., p. 94.

[2]Ibid., p. 113.

[3]Madelyn C. Williams, "Opinions on Clothing, Appearance, and Social Acceptance as Factors in Group Cohesion of Ninth Grade Girls" (Unpublished Master's thesis, Michigan State University, 1963), p. 64.

[4]Hendricks, op. cit., p. 51.

in a predominantly well-dressed population it became accepted habitually
as a "given," or, as one girl stated, "First impression counts, but
after you get to know her, personality and then interests become more
important." Since many of the groups were formulated in elementary
school, the socialization process in which group dress norms function
as social constraint may have become a habit, recognized by only the
members who fail to meet the group norms and are thereby constrained
from interaction with certain elements of the population.[1] Or, the
girls who were incorrectly dressed may have perceived it as a barrier
and strived to overcome it. This effort seemed to be a recognizable
pattern to some of the upper social class girls who stated that some
of the "not dressed right" girls tried to wear the latest fashion,
but did not quite know how and "over did it." The idea tends to co-
incide with Rainwater's evaluation of the differential dress patterns
of working class wives and upper middle class wives.[2] It also clearly
supports the social class variable as a recognizable influence in
adolescent peer group interaction patterns.[3]

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[1]The ideas underlying the above discussion were drawn from
Durkheim. "If I do not submit to the conventions of society, if in my
dress I do not conform to the customs observed in my country and in
my class, the ridicule I provoke, the social isolation in which I am
kept, produce, although in an attenuated form, the same effects as a
punishment in the strict sense of the word. The constraint is none-
theless efficacious for being indirect. . . . all education is a con-
tinuous effort to impose on the child ways of seeing, feeling, and
acting which he could not have arrived at spontaneously. . . . If, in
time, this constraint ceases to be felt, it is because it gradually
gives rise to habits and to internal tendencies that render constraint
unnecessary; but nevertheless it is not abolished, for it is still
the source from which these habits were derived.. . . the aim of
education is, precisely, the socialization of the human being;" Emile
Durkheim, The Rules of Sociological Method, G.E.G. Catlin, ed. (Chicago,
Ill.:University of Chicago Press, 1938), pp. 2 and 6.

[2]Lee Rainwater, Richard P. Coleman and Gerald Handel, Workingman's
Wife (New York: MacFadden Books, 1962), pp. 207-211.

[3]Supra, p.7 .

Change in Membership Among Respondents

A fifth area of exploration evolved from two questions. What happens if the individual respondents are considered as positions formulating the structural frameworks of the configurations? How do they shift within and between configurations to lead to changes in the population distribution from ninth through twelfth grades? The questions led to the formulation of the hypothesis that the membership in each reciprocal friendship category will exhibit more change than stability over a four year time span. Sub-hypotheses were formulated to explore changes longitudinally in isolates, mutual pairs, dyadic ties, and RFS memberships. Two population changes automatically established the loss and creation of some configurational positions, decreasing population N's and movement into and out of the social system.

The second series of hypotheses established that the number of respondents contained in the isolate category changed between the ninth and twelfth grades. When an additional consideration of actual personnel contained in the category is included, the magnitude of change increases. In the tenth grade 3 persons remained who were also isolates in the ninth, 5 in the eleventh, and 2 in twelfth grade. This represents an 87 percent change between ninth and tenth, a 79 percent change between ninth and eleventh, and a 92 percent change between ninth and twelfth grades. Table XV includes not only the changes from the ninth grade, but also the between year continuity and the newly created isolate members each year.

Table XV. Four year summary by number and percentage of stability and change among the girls included in the isolate category membership position in one high school senior class, 1965

	Year and Grade			
	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
Stability and Change in Isolates	N %	N %	N %	N %
Stability:				
Isolates remaining from 1962		3*[a] 13	4* 21[b]	2* 8[b]
Isolates remaining from previous year		-	_8*_	_11*_
Total between year stability			13	13
Change:				
Isolates lost from 1962		20 87	0 79[b]	1 92[b]
Newly formed isolates[c]		_24*_	_24*_	_7*_
Total between year change (loss + replacement)		44	31	19
Total yearly N	23	27[a]	36[a]	20[a]

[a]Totals derived by adding the * items in each column.

[b]Percent lost, or remaining, includes total percent lost, or remaining, from 1962 to the current column. For example, a decrease from 87 to 79 percent between the tenth and eleventh grades indicates that two of the ninth grade isolates who were not isolates in the tenth grade returned to the isolate category in the eleventh grade. This also explains the discrepancy in between-year N's.

[c]Once an isolate was created, she was not counted as newly formed every year after 1962, only in the year of initial formation.

One factor which cannot be included with ease on the table is
the number of four year isolates and the number of actual members each
year. For example, the increase in membership numbers in eleventh
grade is more than the 3 to 5 increase, shown in Table XV, from tenth
to eleventh grades. Four of the eleventh grade isolate members were
either RFS or MP members in the tenth grade and returned to the isolate
category in the eleventh. Only one girl was an isolate all four years.
A general scanning of her characteristics revealed that she was almost
on the median of the middle social class scores, earned average grades,
was neither "best dressed," "most popular," nor "not dressed right,"
and belonged to several clubs. Thus, her "average" characteristics
along several known value dimensions would not aid in establishing
her isolated position. Possibly "psychological" characteristics ex-
plain her position.

A dyad was defined as any two person reciprocated relationship,
either within RFS's or mutual pairs. Table XV reveals a total of 131
dyads in the ninth, 128 in the tenth, 103 in the eleventh, and 124 in
the twelfth grade. The pattern of group structural shift in the
eleventh grade continued to be reflected in the dyad aspect of the
analysis and continued to influence the junior year findings along
every variable.

In the tenth grade, 29 percent of the ninth grade dyads remained;
by the eleventh grade, only 20 percent remained. In the twelfth grade,
16 percent of the ninth grade dyads remained, not an unexpected between
year drop with a population decrease of 11 percent and a loss of 30

Table XVI. Four year summary by number and percentage of the stability and change among the girls in reciprocated dyads in one high school senior class, 1965

	Year and Grade							
	1962 Ninth Grade		1963 Tenth Grade		1964 Eleventh Grade		1965 Twelfth Grade	
Stability and Change in Dyads	N	%	N	%	N	%	N	%
Stability:								
Dyads remaining from 1962	-	-	38*[a]	29	27*	20[b]	21*	16[b]
Dyads remaining from previous year				-	47*		42*	
Total between year stability					54		42	
Change:								
Dyads lost from 1962	-	-	94	71	11	80[b]	6	84[b]
Newly formed dyads[c]				90*	29*		61*	
Total between-year change (loss + replacement)				181	40		67	
Total yearly N	131		128[a]		103[a]		124[a]	

[a]Totals derived by adding the *items in each column.

[b]Percent lost, or remaining, includes total percent lost, or remaining, from 1962 to the current column.

[c]Once a dyad was created, it was not counted as newly formed every year after 1962, only in the year of initial formation.

percent of the original 154 ninth grade members. The loss of 46 positions, plus the three year interaction of 44 new incoming positions, automatically creates a situation for change not present in a closed social system such as the previously cited Jennings' girls' training school study.[1]

Table XVII shows that the exclusive two-person dyads, called mutual pairs in this study, contributed some of the continuity in dyadic relationships over the four years. Two of the nine freshman mutual pairs, or 22 percent, remained in their sophomore year; whereas in the junior year, three, or 33 percent remained. Therefore, one mutual pair lost in the sophomore year was re-formed. By senior year, the entire mutual pair category was populated with members who were isolates or other RFS members in their freshman year, including some who were not present in the freshman population. Thus, the mutual pair membership exhibited an entire replacement of personnel by the end of the longitudinal study.

The dyad formed by 042 and 119 is an especially interesting senior year mutual pair. They received, with one exception, all of the un-reciprocated choices RFS 407 made outside its structure. As freshmen, the girls were members of RFS 107, withdrew into a mutual pair in their sophomore year, reentered RFS 307 as juniors, and withdrew again as seniors. It would seem that they were still perceived as interacting members by the RFS 7 group. Perhaps they did interact along some

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[1]Supra, p. 10.

Table XVII. Four year summary by number and percentage of the stability and change among the girls included in a mutual pair membership position in one high school senior class, 1965

Stability and Change in MP's	Year and Grade							
	1962 Ninth Grade		1963 Tenth Grade		1964 Eleventh Grade		1965 Twelfth Grade	
	N	%	N	%	N	%	N	%
Stability:								
MP's remaining from 1962			2*[a]	22	3*	33[b]	0*	0[b]
MP's remaining from previous year			-		0		1	
Total between year stability			-		7		3	
Change:								
MP's lost from 1962			7	78	0	67[b]	6	100[b]
Newly formed MP's[c]			6*		6*		6*	
Total between year change (loss + replacement)			13		6		14	
Total yearly N	9		8[a]		9[a]		8[a]	

[a]Totals derived by adding the * items in each column.

[b]Percent lost, or remaining, includes total percent lost, or remaining, from 1962 to the current column. For example, a decrease from 78 to 67 percent between the tenth and eleventh grades indicates that one of the ninth grade MP's which was not an MP in the tenth grade returned to the MP category in the eleventh grade. This also explains the discrepancy in between-year N's.

[c]Once an MP was created, it was not counted as newly formed every year after 1962, only in the year of initial formation.

social dimensions, but did not perceive self-interaction along the dimension of a "best friend" as defined in the sociometric question. Their continued recognition as "best dressed" and "most popular" by the twelfth grade population also seems to indicate population perceptual association of them with RFS 407, which seemingly emerged as the "leading crowd" in freshman and senior years. It also was among the structures which emerged in a recognizable configuration, or subset of configurations every year.

The perceptual characterization of the dyad which interacted with the RFS 7 complex may be similarly related to the perception of isolate number 043 as an interacting member of the "leading crowd" to which she belonged as an integral ninth grade member of RFS 107, having three ties. Yet speculative evaluation here might establish some differential population recognition of her position as shown by a sharp decrease in her "best dressed" and "most popular" choices from freshman to senior year. (See Figures 9 and 10 again).[1]

The second hypothesis established that a number of the RFS's remained in a recognizable form over the four year study. Yet a review of the dyadic ties remaining stable shows that only 17 percent of the initial 131 dyads remained in the twelfth grade. (See Table XVIII for a distribution by RFS's of the ninth grade dyads.) Recognizing the possibility for this emergent tendency, the hypotheses concerning RFS memberships posited not only shifting ties within RFS's but also shifting ties between RFS's. The between RFS shifts

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[1]Supra, pp. 106, 107.

Table XVIII. Numerical summary by reciprocal friendship structure of
the ninth grade dyadic membership positions among the
girls in one high school class which became the senior
class, 1965

RFS Number	Number of Dyads
101	3
102	17
103	8
104	7
105	4
106	3
107	33
108	3
109	12
110	8
111	3
112	4
113	6
114	3
115	2
116	3
117	3
	122

were extremely extensive, therefore, a descriptive analysis was chosen; for this reason, it will be held for discussion in the following chapter. The within group changes in membership could be traced, however, according to dyads remaining and dyads created.

Table XIX shows a breakdown by RFS's for the tenth, eleventh, and twelfth grades. Recall of the rationale used to establish RFS numbers after freshman year will eliminate confusion concerning some groups which contain no dyads from the freshman year. The rationale was based on membership continuity, not dyadic, or tie, continuity.[1] Scanning of the between year totals for dyads retained and formed revealed that approximately the same number of dyads were retained between each two years. The junior year configurational pattern continued to show the eleventh grade group's breakdown into fewer reciprocated memberships. Only 47 new dyads were created, almost half the number created in sophomore and senior years.

Emergent patterning of several RFS groups may be cited to illustrate particular dyadic shifting. Of the six entirely new groups created between sophomore and senior years, four contained no ties from previous years, and two contained one dyad each. A second type of dyadic shifting occurred when total small RFS's shifted into large structures. RFS 202 was mentioned as a group formed upon a freshman structure, but continued in later years by the continued union of several small structures drawn into RFS 202. Table XIX shows that 15 of the

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[1]Supra, pp. 53 and 56 for the rationale.

Table XIX. Three year numerical summary of the girls continuing as reciprocated dyadic membership positions in the reciprocal friendship structures formed by one high school senior class, 1965

	Year and Grade							
	1963 Tenth Grade			1964 Eleventh Grade			1965 Twelfth Grade	
RFS[a]	Dyads R 1962	Dyads F 1963	RFS	Dyads R 1963	Dyads F 1964	RFS	Dyads R 1964	Dyads F 1965
201	1	4	301	1	1	401	2	3
202	15	27	302	13	13	402	7	28
204	2	2	305	1	1	407	5	13
205	5	8	307	7	9	414	2	0
207	4	8	313	3	1	417	11	21
213	5	17	317	2	4	422	4	1
216	1	1	322	7	8	427	1	2
217	0	4	330	0	2	442	4	2
219	1	1	332	3	0	450	0	3
220	0	2	333	1	1	477	6	1
222	2	3	335	2	2			
227	1	1	337	3	1			
237	1	4	340	1	1			
			347	2	1			
			367	1	2			
Totals	38	82		47	47		42	74

[a]Key: RFS: RFS Number.

Dyads R. 1962, 3, 4: Number of dyads remaining from 1962, 1963, and 1964, respectively, according to column.

Dyads F. 1963, 4, 5: Number of dyads newly formed in 1963, 1964 and 1965, respectively, according to column.

freshman dyads were continued in the sophomore year, and 31 of the sophomore dyads remained in the junior year. The major loss encompassed the original freshman RFS 102 membership. Continuity was sustained by the continued coalition of the smaller groups which entered RFS 202. When RFS's 432 and 414 dyads are added together, the total shows that nine of the junior year dyads were continued but re-split into two groups.

RFS 117 was a three-person triangle in the ninth grade. It served as the dominant membership for RFS 217 even though the members were not in their same dyadic tied relationships and were joined by some members of RFS 113. RFS 113 was large enough to suffer the loss and still remain a group, with five ninth grade dyads remaining, plus additional new ones. A few more RFS 113 members who became scattered in the tenth grade joined RFS 317, but enough were retained in the "parent"[1] group to retain the number RFS 313. By their senior year, the coalition had shifted so completely that RFS 417, retaining all three of the initial RFS 117 members, gradually drew in RFS 113 members until they were reassembled as a RFS 417-413 coalition.

RFS 107 was the "leading crowd" as entering freshmen, as measured by "most popular" and "best dressed" choices. It retained the "leading crowd" status in the senior year as RFS 407. It was highly closed in unreciprocated choices as well as reciprocated choices in freshman and senior years. The largest measure of unreciprocated choices came in their senior year when, with one exception, all unreciprocated out-group choices were directed toward a single mutual pair, formerly a

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[1]Borrowing from terminology used in family studies, the term parent group will be used to denote an initial ninth grade group from which later-year derivations split and recombined.

member of the larger structure. Although RFS 7 retained dominance over the longitudinal study, it experienced many shifting internal ties among members. Table XVII shows only four dyads remained in the tenth grade from the ninth, seven in the eleventh from the tenth, and five in the twelfth from the eleventh. RFS 477, a fourth-year derivation from the "parent" group shows high between year dyadic stability, retaining six dyads from the previous year and creating only one new dyad. The many additional derivations of RFS 107 over the longitudinal study do not exhibit the high dyadic stability of RFS 477 although membership stability is high.

Because the memberships in the longitudinal population experienced extensive shifts in dyadic ties and configurational splits and recombinations, the hypothesis concerning shifting unreciprocated choices became untestable as a single unit. In other words, there was no traceable structural framework in which to analyze them. For this reason, the data concerning unreciprocated choices will be included only as it supports specific points concerning changing relational patterns.

Summary

This study designated the following areas for investigating stability and change in adolescents' peer group friendship relationships: structure, size, and membership of the sociometric configurations, and the influence of parental social class rankings upon peer group formations. Hypotheses were developed as guides in investigating the changes at each designated level.

Although one-third to one-half of the yearly RFS's contained members with diverse social class scores, the majority were skewed by a markedly deviant score of one person. Thus, the studied population supports the thesis offered in stratification literature that adolescents tend to stratify in peer groups along the social class rankings which they share with their parents.

The findings presented concerning change and stability established change in every hypothesized relationship concerning structure and membership, and also change in several aspects of number, which was hypothesized as exhibiting little change. While a formal acceptance, or rejection, of the hypotheses was not possible without using inferential statistics, the percent of change was sufficiently large to assume logically that high correlations would not have been found on any relationships which hypothesized more change than stability. In fact, with the exception of two sub-hypotheses, there was a range of from 41 percent to more than 50 percent change between the ninth and twelfth grades, excluding the hypotheses related to stability of numbers. Yet they also had several aspects in which large change was evident, the eleventh grade isolates (56%) and RFS members (22%).

When choice status disregarding reciprocation was superimposed on the structures based on reciprocation, the difference in findings using the two methods became immediately apparent. This difference held true not only for the friendship question which by design automatically elicits an answer based on a reciprocation frame of reference, but also for the "most popular," "best dressed," and "not dressed right" choices which elicit social visibility answers not designed to coincide with actual peer interaction patterns of the respondents.

While change appeared at every hypothesized structural level, stability also appeared. The adolescents continued to stratify largely along their family social class rankings. Several RFS groups continued as recognizable units. In sum, although change was evident at every level of the sociometric structures, structural stability emerged in a recognizable form.

The establishment of structural change and stability in this chapter serves as a basis for the following chapter, Chapter VII, which will trace _how_ change and stability transpired in the longitudinal population and informally relate them to selected variables of the girls' value system.

CHAPTER VII

DISCUSSION OF FINDINGS: HOW POPULATION
FRIENDSHIP CHANGES OCCURRED

Answers to the question concerning <u>whether</u> and <u>where</u> adolescent

girls' peer groups changed led to insights into <u>how</u> the longitudinal

groups shifted. Hypotheses were not developed concerning how change

occurred, because the literature yielded insufficient knowledge on

which to base hypothses. Therefore, this chapter will describe how

the populations' changes occured, tracing the regularities of sub-

groups over the four years and considering some groups and individuals

which deviated from patterned regularities. Three aspects of compara-

tive analysis will be included: 1) description of the 1962 ninth

grade population positions as they relate to the 1965 twelfth grade

positions, 2) description of the 1965 twelfth grade population

positions as they relate to the 1962 ninth grade positions, and 3)

summary of the four year sociometric patterns of the girls who have

continued throughout the longitudinal study.

Description of 1962 Ninth Grade Positions
As Located in 1965 Twelfth Grade

There were 17 RFS groups in the ninth grade, containing a total

of 113 members. Eighteen members were located in 9 mutual pairs, and

23 were isolates, giving a total population of 154 girls in the ninth

grade. Figure 11 includes all ninth grade girls with a summary of their 1965 twelfth grade positions designated. The population dispersed into the following patterns:

Eight, or one-third, of the isolates migrated away from the population before the twelfth grade. Only two were isolates in the twelfth grade, 079, the only four-year isolate, and 105, who in her sophomore year became a peripheral member of RFS 201, but returned to the isolate category in the junior year when her dyadic mate left the population. She continued to choose into RFS 301, but was not chosen. Five isolates shifted positions into RFS 432. As previously noted, RFS 202 collected a number of small groups and individuals. The initial membership disintegrated, but the "collectivity" remained. RFS 417 absorbed three of the ninth grade isolates. Like RFS 432, it represents an expansion and coalition of a nucleus from RFS 117 and RFS 113. Two ninth grade isolates shifted into RFS 407, the dominant segment of the "leading crowd." They were "ignored" isolates (I_2) in their freshman year, which indicates that they made choices, but were not chosen. All of isolate 120's choices were into RFS 107, whereas isolate 147 directed part of her choices into RFS 102 and the remaining choices randomly. One isolate moved into RFS 442, a five person group which included two new eleventh grade respondents.

Seven of the nine freshman year mutual pairs were lost through migration, including three in which both members left and four with one member each gone. The two mutual pairs whose remaining members
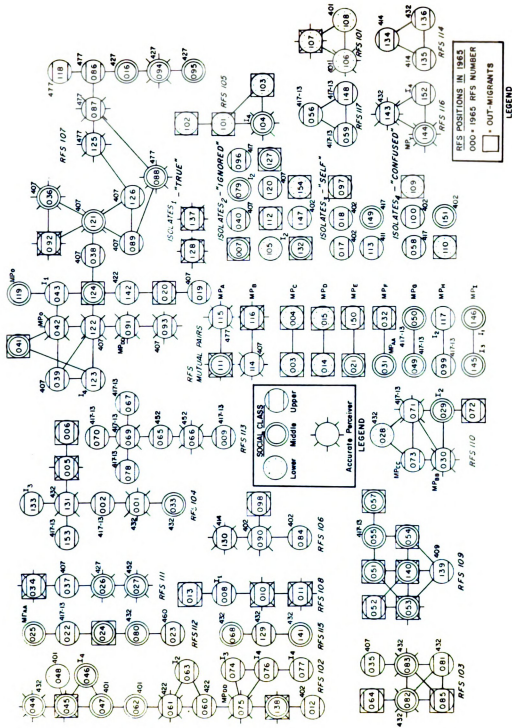
Figure 11. Reciprocal Friendships of the Ninth Grade Girls in One High School Class Which Became the Senior Class of 1965 With Twelfth Grade Reciprocal Friendship Position Indicated for Each Girl

became positioned in derivations of RFS 407 moved into the group to-
gether before their dyadic mate withdrew from the social system. The
third mutual pair which lost one member separated, however, in the
sophomore year, although the lost member did not leave the population
until between the junior and senior year restudy. Of the three ninth
grade mutual pairs whose entire membership remained in the twelfth
grade population, one dyadic unit, MP_G, contained a member who was ab-
sent between years but returned in her senior year. In the interim,
her dyadic mate joined RFS 217, and upon her return she was absorbed
into RFS 417 along with her dyadic mate. The second freshman year
mutual pair, MP_H, had one member absorbed into RFS 417, while her
dyadic mate became an isolate. Both members of the third mutual pair,
MP_I, became isolates in their senior year.

Membership positions lost through out-migration explain the
breakdown of three 1962 RFS's, RFS 105, RFS 109, and RFS 108. One
member each remained in the twelfth grade from RFS's 105 and 108; both
girls became isolates. Number 008,an upper social class member, became
an accurate perceiver isolate who neither chose nor was chosen. Number
104, a middle social class isolate whose friends were lower social class,
continued to make choices, but was chosen only by number 105, the low
social class isolate who became a peripheral member of her RFS as a
sophomore. Thus, a potential mutual pair structure was lost because
she continued to ignore the desire for friendship by number 105 just
as she did in previous years when her group mates were present. The
third RFS lost by moving, RFS 109, was a highly cohesive

closed sub-system in the ninth grade. With two exceptions, all un-
reciprocated choices were within group choices. By the twelfth grade,
only two of the eight members remained in the population; one shifted
into RFS 417, while the other moved into derivations of RFS 202.

In contrast to RFS 109, a closed group which disintegrated,
another closed complex, RFS 107, has continued in a recognizable form,
including splits and recombinations, over the four year study. Only
two original members of RFS 107 migrated from the social system. The
remaining members clustered in three RFS's in their senior year, 427,
477, and 407. They represent the only derivations of RFS 107 still
present in the twelfth grade. The number 477 indicates that over the
four years there were seven splits and recombinations of RFS 107 as
well as the continuation of the dominant "parent" group all four years.
As Figure 11 shows, the three remaining groups represent specifically
definable segments of the original RFS 107. Two original members be-
came isolates and three became mutual pair members. One mutual pair,
042 and 119, received, with one exception, all the unreciprocated
choices made by RFS 407 outside their own group. Only one RFS 107
member became a member of another RFS complex, RFS 442, in the "2 com-
plex." It is interesting to note the high internal interaction in
derivations of RFS 107 and the fact that the limited interaction out-
side the "7 complex" was with RFS 102 derivations. In fact, the one
"7 complex" unreciprocated choice not directed to RFS 407 or the mutual
pair which split from the parent group was to an RFS 432 girl.

RFS 102 also experienced many splits and recombinations. However, the format was quite different from RFS 107. It was not a closed group in the freshman year and subsequent years reflected the continued open character of the RFS "2 complex." In the sophomore year, RFS 202 mushroomed into a 34 person group, collecting several small RFS's and diverse individual personnel from the entire population, including several who migrated into the social system their sophomore year. The small groups shifting into RFS 202 included RFS's 117, 114, 103, 115, and 106. Their personnel continued into RFS 432 with the exception of a coalition split of two RFS 114 members and one RFS 106 member to form RFS 414. One member of RFS 106 and two of the RFS 103 members migrated from the social system. A peripheral member of RFS 103 shifted into RFS 407. With these exceptions, the small groups which clustered in RFS 202 remained to form the nucleus of RFS 432.

While the small RFS's drawn into RFS 202 remained in coalition in their senior year, the dominant "parent" group disintegrated by the senior year. Only two RFS 102 girls, 012 and 044, remained in RFS 432, occupying opposite positions in the RFS 102 structure. The original group disintegrated in the following fashion: two migrated from the social system, five became isolates, one became a member with a girl who shifted from RFS 107 into RFS 202 and then out with her, two remain in RFS 422, and the other three are in RFS 401. Speculation for the latter move might center around social class. Number 048 was the only lower social class member of RFS 102. She shifted with two middle social class girls into the only lower social class group in the twelfth

grade. As Table IV shows, RFS 401 was composed of distinctly different social class rankings. Therefore, the two girls which 048 carried with her into RFS 401 did not represent border line low social class girls. One member of the original three-person RFS 101 migrated from the social system, leaving the dyadic pair continuing for the entire four years. They were a mutual pair, MP_x, in the eleventh grade.

The third large group in the twelfth grade, RFS 417, was formed by a coalition of two ninth grade RFS's, 113 and 117. RFS 113 was a far larger group than RFS 117, but the number 417-13 was chosen because all three 417 members remained together during the entire longitudinal study. RFS 113 members split in their sophomore year and gradually drew together again in RFS 417-13. By their senior year, all of the RFS 113 members were reassembled with one exception, number 066, who was in RFS 442. Her status gives a clue to the wanderings of some RFS 113 members. Most members interacted during the interim years between freshman and senior years with one or more derivations of RFS 102. In fact, the interaction between RFS's 417 and 432 members was extensively open in opposition to the closed character of RFS 107--clearly illustrating open and closed sub-systems within a single social system.

RFS 104 also illustrates the interaction patterns between RFS 117 and RFS 102 members. By the twelfth grade, three of its members were in RFS 402 and two were in RFS 417. Of the remaining RFS 104 members, one became an isolate, while the other two migrated from the social system.

The only two members of RFS 110 who were RFS members in their senior year continue to illustrate the interaction between RFS 117 and RFS 102 members. One is in RFS 432, the other in RFS 417. Of the remaining four RFS 110 members, one migrated from the social system, one became an isolate, and the other two became mutual pair members with new girls who entered the population in the tenth grade. During the interim years they moved through diverse sociometric classifications until they formed mutually exclusive dyads with new girls.

One more RFS illustrates the interaction between RFS 117 and RFS 102. Number 022 shifted into RFS 217, while her former peer mates shifted into RFS 205. This movement is especially interesting because RFS 205 was the lower social class group which collected middle and upper social class girls in the tenth grade only and was subsequently lost by social system out-migration of members. In addition to number 022, the other members of RFS 112 held the following senior year population positions, one out-migrant, one mutual pair member, one in RFS 402, and one in RFS 450. Parsons and his associates stated that members jockey for positions in early stages of group formation.[1] This group seems to illustrate a very loose collectivity whose members continued to jockey for positions and became differentially positioned as they sought "social status," Some gained and some lost status over the four years.

An account of one freshman year RFS remains, RFS 111. It illustrates the very limited interaction between RFS's 102 and 107. Of the three remaining RFS 111 members in the twelfth grade, two were in

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[1]Supra, p. 47 for their statement.

derivations of RFS 107, RFS 407 and RFS 427. The third became a member

of RFS 452. If a hierarchy of "social status" is assigned to the three

dominant groups, it seems reasonable to state that two of the girls

were upwardly mobile into RFS 107 complex, the "social elite," or "lead-

ing crowd," whereas the third girl achieved only second ranked "status"

in RFS 102 complex.

One other speculative question arises, however, in considering

an emergent "social elite" and an "intellectual elite," as described

by Gordon in his tenth grade group.[1] Both Williams and Hendricks found

that RFS 107 and RFS 407, clearly the "social elite," did not contain

honor roll members.[2,3] Can RFS 102 and RFS 117 and their derivations

be considered as the interplay of "intellectual elitism" and something

of a differential social class interaction be operating between the

two? Returning again to Tables IV through VII,[4] they show that the

mean social class scores for the two groups and their derivations ranged

fairly close to one another over the longitudinal study. Yet the

scores consistently remain lower than the scores for RFS 107 and its

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[1]Supra, p. 17 for a discussion of Gordon's findings.

[2]Madelyn Williams, "Opinions on Clothing, Appearance and Social Acceptance as Factors in Group Cohesion of Ninth Grade Girls"(Unpublished Master's thesis, Michigan State University, 1963), p. 119.

[3]Suzanne Hendricks, "Opinions on Clothing and Appearance as Related to Group and Non-group Membership of Twelfth Grade Girls" (Unpublished Master's thesis, Michigan State University, 1965), p. 99.

[4]Supra, pp. 81, 82, 84, and 86.

derivations. Does this tend to support Coleman's findings of high social class and popularity being somewhat inversely related to academic achievement?[1] It would seem logical to assume that the interplay between two "intellectual elites" might be present in a social system with a high expectation of college attendance rather than a single "intellectual elite" as found by Gordon. An interesting investigation of this possibility might be fruitful for the larger project, not only to determine _if_ such an interplay exists, but _how_ it functionally interrelates with social acceptance into groups and population perception of popularity.

Description of 1965 Twelfth Grade Positions As Located in the 1962 Ninth Grade

The above section described the four year movement of the initial ninth grade population positions. After the initial ninth grade study, a total of 44 new girls were added, although many did not remain until the final twelfth grade study. Yet, the interaction between them and the remaining population undoubtedly influenced the final configurational picture of the senior year social system. This section will pinpoint the remaining 105 ninth grade girls and their senior year interaction with the new girls who joined the social system as tenth, eleventh, or twelfth grade students. Figure 12 presents the 1965 girls' positions in 1962.

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[1]Coleman, _op. cit._, p. 48-49.

Figure 12. Reciprocal Friendships of the Twelfth Grade Girls in One High School Senior Class of 1965 With Ninth Grade Reciprocal Friendship Position Indicated for Each Girl

As shown in Figure 12, only three of the 20 senior year isolates were new students, two added as sophomores and one as a junior. Thus, 17 of the senior year isolates were members of the initial social system. They include five from RFS 102, two from RFS 107, and one each from RFS's 104, 116, 110, 105, and 108. The last two RFS's lost all other personnel by out-migration. Only two isolates were also isolates as freshmen. Three were in mutual pairs, and two formed a reciprocated mutual pair with one another.

Five of the twelfth grade mutual pairs were formed with one, or both, members new to the population after the ninth grade study. They included one sophomore-junior combination (200-300) and one totally senior (400) mutual pair. It is interesting to note that none of the "new" senior girls were isolates, which is a different pattern from the between year additions. The three original population girls who formed mutual pairs with new girls included two who were in RFS 110 and one who was a member of RFS 116. Of the three mutual pairs formed entirely from ninth grade members, only one drew membership from the same RFS. Respondents 119 and 042 were members of RFS 107; but they were not dyadic mates as freshmen. Respondents 075 and 091 represent a coalition of an RFS 102 member with an RFS 107 member. Number 025 and number 031 were an RFS 112 member and a mutual pair member whose dyadic mate left the social system.

Only three small senior year RFS's were composed entirely of ninth grade population members. They are RFS's 414, 401, and 427. Each contains dyads remaining from 1962. RFS 414 contained a dyad from RFS 114 plus a member from RFS 106. RFS 427 was formed by a dyad

from RFS 107, a member from RFS 107, and a member from RFS 111. RFS
401 was composed of a dyad from RFS 101, a dyad from RFS 102, and a mem-
ber RFS 102. It included the largest segment of membership remaining
intact from both RFS 101 and RFS 102; but the number 401 was chosen to
avoid confusion with the many derivations of RFS 102 and to denote the
continued presence of a predominantly low social class group. RFS
101 was lower social class, while RFS 102 was largely middle and upper
social class in composition.

Other small RFS's which contained dyads intact from their fresh-
man year include RFS's 477 and 422, derivations of RFS 107 and RFS 102,
respectively. RFS 477 was formed by three dyads from RFS 107, plus a
single member from RFS 107. One member of RFS 477 was a mutual pair
member whose dyadic mate migrated from the social system. The remain-
ing member was a tenth grade addition. RFS 477 had the highest mean
social class score of any twelfth grade RFS. RFS 422 contained one
dyad from RFS 102, one member from RFS 107, one member from RFS 109,
and one tenth grade new girl. Like RFS 477, it had only one middle
social class member, but the overall mean score was several points lower
than RFS 477. A return to Tables IV through VII will facilitate a
comparative view of the social class means.

Two small twelfth grade RFS's did not contain dyads from the
ninth grade. In fact, their memberships were diversely drawn. RFS
460 was composed of three new twelfth grade students plus one girl from
RFS 112. With one exception, her freshman year peer mates remained in
the senior year population. The other RFS without dyads remaining from

the ninth grade, RFS 452, contained two new eleventh grade girls and three ninth grade members. The remaining ninth grade members were, in their freshman year, an isolate, a member of RFS 111, and a member of RFS 113, respectively.

The three large RFS's in the twelfth grade have been characterized as differentially open and closed sub-systems of the social system. RFS 407 and its derivations, RFS 477 and RFS 427, included a number of the original RFS 107 members. The patterning of group additions was also similar for all three sub-units. One member of RFS 427 was drawn from RFS 111. One member of RFS 407 also was drawn from RFS 111. One member of RFS 477 was a tenth grade addition and immediately became a member of the RFS 107 "complex." The same pattern holds true for one tenth grade addition to RFS 407. However, the other tenth grade addition to RFS 407 was an isolate in her sophomore and junior years before achieving membership in RFS 407 in her senior year. The third new student in the relatively closed system of RFS 407 and its derivatives was a twelfth grade addition, possibly a returnee to the social system. Of the remaining RFS 407 members, eight, almost one-half of the total membership, were together in RFS 107. This portion includes a continuation of four original dyads. The two senior year members who were isolates in their freshman year made choices into RFS 107, but were not chosen by RFS 107 members. Thus the positions of all the RFS 407 members are established with the exception of 035 who was a member of RFS 103. She shifted along with all her ninth grade peer mates as a cluster into RFS 202. The next year, she shifted from the cluster into RFS 307.

It is interesting to note that the one RFS 407 unreciprocated choice directed to an RFS 432 member came from one of the girls who had previously interacted with RFS 202. The girl making the unreciprocated choice was a peripherial member of RFS 407 and may have perceived her position to be a tenuous "hanging on" as she seeks mobility into the "leading crowd." As previously mentioned, the interaction between the "7 complex" and the "2 complex" was very limited.

The question which arises concerning the three derivations of RFS 107 which remained in the twelfth grade stems from a speculative attempt to order the groups along value dimensions. While a definitive analysis of the value systems is not a function of this study, some tentative leads may be offered. RFS 427 was composed entirely of middle social class girls who, with one exception, had D grade point averages. RFS 477 contained only one high middle social class girl, and the upper social class girls' social class scores pulled the mean group social class score to the highest social class mean for the entire population. The group's academic achievement was average ($\overline{X}$ Grade point average = 2.87, based on a 4 point rating for an A), containing all C, or B bordering toward C, averages, skewed by a peripheral member with an A average. The dominant RFS 407 had a high upper social class mean score which was skewed by one person. It had a middle to low C academic grade point average with only two B averages in the entire group. ($\overline{X}$ Grade point average = 2.63). Thus, it would seem that RFS 477 was higher in social class and academic rank than RFS 407, while RFS 427 was lower in social class and academic rank. RFS 407 continued to dominate in popularity and dress in the twelfth grade. RFS 477 received a few "best

dressed" and "most popular" choices, whereas RFS 427 received "not

dressed right" choices. (See Figure 8) Thus, the hierarchial order-

ing of RFS 427 in third place continues into the realm of dress as

well as lower social class and academic ranks.

The closed character of RFS 107 and its derivatives and the

obvious upward social mobility which it represents is emphasized by

the fact that, while a few members who interacted through RFS 102

and the RFS 117-113 coalition successfully moved into the "7 complex,"

no RFS 107 members were located in either RFS 432, RFS 452, or the RFS

417-413 coalition. There was, however, one RFS 107 member in RFS 422.

RFS 422 had a higher mean social class score than RFS 432 or RFS 417.

Thus, if social class was the main mobility channel into the RFS 407

complex, then it seems logical to assume that RFS 422 was somewhat

higher in prestige than the larger groups, RFS 432 and RFS 417. How-

ever, this can be nothing more than sheer speculation.

An additional speculative evaluation of the hierarchical order-

ing of the RFS 407 complex, the RFS 402 complex, and the RFS 417-413

coalition stems from the influence of town and university interplay.

The RFS 407 complex contained a few members whose parents were univers-

ity affiliated, three in RFS 407, none in RFS 427, and three in RFS 477.

The RFS 402 complex had more members whose parents were university

affiliated, six in RFS 432, one in RFS 452, and four in RFS 422. Since

RFS 422 was a five person group, the clustering of four members whose

parents were university affiliated may be the value norm for group

formation. This clustering seems to be the key when academic achieve-

ment is included in the picture. All of the girls had high B to A

averages ($\overline{X}$ Grade point average = 3.50). Perhaps the majority of the

girls holding positions in RFS 422 did not desire membership into the

"social elite," or seemingly upward mobility, but perhaps the former

RFS 107 member desired mobility into an "intellectually elite" group.

The dominant derivation remaining of the "2 complex" is RFS

432, the largest sub-unit of the senior year complex. Of the 28 mem-

bers, only six had parents who were university affiliated. All were

upper social class, which seems to indicate high university status for

their fathers. Six RFS 432 members joined the social system after

the ninth grade. There were several RFS 103 members, still clustered

in the same segment of the RFS 432 structure, but rearranged from their

original dyadic clustering. A dyad remained together from RFS 106, a

dyad plus one member from RFS 115, and a dyad plus one member from

RFS 104. The remaining membership was drawn in as single units from

diverse RFS's and isolate positions in the ninth grade. Thus, 15 of

the 28 members were not attached in any fashion to one another in

their freshman year. The remaining 13 were distributed throughout

four groups as clusters in the ninth grade. The conclusion logically

follows that the RFS "2 complex" served as the "melting pot" for the

social system. The melting pot idea also seems to carry over into

academic achievement, with a wide range of grade point averages from

high B to low C, plus two A averages. A wide range of social class

scores complete the picture of value diversification. Perhaps the

appeal which drew members to the RFS "2 complex" was its diversity and

openness.

One large group remains to be explored, RFS 417, described as
a coalition between RFS 113 and RFS 117 members. This included five
stable dyads from the ninth grade, plus an additional stable dyad from
MP_G formed by 049 and 050. Four of the RFS 417 members entered the
social system after the ninth grade. Two came from RFS 104, but became
positioned at opposite ends of RFS 417. The remaining members represented
a collection of isolates and individual mutual pair members. Nine of
RFS 417 members had university affiliated parents, but four were middle
social class, which probably indicates a student position for their
fathers. RFS 417's mean social class score was almost identical with
RFS 432's mean score. Thus, it also seems to be a "melting pot," but
a slightly different type. The basic nucleus stemmed from two rather
than four ninth grade RFS's. The academic achievement of RFS 417 ($\overline{X}$
Grade point average = 2.74), closely parallels RFS 432, a wide range
of low C to high B averages, but four rather than two A averages.

A summary of the senior year group structures seems to reveal
that the culmination of four years of "jockeying for positions" re-
sulted in two types of sub-system complexes, the RFS 7 complex, char-
acterized as a closed sub-system with a hierarchial ordering of individ-
ual RFS's within the complex; and a duality of open sub-system complexes,
the RFS 2 complex, hierarchically ordered like RFS 7 complex but
characterized as an open sub-system, which interacts with a second type
of open sub-system formed by a coalition of RFS 117 and 113 rather
than a hierarchically ordered complex. Two other small closed sub-
groups emerged, RFS 401, the only predominantly lower social class
group which was composed entirely of accurate perceivers, and RFS 460,

the newly formed upper social class group with three members entering

the social system in the twelfth grade.

The accuracy of the open and closed group picture evidently was

perceived by the respondents. The RFS 7 complex made choices either

within the sub-system or into the dominant segment of the complex. All

the out-group unreciprocated choices of RFS 427 were into RFS 407. The

only out-group choices made by RFS 477 were to an isolate who chose into

RFS 477 but was inaccurate in perceiving the right choices to make into

the group. All of RFS 407's out-group choices, with one exception,

went to a single mutual pair which was formerly a member of the RFS 7

complex.

The isolates evidently perceived the pattern of a closed group.

With the exception of the one confused isolate who chose into and was

chosen by RFS 477 members, the remaining isolate choices directed to

groups went to the RFS 2 complex, or the RFS 417-413 coalition. The

isolates who made no choices, but were chosen either were chosen by

other isolates or into the two open sub-systems, not into the closed

RFS 7 complex. Interaction between RFS 432 and RFS 417 is apparent in

the large number of their out-group choices directed to one another.

Only three girls in the entire RFS 2 complex chose into the closed RFS

7 complex. None of the girls in the open RFS 417-413 coalition chose

into the RFS complex. While interaction between the dominant RFS 432 and

RFS 417-413 coalition is evident in out-group choices, no choices were

directed toward RFS 417 by the smaller derivations of the RFS 2 complex.

All of their out-group choices, with the three exceptions to RFS 407,

were directed either to the "parent" group or to other RFS 2 complex

derivations. RFS 422 directed choices to RFS 414 and the larger RFS

432. RFS 414 directed choices to RFS 432. The remaining choices

made by RFS 432 went to RFS 417. Thus, the interaction seems to be RFS

2 derivatives into the dominant 2 complex group and dominant 2 complex

group into RFS 417, with the reverse pattern being only RFS 417 to the

"parent" 2 complex group and none toward the smaller derivations of the

2 complex. All other unreciprocated choices were directed to isolates

and mutual pair members. They have not been cited, because the pur-

pose of this summary was to illustrate the point that the population

perceived the opened and closed sub-systems in the social system.[1,2]

Summary of Sociometric Patterns of the 105 Longitudinal Population Members: Ninth Through Twelfth Grades

The structural picture of the longitudinal population has been

treated from two perspectives, beginning and end of positions in the

social system. From both perspectives change is evident through migra-

tion into the social system and migration from the social system.

Stability of membership rests with the 105 girls from the ninth grade

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[1]Elkin and Westley characterized an adolescent sub-culture as a myth. This study does not support their findings that an adolescent sub-culture does not exist, but it does tend to coincide with their ideas that adolescents do not all conform to the same values. Clearly there is not blanket conformity, or a single sub-culture. Rather, there is a network of sub-cultural complexes, based on positive and negative group esteem, and tending to coincide with social class status of their parents. See, Frederick Elkin and William Westley, "The Myth of Adolescent Culture," American Sociological Review, Vol. XX (1955), p. 684.

[2]The girls' perceptions, plus the findings from the data analysis, seem to support Parson's idea that, as the adolescent moves into the high school culture there emerges a "much sharper prestige-stratification of informal peer groupings with indeed an element of snobbery which often

population who continued through to their senior year. Thus, the re-

maining question concerns the patterned shifting positions of the four

year population members as they continually interacted within the social

system. It was hypothesized that the girls would shift from group to

group as individuals, dyads, and dyadic clusters of ties. This section

will explore the stable members' patterns.[1]

Fifty-three girls had recognizable patterns in the dominant RFS

complexes described in the previous section. They moved as individuals

and clusters of girls. Table XX contains their RFS patterning, grouped

by clusters of movement. Only three girls were "pure" RFS members,

two in RFS 117 and one in RFS 107. The remaining girls moved through

the following complex patterns, RFS 107 complex, RFS 102 complex, RFS

102-107 interaction, and RFS 117-113 coalition. A few girls in all of

the complex patterns withdrew as an exclusive dyad, or mutual pair, dur-

ing one of the four years. Only two girls withdrew as isolates during

the four year patterning. Three 200 numbered girls, indicating tenth

grade entrance into the population, are included in Table XX because

they had a patterned position for the three years after they joined the

social system. All other new girls added after the ninth grade were in

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exceeds that of the adult community in which the school exists." Talcott
Parsons, Social Structure and Personality (Glencoe, Ill.: The Free Press,
1964).

[2]Table 9, Appendix A, contains a four year summary of all the 196
girls' positions.

Table XX. Four year summary by RFS complexes of the recognizable socio-
metric patterns among the girls with continued membership in
one high school senior class, 1965

| | Four Year RFS Pattern | | | |
Respondent Number by complex:	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
RFS 7 complex:				
016	107[a]	227	MP	427
019	107	207	307	407
036	107	237	337	407
038	107	207	367	407
039	107	MP	307	407
043	107	207	307	I_1
089	107	207	367	407
094	107	227	MP	427
114	MP	237	337	407
115	MP	207	307	477
121	107	237	337	407
122	107	MP	307	407
125	107	207	307	477
126	107	207	307	407
205	237	337	407	-[b]
206	-[b]	207	307	477
042	107	MP	347	MP
119	107	MP	347	MP
RFS 7 complex interaction with RFS 2 complex:				
086	107	202	307	477
087	107	202	307	477
088	107	202	307	477
118	107	202	307	477
091	107	222	347	MP
093	107	222	347	407
RFS 2 complex:				
090	106	202	322	402
084	106	202	302	432
130	106	202	302	414
134	114	202	302	414
135	114	202	302	414

Table XX--<u>Continued</u>.

Respondent Number by complex:	Four Year RFS Pattern			
	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
141	115	202	332	432
068	115	202	332	432
129	115	202	332	432
081	103	202	302	432
082	103	202	302	432
083	103	202	302	432
100	14	202	302	432
012	102	202	MP	432
044	102	202	MP	432
062	102	202	322	401
139	109	202	322	422
060	102	202	322	422
061	102	222	322	422
216		222	322	422
RFS 117-RFS 113 coalition:				
050	MP	217	317	417
056	117	217	317	417
059	117	217	317	417
148	117	I3	317	417
022	112	217	317	417
065	113	213	333	417
099	MP	213	333	417
067	113	213	313	417
069	113	213	313	417
070	113	213	313	417
078	113	213	313	417

[a]Key: Reciprocal friendship categories: Numbers refer to RFS number; MP, mutual pair; I, isolate.

[b]Not present.

mixed categories, moving through several RFS's and/or isolate and mutual

pair categories.

Movement through several categories was characteristic of the

remaining 52 girls who continued from their freshman through their

senior years. Thus, approximately fifty percent of the 105 continual

social system members experienced diverse friendship positions over

the longitudinal study. Their patterns are summarized in Table XXI.

The patterns include girls who moved through several RFS's as well as

girls who were positioned in diverse categories. The table is arranged

to present the clusters of shifting positions as follows: Only the first

seven girls at the top of the table interacted through the RFS 7 com-

plex, continuing the illustration of its closed character. The re-

maining girls down through the table to the four year isolate, inter-

acted through the 2 complex and the 117-113 coalition. Below the 4

year isolate, the girls' patterns are extensively mixed; a specific

group pattern is not evident.

Although it is not the primary function of this study to consider

individual choice status, excluding reciprocity of choices, a few cases

will illustrate changing friendship choice status as related to specific

group positions. Returning to Chapter VI, Figures 7, 8, 9, and 10,[1]

which show choice status superimposed on structure; a few illustrative

cases are drawn from the RFS complexes which dominate the longitudinal

picture. The following cases illustrate increased friendship choice status.[2]

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[1]Supra, pp. 103, 104, 106 and 107.

[2]See Tables 10 and 11, Appendix A, for a complete distribution
of choices for all girls.

Table XXI. Four year summary of the shifting sociometric patterns among the girls with continued membership in one high school senior class, 1965

Respondent Number	Four year Sociometric Pattern by RFC Ninth Through Twelfth Grades			
	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
123	107[a]	MP	307	I_4
095	107	I_2	I_2	427
026	111	I_3	I_3	427
037	111	207	I_4	407
027	111	MP	302	442
035	103	202	307	407
040	I_2	202	302	407
120	I_2	202	307	407
142	107	219	I_4	422
033	104	204	MP	432
046	102	202	MP	I
075	102	222	I_3	MP
113	I_3	MP	302	442
151	I_4	202	MP	432
147	I_2	202	I_4	432
055	109	202	322	417
009	113	220	333	417
017	I_3	213	I_4	432
018	I_3	213	302	432
066	113	MP	I_2	442
074	102	213	332	I_3
076	102	213	332	I_4
077	102	213	332	I_4
114	114	213	332	432
050	I_4	217	330	417
149	I_3	I_3	317	417
071	110	205	330	417
025	112	205	335	MP
028	110	205	335	432
104	105	205	305	I_4
105	I_2	205	I_4	I_2
031	MP	205	335	MP

Table XXI--<u>Continued</u>

| Respondent Number | Four year Sociometric Pattern by RFC Ninth Through Twelfth Grades | | | |
	1962 Ninth Grade	1963 Tenth Grade	1964 Eleventh Grade	1965 Twelfth Grade
047	102	202	MP	401
048	102	202	MP	401
106	101	201	MP	401
108	101	202	MP	401
063	102	202	I_1	I_1
117	MP	MP	I_3	I_2
146	MP	I_3	I_1	I_1
133	104	I_4	I_1	I_3
079	I_2	I_2	I_2	I_2
030	110	I_4	I_2	MP
145	MP	205	I_3	I_3
073	110	I_4	305	MP
080	112	204	I_1	432
096	I_2	220	I_4	417
131	104	I_4	MP	432
143	116	216	I_4	432
008	108	213	I_1	I_1
023	112	205	I_2	450
153	104	I_2	330	417
144	116	216	MP	MP

[a]Key: Reciprocal friendship categories: Numbers refer to RFS numbers; MP, mutual pairs; I, isolate.

In RFS 432, number 018 received 9 choices, whereas as a fresh-
man she was an isolate who made no choices but received three. She
was not named as "most popular," "best dressed," nor "not dressed
right" in the ninth grade, but received one "most popular" and one
"best dressed" choice in the twelfth grade. The girl receiving the
largest number of friendship choices in her senior year was number 151,
in RFS 432. She received 10 choices, yet as a freshman she received
only 3 and was a confused isolate. She also was ignored in popularity
and dress choices. Two of the girls in RFS 432 who were named as "most
popular" and "best dressed" in their senior year each received more
friendship choices than when they were freshmen. Number 083 received
8, as opposed to 3 in the ninth grade, whereas number 081 received 6 in
the twelfth and only 3 in the ninth grade. They formed part of the
cluster which moved from RFS 103 into the 2 complex and remained to-
gether the entire longitudinal study. The cluster received almost all
of the popularity and dress choices directed into RFS 432, more than
they received in the ninth grade.

The RFS 7 complex offers several cases to illustrate decreased
friendship choice status by members perceived as "most popular" and "best
dressed." In her freshman year number 043 received eight friendship
choices and was a member of RFS 107. By her senior year, she was an
accurate perceiving isolate who made no choices and received none. She
continued to be named as "most popular" and "best dressed," but received
fewer choices in both categories. Number 122 remained a member of the
RFS 7 complex, but decreased in friendship choice status from 9 choices
as a freshman to 4 as a senior. Her popularity choices also decreased

from 30 to 15, and her "best dressed" choices decreased from five to none. The mutual pair, MP_0, which received all except one out-group friendship choice made by RFS 407 illustrates the closed character of the 7 complex and personal decrease of choice status as they withdrew from the RFS. Number 119 received three choices as a freshman and two as a senior. Number 042 received seven in her freshman year and four in her senior year. Thus, three factors emerge: 042 is clearly the most popular of the two, lowered choice status indicates that the RFS members must have had some perception of the pairs' withdrawal from the group, and the three choices which they received from RFS 407 indicate that only 4 out-group choices were made. Each pair-mate continued to receive "most popular" and "best dressed" choices as seniors, which seemingly indicates that they continued to be perceived as members of the "leading crowd" by the larger social system.

The third complex, the RFS 117-113 coalition, also contains examples of decreased and increased choice status but only on the friend-ship question. Very few popularity and dress choices were directed into this complex. In the ninth grade, number 078 received two choices as a member of RFS 117. Number 149 received two choices, but was an isolate in her freshman year. In the twelfth grade, both were members of RFS 417, receiving six choices each. The reverse pattern is illustrated by number 069, who received six choices in her freshman year and four in her senior year. She was a member of the RFS 417 coalition both years. Neither of the three cited RFS 417-413 coalition members re-ceived choices from the popularity and dress questions.

The above illustrations represent the three major complexes

which seemingly are formed upon positive group esteem[1] of the girls'

dress and academic achievement. In opposition, two illustrations of

lower social class girls, respondents 104 and 105, are drawn from the

negatively esteemed RFS. Each received many "not dressed right"

choices in the ninth grade, but only number 105 was named in the

twelfth grade. In her freshman year, respondent 104 received four

friendship choices and was an integral member of RFS 105. By her

senior year she received only one choice from respondent 105, but made

her choices into groups which seemingly indicated her desire for up-

ward mobility. Number 105 received no friendship choices as a fresh-

man and none as a senior. However, in her sophomore year, she became

a member of RFS 205 by virtue of one choice. All of the members of

RFS 105 migrated from the social system except these two girls. RFS

105 was one of the two lower social class RFS's in the ninth grade.

The second, RFS 401, continued, and respondent 105 directed her remain-

ing unreciprocated choices into this group. Thus, it would seem that

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[1]The idea of positive and negative esteem, or honor, was drawn
from a report of the research findings in a midwestern community. Cloth-
ing as a symbol of social status was a central postulate of the study.
According to the researchers, "the members of both status groups and
aggregates derive a certain solidarity producing dignity from the way
in which they respond to either their positive or negative honor in a
community or to the status arrangement as a whole." Gregory Stone and
William Form, "Instabilities in Status: The Problem of Hierarchy in the
Community Study of Status Arrangements," in Kimball Young and Raymond
Mack, Principles of Sociology (New York: American Book Co., 1965), p.
113. The current population seems to be ordered in status groups rather
than aggregates; and the girls in the RFS's were differently evaluated
by their peers, some RFS's positively esteemed and others negatively
esteemed.

she illustrates the realistic appraisal with which most of the girls
perceived their potential interaction level. Her choices were en-
tirely directed toward her social class equals. Number 104, on the
other hand, had a middle social class rank, but her interaction prior
to the twelfth grade had been with lower social class girls. Perhaps
her rejection of number 105 stemmed from an intellectual, not social
class,value. Number 105 had a low grade point average, whereas number
104 had a high grade point average. Respondent 104's unreciprocated
choices in her senior year were into the 2 complex and the 417-413
coalition, both characterized as higher academically, but lower social
class than the 7 complex.

Two cases are chosen to illustrate mobility through the
groups. Number 120 was an isolate who received no friendship choices
in her freshman year. She moved through the 2 complex into the 7
complex. In her senior year she received three choices, all made by
her membership group, RFS 407. Number 142 illustrates opposite move-
ment from the 7 complex into the 2 complex. She received three friend-
ship choices in the ninth grade as a member of RFS 107. In the twelfth
grade, she was a member of RFS 422, receiving two choices. RFS 422
had been characterized as the "intellectual elite," having all A aver-
ages. It would seem that changing interests from social to academic
emphasis might account for her mobility pattern. She was not named
as "most popular" or "best dressed" in her freshman year when she was
a member of the "leading crowd." Her twelfth grade group received no
choices as "most popular" or "best dressed," nor were they named as "not
dressed right."

Summary

Three factes of patterned change have been discussed to satisfy
the question of how change occurred. In general, the structures
changed from ninth to twelfth grades for several reasons: loss of
positions and creation of new positions by out-migration and migration
into the social system, and shifting internal positions of the stable
four year membership. These changes occurred by individuals, dyads,
and clusters of dyads. The movement was in a recognizable pattern which
resulted in the emergence of three general structural sub-systems, the
RFS 7 complex, characterized as a highly closed group; the RFS 2 com-
plex; and the RFS 117-113 coalition, both characterized as open groups
with the out-group unreciprocated choices indicating interaction be-
tween the two sub-systems. Most of the stable membership could be traced
as interacting through the three sub-systems at some time during the
four year study. In fact, fifty percent could be traced as interacting
within a dominant complex all four years. Only one girl was a four year
isolate. She was "average" in social class, grades, and club member-
ship, and ignored in popularity and dress choices, including "not
dressed right" choices.

Although it was not a primary function of this study to consider
the value system of the social system, certain aspects were drawn in
to illustrate "hunches" which may lead to future hypotheses. An ex-
ploration of the differential social class and academic achievement
seemed to indicate a hierarchical ordering of the three sub-systems.
The RFS 7 complex ranked higher in social class and popularity. Within

its closed sub-system, the three twelfth grade groups seemed to be
ordered, with RFS 477 higher in social class and grades than the "parent"
RFS 407, and RFS 427 lower in both aspects. RFS 407 clearly emerged
as the "leading crowd" based on popularity and dress in ninth and twelfth
grades. It was lower academically, however, than either of the other
dominant complexes.

Both the RFS 2 complex and the RFS 117-113 coalition had an
open group character, but it took two forms. The RFS 2 complex was a
true "melting pot" for several small RFS's, plus diverse individuals.
RFS 117-113 was a coalition,plus individuals. Based on social class and
academic rank, the RFS 2 complex was somewhat higher in prestige than
the RFS 117-113 coalition. However, the difference was minor. One seg-
ment of the 2 complex, RFS 432, the main complex unit, received some
popularity and dress choices. The girls were a cluster moving into the
2 complex from RFS 103. The RFS 2 complex also contained a true "in-
tellectual elite," RFS 422, whose members all had A grade point aver-
ages. With one exception, their parents were university affiliated.
The university affiliation of parents carried over into the dominant
segment, RFS 432. It was also indicative of some members in the RFS
417-413 coalition. The RFS 7 complex contained few members whose
parents were university affiliated.

In opposition to the three dominant sub-systems, a fourth
small sub-system emerged and continued over the four years. This sub-
system appeared to possess characteristics which were negatively
evaluated, that is, unacceptable, by social system norms,low social

class,and poor dress. In the ninth grade there were two RFS's with these characteristics, RFS 105 and RFS 101. By the twelfth grade, only one remained, RFS 401. The loss was due largely to out-migration, including five of the eight known "true" school dropouts for the entire longitudinal study.

One other area of interest was partially explored to satisfy another series of "hunches" which are not formally an aspect of this study. The choice status of individuals as derived from two socio-metric questions, the friendship questions and the popularity and dress questions were considered as they related to structural patterns based on reciprocated choices. Illustrative cases were drawn from the discussion in Chapter VI. The results showed that choice status based on friendship and popularity and dress changed for members of the major sub-systems and of the minor sub-system. In some instances, structural category placement also changed from isolate to RFS, or mutual pair membership, or variations of the three basic social acceptance categories used in this study. Clearly the results indicate that answers to a question which emplants an interaction framework in the respondent's thought process are different from answers to a social visibility question. It also illustrates the false results obtained from an interaction based question analyzed in a social visibility context. Friendship was perceived quite differently from popularity by the respondents in the study.

This chapter has drawn together the final aspects of the analysis encompassed in the study. It also discussed illustrations from the larger study framework which included the value systems of the girls as well as the structural picture of how the girls interacted in their informal friendships within the formal social system of the school. The final chapter, Chapter VIII, will summarize the research design and the resulting findings, followed by conclusions drawn from the findings, recommendations for further analysis of the current project data, and recommendations for future research.

CHAPTER VIII

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND CONTRIBUTIONS

The socialization process which molds new born individuals into social beings is important to every society for survival beyond a single generation. In a complex, industrial society, socialization becomes a longer process, holding youths in a formal educational system for the extensive training necessary to fulfill highly specialized, functionally requisite work roles. Due to the increased time spent in formal education, American adolescents have been characterized as forming a unique sub-culture in which they band together in informal peer groups. Their peer groups function as an important socialization agent tied to both adult socialization agents, the family and the school.

The concern of this study was to investigate change and stability longitudinally in informal adolescent peer groups within the formal school organization. It also investigated the importance of family social class ranking as influential in formulating informal adolescent peer groups. The research design embraced the three independent variables, time, social class, and social acceptance, from a larger research project designed to investigate adolescent girls' opinions concerning dress, social acceptance, and related factors.

An entire population of adolescent girls, members of the Class of 1965 at a midwestern suburban high school, was traced from their

1962 entrance in the school social system as ninth graders through their 1965 senior year. The longitudinal population contained 196 girls, with loss and replacement each year; this number included 154 ninth graders, 155 tenth graders, 143 eleventh graders, and 138 twelfth graders. One hundred and five of the initial 154 girls remained throughout the four year study. The chosen research setting, according to dominant state patterns, is an atypical community. As a whole, residents are younger, more geographically mobile, better educated, and follow better occupations with higher income than the state medians along these variables. However, the community contains social class extremes, an important consideration in selecting the study location. The situation offered an opportunity for a comparative study of the interaction, or lack of interaction, between social class extremes. The community also was easily accessible for the researchers, a factor which proved valuable in the longitudinal investigation.

Data for this study were obtained from the responses to the questions contained in two instruments developed for the larger project. A background questionnaire, administered each year in February when the girls were ninth, tenth, eleventh, and twelfth graders, contained questions which elicited the information for the social class and social acceptance analysis. Interviews, designed to obtain the girls' opinions concerning general acceptance, clothing, and appearance, were administered in their freshman and senior years. Data from the interviews have been incorporated briefly in the current study as illustrative points.

Social class was operationally defined by assigning family social class rankings to each girl, using Warner's Index of Status Characteristics. Re-rankings were made each year as necessary, and all rankings were made by the same team according to the intial criteria established in 1962. Following Warner's idea, social class was defined as the status system which orders individuals in higher or lower positions in their social structure.

Social acceptance was defined as a mutual awareness and desire for interaction among the respondents. It was operationally defined by using the near-sociometric information, the girls' best friend choices, to draw a matrix chart and construct a sociogram each year. The same team developed all matrix charts and sociograms by the same method selected for the initial 1962 phase. A classification of social acceptance categories was established. It included two categories of acceptance, or lack of acceptance, reciprocal friendship structures and isolates. The categories were developed using reciprocated choices, or ties, leading to associational patterns, a structural perspective. This classificatory method differs from most adolescent peer group studies which base social acceptance exclusively on choices received, disregarding reciprocity. The isolates, unchosen individuals, or individuals who did not choose, were included to give a complete picture of the entire peer group patterning. Moreover, one special sub-category of reciprocated friendship structures was designated: the mutually exclusive dyads, or mutual pairs. An exclusive group of two has only one tie to create continuity, or discontinuity if broken, whereas larger groups have

more chances for continuity. Therefore, the mutual pairs were treated

as a special type of RFS and discussed as a separate category.

Five major hypotheses, each containing a series of sub-hypotheses,

were formulated from the overall hypothesis that structural patterns will

change when reciprocity is considered and remain stable when reciprocity is

excluded. They were designed to explore whether and where, i.e.,

at what structural levels, change occurred and to investigate the im-

portance of social class in peer group formation.

The first hypothesis stated that parental social class rank will

influence an adolescent's sociometric position. Approximately one-third

to one-half of the yearly RFS's contained members with diverse social

class scores. However, the majority were skewed by only one person's

markedly deviant score. Therefore, the data tend to support[1] the hy-

pothesis developed from the thesis offered in stratification literature.

The adolescent girls tended to form their peer groups according to the

social class stratification which they shared with their parents. That

is to say, parental values instilled in the early family socialization

process seemed to influence the girls' friendship choices.

The second hypothesis stated that the populations' peer group

friendship patterns will exhibit more change than stability over a four

year time span. Specifically, the disappearance of 1962 RFS's and

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[1]A formal acceptance, or rejection, of the hypotheses is not
possible because the data were not amenable to the use of inferential
statistics.

subsequent creations of new RFS's, would leave few ninth grade RFS's remaining in the twelfth grade. An increase in RFS sizes would lead to fewer RFS's in the twelfth grade than in the ninth grade. There would be few configurational patterns present in the twelfth grade which were present in the ninth grade. The cohesion among the individual RFS's will increase from the ninth through the twelfth grade, And each year the small RFS's would be more cohesive than the large RFS's.

All sub-hypotheses were supported, with one exception. Cohesion decreased among the individual RFS's, a factor supporting the idea presented by Kretch, Crutchfield, and Ballachy and refuting Hallworth's research finding.[1] That is to say, there is an inverse relationship between size and cohesion. Cohesion does not increase as group size increases because, in the larger groups, members in one part of a communication network may not touch all members in another part. Therefore all possible ties are not created and cohesion as measured by reciprocation is lowered.

The third hypothesis was formulated from the overall hypothesis that findings differ between studies basing social acceptance exclusively upon number of choices and studies incorporating reciprocated relationships to determine social acceptance. Little change in the number of respondents in each reciprocal friendship category was hypothesized. Specifically, the isolates and reciprocal friendship structures, including dyads and mutual pairs, were hypothesized as exhibiting little change. The hypothesis and sub-hypotheses were supported with two

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[1]Supra, p. 39 for a discussion of the two views.

exceptions. In the tenth and eleventh grades the number of isolates increased. In the tenth grade there were fewer mutual pairs, whereas in the eleventh grade there were fewer RFS members. The eleventh grade shifts with more isolates and fewer RFS members support Gordon's finding for his eleventh grade group,[1] i.e., excessive clique closure left many unchosen members. The data did not, however, support Gordon's twelfth grade findings. Mutual pairs did not absorb isolates. In fact, the number of mutual pairs and isolates remained closely parallel to the number in the ninth grade.

Although this study focused primarily on reciprocated relationships, the overall hypothesis for the study involved the difference in social acceptance exclusively based on number of choices received and social acceptance derived from reciprocated choices. Therefore, a fourth hypothesis was developed to investigate the difference when choice status disregarding reciprocity was superimposed on the RFS structures constructed from reciprocated choices. The difference in findings by the two sociometric techniques for analysis became immediately apparent regarding two types of sociometric questions in the interviews, the friendship question with an interaction framework and the popularity and dress questions with a social visibility design disregarding reciprocity.

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[1]Supra, p. 18 for a discussion of Gordon's findings.

Individual choice status for the friendship question did not coincide with group membership. For example, individuals with high choice status were dispersed among the RFS's, and the same pattern emerged for individuals with low choice status. Moreover, some isolates received more choices than some peripheral RFS members who were attached to their group by one reciprocated choice.

A different pattern emerged for the popularity and dress choices. The predominant number of "most popular" and "best dressed" choices were directed into one RFS, whereas most of the "not dressed right" choices were directed into another RFS. In addition, there were also isolates who received "most popular" and "best dressed" choices as well as isolates who received "not dressed right" choices. In other words, the popularity and dress choices seemed to be directed into certain structures rather than dispersed throughout all structures as the friendship choices were.

The final hypothesis based on reciprocity considered the girls' changing memberships, defined as positions forming the structures. Membership in each reciprocal friendship category was hypothesized as exhibiting more change than stability, including the isolates and reciprocal friendship structures. Change was evident at every structural level stated in the sub-hypotheses; therefore, the data tended to support the membership hypothesis.

After change was established at every hypothesized level, an analysis of the data was made to determine how the change occurred, and to establish the stability present longitudinally. Several factors

seem to account for the changing positions: migration into and out of the school, internal shifts within individual RFS's, shifts between reciprocal friendship categories and individual RFS's, and splitting and recombining of RFS's.

Only one girl remained an isolate all four years. She was characterized as "average" in social class rank, grades, and club membership, and ignored in popularity and dress choices. None of the freshman year mutual pairs remained in the senior class; most were lost because the members out-migrated. That is to say, the entire dyadic unit, or one dyadic-mate, was lost through a residence change which placed the girls outside the school district.

The shifting internal positions of the stable four year member- ship occurred by individuals, dyads, and dyadic clusters. A recog- nizable pattern of movement emerged. In fact, most of the stable mem- bership could be traced as interacting through three of the four sub- systems which evolved over the longitudinal study. The three dominant sub-systems, the RFS 7 complex, the RFS 2 complex, and the RFS 17-13 coalition, seemed to reflect positive group esteem, whereas the fourth sub-system, composed of RFS's 1 and 5, seemed to reflect negative group esteem. In fact, a hierarchical ordering of the sub-systems according to selected variables was definable. Some seemed more closely aligned to dominant norms than others. The ordering emerged as follows:

The RFS 7 complex, a closed sub-system, ranked higher in social class and popularity. Moreover, there was a within-complex ordering of RFS's according to social class, popularity, and dress norms. It

ranked lower academically, however, than either the RFS 2 complex or the RFS 17-13 coalition.

The RFS 2 complex and the RFS 17-13 coalition were open subsystems with some interaction between them. While they were closely parallel in characteristics, the RFS 2 complex appeared to rank somewhat higher in social class and academic achievement than the RFS 17-13 coalition. The RFS 2 complex also received some popularity and "best dressed" choices, whereas the RFS 17-13 coalition received none. Both contained more members with university affiliated parents than the RFS 7 complex. In fact, the small RFS in the 2 complex which had the highest academic achievement among the RFS's in the population was composed predominantly of members whose parents were university affiliated. It was characterized as the "intellectual elite," whereas RFS 7 was characterized as the "social elite," or the "leading crowd." This coincides with the emergence of intellectual and social elites in the Gordon study.[1] However, unlike Gordon's findings, the social elite was present in the ninth grade rather than formed later.

Perhaps the difference in the Gordon findings and the current findings stems from a town and university distinction within the community, a situation not present in the Gordon study. The "social elite," formed in elementary school, was characterized as composed predominantly of town girls. Unlike university affiliated professionals, geographic mobility is less prevalent for doctors, lawyers, and business owners.

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[1]Supra, p. 17 for a discussion of Gordon's findings.

Therefore, once established they remain stationary and allow stabilized friendship circles to emerge among their children. The university affiliated parents are geographically mobile due to sabbatical leaves and changing universities as occupational mobility occurs. Geographic mobility might be the explanation for the open character of the RFS 2 and RFS 17-13 complexes as opposed to the closed character of the RFS 7 complex.

Different factors seem apparent in the formation of the fourth sub-system which emerged. The fourth small sub-system, RFS's 1 and 5, contained girls who had the characteristics of low social class, poor dress, and lower academic achievement which did not coincide with dominant norms. Only one of the two RFS's remained in the senior year study, RFS 401. Sub-system loss by out-migration included five of the eight known school dropouts during the entire longitudinal study.

Along with incorporating some aspects of the population's value system as related to structural formations, a comparison was made of selected individual respondents as related to structural formation along certain value dimensions. Individual choice status, derived from two sociometric questions, best friend choices and popularity and dress choices, was considered in relationship to structural patterns based on reciprocated best friend choices. Cases chosen for illustration showed that choice status changed for the selected members of the four RFS complexes which emerged, including friendship choice status and popularity and dress choice status. In some cases, the changes included shifts from one category in the social acceptance classification based

on reciprocity to another category as well as changing choice status
excluding reciprocity.

The findings illustrate that analysis of a sociometric question
eliciting an interaction framework yields findings inconsistent with
the findings obtained when the method for analysis excludes reciprocity.
The friendship question automatically created an interaction framework
in the respondents' minds and they responded in this regard. Analyzing
an interaction question excluding reciprocity does not accurately use
the information which the question elicited. Choice status may change
without a change in membership group, or membership group may change
without a change in choice status. Moreover, shifts from group member
to isolate may occur without a change in choice status. Thus, a person
may continue to receive choices, but not make choices and therefore
be excluded from a structured group.

A second point illustrated in the choice status questions is the
fact that a sociometric question can be legitimately designed which
does not lead to interaction perception by the respondents, and their
responses to such questions form a different pattern than responses to
a question designed with an interaction context. The popularity and
dress choices were directed into certain groups by the girls disregarding
their own position in the population. In other words, the RFS 1 and 5
sub-system girls directed some popularity and dress choices into the RFS
7 complex, and the RFS 7 girls directed "not dressed right" choices into
the RFS 1 and 5 sub-system, although the girls did not perceive them-
selves as members of the RFS into which they directed popularity and
dress choices.

A special strength of the findings stems from the longitudinal perspective in the research design,because it allowed the researchers to study the emergent patterning of a group in an open social system. As Gordon stated, "each group has certain unique features in its history affecting its development."[1] To study all four grades in a single time analysis does not allow the researcher to explore individual group characteristics which may emerge. A time sequence analysis facilitates the exploration of certain sociological variables as they may influence the organization-disorganization cycles of a specific group. This analysis becomes especially important in an open social system whose membership may change extensively through geographic mobility.

The current time sequence analysis explored the emerging RFS complexes and allowed the researchers to pinpoint more accurately the presence of positively and negatively esteemed groups with their differing organization-disorganization cycles over the four years. Furthermore, the time sequence analysis showed that only one girl remained an isolate all four years. Patterning of group integration of the other isolates gave insights about the differing modes of acceptance, i.e., the types of RFS's into which the isolates were drawn, or, conversely, the types of RFS's from which isolates withdrew, or were excluded. The data did not allow an accurate decision concerning which alternative was present, withdrawal or exclusion.

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[1]Wayne C. Gordon, The Social System of the High School (Glencoe, Ill.: The Free Press, 1957), p. 81.

General Conclusions and Implications

Several conclusions have been implicitly drawn throughout the research discussion. Apparently there is a difference between adolescent behavior findings when sociometric data are analyzed in the framework of an adult controlled situation and findings when sociometric data are analyzed to place adolescents' positions in their informal peer groups formed outside adult control. A structural category in the classification system of the formal school institution randomizes structure in the informal adolescent peer group system. Adolescent behavior in a given grade or classroom does not indicate informal peer group behavior outside the formal school structure. In other words, they may work with students with whom they have no desire for social interaction. Formal school structure studies yield information concerning behavior in the adult controlled situation. But a sociometric question yields only the answer to the structured question and the findings cannot be used to explain phenomena found in a different structural context.

A second conclusion stems from taking data obtained through sociometric questions structured to elicit an interaction based answer and analyzing the data with total disregard of reciprocity. Social acceptance based exclusively on choice status does not yield the same findings as social acceptance based on reciprocated relationships. This inaccuracy is a weakness of the Cannon study,[1] which analyzed friendship choices excluding reciprocity. The current study has shown, however, that it is

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[1]Kenneth Cannon, "Stability of Sociometric Scores of High School Studies," Journal of Educational Research, LII, No. 2 (October, 1958).

possible to design a sociometric question which does not imply an interaction framework. The findings from the two approaches, choice status and reciprocated choice question designs and analysis, indicate that questions designed within the alternative frameworks tap different dimensions of adolescent behavior and therefore expand the theoretical knowledge of adolescent behavior. However, they also show that the sociometric question must be designed according to the desired findings and the obtained data must be analyzed according to the perspective defined in the question. Moreover, unless both criteria are satisfied, the findings may lead to erroneous conclusions.

One problem confronting sociometric analysis concerns the use of inferential statistics to allow greater generalizing from the findings. This seems to contribute to the false conclusions in sociometric analyses of adolescent peer groups. A sociometric question automatically limits the group into which a person makes choices, i.e., it defines a population parameter which limits the usage of statistics to correlations and other descriptive measures such as ratios and percentages. Because a population is established, inferential statistics are meaningful only in generalizing to the same population over time, or to populations with the same characteristics. In a closed social system, such as the Jennings' girls training school study,[1] the population may remain highly stable and thereby satisfy the assumption of repeated measures on the same population. The same pattern may hold true for a slowly changing rural population such as the population in the Cannon

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[1]Supra, p.10 for a discussion of Jennings' study.

study.[1] However, the assumption of a stable population over time cannot be satisfied in an open social system whose membership consists of highly mobile residents.

A second statistical assumption, the normal distribution, cannot be satisfied when the sociometric question concerns friendship choices, work choices, popularity, or appearance choices. The question automatically elicits data which form a skewed population distribution along the measured variable.

To rank order the respondents exclusively on choice status does not give a necessarily valid social acceptance picture. An equal number of choices to two individuals may not indicate equal group acceptance. Acceptance may be into a sub-group based either on positive esteem or negative esteem according to the group norms. Isolation also takes many forms; some isolates have characteristics which are positively evaluated, whereas others have characteristics which are negatively evaluated by their peers. There are also isolates whose status is by self-design rather than by group rejection. The current data need further exploring to see whether or not variables which might explain this differential evaluation can be isolated.

One additional factor concerning statistics develops from the fact that a sociometric question automatically creates an artificial population parameter when it asks questions about informal peer group relationships in an open social system. Obviously data are obtained only from the respondents "caught" in the social system. Questions about

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[1]Cannon, op. cit.

friendships outside the sociometrically tested group can be used, however, to evaluate informally the degree of interaction external to the group and are therefore valuable, especially with geographically mobile adolescents whose social circle is expanding rapidly. While a formally defined population within the adult controlled formal school organization may include all members, it taps only one dimension of adolescent behavior. Sociometry is a highly purposive research technique and yields data only in accord with the specific sociometric questions asked. Therefore, an artificial population parameter, while including only the "caught" members of informal adolescent peer groups free of adult control, taps an entirely different dimension of adolescent behavior.

One further conclusion concerning the difference in formal school structure and informal peer group structures emerged. Adolescent peer groups have been characterized in the literature as forming along familial social class rankings. When adolescent behavior is considered within the formal school structural classification, that is to say, the group is treated as a single class unit and not in informal peer group categories, social class ranking as a variable is "randomized" out of the picture. If social class is a major basis for peer group formations, i.e., structural formations, such randominzation may account for the high but varied correlations; or populations which have social class homogeneity may introduce an unrecognized controlled variable. Several questions emerge: Is an adolescent sub-culture really a myth as Elkin and Westley suggested?[1] Their population was atypical as is the current

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[1]Supra, p. 146 for their discussion.

population. But, unlike the Elkin and Westley population, the current

population contains distinct social class extremes. Moreover, when

analyzed in regard to social class, predominantly low social class and

predominantly high social class RFS's were distinguishable. It was pre-

dominantly in the middle that social class amalgamation occurred and

this amalgamation was minor and varied according to RFS variations. To

ignore the social class variable in adolescent social acceptance stud-

ies is to ignore the views of social class researchers who suggest

that adolescents share their parents' social class positions and the

value systems which accompany differential social class rankings. More-

over, values influence social behavior.

Public school education in America is characterized as a largely

middle class phenomenon, and most adolescent behavior studies are school

oriented. Does this orientation, which excludes students who fail to

adapt to middle class values, plus randomizing the influence of social

class by analyzing the data within the formal school structural frame-

work,account for the variation even among high correlations? Is

adolescent conformity to values a fact or a myth? Or, is it, as Gordon

suggested, "significantly related to the social class positions of the

members' families in the communities?"[1] Can an aggregate of individuals

be treated as a group long enough so that it becomes a group? Witness

the Negro revolution in which an aggregate united for group action.

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[1]Supra, p. 19 for a complete discussion of Gordon's position.

Is this a possibility with adolescents? This study seems to show that adolescent conformity does not occur as a blanket sub-cultural conformity. Rather, it occurs "within their own groups," to quote the respondents in the study.[1]

The Coleman study found within and between school variations in the social structures and values of the nine schools reported in his monograph. An interesting point emerged, however, in the single brief mention of a tenth school, a university affiliated school similar to the current social situation.[2] In the statement regarding the university affiliated school, Coleman noted that it did not conform to the patterning of his other nine schools. This omission poses an interesting question. Why did Coleman choose to exclude it from his analysis? Would the findings have supported the current findings or the Elkin and Westley findings? Did he exclude the school because the findings deviated from the pattern of his other nine schools?

The questions posed above can only be answered after future studies are designed to gain a more complete understanding of adolescent behavior. However, future studies will lead to an adequate accounting of adolescent behavior only if the assumptions underlying sociometry

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[1]Following Lazersfeld and Barton, the researchers have attempted to develop a classification which coincides with the respondents' definition of the situation. Perhaps this accounts for the findings which differ with choice status measurement findings. Supra, p. 40 for the Lazersfeld and Barton position.

[2]James Coleman, The Adolescent Society (Glencoe, Ill.: The Free Press, 1961), p. 56.

are considered and research designs are developed which recognize the
necessity of data analysis in a manner suitable to the design, i.e.,
analysis recognizing the difference between sociometrically treating
an aggregate of individuals through choice status analysis and
structural research designs based on reciprocity which creates a true
group picture. Choice status does not create structure. Yet the liter-
ature characterizes adolescents as functioning in groups, a structural
perspective.[1]

<div align="center">Recommendations for Future Research</div>

Two general recommendations for future research studies emerge
from the current findings. One concerns additional analysis of the data
available in the current longitudinal project. The second applies to
the development of future studies.

The most obvious recommendation for additional analysis concern-
ing the available longitudinal data is the completion of a comparative
ninth and twelfth grade value systems analysis based on the sociometric-
ally defined informal group structures of the girls. This analysis

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[1]Perhaps the confusion in the literature stems from a limited
understanding of the theory underlying the sociometric technique, and
the initial purpose for which it was designed. Moreno was concerned
with deviant behavior. Jennings conducted her studies in a girls'
training school. Therefore, the initial purpose for which sociometry
was developed was social therapy in which an aggregate of deviant
individuals were brought together for group therapy. Thus psychology
and sociology perspectives are united in the method. The method was
borrowed, without an understanding of the principles underlying the
method, to study group behavior in an open social system composed of
"normal" individuals in a "natural" setting which was not artificially
created medically, nor for social control. In the artifically created
groups, the individuals were not free to come and go at will, whereas
they are free to move in and out of an open social system. In other
words, in the former the population remained highly stable. In the
latter the population might remain stable, but probably would experience
rapid change of personnel.

should include not only patterned regularities, but also deviations of groups and individuals from normative values. Special consideration should be given to analyzing the mutual pairs as individual dyads rather than as a category. An especially interesting aspect of the analysis should be consideration of whether or not the dyads were formed by girls with like or unlike sociological characteristics and opinions.

The isolate category needs further analysis from several approaches. Four sub-categories of isolates were developed. These sub-categories should be explored to determine whether or not the girls in the same category have similar characteristics and if between-sub-category characteristics differ. Furthermore, the individual isolates should be explored as they relate to the RFS's into which they made choices or were chosen. In other words, a reference group conceptual framework may be utilized.

The second general recommendation concerns the development of future studies using the methods incorporated in the present study, including the longitudinal perspective. Studies should be designed to see if similar findings will be obtained from populations with different social class and educational bases, Negro-white ethnicity variables, rural-urban variables, regional variables, and varied combinations of these variables. Only after such future studies have been accomplished can the myth of an adolescent sub-culture be established or refuted. Moreover, the refuting or acceptance will occur only if the methodological considerations underlying sociometry are understood and incorporated in the research designs.

Contributions of the Study

This study may contribute to the knowledge of adolescent peer group behavior if parents, educators, and researchers obtain ideas and insights concerning the unique developmental features of informal adolescent peer groups which function outside the realm of adult social control. The study population was characterized as drawn from a highly atypical suburb in terms of the overall state community compositions. However, it may be representative of an emerging national community trend as higher education becomes more extensively emphasized and suburban dwelling areas continue to mushroom. Data from the 1960 census revealed increasing national geographic mobility, increasing level of education, more white collar than blue collar workers, and suburbs populated with younger adults. All were characteristics of the majority of the families represented in this study. Therefore, the study provides insights concerning the emergent patterning of adolescent informal peer friendships among a group whose parents were highly educated, white collar employed, younger, and recent residents in their homes. In addition, some children were drawn in from a low socio-economic suburb annexed by the school district two years prior to initiating the study. Therefore, the interaction of social class extremes was explored in the study. The data revealed the following findings:

A four year tracing of the group from ninth through twelfth grade revealed four definable sub-system complexes as they split and recombined longitudinally. The sub-systems showed a definite town and university split as follows:

1. The "social elite" sub-system was a closed sub-system composed predominantly of girls whose fathers were doctors, lawyers, business owners, i.e., stable resident professionals. The sub-system members ranked higher in social class and were most often listed as "most popular" and "best dressed." They were not, however, the highest academic achievers.

2. The second town sub-system, also a relatively closed sub-system, was at a polarity to the social elite, i.e., it was composed of low social class girls who were often named as "not dressed right." Their fathers were blue collar workers. Most of the girls were low academic achievers. This sub-system contained five of the eight known school dropouts for the entire study.

3. The third and fourth sub-systems also contained some town girls, but the majority of girls whose parents were university affiliated were in one of these two sub-systems. Both were open sub-systems with interaction between them as well as with the mutual pairs and isolates. While the characteristics of the two sub-systems were closely parallel, one seemed to enjoy a little more prestige than the other. It ranked somewhat higher in social class, received a few popularity and dress choices, and was a little higher in academic achievement. In fact, it contained the structure which emerged as the "intellectual elite." All five members had "A" averages, and four of the five were children of university affiliated personnel.

In addition to the findings concerning adolescent behavior, the study may contribute further to future research if the methodological innovations and discussions incorporated in the problem lead to stronger research designs capable of producing data which reflect the actual

behavior and opinions of adolescents. To elaborate, findings emerged

concerning the different sociometric technique variations and situations

which have been used previously in investigating adolescent behavior.

Unlike the current school situation which is an open social system,

many studies used closed social situations. Moreover, the findings were

used to restructure the group for group therapy. This study investigated

the group as it developed with unique historical features undistorted

by adult manipulation of the group.

Additional investigation of adolescent behavior studies showed

two modes for establishing social acceptance, individual choice status

excluding reciprocity, and a structural perspective based upon recip-

rocated choices. This study analyzed data from both perspectives and

showed that different patterns of responses emerged on an interaction

based question and a social visibility question which excluded inter-

action. That is to say, responses to the friendship question which

establishes an interaction framework in the respondents' minds were

distributed throughout the four sub-system complexes, clearly showing

that individual choice status analysis of an interaction based question

leads to erroneous conclusions. On the other hand, responses to the

social visibility questions concerning popularity and dress, which were

not designed to elicit interaction answers, were directed into selected

sub-systems whether or not the respondent perceived herself as a mem-

ber of the sub-system.

To summarize, this study contributes findings concerning adolescent

behavior in an open social system populated mainly with highly mobile,

upper middle class residents, but also containing some lower social

class students, creating a comparative situation in which to study social

class extremes. It further contributes to sociometric methodology <u>per se</u>

by clarifying and separating some different types of open and closed

social situations and analytic frameworks used in studying group inter-

action.

APPENDIX A

WHAT THIS IS ALL ABOUT

You may recall that Michigan State University has been doing a study of the opinions of young people in (name of state).[a]

Since we are still working on the study, we would like to see what has happened to the people in your grade. Therefore, we would like you to fill out again the part about yourself and your class.

You can help us best by answering the following questions as clearly and carefully as you can. If there is something you do not understand, ask questions. You will be helped as much as possible.

This information is confidential. No one you know, including your teachers, will ever see what you have written.

1. Your name_____, _____, _____
                   last   first   middle

2. Address_____

3. When were you born?_____, _____, _____
                           Month   Day   Year

4. What is the name and location of the last grade school you attended?

_____

[a]The community name which appeared in the schedules is replaced with (name) as shown above.

5. How many clubs or organizations in school and outside of school do you belong to?

      <u>In school</u>   <u>Outside</u>

      None_____   None_____

      One _____   One _____

      Two _____   Two _____

      Three_____   Three_____

      Four or more_____   Four or more_____

6. Please list the clubs and organizations you belong to:_____

_____

_____

7. The people with whom we share secrets and spend most of our time are usually referred to as our "best friends."

Write the names of your two "best girl friends" in the 12th grade in the (name) High School. (If you only have one person you consider a "best friend," write her name only, and if you have no one, leave the space blank).

      1._____

      2._____

If you have more than two "best girl friends" in the 12th grade, write their names in the space below.

If your "best girl friends" are in another grade, write their names in the space below.

      <u>Name</u>   <u>Grade</u>

If your "best girl friends" are in another school, write their names in the space below.

      <u>Name</u>   <u>Name of School</u>   <u>Grade</u>

8. What church do you go to?_____

9. How many living brothers and sisters do you have? (Circle the correct number on each line, and 0 if none.)

      Brothers   0 1 2 3 4 or more
      Sisters   0 1 2 3 4 or more

10. Who contributes most of the financial support of your family?

    Your father_____
    Your mother_____
    Some other person____(Explain who this person is. For example, "my brother," "my uncle."_____

11. How far did this person mentioned above go in school?

    No schooling_____
    Some grade school_____
    Graduated from grade school_____
    Some high school_____
    Graduated from high school_____
    Some college_____
    Graduated from college_____
    Don't know_____
    Other (Explain)_____

12. What does this person do for a living? (Write in the complete name or title of his or her job, not the company he or she works for.)

13. Describe as accurately as possible what this person makes or does on the job. (For example: he supervises the work of 15 office clerks; he sells from door to door; he operates a farm of 160 acres, etc.)

14. Does any other person contribute to the financial support of your family? ___Yes ___ No

If yes, explain who (mother, father, brother, etc.)_____

What does this person do?_____

APPENDIX A, 2.

CONFIDENTIAL INTERVIEW[a]

What this is all about

The youth of a community are in many respects the most important element of our society.

There is a great deal written and said about this age group, but much of it is not based on facts.

You may recall that Michigan State University has been doing a study which is intended to supply important information about the opinions of young people.

Since we are still working on this study we need your cooperation once more. You can help best by answering the questions as clearly and carefully as possible. I would like your honest reaction to what adolescents think. You may think about the question and take your time in answering it. There are no right or wrong answers. We want to know what your opinions are. Different people will have different opinions.

This information is confidential. Your name will never be used and no one you know will know what you have said.

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[a]Reduced to one-third of original interview schedule which allowed adequate space for recording responses.

Now I would like to begin by asking you some questions about what would happen if a new girl came into your grade at school.

1. If a new girl came to (name) High School, describe the most important things she should do if she wanted to get in with the popular girls._____

2. What characteristics are used in judging a new girl in (name)?

   _____

3. What characteristics do you use in choosing a friend?_____

   _____

4. Do you think it is difficult to make friends in (name) High School? _____ No If yes, why do you think it is difficult?
   _____ Yes

   _____

5. What are some important things that one should do in order to be popular in your group?_____

6. What are the characteristics of the most popular girl in the twelfth grade?_____

7. Who is the most popular girl in the twelfth grade?_____

8. Does the clothing of the popular girls in the twelfth grade differ from the clothing of the other girls?
   _____ No If yes, how does their clothing differ?_____
   _____ Yes _____

9. Do you think clothing influences a girl's popularity at (name) High School? No _____ Why or why not?_____
                        Yes_____ _____

10. How do your clothes compare with those of other girls in school?

    _____

11. How does your group of friends compare in dress with other groups at school?_____

    _____

12. What are the characteristics of the best dressed girl in the twelfth grade?_____

13. Who do you think is the best dressed girl in the twelfth grade?

    _____

14a. Is there anything about yourself you would like to change?
_____ No If yes, what is the main thing you would change?
_____ Yes _____

Anything else?_____

14b. Do you think you would make a different impression on others if you could make these changes?
_____No If yes, why do you think this change will cause you to
_____Yes make a different impression?_____
_____

14c. If yes, do you think it would be easier to make friends if you made these changes?
_____No If yes, why do you feel this way?_____
_____Yes _____

15. Most people like to have others approve of their clothing. Whose approval of your clothing means the most to you?_____
Why?_____

16. Do some clothes give you more self-confidence than others?
_____No   If yes, which ones?_____
_____Yes _____

Why?_____

17a. Do you have a best friend?
_____No If yes, what is your best friend's name?_____
_____Yes

17b. Do you think that the manner in which your best friend dresses is a reflection on you? By that I mean, do others judge you by the way your best friend dresses?
_____No   If yes, why do you think this way?_____
_____Yes _____

18a. Are there any girls in the twelfth grade who do not dress right?
_____No   If yes, why do you think their clothes are not right?
_____Yes _____

18b. How would you describe the clothes of these girls who do not dress right?_____

18c. Besides not dressing right, please describe any other characteristics of these girls._____
Would you please tell me who they are?_____
_____

18d. Do they have many friends?
_____No   If yes, are their friends dressed right?
_____Yes
_____No   If no, what's wrong with the way they dress?_____
_____Yes _____

19. Do you have any friends that are not dressed right?
_____No   If yes, what's wrong with the way they dress?_____
_____Yes _____

20. Have you ever come to school dressed differently from the other
girls? _____No   If yes, how did you feel when you were dressed
_____Yes differently from the other girls?_____
_____

21. You may recall that (name) High School used to have "dress-up"
day. If you still had such a day and you heard that everyone
on "dress-up" day was going to wear a sweat shirt to school and
at the last minute they changed their minds but you were not
notified and wore one to school, what would you do when you saw
them dressed differently?_____
_____

How would you feel?_____

22. Are you usually satisfied with your general appearance?
_____Yes   If no, why not?_____
_____No

22a. Are you usually satisfied with your clothes?
_____Yes   If no, why not?_____
_____No

23. Are you usually satisfied with your hair?
_____Yes   If no, why not?_____
_____No

24. Are you usually satisfied with your complexion?
_____Yes   If no, why not?_____
_____No

25. Does your mother make suggestions about the clothes you wear to
school? _____No   If yes, do you follow her suggestions?_____
_____Yes

I would like you to answer the next four questions with one of these
responses. (Give interviewee card with responses).

26. Do you enjoy wearing your clothes if your friends don't like them?
___Almost always
___Often
___Sometimes
___Seldom
___Never

27. Do you feel ill at ease at school because of your clothing?
___Almost always
___Often
___Sometimes
___Seldom
___Never

28.. Do others compliment you on the way you dress at school?
___Almost always
___Often
___Sometimes
___Seldom
___Never

29. Have you felt embarrassed about the clothes you wear to school?
___Almost always
___Often
___Sometimes
___Seldom
___Never

If you have felt embarrassed about your clothes, why?_____

_____

APPENDIX B

Table 1. Numerical social class distribution by social acceptance categories among the 1962 ninth grade girls in one high school class which became the senior class, 1965

Social Class	ISC[a] Weighted Ratings	I	MP	RFS 101	RFS 102	RFS 103	RFS 104	RFS 105	RFS 106	RFS 107	RFS 108	RFS 109	RFS 110	RFS 111	RFS 112	RFS 113	RFS 114	RFS 115	RFS 116	RFS 117	Totals N	%
Upper Social Class	12-17	1[b]	1			1				3				1							7	
	18-22	1							2	5	1					1	1	1	1		13	
	23-24										1										1	
	25-33	7	4		6	3	4		1	7	1	2	3	1	1	6	1		1	2	50	
	34-37	4	2		1		1		1	4	1				3		1			1	19	
																					90	(59)
Middle Social Class	38-50	6	4		6	2	3	1		8		6	2	2				1	1		42	
	51-53	1			1																2	
	54-61		3												1			1			4	
																					48	(31)
Lower Social Class	62-66		1	2				1													4	
	67-69		1		1																2	
	70-84		2	1	1			2					1								10	
																					16	(10)
Totals		23	18	3	15	6	8	4	4	27	4	8	6	4	5	7	3	3	3	3	154	(100)

[a]Key: ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type. I refers to isolate; MP refers to mutual pair; RFS refers to reciprocal friendship structure. Each RFS was given a number for identification.

[b]Number of girls in each category.

Table 2. Numerical social class distribution by social acceptance categories among the 1963 tenth grade girls in one high school class which became the senior class, 1965

Social Class	ISC[a] Weighted Ratings	I	MP	RFS 201	RFS 202	RFS 222	RFS 213	RFS 217	RFS 237	RFS 207	RFS 227	RFS 205	RFS 204	RFS 216	RFS 219	RFS 220	Totals N	%
Upper Social Class	12-17				2[b]		1			3							6	
	18-22		1		3		4			1					1		10	
	23-24				1		1	2		1		1	2				8	
	25-33	8	3		12	4	9	2	3	4		1	1	2	2	1	52	
	34-37	4	4			2	3			1		2				1	18	
																	94	(61)
Middle Social Class	38-50	13	5		15				2	2	2	2	1	1			43	
	51-53		2		1												3	
	54-61			1								1					2	
																	48	(31)
Lower Social Class	62-66	1		1							1	1					4	
	67-69		1														1	
	70-84	1		2				1				4					8	
																	13	(8)
Totals		27	16	4	34	6	18	5	5	12	3	12	4	3	3	2	155	(100)

aKey: ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type. I refers to isolate; MP refers to mutual pair; RFS refers to reciprocal friendship structure. Each RFS was given a number for identification.

bNumber of girls in each category.

Table 3. Numerical social class distribution by social acceptance categories among the 1964 eleventh grade girls in one high school class which became the senior class, 1965

Social Class	ISC[a] Weighted Ratings	I	MP	RFS 305	RFS 332	RFS 342	RFS 322	RFS 340	RFS 347	RFS 307	RFS 367	RFS 337	RFS 350	RFS 333	RFS 335	RFS 330	RFS 313	RFS 317	Totals N	%
Upper Social Class	12-17	2[b]								3	1								6	
	18-22	2			5	1	1		1	3							1		14	
	23-24	2	1																3	
	25-33	11	5	1	6	2	5		2	5	2	3		3		2	3	3	53	
	34-37	8	1		1	1			1	2					1	1		1	17	
																			93	(65)
Middle Social Class	38-50	6	8	1	5		3	2		2		2	3		1		1	1	35	
	51-53	2					1								1				4	
	54-61	1					1	1										1	4	
																			43	(30)
Lower Social Class	62-66	1	1																2	
	67-69		1																1	
	70-84	1	1	1											1				4	
																			7	(5)
Totals		36	18	3	17	4	11	3	4	15	3	5	3	3	4	3	5	6	143	(100)

[a]Key: ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type. I refers to isolate; MP refers to mutual pair; RFS refers to reciprocal friendship structure. Each RFS was given a number for identification.

[b]Number of girls in each category.

Table 4. Numerical social class distribution by social acceptance categories among the 1965 twelfth grade girls in one high school senior class, 1965

Social Class	ISCa Weighted Ratings	I	MP	RFS 401	RFS 432	RFS 422	RFS 452	RFS 407	RFS 427	RFS 477	RFS 460	RFS 414	RFS 417-13	Totals N	%
Upper Social Class	12-17				3	1		6		2				12	
	18-22	2b	3		4		1	1		1			1	13	
	23-24	1	1											2	
	25-33	4	4		10	3	2	6		3	1	2	13	48	
	34-37	3	2		1			1			2		4	13	
														88	(64)
Middle Social Class	38-50	7	5	1	9	1	2	3	4	1	1	1	5	40	
	51-53	1	1	1										3	
	54-61	1											1	2	
														45	(32)
Lower Social Class	62-66			1										1	
	67-69			1										1	
	70-84	1		1	1									3	
														5	(4)
Totals		20	16	5	28	5	5	17	4	7	4	3	24	138	(100)

aKey: ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type. I refers to isolate; MP refers to mutual pair; RFS refers to reciprocal friendship structure. Each RFS was given a number for identification.

bNumber of girls in each category.

Table 5. Percentage distribution according to individual ISC[a] indices and reciprocal friendship categories among the 1962 ninth grade girls in one high school class which became the senior class, 1965

Individual ISC Indices for Ninth Grade Girls

Reciprocal Friendship Categories	Occupational Rating									House Type Rating									Dwelling Area Rating								
	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)
Isolates	36	27	14	5	-	18	-	100	(23)	5	5	22	41	13	9	5	100	(23)	9	5	41	13	18	5	9	100	(23)
Mutual Pair Members	27	22	17	6	22	-	6	100	(18)	-	-	17	28	22	27	6	100	(18)	-	6	33	33	16	6	6	100	(18)
RFS Members	45	30	15	4	4	2	-	100	(113)	4	14	17	39	19	7	-	100	(113)	11	7	41	23	11	2	5	100	(113)
All Girls	42	28	15	4	6	4	1	100	(154)	3	11	18	38	19	10	1	100	(154)	9	7	40	23	13	2	6	100	(154)

[a] ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type.

Table 6. Percentage distribution according to individual ISC[a] indices and reciprocal friendship categories among the 1963 tenth grade girls in one high school class which became the senior class, 1965

Individual ISC Indices for Tenth Grade Girls

Reciprocal Friendship Categories	Occupational Rating									House Type Rating									Dwelling Area Rating								
	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)
Isolates	26	26	40	-	4	-	4	100	(27)	-	4	18	48	26	-	4	100	(27)	7	4	37	30	18	4	-	100	(27)
Mutual Pair Members	19	31	25	19	-	6	-	100	(16)	-	13	-	74	13	-	-	100	(16)	6	6	44	19	19	6	-	100	(16)
RFS Members	49	25	13	4	4	4	1	100	(112)	3	13	23	34	17	9	1	100	(112)	13	7	38	24	11	2	5	100	(112)
All Girls	41	26	19	5	4	4	1	100	(155)	2	12	20	41	18	6	1	100	(155)	11	6	39	24	13	3	4	100	(155)

[a] ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type.

Table 7. Percentage distribution according to individual ISC[a] indices and reciprocal friendship categories among the 1964 eleventh grade girls in one high school class which became the senior class, 1965

Individual ISC Indices for Eleventh Grade Girls

Reciprocal Friendship Categories	Occupational Rating									House Type Rating									Dwelling Area Rating								
	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)
Isolates	39	28	22	5	3	3	-	100	(36)	11	11	45	17	11	-	5	100	(36)	5	14	28	31	22	-	-	100	(36)
Mutual Pair Members	17	33	28	6	11	5	-	100	(18)	5	5	28	28	17	5	12	100	(18)	-	-	17	44	28	11	-	100	(18)
RFS Members	44	28	16	8	2	1	1	100	(89)	16	10	41	24	6	2	1	100	(89)	1	14	27	35	17	6	-	100	(89)
All Girls	39	29	19	7	3	2	1	100	(143)	13	10	40	23	8	2	4	100	(143)	2	12	26	35	20	5	-	100	(143)

[a]ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type.

Table 8. Percentage distribution according to individual ISC[a] indices and reciprocal friendship categories among the 1965 twelfth grade girls in one high school senior class, 1965

Individual ISC Indices for Twelfth Grade Girls

Reciprocal Friendship Categories	Occupational Rating									House Type Rating									Dwelling Area Rating								
	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)	1 %	2 %	3 %	4 %	5 %	6 %	7 %	Totals %	(N)
Isolates	40	25	20	10	-	5	-	100	(20)	-	5	20	35	35	5	-	100	(20)	-	15	45	15	20	-	5	100	(20)
Mutual Pair Members	31	50	13	6	-	-	-	100	(16)	-	19	31	31	19	-	-	100	(16)	6	13	56	19	6	-	-	100	(16)
RFS Members	49	23	15	7	3	2	1	100	(102)	6	17	23	32	17	5	-	100	(112)	20	6	42	22	6	2	2	100	(102)
All Girls	43	29	16	7	2	2	1	100	(138)	4	15	24	33	20	4	-	100	(138)	15	8	44	21	8	2	2	100	(138)

[a]ISC refers to Warner's Index of Status Characteristics, a social class rating based on occupation, dwelling area, and house type.

Table 9. Individual sociometric pattern for the girls in one high school senior class, 1965

	Year and Grade				
Number	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
001*	RFS[a] 104	RFS 204	RFS MP	RFS 432	RFS*
002*	RFS 104	RFS 204	I_1	RFS 417-13	△ *
003	RFS MP	-	-	-	
004	RFS MP	I_2	-	-	△
005	RFS 104	-	-	-	
006	RFS 104	-	-	-	
007	I_2	RFS MP	RFS 350	-	△
008*	RFS 108	RFS 213	I_1	I_1	△*
009*	RFS 113	RFS 220	RFS 333	RFS 417-13	RFS*
010	RFS 108	RFS 213	I_4	-	△
011	RFS 108	RFS 220	-	-	RFS
012*	RFS 102	RFS 202	RFS MP	RFS 432	RFS*
013	RFS 108	-	-	-	
014	RFS MP	-	-	-	
015	RFS MP	I_3	-	-	△
016	RFS 107	RFS 227	RFS MP	RFS 427	RFS*
017*	I_3	RFS 213	I_4	RFS 432	△ *

[a]Key: RFS = reciprocal friendship structure
MP = mutual pair
I = isolate (subscript = class of I)
- = not in population during year
* = in population for all four years
△ = change in pattern

Table 9--<u>Continued</u>

	Year and Grade				
Number	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
018*	I_3	RFS 213	RFS 332	RFS 432	△*
019*	RFS 107	RFS 207	RFS 307	RFS 407	RFS* (7)
020	RFS 107	RFS 219	RFS 332	-	RFS
021	RFS MP	-	-	-	
022*	RFS 112	RFS 217	RFS 317	RFS 417-13	RFS*
023*	RFS 112	RFS 205	I_2	RFS 460	△*
024	RFS 112	RFS MP	-	-	RFS
025*	RFS 112	RFS 205	RFS 335	RFS MP	RFS*
026*	RFS 111	I_3	I_3	RFS 427	△*
027*	RFS 111	RFS MP	RFS 332	RFS 452	RFS*
028*	RFS 110	RFS 205	RFS 335	RFS 432	RFS*
029	RFS 110	I_3	-	I_2	△
030*	RFS 110	I_4	I_2	RFS MP	△*
031*	RFS MP	RFS 205	RFS 335	RFS MP	RFS*
032	RFS MP	I_4	RFS MP	-	△
033*	RFS 104	RFS 204	RFS MP	RFS 432	RFS*
034	RFS 111	RFS 207	-	-	RFS
035*	RFS 103	RFS 202	RFS 307	RFS 407	RFS*
036*	RFS 107	RFS 237	RFS 337	RFS 407	RFS* (7)
037*	RFS 111	RFS 207	I_4	RFS 407	△*
038*	RFS 107	RFS 207	RFS 367	RFS 407	RFS* (7)

Table 9--Continued

	Year and Grade				
Number	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
039*	RFS 107	RFS MP	RFS 307	RFS 407	RFS*
040*	I_2	RFS 202	RFS 332	RFS 407	△ *
041	RFS 107	RFS MP	-	-	RFS
042*	RFS 107	RFS MP	RFS 347	RFS MP	RFS*
043*	RFS 107	RFS 207	RFS 307	I_1	△ *
044*	RFS 102	RFS 202	RFS MP	RFS 432	RFS*
045	RFS 102	-	-	-	
046*	RFS 102	RFS 202	RFS MP	I_4	△ *
047*	RFS 102	RFS 202	RFS MP	RFS 401	RFS*
048*	RFS 102	RFS MP	RFS MP	RFS 401	RFS*
049	RFS MP	-	-	RFS 417-13	RFS
050*	RFS MP	RFS 217	RFS 317	RFS 417-13	RFS*
051	RFS 109	-	-	-	
052	RFS 109	RFS 213	-	-	RFS
053	RFS 109	-	-	-	
054	RFS 109	-	-	-	
055*	RFS 109	RFS 202	RFS 322	RFS 417-13	RFS*
056*	RFS 117	RFS 217	RFS 317	RFS 417-13	RFS*(17)
057	RFS 109	RFS 202	RFS 322	-	RFS
058*	I_4	RFS 217	RFS 330	RFS 417-13	△ *
059*	RFS 117	RFS 217	RFS 317	RFS 417-13	RFS*(17)

Table 9--<u>Continued</u>

Number	Year and Grade				
	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
060*	RFS 102	RFS 222	RFS 322	RFS 422	RFS* (2)
061*	RFS 102	RFS 222	RFS 322	RFS 422	RFS* (2)
062*	RFS 102	RFS 202	RFS 322	RFS 401	RFS*
063*	RFS 102	RFS 202	I_1	I_2	◢ *
064	RFS 103	I_2	-	-	△
065*	RFS 113	RFS 213	RFS 333	RFS 417-13	RFS*
066*	RFS 113	RFS MP	I_2	RFS 452	◢ *
067*	RFS 113	RFS 213	RFS 313	RFS 417-13	RFS*
068*	RFS 115	RFS 202	RFS 322	RFS 432	RFS*
069*	RFS 113	RFS 213	RFS 313	RFS 417-13	RFS*
070*	RFS 113	RFS 213	RFS 313	RFS 417-13	RFS*
071*	RFS 110	RFS 205	RFS 330	RFS 417-13	RFS*
072	RFS 110	I_2	-	-	△
073*	RFS 110	I_4	RFS 305	RFS MP	◢ *
074*	RFS 102	RFS 213	RFS 342	I_3	◢ *
075*	RFS 102	RFS 222	I_3	RFS MP	◢ *
076*	RFS 102	RFS 213	RFS 342	I_4	◢ *
077*	RFS 102	RFS 213	RFS 342	I_4	△ *
078*	RFS 113	RFS 213	RFS 313	RFS 417-13	RFS*
079*	I_2	I_2	I_2	I_2	I*
080*	RFS 112	RFS 204	I_1	RFS 432	◢ *
081*	RFS 103	RFS 202	RFS 332	RFS 432	RFS*

Table 9--<u>Continued</u>

| Number | Year and Grade | | | | |
	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
082*	RFS 103	RFS 202	RFS 332	RFS 432	RFS*
083*	RFS 103	RFS 202	RFS 332	RFS 432	RFS*
084*	RFS 106	RFS 202	RFS 332	RFS 432	RFS*
085	RFS 103	RFS 202	RFS 332	-	RFS
086*	RFS 107	RFS 202	RFS 307	RFS 477	RFS*
087*	RFS 107	RFS 202	RFS 307	RFS 477	RFS*
088*	RFS 107	RFS 202	RFS 307	RFS 477	RFS*
089*	RFS 107	RFS 207	RFS 367	RFS 407	RFS* (7)
090*	RFS 106	RFS 202	RFS 322	RFS 432	RFS*
091*	RFS 107	RFS 222	RFS 347	RFS MP	RFS*
092	RFS 107	-	-	-	
093*	RFS 107	RFS 222	RFS 347	RFS 407	RFS*
094*	RFS 107	RFS 227	RFS MP	RFS 427	RFS*
095*	RFS 107	I_2	I_2	RFS 427	$\triangle$ *
096*	I_2	RFS 220	I_4	RFS 417-13	$\triangle$ *
097	I_3	-	-	-	
098	RFS 106	RFS 213	-	-	
099*	RFS MP	RFS 213	RFS 333	RFS 417-13	RFS*
100*	I_4	RFS 202	RFS 332	RFS 432	$\triangle$ *
101	RFS 105	RFS 205	-	-	RFS
102	RFS 105	RFS 205	I_2	-	$\triangle$
103	RFS 105	RFS 205	RFS 305	-	RFS (5)

Table 9--<u>Continued</u>

| Number | Year and Grade | | | | |
	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
104*	RFS 105	RFS 205	RFS 305	I_4	△ *
105*	I_2	RFS 205	I_4	I_2	△ *
106*	RFS 101	RFS 201	RFS MP	RFS 401	RFS*
107	RFS 101	-	-	-	
108*	RFS 101	RFS 201	RFS MP	RFS 401	RFS*
109	I_4	RFS 201	-	-	△
110	I_4	RFS 201	-	-	△
111	RFS MP	RFS 207	-	-	RFS
112	I_2	I_2	-	-	I
113*	I_3	RFS MP	RFS 332	RFS 452	△ *
114*	RFS MP	RFS 237	RFS 337	RFS 407	RFS*
115*	RFS MP	RFS 207	RFS 307	RFS 477	RFS*
116	RFS MP	RFS 237	RFS 337	-	RFS
117*	RFS MP	RFS MP	I_3	I_2	△ *
118*	RFS 107	RFS 202	RFS 307	RFS 477	RFS*
119*	RFS 107	RFS MP	RFS 347	RFS MP	RFS*
120*	I_2	RFS 202	RFS 307	RFS 407	△ *
121*	RFS 107	RFS 237	RFS 337	RFS 407	RFS* (7)
122*	RFS 107	RFS MP	RFS 307	RFS 407	RFS*
123*	RFS 107	RFS MP	RFS 307	I_4	△ *
124	RFS 107	RFS 207	-	-	RFS
125*	RFS 107	RFS 207	RFS 307	RFS 477	RFS* (7)

Table 9--<u>Continued</u>

Number	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
			Year and Grade		
126*	RFS 107	RFS 207	RFS 307	RFS 407	RFS* (7)
127	I_2	RFS 202	RFS 340	-	△
128	I_1	-	-	-	
129*	RFS 115	RFS 202	RFS 322	RFS 432	RFS*
130*	RFS 106	RFS 202	RFS 332	RFS 414	RFS*
131*	RFS 104	I_4	RFS MP	RFS 432	△*
132	I_2	-	-	-	
133*	RFS 104	I_4	I_1	I_3	△ *
134*	RFS 114	RFS 202	RFS 332	RFS 414	RFS*
135*	RFS 114	RFS 202	RFS 332	RFS 414	RFS*
136*	RFS 114	RFS 213	RFS 342	RFS 432	RFS*
137	I_1	RFS 213	-	-	△
138	RFS 102	RFS 202	-	-	RFS
139*	RFS 109	RFS 202	RFS 322	RFS 422	RFS*
140	RFS 109	-	-	-	
141*	RFS 115	RFS 202	RFS 322	RFS 432	RFS*
142*	RFS 107	RFS 219	I_4	RFS 422	△ *
143*	RFS 116	RFS 216	I_4	RFS 432	△ *
144*	RFS 116	RFS 216	RFS MP	RFS MP	RFS*
145*	RFS MP	RFS 205	I_3	I_3	△ *
146*	RFS MP	I_3	I_1	I_1	△ *
147*	I_2	RFS 202	I_4	RFS 432	△ *

Table 9--Continued

Number	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
			Year and Grade		
148*	RFS 117	I_3	RFS 317	RFS 417-13	△ *
149*	I_3	I_3	RFS 317	RFS 417-13	△ *
150	RFS MP	-	-	-	
151*	I_4	RFS 202	RFS MP	RFS 432	△ *
152	RFS 116	-	I_2	I_4	△
153*	RFS 104	I_2	RFS 330	RFS 417-13	△ *
154	I_2	-	-	-	
201		RFS MP	I_2	RFS MP	△
202		I_2	-	-	
203		RFS MP	-	-	
204		RFS MP	RFS 350	RFS 417-13	RFS
205		RFS 237	RFS 337	RFS 407	RFS (7)
206		RFS 207	RFS 307	RFS 477	RFS (7)
207		RFS 205	I_3	RFS MP	△
208		I_2	I_3	RFS 407	△
209		I_2	I_3	RFS MP	△
210		I_3	RFS MP	RFS MP	△
211		I_3	RFS 350	I_3	△
212		RFS 216	-	-	
213		I_2	-	-	
214		RFS 219	RFS 232	RFS 432	RFS

Table 9--Continued

Number	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
215		RFS 213	I_3	RFS 432	
216		RFS 222	RFS 322	RFS 422	RFS (2)
217		I_4	-	-	
218		RFS 202	RFS 340	RFS 432	RFS
219		I_1	-	-	
220		RFS 227	I_4	I_2	△
221		I_2	-	-	
301			RFS 332	RFS 452	RFS
302			RFS 340	-	
303			I_1	RFS MP	△
304			I_2	-	
305			RFS 335	RFS 432	RFS
306			RFS 313	RFS 432	RFS
307			RFS 332	RFS 452	RFS
308			RFS MP	RFS 417-13	RFS
309			RFS MP	RFS 417-13	RFS
310			RFS 367	-	
311			I_3	-	
312			I_1	-	
313			I_2	I_2	I

Table 9--<u>Continued</u>

| Number | Year and Grade | | | | |
	1962 Ninth Grade (N=154)	1963 Tenth Grade (N=155)	1964 Eleventh Grade (N=143)	1965 Twelfth Grade (N=138)	Sociometric Pattern (Total N=196)
402					RFS 460
403					RFS 460
404					RFS 417-13
405					RFS 460
406					RFS 407
407					RFS 432
409					RFS MP
410					RFS MP

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Table 10. Numerical comparison of reciprocated choices and choice statuses among the girls in one 1962 ninth grade high school class which became the senior class, 1965

Respondent Number	Friendship Question RC[a]	CS	Popularity and Dress Questions CS, MP	CS,BD	CS,NDR
001	2	4			
002	2	3			1
003	1	1			9
004	1	1			14
005	2	3			
006	1	1			
007	0	0			
008	2	3	1		
009	1	1			
010	2	4	1		1
011	1	6			
012	1	5			
013	1	3			
014	1	2		1	4
015	1	1			
016	2	2			
017	0	2			
018	0	3			
019	1	1	4	1	1
020	2	3	1		
021	1	1			
022	2	2			
023	1	1			1
024	2	5			
025	1	2			
026	2	6		1	
027	1	2			
028	2	3			
029	3	4			
030	3	4			
031	1	1			
032	1	3			1
033	1	2			
034	1	3	20	4	
035	1	1		4	2
036	2	5	10	1	

[a]Key: RC,FQ = Number of reciprocated choices, or ties, friendship question.
CS,FQ = Choice status, or number of choices received, friendship question.
CS,MP = Choice status, "most popular" question.
CS,BD = Choice status, "best dressed."
CS,NDR = Choice status, "not dressed right."

Table 10--<u>Continued</u>

Respondent Number	Friendship Question		Popularity and Dress Questions		
	RC	CS	CS,MP	CS,BD	CS,NDR
037	2	3	1	14	
038	2	4	4	10	1
039	3	3	23	7	
040	0	0			
041	2	2	16	4	
042	4	7	8	9	
043	3	8	23	25	1
044	1	4			
045	4	4			1
046	2	2			
047	3	3			1
048	1	1			
049	1	1			
050	1	1			1
051	3	5			
052	2	6			
053	4	7			
054	3	8			
055	3	3			
056	2	2			
057	1	2			
058	0	1			
059	2	2			
060	3	4			
061	3	5			
062	2	4			
063	2	2			
064	1	3			
065	2	2			
066	2	2			
067	1	2			
068	1	2			
069	4	6			
070	1	4			
071	4	6	1		
072	1	1			
073	3	5			
074	2	4	1		
075	4	8	2	1	
076	3	3			
077	1	2	1		
078	1	2			
079	0	0			
080	2	4			
081	3	3		2	
082	4	4			
083	4	4			

Table 10--<u>Continued</u>

Respondent Number	Friendship Question RC	CS	Popularity and Dress Questions CS,MP	CS,BD	CS,NDR
084	1	1			
085	3	4			
086	2	3			
087	3	5			
088	2	7			
089	3	4	1		
090	3	5	2		
091	2	4	5	5	
092	2	2			
093	1	1	15		
094	2	3	1		1
095	1	1			1
096	0	0			
097	0	1			
098	1	2			
099	1	2			
100	0	1			
101	3	4		1	2
102	1	1			16
103	2	4		1	3
104	2	4			3
105	0	0			11
106	2	2			5
107	2	4			16
108	2	3			16
109	0	1			
110	0	2			4
111	1	1			
112	0	0			
113	0	3	4		
114	1	3	2	3	
115	1	2			
116	1	1	1	4	
117	1	1			
118	1	1		1	1
119	1	3	2	10	
120	0	0	1	5	
121	5	6	3	2	
122	5	9	30	5	
123	3	3	3	4	
124	4	5	27	61	
125	2	2			1
126	3	4	8	5	1
127	0	0			
128	0	0			
129	2	2			
130	1	5			

Table 10--Continued

Respondent Number	Friendship Question RC	CS	Popularity and Dress Questions CS,MP	CS,BD	CS,NDR
131	4	5			1
132	0	0			
133	1	2			
134	2	4			
135	2	3			
136	2	4		1	
137	0	0			
138	2	8	1	1	
139	3	4			
140	5	8			
141	1	3			
142	2	3			
143	2	2			1
144	2	2			
145	1	2			1
146	1	2			5
147	0	0			
148	2	2			
149	0	2			
150	1	2		1	
151	0	4			
152	2	2			1
153	1	1			1
154	0	0			6

Table 11. Numerical comparison of reciprocated choices and choice statuses among the girls in one 1965 twelfth grade high school senior class, 1965

Respondent Number	Friendship Question RC[a]	CS	Popularity and Dress Questions CS,MP	CS,BD	CS,NDR
001	2	4			
002	2	3			
003					
004					
005					
006					
007					
008	0	0	2		
009	1	2			
010					
011					
012	3	4			
013					
014					
015					
016	3	3			1
017	3	3			
018	4	9	1	1	
019	1	1		5	
020					
021					
022	4	4			
023	1	3			
024					
025	1	1			
026	1	3			
027	3	4		1	
028	2	2			
029	0	0			
030	1	1			
031	1	2			
032					
033	2	4			
034					
035	2	5		1	1
036	3	6	4		1

[a]Key: RC,FQ = Number of reciprocated choices, or ties, friendship question.

CS,FQ = Choice status, or number of choices received, friendship question.

CS,MP = Choice status, "most popular" question.

CS,BD = Choice status, "best dressed."

CS,NDR = Choice status, "not dressed right."

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Table 11--Continued

Respondent Number	Friendship Question		Popularity and Dress Questions		
	RC	CS	CS,MP	CS,BD	CS,NDR
037	1	1	1	4	
038	2	5	1	3	
039	2	3	13	21	1
040	1	1			
041					
042	1	4	3	12	
043	0	0	8	15	1
044	2	4			
045					
046	0	1			1
047	2	3			
048	3	3			
049	2	3			
050	3	3			
051					
052					
053					
054					
055	1	2			
056	2	3			
057					
058	2	3			
059	4	4			
060	4	4	1		
061	2	3			
062	1	2			
063	0	0			1
064					
065	3	4		8	
066	1	2			
067	3	3			
068	2	5			
069	4	4			1
070	3	3			
071	4	5			
072					
073	1	4			
074	0	1			
075	1	5	1		
076	0	1			
077	0	1			
078	4	6			
079	0	0			
080	2	3			
081	3	6		1	
082	1	2		2	
083	3	8	1	4	
084	3	5		1	
085					

Table 11--Continued

Respondent Number	Friendship Question		Popularity and Dress Questions		
	RC	CS	CS,MP	CS,BD	CS,NDR
086	2	2			
087	3	3		1	
088	1	3			
089	3	4			
090	1	1			
091	1	2	39	3	
092					
093	1	4	23	3	
094	1	3			1
095	1	1			1
096	3	5			
097					
098					
099	1	2			
100	3	4			
101					
102					
103					
104	0	1			
105	0	0			6
106	2	2			2
107					
108	2	2			7
109					
110					
111					
112					
113	2	3			
114	3	4	8	9	1
115	1	3	4	2	
116					
117	0	0			
118	3	3			
119	1	2	23	5	
120	2	3	1	1	
121	2	4	1		
122	1	4	15		
123	0	2			
124					
125	2	3			
126	2	3	2	3	1
127					
128					
129	3	3			
130	1	1			
131	3	4			
132					
133	0	4			1

Table 11--<u>Continued</u>

Respondent Number	Friendship Question		Popularity and Dress Questions		
	RC	CS	CS,MP	CS,BD	CS,NDR
134	1	2			
135	2	4	2	2	
136	1	3	4	1	
137					
138					
139	2	6			
140					
141	2	2			
142	1	2			
143	2	3			
144	1	4			
145	0	2			
146	0	0			3
147	2	4			
148	1	1			
149	6	6		4	
150					
151	3	10			
152	0	1			
153	1	1			1
154					
201	1	1			1
204	2	4			
205	4	5			
206	2	2			
207	1	3			2
208	4	5	2	1	
209	1	1			
210	0	4			
214	1	1		2	
215	3	3			
216	1	1	1	1	
218	5	5			
220	0	0	1	1	
301	3	3		1	
303	1	1			
305	2	2			
306	1	1			
307	3	4			
308	4	5			1
309	4	5			
313	0	0		1	

Table 11--Continued

Respondent	Friendship Question		Popularity and Dress Questions		
Number	RC	CS	CS,MP	CS,BD	CS,NDR
402	2	3			
403	1	1			
404	2	3			
405	2	2			
406	2	3		1	
407	2	4			
409	1	1			
410	1	1			

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