Development of measurement techniques for comparative sociological analysis of rural communities

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DEVELOPMENT OF MEASUREMENT TECHNIQUES FOR COMPARATIVE SOCIOLOGICAL
ANALYSIS OF RURAL COMMUNITIES

by

Donald R. Fessler

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

Major Subject: Rural Sociology

Approved:

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Iowa State College

1951
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INTRODUCTION

Origin of the Study

In 1947 the Consumers' Cooperative Association of Kansas City, Missouri, asked members of the sociology staff of Iowa State College to make a study of farmers' cooperatives in Iowa. One of the purposes of this research study was to determine the relationship of the cooperatives to the communities in which they were established.

The project as set up involved the study of twenty-two Iowa communities, sixteen of which had trade centers of less than one thousand population and the rest had centers with populations up to five thousand. None of the community centers had populations of less than 250 since it was essential that each community have the basic institutional services. Besides the case study of each of the communities, the field work included interviews with over five hundred farmers within the boundaries of the twenty-two communities. While these interviews were primarily intended to elicit opinions about cooperatives the schedules used were sufficiently comprehensive to reveal opinions about other group activities and community relations in general.

On the basis of the interviews, the community case studies, and financial strength estimates of the community business agencies secured from Dun and Bradstreet of New York City, an attempt was made to find measures where-
by the communities with cooperatives could be compared with the communities without. The present dissertation is a study of the measurement techniques thus developed.

The nature and purpose of the original project necessitated an emphasis upon the economic aspects of community life and set limits to the financial resources available for the research. For this reason it is hoped that the measuring techniques developed here will be looked upon as only beginnings, as attempts to explore areas of community measurement, rather than as final solutions. The definition of community used in this dissertation in itself suggests functional areas in which indexes may be developed which may well prove more effective instruments than the ones used here.

The theoretical approach to community relations upon which the indexes have been based will be drawn from the relationships existing in the sixteen primary rural communities of the cooperative study as these relationships were seen by the author. An attempt will be made to apply accepted sociological principles to these relationships where such principles are known to the author. Over two hundred field interviews with farmers and interviews with most of the merchants and community leaders in the sixteen communities are the basis for much of the interpretation of community relationships embodied in this dissertation.

Purpose

The sixteen Iowa primary rural communities of the cooperative study were social groups each possessing values and social norms of behavior
functioning like other social groups in shaping the lives of their members. Each community had characteristics peculiar to itself which distinguished it from other rural communities. These characteristics may have been due to the presence of certain variables in social organization, such as the presence or absence of cooperatives, or they may have been the reason for the existence of these variables. In either case, before it could be decided whether these variables were causes or results, the characteristics to which they were related had to be measured.

It is the major hypothesis of this dissertation that component characteristics of these primary rural communities can be measured and the differences between the communities subjected to statistical tests for comparative purposes. To test the hypothesis, measuring devices will be constructed to deal both with the social satisfaction of the community as a whole and with the specific and limited parts of community satisfaction which are related to the functioning of the business aspects of community life.

A secondary hypothesis is that these measuring devices can be so constructed as to conform to certain criteria which are essential if the devices are to have more than limited value and applicability.

In order to provide a more thorough understanding of the phenomena which it is proposed to measure, it is the purpose of this introductory section (1) to find a satisfactory definition of a primary rural community, (2) to limit the population size which for purposes of empirical analysis can be shown to comprise such a community, and (3) to indicate the means whereby community boundaries may be delineated.
Definition of Community

It is not the purpose of this dissertation to add to the multiplicity of definitions of community already in existence. It will better serve present needs to draw on the experience and insight of others and to synthesize their contributions in a manner to bring light to bear on the problem at hand.

Brunner held that the rural community first of all comprised the population of an area in which a majority of the people availed themselves of the use of most of the social, economic and religious services of the community trade center or who were, as Cooley phrased it, served by a constellation of services and who had diversified as well as common interests. It was an area in which the people had a sense of belonging to the group out of which grew a feeling of responsibility which could be called on when situations arose requiring concerted action. The identification of the individual with the other members of his community was such that when he said "we" there was no thought of distinction and when he said "ours" there was no thought of division. This sense of identification with the community as a social group grew from the individual's dependence upon the community for the satisfaction of his physical and spiritual wants.

On the basis of these concepts each of the sixteen primary rural com-

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1E. deG. Brunner. Village Communities. N.Y., Geo. H. Doran Co. 1927.  
5Ibid., p. 151.
the group as a society, group as a social group. An. Soc. Roy. 61.

...
exchanges of the social scene. This feeling involving subordination to the whole on the part of the individual is obviously fostered by training and habituation in the daily discipline of life, and thus wrought into character it expands until in some degree it expresses the mode in which the individual normally realizes his membership within the whole community. 1

The community social norms of behavior, listed by Hiller as the fourth criterion, may have their origin in and constitute the constellational aspect of the community institutions, but the non-specialized, face-to-face nature of primary community contacts tends to subordinate institutional norms of conduct to community norms. In other words, as Cooley pointed out, community sets the pattern of life. 2 Few contacts in the primary community serve single purposes. People go to church to renew contacts with relatives and friends as well as to worship. Even shopping fulfills social needs to the extent that merchants and customers have bonds that transcend the purely economic ones. Fraternal organizations, while bearing the name and form of similar organizations elsewhere, are transformed into primary groups by the degree of intimate understanding and appreciation that exists between the members.

Since institutions within community are "segments of society", to use Hiller’s definition, 3 the community social norms derived from them are not completely detached from the norms of the society found in the state or

3 Hiller, op. cit., p. 189.
country in which the community is located. In this case this larger society will imply that of the state of Iowa since it was in this area that the field work was done. According to Hiller's theoretical approach the community social norms insofar as they differ from those of the larger society may be looked upon as the local variations of the institutional norms predominant in that society.

From this point of view it is unrealistic to attempt to evaluate the social life of Iowa communities only in terms of the social norms of the whole state. As social groups these communities can better be evaluated in terms of the conformity of conduct to the social norms peculiar to the members of the respective communities since these to a degree will reflect the social norms of society as the latter apply to local conditions.

The community social norms of behavior approximate the societal social norms according to the degree of mobility and communication existing between the two, but they will not often be identical. For this reason, what may seem to an outsider to be an ideal community, may to its members be far from ideal. A suburban community, for example, where substantial, church-going, upper-middle-class members appear to enjoy a high degree of group solidarity, may, in the eyes of the members themselves appear to fall short of maintaining conduct according to the norms of behavior long accepted by the community. On the other hand, a rugged frontier community which may fall short of being "good" by other standards, may, to its members be a very satisfying place in which to live since they know that its members
are conforming to community norms of behavior. In each case, so long as the communities are not isolated, there is sufficient awareness of the standards of society to temper the evaluation in the light of those standards.

Where the degree of communication and physical mobility tend to be high as in the state of Iowa, the degree of conformity of community social norms to the norms of the state as a whole will tend to be correspondingly high. Iowa is sufficiently integrated institution-wise so that it is able to demand a degree of conformity to its norms through the organizational framework of its separate institutions. When a community falls short of these general institutional norms, some of its members at least will be in sufficient touch with the society of the state as a whole to prod it in the direction of meeting the state norms, and, at the very least, to prevent a complacent acceptance of the community's own norms as a basis of self-evaluation. It is this factor that makes an evaluation of the institutional behavior of the community on the basis of the normal distribution of opinions of a completely random sample of its members a valid and meaningful evaluation.

If, in the expression of their opinions about a community, the members demonstrate that they are guided by a common set of values and norms of behavior, it can be said that a high degree of group solidarity exists among them. Solidarity in this sense does not imply that as individuals the people must think well of each other. Like the men in a fighting unit, they can have a sense of interdependence, they can have common interests,
and they can feel a sense of belonging to the group as a whole without necessarily developing affection for each other or ruling out mutual hatreds. It is, therefore, possible to look to the opinions of the members themselves for the data which can be used to measure community solidarity.

Relationship of individuals within groups

It must be emphasised, however, that unless the number of people involved in the institutional activities of a given area remains small enough to permit a predominance of primary group contacts, primary community as it has here been defined, no longer exists. The explanation of this lies in the social relationships of the individuals within the community.

Individuals are bound by ties of physical and social dependence to various groups within the community. To maintain their positions within each group they must accept its system of values and abide by its norms of behavior. But the groups are not something apart from the individuals themselves. The group values and social norms of behavior are determined by their respective members. Since these members share not only the values and norms which spring from the culture of the larger society but also these peculiar to the local community, the values and norms of behavior of all the groups in the community tend to be fairly consistent with each other. This is what is meant by a community range of values and social norms of behavior.

For example, the members of a bridge club are not free to set up standards of conduct unrelated to those of other groups in the community.
members' experiences to certain social norms or behaviors regarded as right because each member of the club is at the same time a member of other groups—
within groups, may operate to improve their status within the larger group, that is, the community, by increasing conformity to community values and social norms of behavior. The members are subjected to the social pressures of most of the groups and therefore are cognizant of the community pattern of values and norms.

Again, where the population is large, the groups may be numerous and operate not in a community framework but in a specialty framework. That is, they may seek status not by conformity to any overall pattern of values and norms for the entire population, but by conformity to the values and norms of a particular institution or even a special field of activity within an institution. This is possible because the members of a group, whether it be a church, a ball club, or a luncheon club, are attached to other groups for each of which there is a separate set of values and norms. When enough members of one group are likewise members of some other group, the norms of the two groups will bear a resemblance to each other. This resemblance will be over and above that which is due to the fact that both groups share the same general norms of a society that transcends the local community. In fact, the points of resemblance may be deviations from the social norms of the state. This may best be illustrated by the fact that in most communities whether large or small certain churches and fraternal organizations have the social norms of the business "set" which belongs to them, while other churches and clubs have norms which reveal their middle- or lower-class membership.

To a certain extent this also holds true of values. However, different groups even in primary rural communities may be distinguished from each other by different sets of values, that is, each group places a high value on different things according to the nature of the group itself. The fact
about the phenomenon and the commitment of the members.

When the commitment is high, the proportion of the members
Themselves, and not their own, own the common goal. The
same, therefore, by the principle of separation of classes, the
scope of an exception where there is not
more than one group, can happen where a common goal is
accomplished, because it is not just a matter of personal school and
the separation

of the exceptions, or to the degree to which the groups into exception
If combinations exist mutually
the group among which

*Commitment

the extent that there is the same
Commitment between and among the groups, except to
so extensive, because it is not just a matter of personal school and
the separation of classes, or to the degree to which the groups into exception
If combinations exist mutually
the group among which

As a general rule, then, it can be said that some of the points and

The combination of commitment and cooperation

*Commitment and cooperation do not mean that the kind of values espoused by the two groups
do not affect the kind of values espoused by the two groups, and therefore, it is possible to
coordinate values between the two groups where compatible. It
that members of one group may also be members of another group because the

systems of value and separate norms of behavior. There will be a low degree of consensus among them. This consensus can be taken as a measure of the degree of community solidarity.

The Population Limits of Primary Rural Communities

The character of a community, as it has heretofore been defined in this dissertation, depends to a very large degree on the primariness of the everyday activities of its members. It is important, therefore, for empirical purposes, to determine the approximate maximum size of the population aggregate to which may rightly be applied the term primary rural community. Several factors are involved which may be used in setting up criteria for this purpose.

As indicated before, when the study of the relationship of farmers' cooperatives to Iowa communities was organized, the minimum population of the trade centers of the communities to be investigated had to be set arbitrarily at 250 in order to insure that all communities concerned had centers providing business services. Since the present study is based on the data collected for the cooperative study, it will be necessary here to accept this arbitrary population limit for practical rather than theoretical reasons.

The following are the factors involved in determining the maximum population limits:
Primary group factors predominate

As Cooley pointed out, "The community provides the immediate associational setting within which function the primary groups." While this may apply to parts of cities and towns, it does not hold true where secondary are as frequent or more frequent than primary group contacts. Where it is properly applied to whole locality groups as such, those groups should be of a predominantly primary character. Murdock emphasized this point when he wrote:

The most significant fact about the community as thus defined and restricted is that it is the group within which informal mechanisms of social control operate with genuine effectiveness. Whether in a band of Australian aborigines or in a rural settlement in our own society, the behavior of every individual is restrained and molded primarily by the opinions and reactions of those with whom he maintains daily face-to-face relations. It is upon them that he depends for all major social satisfactions, and the withdrawal of these, or its threat, constitutes the most effective of all sanctions. Praise and reciprocal response are the rewards for conformity to social expectations. Criticism, ridicule, gossip, withdrawal of reciprocity, and even social ostracism are the penalties for non-conformity. The pressure of public opinion and of these informal mechanisms of social control may be regarded as socially beneficial or as tyrannical, depending upon one's personal philosophy, but their effectiveness in a community situation cannot be denied or minimized.

Identification

The member of a primary rural community through his close identity with the other members of the community is constantly subject to the

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1Cooley, op. cit., p. 227.
social controls which constrain him into at least outward conformity with
the community norms of behavior. He is never shielded from social con-
trols by anonymity. This has its bad as well as its good aspects, but for
the present this is not an important consideration. The essential fact is
that the functioning of the primary rural community depends to a large
extent upon the identification of the individual with the other members
of the community.

Involvement of the whole personality

A third factor to be taken into account in limiting the population
size of community, as the term is used here, is the number of individuals
who, in carrying out the majority of their institutional functions, involve
their whole personalities in their relations with others. This means that
the community members will practically never be involved in groups within
the community that are specialised to such a degree that only one facet of
their personalities is known to the other members of the group.

Criteria for setting maximum population limits to the primary rural
community

From the foregoing it is possible to set up three criteria for deter-
mining the maximum population size of the rural community. It must be
small enough to insure that:

(1) informal social control will be implemented by the identification
of the members with the group as a whole and will not be hampered by the
presence within the system of conflicting roles or norms of behavior;
(2) the degree of specialization of activities and interests will be sufficiently limited to allow for the involvement of the whole personalities of community members, rather than segmented personalities, in local activities;

(3) primary group contacts will predominate.

Murdock set the maximal population of community at not much more than a thousand. In support of this he quoted an unpublished study undertaken by W.H. Goodenough some years ago in which the author had demonstrated that the average population of a community ranged from approximately fifty in societies organized in migratory bands to about three hundred in those with settled agricultural villages. He had also shown that it rarely exceeded one thousand or twelve hundred, even in individual instances, in the absence of complicating factors. This appeared to be about the maximal number of people who could maintain regular face-to-face relationships with one another.¹

Recent research in Iowa would show that Murdock's limits are low. The data collected and analyzed by Jehlik and Wakeley for Hamilton County, Iowa, indicate that communities with a combined farm and trade center population of up to approximately two thousand had a moderate to high degree of group consciousness and solidarity. The one exception was a community of over 1600 which had a farm population over twice as large as that of the center and in which the number of institutionalized services was relatively low.²

¹Ibid., p. 714.

The rating of group consciousness and solidarity used by Jehlik and Wakeley is very nearly synonymous with what has here been defined as a sense of primary community. The conclusions which may be drawn from their data were supported by contacts with farm and trade center members of the twenty-two communities included in the Iowa cooperative study.

Since the population of rural communities in Iowa is approximately fifty per cent on the farms and fifty per cent in the trade center, the community as a whole may contain roughly two thousand people and the trade center approximately a thousand. With such population limits the community will be small enough to allow for primary face-to-face contacts between its members including both the trade center residents and the farmers whenever the latter participate in the activities of the local institutionalized associations. In such a setting the farmer may enjoy primary group contacts with other members, they are subject to the same social controls, they achieve identification with the community as a group, and, finally, they conform to the same values and norms of behavior.

Delineating Community Boundaries

Whatever population limits are accepted for the rural community, the task has still to be faced of delineating the actual boundaries within which the residences of its members are located. Beginning with Galpin's early study of agricultural villages, community boundaries for the most part have been determined on the basis of the areas serviced by the trade
center institutions. As Wakeley phrased it in his Schuyler County study:

The persons who regularly or habitually patronize or prefer a certain center, may be located geographically in relation to the place where the center is located. The boundary line connecting the locations of the homes of the persons most distant from the centers who patronize it regularly for any service under consideration. A combination or a composite of these service areas constitutes the community area.

How many service areas are necessary to determine a community depends in the last analysis, as Ensminger suggested, on the feeling of the people. If the community, through its institutional services, provides enough contacts so that the people feel that they are members of an entity, that entity is for them their community.

Actual field practice connected with the study of agricultural cooperatives in Iowa indicated that by starting with the grocery trade area as a base, the boundaries of a rural community could be drawn with a high degree of accuracy with the help of village merchants. A later check with a random sample of farmers living on the outer margins of a community so delineated supported the judgment of the merchants to an acceptable degree. In previous community studies this grocery trade area has proven to be synonymous with the area in which all the characteristics of primary rural community function.

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Criteria for Evaluating Community Indexes

It is the purpose of this dissertation to locate or to create measures of community which can be used for comparative purposes. Lundberg has aptly pointed out that no measurement describes all aspects of any natural phenomenon. To measure a tree usually means to measure its height, though obviously there are many other factors involved in the phenomenon which is symbolized by the use of the word "tree". This is not to say that what is left out is unimportant. The fact that a yardstick does not measure the weight of a tree does not invalidate the use of the yardstick for measuring the tree.

By definition community consists of (1) a constellation of social and economic services, (2) a feeling of interdependence, (3) a feeling of common interest, (4) a sense of belonging to the group as a whole, (5) a common set of values, and (6) common norms of behavior. Each of these components is a dimension of community, as height, width, thickness and weight are dimensions of a tree. Measuring instruments or indexes which have the capacity to determine whether some communities have more or less of these six components than other communities have may be said to be measures of community. The validity of the indexes rests on their possession of this capacity.

It must be pointed out here, however, that the question of what constitutes a good community in relation to the amount of any of these com-

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ponents present in it is beyond the scope of this thesis. It is not implied here that the more of any of the components a community may be shown to possess, the better it is, nor will the indexes be set up to measure the "goodness" of a community in this sense.

In order to increase the value of community indexes and to enlarge their applicability, the following additional criteria are suggested.

(1) The index must be so constructed as to eliminate the influence of population size.

(2) Environmental factors such as climate and geography must be eliminated from the measurement data.

(3) Purely objective techniques must be used so that the indexes will produce similar results when administered by different people.

(4) Ideal standards of achievement should be avoided and communities measured by what actually exists either in fact or in the minds of the community members.

(5) The items in a community index should be subject to numerical evaluation so that a total index score can be arrived at for each community and meaningful comparisons made between communities or groups of communities.

A number of attempts have been made in the past to analyze communities comparatively. A review of these studies will be helpful not only in determining whether or not any of them meet the criteria set up for community indexes, but also in suggesting the form and content which any new index should have. Since most of these studies were set up for different purposes from the present one, any criticism implied in the
following review is solely in terms of how the index in question meets the present needs. The value of each of these studies in its own field of inquiry is fully appreciated.

Previous Attempts at Measuring Community

Community personality

In his book, The Changing Community, Zimmerman studied fifteen communities in Asia, England, Canada and different parts of the United States and developed a conceptual framework for a typology based on the idea that local communities, like individuals, possessed personalities which were expressions of their internal structures and their environments. 1 These community personalities were expressed in such names as "good-natured Littleville", "indecisive Hamlet", and the like.

Zimmerman's type of analysis, while valuable in itself, falls short of the present need for an objective index. His analysis can be made only by a well-trained sociologist or anthropologist whose conclusions will depend on his powers of observation and his critical discrimination quite as much as on actual community differences. Likewise, since the larger environment plays an important part in the analysis, actual differences in the internal social make-up of the communities can well be lost sight of if environmental differences are great, as between communities in England and in the American Southwest. On the other hand, where environment is more or less the same, as in rural Iowa, community character, as

delineated by this type of analysis, will be only mildly discriminative.

The Zimmerman study is valuable, however, in that it suggests that communities are complexes of sociological characteristics, which he calls community personality. Some of these characteristics may be discrete, but such of them as are continuous should be capable of being isolated and evaluated on a numerical scale, adding up to a total community-personality index score that can be used for statistical purposes.

**Large versus small-farm communities**

In a study prepared for the United States Senate, Goldschmidt made a comparison of two communities in California. This study, while not providing an index by which to measure community character, indirectly arrives at certain factors which might well be considered indices of good community. His comparison is of two communities of comparable population, one of which contains small farms and the other large industrialized farming enterprises. The small-farm community differed from the other in the following ways:

1. It had twice as many separate business establishments.
2. Its retail trade was greater by 61 per cent.
3. The expenditure for household supplies and building equipment was over three times as great.
4. It supported twenty per cent more people per dollar volume of agricultural production.
5. Its residents had a higher average standard of living.
(6) Two and a half times as many breadwinners were independently employed in the trade center, as white-collar workers, or operators.

(7) Less than half as many of its breadwinners were landless, insecure agricultural wage laborers.

(8) It possessed far more of the physical facilities for community living such as paved streets, sidewalks, garbage disposal, sewage disposal, and other public services.

(9) Its schools were more plentiful and offered broader services, including more grades taught.

(10) It had more public parks and recreation areas per unit of population.

(11) It had more than twice as many organizations for civic improvement and social recreation and greater facilities for Boy Scout activities and other public functions.

(12) It supported two newspapers (as compared to one in the industrial farm community) with considerably more news space.

(13) It had more churches and church-goers per unit of population.

(14) Its local decisions were made by local people rather than on the county level as was true of the industrial farm community.¹

Some of these differences may be symptomatic of basic differences in the deeper primary relationships in the two communities. Others may simply

indicate business inefficiencies which need not be correlated with the
primariness of the two communities. In either case Goldschmidt has here
suggested a number of factors which might well be developed further into
a community index. Since only two communities were included in the study, a
question may be raised, however, whether or not he was justified in making
the implication that small-farm communities other than those studied would
show the same high positive correlation with the characteristics he enumer-
ates, and that industrial-farm communities would reveal an equally high
negative correlation with these characteristics. Conclusions of this
nature would be justified only after a broad study was made of a repre-
sentative sample of communities. An index based on these characteristics
would facilitate such a study and make objective comparisons possible.

Organizational analysis

In his study, Diagnosing Rural Community Organization, Ensminger has
suggested eight important areas of social relationship within communities
which can be scored on a two- or three-point scale to determine the
uniqueness of a community and in a sense compare it with other communities.
Ensminger's eight areas were:

(1) Village-farm relationships: adolescent, mature, debilitated.
(2) Degree of organization: underorganized, overorganized,
disorganized,
(3) Organizational interaction: circumscribed, conflictive,
cooperative.
(4) Assimilative character of the community: efficient, inefficient.
(6) Leadership: personal, positional, organizational.
(7) Community self-identification: geographical distinction along
with history and tradition, competition or cooperation with
other communities or outside pressures, divided loyalties.
(8) Community activities and events: community supported activities,
activities without community interest, interest and activities
lacking.\(^1\)

This type of analysis is most suggestive. It has certain character-
istics, however, which would make it difficult to set it up as an index for
comparative purposes. A scale such as that used for leadership: personal,
positional, and organizational, cannot without difficulty be given numer-
ical evaluation that would be accepted without reservation. The assim-
ilative character of the community and community self-sufficiency may to a
large extent be merely the reflection of the community size. The scale for
measuring each area allows too great a range between communities and the
valuations used in most of the areas could only be arrived at after pro-
longed study by the sociologist. Few if any community leaders would be in
a position to understand the sociological implications of the terms used,
and whether made by sociologist or community leader, the evaluations would

allow for a high degree of subjectivity. Failure to weight the areas and develop a numerical score limits the usefulness of the analysis for other than diagnostic purposes.

Though it meets none of the criteria set up for a statistical index, Emsminger's analysis affords insight into a number of areas that should be considered in developing an index of the social characteristics of a community.

Indexes of trade-center services

In 1923 Kolb published an experiment station bulletin in which he attempted to classify rural community centers by the number of economic, educational, religious, social, communication, and organizational services they provided. He grouped the service centers according to the services provided and found a fairly wide range of population sizes within each classification, so wide, in fact, that his categories are of limited value for scaling purposes. His classifications of community centers were:

1. the single simple service type (crossroads store),
2. the limited simple service type (population 100-400),
3. the semi-complete service type (population 400-1200, average 800),
4. complete partially specialized (population 1200-5000),
5. urban, highly specialized.¹

Much later, Nelson and Jacobson classified small centers as those that lacked one or more of the following services: a bank, a post office, an express office, a telegraph office, and a publisher. Medium-sized centers were those possessing all the above services but less than 75 business units, and large centers were those with over 75 business units.\(^1\) Zimmerman had previously used the same general classification in a somewhat similar study.

Melvin made a study of all types of services in villages of different sizes in New York state in 1925. From the data he collected he concluded that there was a high coefficient of correlation between the number of economic services and population size up to a limit of size which varied for each type of service.\(^2\) For present purposes it will be well to note that these limits were beyond the population limits set for a primary rural community as defined in this dissertation.

**Community service and group identification ratings**

While the foregoing are purely classificatory schemes, they can be said to be the foundations for later evaluative scales, especially for a series of community studies carried on in different parts of the country by the Bureau of Agricultural Economics under Carl Taylor's direction.

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One of these studies was made by Alexander and Nelson in Goodhue County, Minnesota. The authors developed a scale with which to rate community service centers. The following service ratings were used:

- A^5 100 or more different kinds of services: high;
- A^4 50-99 different kinds of services: relatively high;
- A^3 15-49 different kinds of services: medium;
- A^2 5-15 different kinds of services: relatively low;
- A 1-4 different kinds of services: low.

Dan and Bradstreet data were used in determining the number of services in each community except in the smaller places where a count was made by the authors. Schools were included in the A or service rating and were given the following weights: one teacher school, 1; consolidated elementary school, 3; consolidated high school, 2; consolidated elementary and high school, 5.

A second scale, called a B or group identification rating, was also developed. In order to arrive at ratings on this item, group identification was considered as the result of what has been commonly referred to in sociological literature as primary-group activities. Accordingly, an ideal type of neighborhood primary group was posited with the following behavior characteristics assigned to it:

1. visiting by families and by individuals;
2. mutual aid,
   a. in emergencies, i.e., sickness, death;
   b. in production, i.e., exchange of work and tools;
   c. in borrowing and lending, i.e., food, money;
Errors occurred in the payment of the group's contribution.

The group's contribution was divided among the members of the group. Each member received a share of the total contribution.

The group's contribution was divided among the members of the group. Each member received a share of the total contribution.

The group's contribution was divided among the members of the group. Each member received a share of the total contribution.

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The group's contribution was divided among the members of the group. Each member received a share of the total contribution.
Another of the BAE studies was carried on by Grigsby and Hoffsommer in Frederick County, Maryland. These authors used a similar A and B rating scale but with a few minor additions and changes. Under the A or service rating one point was added for one or more doctors, and one point for one or more dentists who maintained offices within the center. Also under A the schools were rated: 2 points for elementary school, 2 points for high school, 4 points for elementary and high school. Parochial schools were not considered in weighting the educational services if they duplicated public schools. To the B or group identification rating were added the following factors: degree of kinship by blood or marriage, and degree of ethnocentric characteristics within the community, such as belonging to the same religious or ethnic group. ¹

These BAE studies touch upon most of the points which need to be considered in any analysis of community. They are intended primarily for diagnostic rather than comparative purposes which, unfortunately, limits their usefulness when a number of communities are being considered in relation to each other. The five-point A scale and the three-point B scale allow for great variations within each category. For example, a town with 61 services gets the same rating, A⁴, as a town with 99 or almost twice as many services, with no consideration for the population base which supports these services. Nor is the quality or kind of service taken into account. Furthermore, the B ratings would have to be made by an ex-

exceptionally keen and well-trained observer who, despite his training, would not be entirely free from subjective evaluation.

The A and B ratings are excellent for diagnostic purposes, but are difficult to apply in the comparative analysis of several communities of varying population size. They represent the opposite ends of a group identification-specialization continuum and are considerably affected, therefore, by the size of the community involved.

Community rating chart

Several attempts have been made by extension sociologists to develop community rating sheets for the use of community councils. In West Virginia, Frame and Rapking developed a community rating chart in which community spirit, citizenship, recreation, health, homes, schools, churches, business and farms were included. Each item was to be scored separately and a total community score of 1000 was possible.¹

In 1929 this community score chart was revised, leaving out recreation and farms as major headings and adding social welfare (including recreation), appreciation of the beautiful, and industry. In this latter score chart each major heading was broken down into subheadings which were carefully defined so that community members would know just what criteria were to be used. The scoring of each major heading was to be undertaken in the separate communities by a special committee of community leaders.²

While community score charts in general serve a useful purpose in the self-analysis of communities, they are open to several criticisms as measurement techniques. In this particular case certain arbitrary standards of achievement are implied by the type of items selected for scoring and insufficient regard is given for the relation of these items to community size. Furthermore, the community leaders who score the different areas of activity may in many cases have a vested interest in giving their community a high score and as leaders they often represent a favored segment of the population. The average citizens in many of these communities may feel quite differently about the services and activities of the community.

A somewhat more objective index of community interests was developed by Burt for rural communities of Missouri. The interests he chose were: (1) public schools, (2) health conditions, (3) utilities and public services, (4) finance, wealth and trade, and (5) civic and religious interests. Each component was made up of items which could be objectively measured. For example, the index score for schools was based on such items as the per cent of school population attending school daily, the average number of days attended by each child of school age, per cent of secondary teachers who had eight or more years of training above the eighth grade, and the average annual expenditure for each child attending school.¹

Burt achieved a high degree of objectivity in his index, but many of the items such as those about the church, are items which can be measured objectively but have little to do with the quality of the service provided and its consequent benefit to the community. For example, a church filled to capacity every Sunday can still be a highly disruptive force in community relations. This difficulty is found in indexes which set up an arbitrary standard.

Community satisfaction index

For a different approach to the problem of developing a community index an attitude study by Davies is most suggestive. He devised a scale to rate attitude of community satisfaction, not for the purpose of comparing specific communities but to compare attitudes of individuals towards various kinds of communities. His scale contained forty statements to which interviewees were asked to respond on a five-point scale which could be scored numerically.¹ By wording all statements to apply to a particular community, that is, the community of the interviewee, and by a careful selection of objects of reference within the community, such a scale could be devised and used for comparing communities.

Past attempts to rate communities summarized

Other than a few which do little more than duplicate the techniques suggested here, the community studies which have just been reviewed con-

stitute the major contributions made by sociologists in their attempt to evaluate and, in a sense, to measure rural communities. All of them contribute valuable ideas for the construction of the kind of indexes that are needed here and their shortcomings are due primarily to the fact that they were intended for purposes somewhat different from those of the present study. Since, in their present form, however, none of them meets the suggested criteria for community indexes, new indexes will have to be devised. The ideas and methods already developed will be utilized as far as possible.

Several of the studies, for example, suggest that the rural community can be measured by the degree to which its institutions can be said to function properly in fulfilling the needs of community members. In many cases the economic services of the community trade center were evaluated and used as a measure of community. Others included fraternal, recreational and "public" services.

The personal and organizational interactions which take place in a primary rural community are likewise used in some studies as valid measures of community. These studies, especially when viewed from the theoretical approach suggested by Lazarsfeld and Merton, indicate the possibility of developing a sociological scale or pattern analysis which would be extremely useful in the measurement of the primary rural community. Elaborate research would be required to do the job, however, and such an

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undertaking would be beyond the scope of this study.

A simpler approach to community relations is indicated by the use of opinion scales. Techniques for the development of such scales have already been perfected and the scales lend themselves to the measurement of various aspects of community such as institutional behavior, inter-group and inter-personal relations, and community-centered activities.

Modifications will be made of some of these ideas and techniques in devising indexes that will more completely meet the criteria set up.
THREE PROPOSED INDEXES OF COMMUNITY

It is a major hypothesis of this dissertation, as indicated at the outset, that the characteristics of rural communities may be measured and that the differences between them, when subjected to statistical tests, will provide the basis for significant comparisons. A corollary hypothesis may be added to the effect that, in devising indexes for this purpose, all of the criteria set forth in the introduction to this dissertation may be met. The validity of such indexes will depend on whether or not they have the capacity to distinguish significant differences between communities in the amount of any one or all of the components which the communities possess.

Two indexes, a Business Service Index and a Per Capita Financial Strength Index, are at hand to test these hypotheses. They were developed by the author as a part of the study of agricultural cooperatives in Iowa.\(^1\) The indexes were used to determine whether or not communities with farmers' cooperatives were significantly different from communities without. The results of the application of the indexes to a sample of sixteen primary rural communities in Iowa supported the hypotheses.

Some improvements have been made on these indexes since the report of the cooperative project was published. These improvements are in the direction of simplifying the indexes and do not change their ability to

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detect significant differences between communities. To avoid repetition they will be described in their improved form. This will be followed by a description of the application of the indexes to the sixteen communities of the cooperative study.

To the two indexes reported in the bulletin on agricultural cooperatives will be added another, a Community Solidarity Index, which was tested in only eight of the sixteen communities. On the basis of the results of the application of this index to a limited sample of communities, evidence will be presented to show that it, too, supports the hypotheses of this dissertation.

**Business Service Index**

The review of past attempts to measure community reveals that some emphasis has been placed on the simple procedure of counting the number of services provided in the community trade center. The chief deficiency of such measures has been that no attempt was made to determine the quality of the services provided nor to eliminate the influence of population size. The first of these deficiencies will be dealt with later on in the discussion of the financial strength index. The second is the chief justification for developing the present Business Service Index.

In setting up this Business Service Index, the economic services of a community trade center are classified in six categories: A. Communication services (post office, telephone central, and local newspapers), B. Professional services (doctor, dentist, lawyer, veterinarian), C. Farm supply
and marketing services (farm implements, produce buying, creamery, elevator, feed store, etc.), D. Commercial recreation services (movies, skating rink, bowling alley, dance hall), E. Civic utilities (paved streets in the business district, sewer system, water supply), F. General commercial services (banks, retail stores, manufacturing concerns and work crews).

Two of these categories may need justification for being on such a list of business services. The first of these is category A., Communication services. These services are included primarily because they facilitate economic activity between the concerns and the outside world and between the concerns and the members of the community, especially those members living in the open country. Without these forms of communication both the quality and the quantity of economic activity would be limited, yet they are all community-centered by contrast to other forms of communication which are centered on the larger society, forms such as magazines, state and national newspapers, radio and television.

The other category which needs explanation is E., Civic utilities (paved streets in the business district, sewer system and water supply). Again these are not of themselves economic services but are what may be called "public" services. They facilitate business activity and make it more attractive and more desirable from the point of view of the health and comfort of those who do business in the community trade center. While farmers may not be conscious of the presence or lack of these items at all times, it is reasonable to suppose that they take them into account when making their choice of trade centers when other factors are equal. The
physical appearance of the community trade center would have a comparable effect, but this factor is not included here since no completely objective means of measuring it is at hand.

The services were divided into six categories in order that full credit might be given for having a desirable variety of services and not for just a large number of indiscriminate and duplicated services. A balance of the different kinds of service was the chief criterion on which the division was made. The list of services was restricted to business services in order that the index scores might later be used in conjunction with the scores of an index based on Dun and Bradstreet ratings of the financial strength of business concerns in the trade centers. For this reason no attempt was made to include religious and educational services.

In order to eliminate the influence of population size, the average number of services in any category for trade centers of different population sizes was used as the basis for scoring. This average was arrived at by using a sample of actual community trade centers in Iowa, the sixteen trade centers with populations under one thousand in the cooperative study already referred to.

The community trade centers were well scattered over a population range of from 260 to 732. The number of services in each of the six categories was listed for each center and a regression coefficient calculated between the population size and the number of services of each kind. This coefficient when multiplied by the population of a particular center
Table 1. Business Service Index scores of seven community trade centers without farmers' cooperatives

<table>
<thead>
<tr>
<th>Class of service</th>
<th>Name and population of trade center</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sham-</td>
</tr>
<tr>
<td>A. Communication</td>
<td></td>
</tr>
<tr>
<td>Expected number</td>
<td>.45</td>
</tr>
<tr>
<td>Actual number</td>
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</tr>
<tr>
<td>Score</td>
<td>2.55</td>
</tr>
<tr>
<td>B. Professional</td>
<td></td>
</tr>
<tr>
<td>Expected number</td>
<td>-.02</td>
</tr>
<tr>
<td>Actual number</td>
<td>0</td>
</tr>
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<tr>
<td>C. Farm</td>
<td></td>
</tr>
<tr>
<td>Expected number</td>
<td>3.18</td>
</tr>
<tr>
<td>Actual number</td>
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<td>Score</td>
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<tr>
<td>D. Commercial recreation</td>
<td></td>
</tr>
<tr>
<td>Expected number</td>
<td>-.06</td>
</tr>
<tr>
<td>Actual number</td>
<td>0</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
</tr>
<tr>
<td>E. Civic utilities</td>
<td></td>
</tr>
<tr>
<td>Expected number</td>
<td>.96</td>
</tr>
<tr>
<td>Actual number</td>
<td>1.00</td>
</tr>
<tr>
<td>Score</td>
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<tr>
<td>F. General commercial</td>
<td></td>
</tr>
<tr>
<td>Expected number</td>
<td>15.85</td>
</tr>
<tr>
<td>Actual number</td>
<td>15.00</td>
</tr>
<tr>
<td>Score</td>
<td>2.85</td>
</tr>
<tr>
<td>Total score</td>
<td></td>
</tr>
<tr>
<td>All services</td>
<td>7.55</td>
</tr>
<tr>
<td>Basic score</td>
<td>20.00</td>
</tr>
<tr>
<td>Index score</td>
<td>27.55</td>
</tr>
</tbody>
</table>

aThe expected scores are computed by the use of the following coefficients of regression for each service category: A. .0093X - 1.974; B. .00954X - 2.499; C. .0068X plus 1.41; D. .00284X - .50; E. .00274X -.2437; F. .02654X plus 3.556. The X in the equations is the population of each community trade center.

bThere is a maximum of three services in this service category so the highest expected number is 3.00 regardless of population size.
indicated the number of services of any kind that might be expected for
that center and by comparing it with the actual number of services in the
trade center it was apparent whether that center was above or below aver-
age in this respect.

If the actual number of services provided by a center was equivalent
to the expected number, the community's score in that category was zero;
if it was larger or smaller, the difference between the actual and the
expected number became the score with a positive sign before it when larger
and a negative sign when smaller.

Since only three communication services were listed (post office,
telephone central and newspaper) and only three civic utilities (paved
streets in the business district, sewer system, and water supply), no
community trade center could have more than three in either category
regardless of its size. A glance at Table 2 will show that the expected
number of communication services, for example, never exceeds 3 even though
the population size multiplied by the regression coefficient would result
in expected numbers of 4.71 for Dayton and 4.85 for Farley.

When the scores for all six categories were added for each community,
some communities had a negative total score. To facilitate statistical
computations it was desirable to convert these negative scores to pos-
itive ones. This was done by adding a "basis" score of twenty to all
total scores to provide the final index score.

So long as a system of scoring was set up that could be applied
objectively to any of the community trade centers, weighting of the scores
Table 2. Business Service Index scores of nine community trade centers with farmers’ cooperatives

<table>
<thead>
<tr>
<th>Class of service</th>
<th>Name and population of trade center</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Hanlon- Yale town</td>
</tr>
<tr>
<td></td>
<td>260</td>
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</tbody>
</table>

A. Communication

<table>
<thead>
<tr>
<th>Exp. number</th>
<th>45</th>
<th>71</th>
<th>1.29</th>
<th>2.04</th>
<th>2.38</th>
<th>2.45</th>
<th>3.00</th>
<th>3.00</th>
<th>3.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act. number</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
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<tr>
<td>Score</td>
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<td>1.29</td>
<td>0.61</td>
<td>-0.04</td>
<td>-0.38</td>
<td>-0.45</td>
<td>-1.00</td>
<td>0.00</td>
<td>-1.00</td>
</tr>
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</table>

B. Professional

<table>
<thead>
<tr>
<th>Exp. number</th>
<th>0.02</th>
<th>0.27</th>
<th>0.97</th>
<th>1.64</th>
<th>1.93</th>
<th>2.06</th>
<th>3.41</th>
<th>4.39</th>
<th>4.54</th>
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<tbody>
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<td>2.00</td>
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<td>-0.96</td>
<td>-0.95</td>
<td>2.61</td>
<td>-0.54</td>
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C. Farm

<table>
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<tr>
<th>Exp. number</th>
<th>3.18</th>
<th>3.36</th>
<th>3.36</th>
<th>4.33</th>
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<td>6.00</td>
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<td>Score</td>
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<td>-1.63</td>
<td>-1.58</td>
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<td>-4.37</td>
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D. Commercial recreation

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<tr>
<th>Exp. number</th>
<th>0.05</th>
<th>0.02</th>
<th>0.22</th>
<th>0.42</th>
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<th>0.94</th>
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E. Civic utilities

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<tr>
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<th>1.03</th>
<th>1.23</th>
<th>1.42</th>
<th>1.50</th>
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<td>0.97</td>
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<td>-0.34</td>
<td>-0.54</td>
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<td>-0.30</td>
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F. General commercial

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<tr>
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<th>16.56</th>
<th>16.40</th>
<th>20.34</th>
<th>21.13</th>
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<td>20.00</td>
<td>16.00</td>
<td>22.00</td>
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<td>-3.50</td>
<td>4.78</td>
<td>-1.93</td>
<td>-3.32</td>
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Total score

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<tr>
<th>All services</th>
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<th>5.05</th>
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<th>-3.19</th>
<th>3.71</th>
<th>-3.72</th>
<th>3.95</th>
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<tbody>
<tr>
<td>Basic score</td>
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<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
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<tr>
<td>Index score</td>
<td>25.56</td>
<td>25.05</td>
<td>26.98</td>
<td>15.81</td>
<td>16.29</td>
<td>16.28</td>
<td>25.98</td>
<td>25.98</td>
<td>14.53</td>
</tr>
</tbody>
</table>

*a* The expected scores are computed by the use of the following coefficients of regression for each service category: A. \*0085\*X = 1.974; B. \*00564\*X = 2.493; C. \*0063X plus 1.41; D. \*00284\*X = 2.60; E. \*00274\*X = 2.437; F. \*00284\*X plus 5.56. The X in the equations is the population of each community trade center.

*b* There is a maximum of three services in this service category so the highest expected number is 3.00 regardless of population size.
was considered to be of secondary importance. The use of the average number of services as the benchmark for determining the scores was considered the basic factor.

This Business Service Index as it now stands has been validated by its application to the sixteen small community trade centers which were included in the study of cooperatives. The results, while valid, cannot be generalized to apply to Iowa because the number of centers is too small to permit such generalization. It is hoped that a state-wide random sample of primary rural community centers can later be chosen to determine the average number of services which can be expected throughout the state in centers falling within the different population categories. The present index which was tested in this pilot study of sixteen trade centers is only a working model for such an enlarged index.

This index may be used to determine whether or not significant differences exist between communities in relation to specified variables. For example, in the cooperative study it was found by the use of the index that community trade centers in which farmers' cooperatives were located had an average index score of 21.6 while communities without such cooperatives had an index score of 18.2. This difference of 3.4 is highly significant by the test of analysis of variance. Furthermore, a comparison of the average scores for each of the service categories makes possible an analysis of the specific areas of difference between the two types of community trade centers. The cooperative community centers, for example, were, on the average, stronger in professional services, farm services, civic util-
ities, and general commercial services. The community centers without farmers' cooperatives had, on the average, more communication and commercial recreation services.

The chief weakness of the Business Service Index is that it does not measure the quality or the amount of services which are provided by the different business agencies in the community trade centers, though in general they are related to the number of agencies. Important as they are the exact measurement of each of these factors was outside the scope of this study and can well await more exact and thoroughgoing analysis.

For this reason the Business Service Index needs to be used together with an index which measures the quality, the size, or the financial strength of the services provided in each community trade center. Which of these three things is to be measured will depend to some extent upon the data that are available.

The Per Capita Financial Strength Index

Perhaps the ideal index to be used in conjunction with the Business Service Index would be one based on the annual volume of business done by all the business agencies in each community. Unfortunately such data are not available for primary rural community trade centers. The individual incomes of the members of a community, if available, would not be a true index of community itself since members of two communities could have the same total income yet one community be weak because its members spent most of their incomes in neighboring centers and the other strong because its members spent theirs with local concerns.
Though far from ideal, the best data available at the present time on which an index may be based are the Dun and Bradstreet estimates of the financial strength of the individual concerns in each trade center. These estimates are essentially credit ratings; they indicate how much money it would be safe to lend each business concern and, therefore, are a combined rating which reflects such factors as business acumen, volume, and efficiency of operation. The ratings are made by experts in the field of finance.

In their estimates of the financial strength of a particular concern Dun and Bradstreet used key symbols such as "B" for concerns having an estimated strength of from $200,000 to $300,000, and "E" for the $20,000 to $35,000 bracket. In order to use this type of estimate in a community index, the symbol had to be accepted as standing for the mean figure of the category rather than for the range. Thus in all cases where "B" was the symbol for the financial strength of different businesses, the mean figure of $250,000 was the figure used, just as $27,500 was used for the "E" category. So long as this procedure was applied without variation to all concerns in all community trade centers being analyzed, the results may be said to have been without prejudice to any one community and were satisfactory for the purpose at hand.

Some primary rural trade centers had lumber companies and sometimes other concerns which were branches of larger business organizations. Where this was the case, the Dun and Bradstreet estimate was always of the parent concern. In order to compute the proportion of the parent company's financial strength invested in the local branch, the business houses themselves had to be contacted. As a rule they did not hesitate to indicate the
share of their total financial strength which was represented in the local agency. While their estimate of their own financial strength might differ from that computed by Dun and Bradstreet, the proportion of it that was credited to the local concern was the important factor.

The Dun and Bradstreet data did not include a financial strength estimate for banks. This information had to be obtained from reports of the state department of banks. Here the capital and surplus figures were used. The estimate for banking offices or branches was obtained in the same way as with other branch concerns.

Occasionally the name of a firm appeared in the Dun and Bradstreet data without a financial strength estimate. When this occurred, the county tax records were consulted. Whatever estimate was obtained from this source, or directly from contact with the concern itself, was placed in one of the categories used by Dun and Bradstreet and the mean of that category substituted for it so it would have a comparable weight with other concerns in the trade center. For example, if the tax records indicated a valuation of $21,500, the concern belonged in the "S" category and the estimate $27,500 was substituted for the tax valuation. While the tax figures were only a part of the Dun and Bradstreet estimates, when considered in relation to the fairly wide range of the Dun and Bradstreet strength categories, they could be said to be sufficiently reliable to meet the purposes of the study.

If no tax records were available for the firm for a particular year and if it was no longer in existence, an estimate had to be obtained by other
and less dependable means. By checking the Dun and Bradstreet data for the years prior to and following the years for which the firm was listed, some clue was obtained of its estimated strength. It was assumed that once a firm had been established in a center it did not always just evaporate if the owner could not make a go of it. More likely than not it had changed hands. Therefore, if the Farmers' Union General Store, for example, was listed for the year 1925, but not in subsequent years, and a general store appeared under a different name in the years immediately following, the chances were fairly good that the business had only passed under new ownership and, within the fairly broad range of the Dun and Bradstreet financial strength categories, the strength of the concern could be considered more or less the same as that of the new concern. If even this procedure failed to provide a clue to the financial strength of a business agency, the only recourse was to check the strength of other similar firms in the same center or in other centers of the same size and form an estimate on the basis of these figures.

These methods of filling in estimates not provided by Dun and Bradstreet for concerns which they list are all admittedly open to question. Until better methods are suggested, however, only two alternatives remain: either the Dun and Bradstreet estimates must be dropped entirely as a source of valuable data, or the firms listed by them but for which they offer no financial strength estimates must be ignored. This latter course could result in greater inaccuracies than the procedures suggested.

After the estimated strength of all the concerns in a community trade
center had been obtained for a particular year, the estimate for the
center as a whole was computed. Since the financial strength of a center
had to be considered from year to year to determine whether or not it was
economically stable, the fluctuation in the yearly estimates which was due
solely to the general fluctuation in money value had to be estimated and
eliminated. This was done by dividing the total estimate of a center by
the Federal Reserve Commodity Price Index for the year in question and
then multiplying it by 100. Thus, if a center's financial strength was
$120,000 in a year for which the Federal Reserve Commodity Price Index was
109, the estimate, by the process outlined above, was adjusted to read
$110,091.

When this corrected total financial strength of the community trade
center was obtained, one more step remained. The total was divided by the
population of the center according to the census figures current in the
year for which the center's financial strength was being computed. The
resulting figure was called the Per Capita Financial Strength figure for
the center for a particular year. Fluctuations in population in rural
communities were generally so small from year to year as to make little
difference in the index figures for years between censuses.

When the Per Capita Financial Strength Index scores for the sixteen
community trade centers of the cooperative study were compared, there
was found to be no correlation between the size of the index score and
the size of the population of the trade center. This would indicate that
the influence of size had been eliminated.
The most important feature of the producer's community was the population's reliance on the per capita capital stock in the index of this time. The per capita capital stock could be obtained for years up to the present time.

The reason for the high rate of innovation in the economy was considered to be one of the important reasons to obtain the data on innovation as estimates for every year between 1926 and 1946. The reason was to see if the innovation stock estimates for every year were taken to be the same proportion of general innovation stock and then the long-range fluctuation.

The study of innovation was considered to be of the innovation capital stock index since the importance of this type of the trade center had been studied by a number of a number of economists and others. The study of the research on innovation in money value and time has been undertaken.

The per capita capital stock in the index provided to have been useful.
relationships which bind the community together. Since rural community trade centers in Iowa are generally farm service centers, the population of the centers is for the most part employed in operating these business agencies. How well they do their job is reflected both in the size of the outlying farm community that is tributary to the center and in the financial strength of the concerns at the center. Where the financial strength of the center is large in relation to its population, the community as a whole can be assumed to be stronger than when the financial strength is small.

The fact that the Per Capita Financial Strength Index was not based on exact dollar for dollar figures but on averages of estimates did not invalidate it for comparative purposes. The crucial point was that a procedure had been developed which, if conscientiously adhered to, resulted in estimates which were fair to all the centers involved. Whatever deficiencies there were in the method, such as the means of arriving at estimates not given by Dun and Bradstreet, applied across the board to all the community centers concerned.

In order to maximize the reliability of the Per Capita estimates, the following points had to be kept in mind and adhered to: (1) The Dun and Bradstreet data had to be checked against the situation in the individual centers to make sure that banks and all other existing concerns were included in the final estimate. The existence of banks over the entire period under consideration had to be checked since many of them closed their doors during the depression years and were almost forgotten.
(2) Where estimates other than those provided by Dun and Bradstreet were used, the procedures outlined above had to be followed consistently in all cases. (3) In dividing the estimated strength of the center by its population, the population figure given in the general census current in the year for which the estimate was computed was used throughout. Population figures provided by the residents or by the officials of the trade center were not consistently reliable and if used might have injected greater error into per capita strength estimates. The actual population in the years between censuses differs from the census figures, but by reliance on the census figures alone a source of greater inaccuracy was avoided.

When the Per Capita Financial Strength Index was applied to the sixteen trade centers of the study of Iowa cooperatives, some significant results were obtained. The trade centers in the study were divided into two groups, those that had no farmers' cooperatives and those that had acquired cooperatives since 1925, the first year for which financial strength estimates were obtained. None of the communities in the study had had cooperatives prior to 1925.

One of the centers without cooperatives had PCFS Index scores in 1925, 1930 and 1935 which were almost five times as large as the scores for other centers without cooperatives and more than twice as large as those for centers with cooperatives, though in later years the index scores for this center, Kiron, fell in line with those of the other centers. Because of this unexpected wide discrepancy, Kiron was withdrawn from the sample
when comparisons were made between the trade centers which had and the trade centers which did not have cooperatives. However, whether Kiron was withdrawn or not, the differences between the two groups of community trade centers was significant at the 1 per cent level.

The remaining six trade centers without cooperatives had PCFS Index scores in 1925 which were not significantly different from the scores for the centers with cooperatives. However, by 1949, the difference between the scores of the two groups of community trade centers had increased until it was highly significant. A glimpse at Table 3 will show that while centers with cooperatives and centers without cooperatives started out approximately equal, the scores for the centers without cooperatives fell consistently below those for the centers with cooperatives and were much lower in 1949 than they had been in 1925. The centers with cooperatives, on the other hand, had slightly higher scores in 1949 than they had started with in 1925. These differences are graphically illustrated in Figure 1.

Index of Community Solidarity

The emphasis on the economic aspects of community life in previous indexes of community implies acceptance of the idea that communities which are strong economically are strong in other respects. Empirical evidence is needed to prove this. Furthermore, it would be worth while to determine whether or not communities differ from each other in social characteristics when compared on the basis of their relation to such
### Table 3. Per Capita Financial Strength Index scores for the sixteen primary communities included in the cooperative study

<table>
<thead>
<tr>
<th>Community centers</th>
<th>Years scored</th>
<th>1925</th>
<th>1930</th>
<th>1935</th>
<th>1940</th>
<th>1945</th>
<th>1949</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiron</td>
<td></td>
<td>2113</td>
<td>1992</td>
<td>1190</td>
<td>412</td>
<td>507</td>
<td>716</td>
</tr>
<tr>
<td>Shambaugh</td>
<td></td>
<td>515</td>
<td>496</td>
<td>118</td>
<td>112</td>
<td>71</td>
<td>177</td>
</tr>
<tr>
<td>Floyd</td>
<td></td>
<td>432</td>
<td>161</td>
<td>211</td>
<td>158</td>
<td>154</td>
<td>155</td>
</tr>
<tr>
<td>Runnells</td>
<td></td>
<td>476</td>
<td>530</td>
<td>432</td>
<td>348</td>
<td>312</td>
<td>428</td>
</tr>
<tr>
<td>Galva</td>
<td></td>
<td>488</td>
<td>618</td>
<td>436</td>
<td>588</td>
<td>587</td>
<td>533</td>
</tr>
<tr>
<td>Gravity</td>
<td></td>
<td>396</td>
<td>458</td>
<td>201</td>
<td>202</td>
<td>133</td>
<td>199</td>
</tr>
<tr>
<td>Moravia</td>
<td></td>
<td>518</td>
<td>541</td>
<td>314</td>
<td>470</td>
<td>341</td>
<td>454</td>
</tr>
<tr>
<td><strong>Average score</strong></td>
<td></td>
<td>705</td>
<td>685</td>
<td>422</td>
<td>327</td>
<td>301</td>
<td>367</td>
</tr>
<tr>
<td><strong>Average, Kiron omitted</strong></td>
<td></td>
<td>471</td>
<td>467</td>
<td>294</td>
<td>313</td>
<td>266</td>
<td>309</td>
</tr>
</tbody>
</table>

**Without cooperatives**

<table>
<thead>
<tr>
<th>Community centers</th>
<th>1925</th>
<th>1930</th>
<th>1935</th>
<th>1940</th>
<th>1945</th>
<th>1949</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanlontown</td>
<td>753</td>
<td>666</td>
<td>744</td>
<td>573</td>
<td>442</td>
<td>636</td>
</tr>
<tr>
<td>Yale</td>
<td>556</td>
<td>649</td>
<td>593</td>
<td>518</td>
<td>579</td>
<td>565</td>
</tr>
<tr>
<td>Dunkerton</td>
<td>925</td>
<td>659</td>
<td>433</td>
<td>161</td>
<td>181</td>
<td>487</td>
</tr>
<tr>
<td>Velga</td>
<td>230</td>
<td>255</td>
<td>188</td>
<td>145</td>
<td>143</td>
<td>268</td>
</tr>
<tr>
<td>Garrison</td>
<td>618</td>
<td>648</td>
<td>781</td>
<td>728</td>
<td>559</td>
<td>606</td>
</tr>
<tr>
<td>Waukeee</td>
<td>502</td>
<td>635</td>
<td>618</td>
<td>605</td>
<td>498</td>
<td>491</td>
</tr>
<tr>
<td>Burt</td>
<td>310</td>
<td>306</td>
<td>354</td>
<td>372</td>
<td>341</td>
<td>524</td>
</tr>
<tr>
<td>Dayton</td>
<td>322</td>
<td>467</td>
<td>426</td>
<td>271</td>
<td>449</td>
<td>671</td>
</tr>
<tr>
<td>Farley</td>
<td>228</td>
<td>334</td>
<td>187</td>
<td>173</td>
<td>160</td>
<td>252</td>
</tr>
<tr>
<td><strong>Average score</strong></td>
<td>495</td>
<td>557</td>
<td>490</td>
<td>394</td>
<td>372</td>
<td>500</td>
</tr>
<tr>
<td><strong>Average, all communities</strong></td>
<td>587</td>
<td>613</td>
<td>455</td>
<td>365</td>
<td>341</td>
<td>442</td>
</tr>
</tbody>
</table>
Figure 1.
PER CAPITA FINANCIAL STRENGTH INDEX SCORES
FOR COMMUNITIES WITH AND COMMUNITIES WITHOUT FARMERS COOPERATIVES
variables as the presence or absence of cooperatives, proximity to paved highways and railroads, or ethnic composition.

By the definition of primary rural community set up in this dissertation it was indicated that the components of community which might be measured were: (1) the institutional services, (2) the feeling of interdependence, (3) the feeling of common interest, (4) the sense of belonging to the community group as a whole, (5) a common set of social values, and (6) common social norms of behavior. The Business Service Index and the Per Capita Financial Strength Index were attempts to measure the institutionalized business services of a community as they exist in fact. The index of community solidarity which it is now proposed to develop will attempt to measure two things: (1) the degree of satisfaction with the functioning of the institutional services, and (2) the degree of solidarity existing in the community as expressed by the agreement of opinions about it. This latter will indicate whether or not a common set of values and common social norms of behavior exist within the community, and in that sense evidence of their presence or absence can be used as a measure of community.

As indicated in the introduction to this dissertation, a community is a social group and as such has its own set of values and norms of behavior which are local variations of the values and norms dominant in the society of which the community is a part.

If this is true, when an individual is asked his opinion about the social behavior of the members of his community, his opinion will be based
more or less on the community norms of behavior. The more the members of
the community are in agreement in their opinions, the more evidence there
is that such community norms exist.

From this point of view it is not essential that the opinions expressed
deal entirely with community-centered forms of behavior. They may be
individual-centered or institution-centered. The community aspect of such
opinions is that agreement or lack of agreement as expressed in the opin-
ions of community members will indicate the degree to which they are based
on common (i.e., community) values and social norms of behavior. The
solidarity made evident by the acceptance of such common values and social
norms is the object of measurement here. It is consensus as Masliver
conceived it.¹

It is not the purpose of this dissertation to prove that community
solidarity of this kind is good or bad, nor that indexes of such solidarity
could distinguish between good and bad communities. Such indexes would
measure only the degree to which such solidarity existed in a community
and by so doing would be a measure of the degree of community itself.

The solidarity which is to be tested is related to community norms
of behavior. By definition social norms are the culturally defined proper
or "good" forms of behavior. Therefore the opinions which are solicited
from community members deal with how proper or good they think the social
behavior of their community is.

¹Masliver, op. cit., p. 161.
Choosing the criteria of a good community

With these points in mind an index of community solidarity was devised for the communities of the Iowa cooperative study. Eight areas of community behavior were first outlined; these were: I. Community spirit, II. Interpersonal Relations, III. Family Responsibility (to the community), IV. Schools, V. Churches, VI. Economic Behavior, VII. Local Government, and VIII. Tension Areas. Criteria of behavior were set up in each area which, if adhered to by the members of a community, would result in its being in their words a good community. For instance, in Area II, in their relations with one another, members of a good community would (1) avoid being critical of each other, (2) be polite and courteous, (3) have a sense of belonging to the community group as a whole, (4) have a capacity for being friends with other community members, and (5) be tolerant of individual differences. In Area IV, the schools of a good community would (1) provide a program in which both farm and village students could participate freely and on equal terms, (2) prepare young people to cope with life's problems, (3) give the students a mastery of the tool subjects of reading and writing, (4) try to insure that their students were not handicapped if they went on to college, (5) keep the majority of their students interested in completing at least twelve years of education, and (6) develop in their graduates the desire and ability to take an active part in improving their community. The criteria of all eight areas of community life are given in Appendix I as Criteria of a Good Community.
Each criterion was stated in everyday language in both a favorable and an unfavorable manner as it might be applied to a particular primary rural community. For example, the statements relating to the schools of a community were: (1) a. The schools do as good a job for the farm kids as for the town kids. b. Farm kids don't fit into the school program very well. (2) a. The kids who have gone to school here turn out to be well-adjusted. b. Our schools do a poor job of preparing young people for life. (3) a. Our schools fail to give students a mastery of reading and writing. b. Most of the students here learn to read and write well. (4) a. Our schools do a good job of preparing students for college. b. Our young people who go on to college find themselves poorly prepared. (5) a. Many young people in the community do not finish high school. b. Most of the young people nowadays graduate from high school. (6) a. Our high school graduates take an active interest in making their community a better place in which to live. b. High school graduates around town make little use of what they've been taught in school.

The pretest

In all, fifty-nine criteria of community behavior were set up on a trial basis, with not less than five criteria in any one of the eight areas. With a favorable and an unfavorable statement for each criterion, a schedule of 113 statements was constructed. It was desirable to reduce this to forty statements, with five statements in each of the eight areas.

To pretest the schedule and to provide a basis for choosing the forty state-
ments, the schedule of the full 118 statements was read to the junior and senior high school students* in eight of the communities of the cooperative study. The statements were shuffled and placed so that no two of them dealing with the same criterion or even from the same area occurred in close proximity to each other. This was done to encourage among the students a spontaneous reaction to each individual statement.

The manner of administering the schedules in the high schools is indicated in the instructions of the condensed schedule given in Appendix 2. An opportunity was given in filling out the schedules for the students to indicate whether they lived in the community trade center, on a farm within the community boundaries, or on a farm or in a village outside the community. The schedules of the students who indicated that in their opinions they lived outside the community were eliminated for present purposes.

Scoring the pretest

In order to score the schedules, a value of 5 was given for the responses marked VT (very true), 4 for T (true), 3 for ND (not decided), 2 for U (untrue), and 1 for DU (definitely untrue) for those statements which were favorable to the community, such as "Local concerns deal fairly and squarely with everyone." Other statements like "People here give you a bad time if you insist on being different," which indicated

*High school students were used because of project limitations of time and money.
an unfavorable opinion of the community were scored 1 for VT, 2 for T, 3 for ND, 4 for U, and 5 for DU. A high total score for any primary rural community would, therefore, indicate that opinions of its members were generally favorable, and a low score, that they were unfavorable to the community.

In the eight communities in which the high school students were interviewed there were altogether 240 schedules exclusive of those of students who lived outside the community boundaries. The individual scores for each of the 118 statements were correlated with the individual schedule totals in order to determine which of the statements best measured what the schedule as a whole was trying to measure. The statements were ranked by the size of this coefficient.

As indicated above, the statements were to be reduced to the forty which, according to the size of the coefficients of correlation best measured the opinions of the community members about their communities. There was no magic assigned to the number forty. Any multiple of eight could have been used, but forty statements allowed for five questions in each area which seemed enough to give a reliable picture of that area without making the total schedule too long. If the favorable and unfavorable statements of a pair both ranked among the first forty by the size of their coefficients, the one with the smallest coefficient was eliminated. In one or two cases more than five statements belonging to one of the eight areas turned up among the top forty. Here all but the top five were dropped so that there would be just five statements in each of
the eight areas. The resulting forty statements were used to make up the Community Solidarity Index schedule given in Appendix 2.

Testing the community criteria among college students

To further test the choice of community criteria for use in the schedule, a questionnaire was made out and submitted to over a hundred college students. In this questionnaire the students were asked which of the 58* criteria that were used as the basis of the statements in the original long schedule were (1) very essential to a good community, (2) important to it but not essential, or (3) not important. For example, they were asked whether or not, in their relations with one another, members of a good community (1) avoid being critical of each other, (2) are polite and courteous, and so on. The five-point scale used in the high school schedules was deemed less suited here than the three-point scale since the college students were being asked to consider abstractions about which they could hardly be as precise as they could be about a particular community. The three-point scale allowed for the ranking of the criteria according to the choices made by the college students. The 58 criteria are listed in Appendix 1.

In the high school schedules a pair of statements, one favorable to the community and the other unfavorable, had been used to express each of

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*Due to a typographical error one of the criteria was lost when the college questionnaire was made up leaving a total of only 58.
the 59 criteria. Of the two statements the one which was least correlated with the schedule totals was dropped out leaving 59 statements, some favorable and some unfavorable to the community. These were ranked by the size of the coefficient of correlation. Each of the statements was an expression of one of the criteria which the college students had rated as essential, important but not essential, or not important. The ranking of the criteria by the high school students was correlated with their ranking by the college students. The resulting correlation was higher when the college students making the responses came from rural communities than when they came from cities. The college students from communities with trade centers of 2500 inhabitants or less chose criteria which had a coefficient of correlation of .65 with those chosen by the high school students; those from communities with centers of from 2501 to 5000 inhabitants showed a correlation of .67, those from communities with trade centers of 5001 to 15,000, a coefficient of .71, and those from cities from 15,001 to 125,000, a coefficient of .53. All four coefficients of correlation were highly significant. These figures would seem to indicate that the forty criteria chosen for the final schedule were looked upon as essential to good primary rural communities by college and high school students alike, and that individuals who themselves came from rural communities were inclined to favor these particular criteria even more than individuals who came from larger centers. This is important since the index for which the schedule was devised was intended for use in primary rural and not in urban communities.
Applying the index

By the use of the high school and college schedules in the manner described above, assurance was gained that the criteria of community behavior expressed in the forty statements selected for the Community Solidarity Index were suitable criteria for measuring the overall characteristics of a primary rural community. The choice between the favorable and unfavorable statements as applied to specific communities was likewise validated in this manner.

Having established which of the statements were to be used in the Index of Community Solidarity, the other 78 statements in the original high school schedule were discarded and a score obtained from the forty statements only for each of the eight communities in which the schedule was given. Here again only the schedules of the students living in the community trade center or on farms within the community boundaries were used.

On the basis of the farm and trade center schedules a mean score and a standard deviation of scores was computed for each community. These figures are given in Table 4. The mean score for each community indicates what, in general, a sample of the population thinks of the institutions of that community and may be looked upon as an index of the proper functioning of the institutions of a community. That is, in a sense the institutional behavior of a community is relatively superior insofar as it is scored higher by community members and relatively inferior when it
Table 4. Index scores for community solidarity by areas of service

<table>
<thead>
<tr>
<th>Communities and total scores</th>
<th>Areas of Institutional Services</th>
<th>Av.</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
</tr>
<tr>
<td>Garrison Mean</td>
<td>18.8</td>
<td>19.7</td>
<td>17.8</td>
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<tr>
<td>Mean+S.D.</td>
<td>2.3</td>
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<td>2.6</td>
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<tr>
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<td>15.2</td>
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<tr>
<td>Hanlontown Mean</td>
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<td>19.9</td>
</tr>
<tr>
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<td>1.9</td>
<td>1.9</td>
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<tr>
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<td>21.4</td>
<td>21.8</td>
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<td>18.0</td>
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<tr>
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<td>16.5</td>
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<tr>
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<td>1.1</td>
<td>2.7</td>
<td>3.2</td>
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<tr>
<td>Mean+S.D.</td>
<td>17.2</td>
<td>19.2</td>
<td>19.0</td>
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<tr>
<td>Mean+S.D.</td>
<td>15.0</td>
<td>13.8</td>
<td>12.5</td>
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<tr>
<td>Waucoco Mean</td>
<td>14.4</td>
<td>17.7</td>
<td>17.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>3.1</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Mean+S.D.</td>
<td>17.5</td>
<td>20.5</td>
<td>20.7</td>
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<tr>
<td>Mean+S.D.</td>
<td>11.3</td>
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<td>14.9</td>
</tr>
<tr>
<td>Burt Mean</td>
<td>16.4</td>
<td>17.9</td>
<td>16.5</td>
</tr>
<tr>
<td>S.D.</td>
<td>3.5</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Mean+S.D.</td>
<td>19.9</td>
<td>21.1</td>
<td>21.5</td>
</tr>
<tr>
<td>Mean+S.D.</td>
<td>12.9</td>
<td>14.7</td>
<td>15.5</td>
</tr>
<tr>
<td>Dunkerton Mean</td>
<td>13.4</td>
<td>12.7</td>
<td>15.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.1</td>
<td>4.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Mean+S.D.</td>
<td>17.5</td>
<td>17.2</td>
<td>17.9</td>
</tr>
<tr>
<td>Mean+S.D.</td>
<td>9.3</td>
<td>9.2</td>
<td>13.3</td>
</tr>
<tr>
<td>Moravia Mean</td>
<td>15.1</td>
<td>16.1</td>
<td>15.8</td>
</tr>
<tr>
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<td>2.8</td>
<td>3.2</td>
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<tr>
<td>Mean+S.D.</td>
<td>18.1</td>
<td>18.9</td>
<td>19.0</td>
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<tr>
<td>Mean+S.D.</td>
<td>12.1</td>
<td>13.5</td>
<td>12.6</td>
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<tr>
<td>Runnels Mean</td>
<td>12.9</td>
<td>12.8</td>
<td>15.4</td>
</tr>
<tr>
<td>S.D.</td>
<td>5.3</td>
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<td>2.9</td>
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<tr>
<td>Mean+S.D.</td>
<td>16.0</td>
<td>16.6</td>
<td>16.3</td>
</tr>
<tr>
<td>Mean+S.D.</td>
<td>9.8</td>
<td>9.0</td>
<td>10.5</td>
</tr>
</tbody>
</table>
is scored lower by them regardless of how well the community meets the standards set by the society of which the community is only a part.

However, a sample of the population in practically all communities will contain individuals who are newcomers as well as individuals who have been lifelong residents. The opinions of the newcomers will be affected to a large extent by their knowledge of other communities. This will also be true of many of the farmers in the community who have frequent contacts with other communities where they may go to church, do some of their shopping, attend lodges and farm organization meetings or visit relatives and friends. Among the general population the high degree of physical mobility such as is found in most Iowa communities, and the constant communication with the outside world through the press, radio and other secondary media, work together to insure that the individual's opinion of his community will to a large extent be tempered with a knowledge of the standards of the society of which the community is a part. This would not have been true a few generations ago when many Iowa communities were both physically and socially isolated.

While the Community Solidarity Index is in fact an index of the opinions of community members about the institutional behavior of their communities it is also an index of two other things: (1) It is an index of the degree of solidarity existing in the community as measured by the standard deviation of the scores. In this sense it is simply a measure of community without any implications of good or bad. (2) It is also an
index of the degree to which the institutions of the community function adequately as expressed by the degree of approval voiced by community members and indicated by the total index score.

A degree of proof of this latter is found in a comparison of the Community Solidarity Index scores with the scores of another index dealing specifically with only one of the eight areas of community life. An index of rural schools in Iowa was prepared by the Vocational Education Department of Iowa State College. This index was based on over one hundred items concerned with the equipment and facilities of rural schools. Among the communities to whose schools this index was applied, as reported in a study by Christensen1 were three of the eight communities for which Community Solidarity Index scores were available. While this sample of communities is much too small to be used as the basis for making statistical comparisons, it is important to note that the scores of one of the communities was above the third quartile of both indexes, one between the mean and the third quartile of both, and one was below the first quartile of one index and just too large by a decimal fraction to fall below it in the other index. The actual scores are given in Table 5.

Table 5. A comparison of Community Solidarity Index scores with I.S.C. school index scores of three communities

<table>
<thead>
<tr>
<th>Community</th>
<th>School Index</th>
<th>Solidarity Index Total</th>
<th>Schools only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamletstown</td>
<td>107</td>
<td>146</td>
<td>19.7</td>
</tr>
<tr>
<td>Wauksee</td>
<td>96</td>
<td>136</td>
<td>18.3</td>
</tr>
<tr>
<td>Rumwellis</td>
<td>80</td>
<td>106</td>
<td>15.1</td>
</tr>
</tbody>
</table>

A measure of community consensus

The standard deviation of the scores of all the schedules for each community is a reliable statistical measure of the degree of consensus among community members about the institutions of their community. The smaller the standard deviation, the more in agreement the people are, regardless of whether their opinions result in a high or a low estimate of their community.

In comparing the total scores and the standard deviations of the eight communities in which schedules were taken it appeared that the communities with the higher total index scores also had the smaller standard deviations indicating that the higher the scores the more in agreement the members of a community were. The sample of communities was too small to prove this statistically, but it is something which may be tested in any future use of the index.

The community profile

In setting up the Index of Community Solidarity, care was taken to choose five criteria of behavior in each of eight different areas of community life—the five criteria, that is, which carried more or less equal weight with the thirty-five other criteria in the index. The entire forty criteria, consequently, present a well-balanced, all-round profile of primary rural community life. This may be graphically represented by an octagon as shown in Figure 2 in which each point represents one of the eight areas of the index. The distance from center to point, here re-
COMMUNITY SOLIDARITY INDEX PROFILES OF TWO COMMUNITIES SHOWING SYMMETRY AND COMMUNITY CONSENSUS

Figure 2. Community solidarity index profile
ferred to as the radius, represents the 25 possible points which may be attained on the five statements in that area. The points are numbered clockwise for the different areas, with Area I nearest the 2 o'clock position and Area VIII at 12 o'clock.

The mean score for the five statements in each area is plotted on the radius of that area with one sigma distance indicated between it and the center and another sigma distance marked off between the mean and the outer point. When the means and the sigma distances of all eight areas are connected, three octagons appear superimposed upon the base or outer octagon, the base representing a community with a perfect score.

A glance at Figure 2 will reveal that community G with a high score of 153 has a high degree of consensus in each of the eight areas as indicated by the sigma distances on either side of the mean, and the octagons form a symmetrical pattern. This symmetry reveals that in the opinion of the members of the community it is strong in all areas. It is a well-balanced community. Community D, on the other hand, reveals wide diversity of opinion within most areas, a varying degree of consensus from area to area, and a low estimate in some areas and a moderately low estimate in others. It is asymmetrical. The opinions of its members reveal that the community is not well-rounded.

The index as a basis for comparisons

Of the eight communities in which the Community Solidarity Index schedules were used five had farmers' cooperatives and three did not. When the average total index scores of the communities with and the com-
The orthographic similarity of the statements was read to the high school

*It is not so great an amount to be regarded

school responses into the cost of the school
then, when they were found to be
school of the same common sense. *If then, when the two agree in

enlargement and common sense to be hoped to be found in the same
the result that the index is best read to such a sample of

with other statements in number, the larger the better.

a sample of persons from whom results can be reached

as the amount of apparent common sense for purposes of preference

The community of Attinmon Peisapetos has so far been...
be read to groups of students, as was done in the project.

or what he thinks it is. The teachers used in the high schools were
and faculty members in the communities should be interested

for their cooperation. Otherwise the answers recorded on the schedule

were written with the responses are being made and a question if that set

necessary for the investigator to remain in the presence of the speaker

is not the case, since spontaneous responses are essential. It will be

need to read to them and record their responses. Even if this

looked from hand to hand in the schedule alone in which case the investigator
SUMMARY AND CONCLUSION

On the basis of data collected for a study of the relation of farmers' cooperatives to the Iowa communities in which they were established, three community indexes were developed. The purpose of such indexes was to determine whether or not there were statistically significant differences between communities with cooperatives and communities without them.

The theoretical justification for considering such indexes to be indexes of community was that no index measured all aspects of a phenomenon; it more often measured only one aspect. Therefore, an index which measured some aspect or component of community could be considered an index of community. The components of a primary rural community were considered, by definition, to be: a constellation of institutionalized services, a feeling of interdependence, a feeling of common interest, a sense of belonging to the community group as a whole, a common set of values, and common social norms of behavior.

The business services were part of the institutionalized services to be measured by the first two indexes. In developing the first index, the Business Service Index, the business agencies of primary rural communities were classified according to six categories: A. communication, B. professional, C. farm supply and marketing, D. commercial recreation, E. civic utilities, and F. general commercial services. The number of agencies in each of these categories was determined for the sixteen community trade
centers included in the study of cooperatives in Iowa, and a regression coefficient was computed between the number of agencies and the population of the centers. With this coefficient it was possible to compute the number of agencies in each category which centers of a certain population could be expected to have. Each community was then scored by the amount its actual number of services differed from the expected number.

The nine community trade centers which had cooperatives possessed Business Service Index scores which were significantly higher than the seven trade centers without cooperatives.

Dun and Bradstreet estimates of the financial strength of the business agencies in the community trade centers were used as the basis of the second index, the Per Capita Financial Strength Index. Fluctuations in money value were eliminated from the total financial strength estimates of each trade center by the use of the Federal Reserve Commodity Price Index figures. Then the corrected total estimate for each center was divided by the population of the center to obtain the per capita estimate.

Per Capita Financial Strength Index scores were obtained for the sixteen community trade centers for the years 1925, 1930, 1935, 1940, 1945 and 1949. An analysis of these data indicated that, in 1925, before cooperatives were established in any of the trade centers, the nine centers which later acquired cooperatives had an average PCFS Index score which was not significantly different from the average for the seven centers which did not acquire cooperatives. By 1949, however, the average for the centers with cooperatives was significantly higher than the average for the centers without cooperatives. The average for the centers with cooper-
atives was also slightly stronger in 1949 than it had been in 1925 while the average for the other centers was lower than it had been at the earlier date.

These two business indexes are measures of that component of community which is the constellation of institutionalized services as it existed in fact. The third index, the Community Solidarity Index, was designed to measure the degree of satisfaction with the manner of the functioning of all community services as it was expressed in the opinions of members of the community. This was done by registering the reaction of community members to forty statements relating to eight areas of community behavior: I. community spirit, II. interpersonal relations, III. family responsibility, IV. schools, V. churches, VI. economic behavior, VII. local government, VIII. tension areas. The respondents were given an opportunity to indicate that the statements, as they applied to their respective communities, were very true, true, not applicable, untrue, or definitely untrue.

Included in the components of a primary rural community were a common set of values and common norms of behavior. If such values and norms existed to a high degree in a community, the community members would show a high degree of consensus in their opinions about community behavior. This degree of consensus or solidarity was determined for each community by computing the standard deviation of the scores of all the Community Solidarity Index schedules obtained from community members. If the standard deviation was small, a high degree of consensus or solidarity existed; if it was high, solidarity was less.

A community profile was drawn with the use of the Community Solidarity Index scores. A score of 25 points was possible for each of the eight areas of community behavior. An octagon was drawn with a radius of 25 units
from center to each of the points. The mean community score for each area was laid out on the radius of this octagon, with one sigma distance indicated above and one below the mean. When lines were drawn between the means and sigma distance points of all the areas, three octagons took shape upon the base octagon which represented a community with a perfect score. The symmetry of the octagons thus drawn indicated whether or not the areas of community behavior were well balanced, and the spread between the upper and lower sigma distances illustrated the degree of agreement present in the community.

In place of a random sample of the adult population the junior and senior students in the high schools of eight of the sixteen communities of the cooperative study were used to pretest the Community Solidarity Index. On the basis of the scores from these schedules it was found that the five communities with cooperatives had significantly higher community scores and a lower standard deviation (indicating more solidarity) than the three communities without cooperatives.

In terms of what they were designed to measure, these three community indexes have been validated by their application to the communities of the cooperative study. All three indexes detected significant differences between communities in regard to certain characteristics which by definition were said to be components of primary rural communities.

All three indexes succeeded in eliminating the influence of community size, in avoiding arbitrary standards of achievement, and in evaluating the community as a social entity apart from environmental factors. The indexes were capable of being administered objectively and were subject to numerical evaluation.
This dissertation did not attempt to evaluate the components of primary rural communities as such. Therefore the implication cannot be drawn that a high score on any of the indexes developed here is evidence that the community is a superior community, except in the case of the Community Solidarity Index where a high total score indicates that the community is a superior community in the opinion of its own members.
SUGGESTIONS FOR FURTHER RESEARCH

The indexes developed in this dissertation are based on data from only sixteen Iowa primary rural communities, a sample of communities too small to be used as the basis for inferences about primary rural communities in the state as a whole. It is important that they be further validated by application to a larger and more representative sample of Iowa communities. Some of the things to be accomplished by such a step would be:

1. Reliable regression coefficients can be computed for each category of the Business Service Index. When this is done any single primary rural community in the state can be scored by the use of these coefficients without reference to any other communities.

2. The Community Solidarity Index can be applied to a random sample of the adult population in each community as well as to the high school juniors and seniors to determine the degree of correlation between the adult scores and the student scores. If the correlation is significantly high, any future use of the index may, for reasons of economy, be restricted to the use of the high school schedules.

3. Correlations can be computed between the business indexes and the economic behavior area scores of the Community Solidarity Index to determine how closely the opinions of the members of a community about some aspect of community behavior reflect an objective rating of that aspect. Similar correlations can be computed to indicate relationships to the Iowa
State College Rural Community School Index and any other objective indexes available, or to be developed.

4. By a careful check in each community of such factors as the kind of schools, number of churches, proximity to railroads and paved highways, distance from larger centers, ethnic composition, and such other factors as may be considered to affect the character of a community, correlations may be computed between the scores of the indexes and the presence or absence of these factors. Precise economic studies of the factors having to do with the manner in which the economic services function, such as the presence or absence of monopolistic concerns, of chain stores, and of locally owned and operated business agencies, may be correlated with the two indexes which deal with the business services. Such correlations may indicate clues as to what factors should be given consideration in the further development of the indexes.

Deficiencies in the present indexes dealing with the business services indicate the need for the development of techniques to measure the quality and amount of services provided by the business agencies in the trade centers of primary rural communities. No less desirable would be a measure of the exploitative character of local business concerns or of the manner in which the profits of these agencies are distributed, i.e., whether or not the profits are drained out of the community, pocketed by a few, or distributed widely among the population. Such factors may be found to be closely related to the feeling of community or lack of it.
The definition of primary rural community used in this dissertation suggests areas in which new and meaningful indexes can be developed. Indexes of the feeling of interdependence and common interest, or of the sense of belonging to the community group as a whole can be devised either in the form of check sheets for individuals or in the form of opinion schedules such as were used in the Community Solidarity Index. The theoretical framework developed by Lazarsfeld and Merton suggests the possibility of developing a sociological scale or pattern analysis for the measurement of personal and organizational interactions within a community.

The study of the measurement of primary rural communities is an area in which much imaginative research needs to be done. The more reliable measurement techniques and devices that can be developed, the firmer will be the grounds on which to base an evaluation of such research efforts.
Appendix 1. Criteria of a Good Community

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
</tr>
</tbody>
</table>

Approximate population of home community

The following are considered by some people to be characteristics essential to a good community. You may think of others just as essential, but for present purposes these may be looked upon simply as a sample list. In your judgment which of the following items are very essential to a good community, which are important but not necessarily essential, and which are not important. Circle the proper classification after each item: VE for very essential; I for important; and NI for not important. One third, or roughly 20 statements, should fall in each class.

I. Members of a good community

* 1. have a sense of equality towards one another. VE I NI
* 2. consider farmers and townspeople equally important. VE I NI
* 3. cooperate to achieve community goals. VE I NI
* 4. help young people find healthy recreation rather than tell them what not to do. VE I NI
* 5. are concerned about the appearance of the community. VE I NI
* 6. get behind efforts to improve the community. VE I NI
* 7. respect each other's privacy in personal affairs. VE I NI
* 8. help their young people get ahead. VE I NI

II. In their relations with one another members of a good community

* 9. avoid being critical of each other. VE I NI
* 10. are polite and courteous. VE I NI
* 11. develop a sense of belonging to the group as a whole. VE I NI
* 12. have a capacity for being real friends. VE I NI
* 13. are tolerant of individual differences. VE I NI

*Indicates those criteria used as the basis for statements in the final Community Solidarity Index.*
III. **The families in a good community**

*14. keep their children under control.*  
*15. are strongly opposed to divorce and separation among themselves.*  
*16. teach their children to respect other people's rights and property.*  
*17. are not satisfied just to keep their children out of the way but want them to develop into mature individuals.*  
*18. provide positive activities for their young people rather than just keeping them out of trouble.*  
*19. make an effort to get their children to Sunday School or Church on Sunday.*

IV. **The schools in a good community**

*20. provide a program in which both farm and village students can participate freely and equally.*  
*21. prepare young people to cope with life's problems.*  
*22. give the students mastery of the tool subjects of reading and writing.*  
*23. try to insure that their students are not handicapped if they go on to college.*  
*24. keep the majority of their students interested in completing at least twelve years of education.*  
*25. develop in their graduates the desire and ability to take an active part in bettering the community.*

V. **The churches of a good community**

*26. cooperate with one another in religious activities.*  
*27. deal realistically and courageously with life's problems.*  
*28. inspire their members to carry the ideas of brotherhood into all walks of life.*
29. make church-going a joyful, not a solemn, experience. VE I NI

30. are a help and not a hindrance to better community life. VE I NI

31. treat one another as equals. VE I NI

32. are concerned about more important things than their own size and appearance. VE I NI

33. set a good example for all through the conduct of their members. VE I NI

34. favor those activities which make community life interesting. VE I NI

VI. **In the economic life of a good community**

35. there is no favoritism or discrimination. VE I NI

36. the people do not abuse rented property. VE I NI

37. business concerns do not take advantage of the customers. VE I NI

38. local concerns pay fair wages to employees. VE I NI

39. economic gains are not monopolized by a few. VE I NI

40. the people are generous in money matters. VE I NI

41. owners of rental properties do not try to take advantage of the housing shortage. VE I NI

42. landlords keep their property in good shape. VE I NI

43. working class people are respected. VE I NI

44. renters are prompt in paying their rents. VE I NI

VII. **Under the local government of a good community**

45. local laws are applied equally to all, both rich and poor. VE I NI

46. the authorities maintain law and order effectively. VE I NI

47. town officials are the public servants not the bosses of the community. VE I NI
81.

*48. the town council does its job well.  VE I NI
*49. town politics are run democratically.  VE I NI
*50. the community does not lack real leaders.  VE I NI

VIII. In a good community

*51. the people as a rule show good judgment in what they do.  VE I NI
*52. peace and order prevail most of the time.  VE I NI
*53. young people keep sex well under control.  VE I NI
54. marriage between families within the community is looked upon as desirable.  VE I NI
*55. status is not based on wealth alone.  VE I NI
56. negroes are treated like other human beings.  VE I NI
*57. people are not discriminated against because of their nationality.  VE I NI
58. drinking is not a problem among the young people.  VE I NI
Appendix 2. Community Solidarity Index

<table>
<thead>
<tr>
<th>Name</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Married</th>
<th>Single</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of children in school, if any</th>
<th>boys</th>
<th>girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of children out of school</th>
<th>Grandchildren, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of years resident in community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of residence: outside of town</th>
<th>how far</th>
<th>miles; in town</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Think of each of the statements below as relating to the people of this entire community both in town and on the neighboring farms. If you think the statement fits this community very well, after the number of the statement circle vt (for very true); if it applies only partially, circle t (for true); if you cannot see how it relates one way or another to this particular community, circle nd (for not decided); if you think it does not apply, circle u (for untrue); and if it definitely does not apply, circle du (for definitely untrue). PLEASE RECORD THE IMPRESSION THAT FIRST OCCURS TO YOU.

1. Real friends are hard to find in this community. (2)*  
   vt  t  nd  u  du

2. Our schools do a poor job of preparing young people for life. (4)  
   vt  t  nd  u  du

3. Local concerns deal fairly and squareely with everyone. (6)  
   vt  t  nd  u  du

4. The community is very peaceful and orderly. (9)  
   vt  t  nd  u  du

5. A lot of people here think they are too nice for you. (1)  
   vt  t  nd  u  du

6. Families in this community keep their children under control. (3)  
   vt  t  nd  u  du

7. The different churches cooperate well with one another. (5)  
   vt  t  nd  u  du

8. Some people here "get by with murder" while others take the rap for any little misdeed.  
   vt  t  nd  u  du

9. Almost everyone is polite and courteous to you. (2)  
   vt  t  nd  u  du

10. Our schools do a good job of preparing students for college. (4)  
    vt  t  nd  u  du

11. Everyone here tries to take advantage of you. (6)  
    vt  t  nd  u  du

*The figure indicates the area to which the statement belongs.
12. People around here show good judgment. (8) vt t nd u du
13. People won't work together to get things done for the community. (1) vt t nd u du
14. Parents teach their children to respect other people's rights and property. (3) vt t nd u du
15. Most of our church people forget the meaning of the word brotherhood when they get out of church. (5) vt t nd u du
16. This community lacks real leaders. (7) vt t nd u du
17. People here give you a bad time if you insist on being different. (2) vt t nd u du
18. Our high school graduates take an active interest in making their community a better place in which to live. (4) vt t nd u du
19. A few people here make all the dough. (6) vt t nd u du
20. Too many young people get into sex difficulties. (8) vt t nd u du
21. The community tries hard to help its young people along. (1) vt t nd u du
22. Folks are unconcerned about what their kids do so long as they keep out of trouble. (3) vt t nd u du
23. The churches are a constructive factor for better community life. (5) vt t nd u du
24. The mayor and councilmen run the town to suit themselves. (?) vt t nd u du
25. I feel very much that I belong here. (2) vt t nd u du
26. Many young people in the community do not finish high school. (4) vt t nd u du
27. The people here are all penny-pinchers. (6) vt t nd u du
28. You must spend lots of money to be accepted here. (8) vt t nd u du
29. The people as a whole mind their own business. (1) vt t nd u du
30. Most people get their families to Sunday School or church on Sunday. (3) vt t nd u du
31. Every church wants to be the biggest and the most impressive. (5)
32. A few have the town politics well sewed up. (7)
33. People are generally critical of others. (2)
34. Most of the students here learn to read and write well. (4)
35. Local concerns expect their paid help to live on low wages. (6)
36. You are out of luck here if you happen to belong to the wrong nationality. (8)
37. No one seems to care much how the community looks. (1)
38. If their children keep out of the way, parents are satisfied to let them do whatever they want to do. (5)
39. Most of our church-goers do not practice what they preach. (5)
40. The town council gets very little done. (7)
Appendix 3. The 118 Statements Used in the Original High School Schedules.

These statements are rearranged to appear in pairs (favorable and unfavorable) and in the area to which they belong. Those marked with an asterisk (*) are the ones chosen for the final Community Solidarity Index schedule shown in Appendix 2. The figure following each statement is its rank according to the size of the coefficient of correlation between it and the total schedule scores.

<table>
<thead>
<tr>
<th>I. Community Spirit</th>
<th>C of C</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>*A lot of people think they are too nice for you.</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>People look on each other as equals.</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>*People won't work together to get things done for the community.</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Most people enjoy working together whenever there's something to be done.</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>*The community tries hard to help young people along.</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>The community offers few opportunities for young people to get ahead.</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>*The people as a whole mind their own business.</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>People concern themselves too much about other people's affairs.</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>*No one seems to care much how the community looks.</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Everyone takes pride in the appearance of the community.</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Efforts to improve the community generally fail.</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Anything of a progressive nature is generally approved.</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Folks are more interested in telling the kids what not to do than in helping them find healthy recreation.</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>The community provides opportunities for the kids to have a good time together.</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Farmers are considered just as important in community affairs as are townpeople.</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>Farmers and townpeople rarely associate together.</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>

II. Interpersonal Relations

*Almost everyone is polite and courteous to you. | 1 |      |
| Not many people go out of their way to be decent to you. | 56 |      |
*Real friends are hard to find in this community.  
Most of the people here are very friendly.  
2  

*People here give you a bad time if you insist on being different.  
People here believe it takes all kinds of people to make life interesting.  
18  

*I feel very much that I belong here.  
This place will never seem like home to me.  
19  

*People are generally critical of others.  
Most people are polite and helpful whatever happens.  
25  

III. Family Responsibility  

*Families keep their children under control.  
Children are allowed to keep all hours.  
17  

*People teach their children to respect other people's rights and property.  
Children here are careless about other people's property.  
31  

*Most people get their families to Sunday School or Church on Sunday.  
Most people let their children do as they please about going to Sunday School or Church.  
54  

*If their children keep out of the way, parents are satisfied to let them do whatever they want to do.  
Most folks want to see their youngsters develop into law-abiding citizens.  
67  

*Folks are unconcerned about what their kids do as long as they keep out of trouble.  
Folks take an interest in what their young people do in their spare time.  
41  

Folks are unconcerned whether or not their children finish high school.  
Most parents try to get their children through high school.  
86  

Too many couples are getting divorced or just aren't living together.  
Husbands and wives around here stick together even if they are unhappy.  
86
IV. Schools

Our schools do a poor job of preparing young people for life. 10
The kids who have gone to school here turn out to be well-adjusted. 102

Our schools do a good job of preparing students for college. 33
Our young people who go on to college find themselves poorly prepared. 52

Our high school graduates take an active interest in making their community a better place in which to live. 50
High school graduates around town make little use of what they've been taught in school. 92

Many young people in the community do not finish high school. 61
Most of the young people nowadays graduate from high school. 94

Most of the students here learn to read and write well. 60
Our schools fail to give students a mastery of reading and writing. 76

Farm kids don't fit into the school program very well. 100
The schools do as good a job for the farm kids as for the town kids. 101

V. Churches

The different churches cooperate well with each other. 6
The different churches have very little to do with each other. 23

Most of our church people forget the meaning of the word brotherhood when they get out of church. 12
People really like their neighbors. 44

The churches are a constructive factor for better community life. 16
The churches have very little real effect on the morals of the people. 77

Every church wants to be the biggest and most impressive. 21
The churches are more interested in getting converts than in setting a good example. 115

Most of our church-goers don't practice what they preach. 24
Church people show that they really believe in their religion. 93

Church-going people favor the things that make the community interesting. 63
The churches put a damper on all good times. 107
Members of some of our churches look down on the members of other churches in the community. It is unimportant what church you belong to, one is as good as another.

Most people enjoy going to church on Sunday.

People go to church here because they are afraid not to.

Ministers speak out freely against what they think is wrong.

Ministers have to leave economics and politics alone.

VI. Economic Behavior

*Local concerns deal fairly and squarely with everyone.

Most local business houses charge all that the traffic will bear.

*Everyone tries to take advantage of you.

People seem to enjoy helping you get ahead.

*A few people here make all the dough.

Nearly everyone gets about what he earns.

*The people here are penny-pinchers.

When it comes to money-matters, people are very generous.

*Local concerns expect their paid help to live on low wages.

Wages here are good as compared to those in other communities.

People are hard on the places they rent.

Most renters take pride in their places and keep them in good shape.

The working class of people around here are lazy and shiftless.

Working class people here are ready and willing to work.

Landlords go out of their way to keep their places in good shape.

Landlords let their places fall apart before they spend much money on repairs.

People who live in rented places are careless about paying their rent on time.

Most people are prompt in paying their rent.

Landlords are out to take advantage of the housing shortage.

Rents here are as reasonable as can be expected.
VII. Local Government

*Some people "get by with murder" while others "take the
rap" for any little misdeed. When people get into trouble, they are all treated alike
regardless of who they are. 9

*This community lacks real leaders. There are a number of capable leaders here who know how to
get things done. 46

*The mayor and councilmen run the town to suit themselves. Being a town official doesn't make a person any more
important than others. 49

*The town council gets very little done. The town is being improved as fast as the council can
get it done. 114

*A few have the town politics "well sewed up". The town is run democratically. 62

The local authorities are lax in maintaining law and order. There is so little trouble here that the town marshal has
little to do. 117

VIII. Tension Areas

*The community is very peaceful and orderly. People here are rowdy and boisterous. 5

*People around here show good judgment. A lot of wild ideas are cooked up here. 3

*Too many young people get into sex difficulties. The kids in this community have good attitudes toward sex
matters. 21

*You must spend lots of money to be accepted here. Many of our most respected families live within modest incomes. 15

*You are out of luck here if you happen to belong to the wrong nationality. We think of ourselves as all being Americans. 34

34
People here would refuse to let Negroes into their homes except to work.  
The few Negroes that show up around here are treated just like the rest of the people.

There is too much drinking among the younger people.  
The liquor situation is under control here.

People prefer to have their sons and daughters marry someone from outside the community.  
Marriages between local families are looked upon as very desirable.