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To the Graduate Council:

I am submitting herewith a thesis written by Antonios E. Trimis entitled "Factors Relating to Patronage of Purchasing Cooperatives by 107 Middle Tennessee Farmers." I recommend that it be accepted for 9 quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

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FACTORS RELATING TO PATRONAGE OF PURCHASING COOPERATIVES BY 107 MIDDLE TENNESSEE FARMERS

A THESIS

Submitted to
The Graduate Council
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

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by

Antonios E. Trimis

June 1956

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CHAPTER I

INTRODUCTION AND PROCEDURE

Many students divide the administration of cooperative associations into two distinct parts or functions. J. W. Jones'[1] divisions are as follows: "First, business administration, which includes financing, processing and merchandising the commodities handled, and supervision of credits and collections; and second, membership administration which includes the maintenance of agreeable human relationships."

Membership relations have been an area of great importance in cooperative associations as well as in other business organizations. J. P. Warbasse[2] in his book, Problems of Cooperation, considers the errors of educational and social work real causes of the failure of many societies.

Previous Studies

The maintenance of agreeable human relations has been frequently studied by students of cooperation. Many of these studies have been inquiries into the attitudes of farmers toward their cooperative associations. It has often been indicated in these writings that an analysis of what the members and non-members thought of their cooperative associations would be a step toward a better understanding of the problem of membership relations. Some of these studies of attitudes were more

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[1]J. W. Jones, Membership Relations of Cooperative Associations, Cooperative Research and Service Division, Farm Credit Administration, U. S. Department of Agriculture, Bulletin 9, October 1936.

[2]J. P. Warbasse, Problems of Cooperation, Island Press, New York, 1942.

descriptive than analytical. The interest was centered on what the attitudes were and not on how these attitudes were formed. Several students, however, went further in discovering how these attitudes were developed. The means of communication, for instance, were thought by some to be an important factor in the formation of attitudes, and some of the studies were directed toward the collection of information regarding the effect of certain means of communication.

The logic behind their studies was something like this: Ideas flow through word of mouth, the written page, and through other technical means, such as the radio and television. If a farmer, for example, patronizes the cooperative association because of information he obtains about the cooperative from reading the newspaper, then the hypothesis could be made that because Farmer Jones is much affected in his purchasing habits by reading the newspaper, a membership relations program should use the newspaper as the media for communicating the facts about cooperatives to the farmer.

Furman Preston Bowers[3] made such a study in Northern Middle Tennessee in 1950 in which he attempted to discover the farmers' knowledge of and attitudes toward the Eastern Dark Fired Tobacco Growers' Association and towards the government programs affecting tobacco. This was one of the first studies made in Tennessee in the area of membership relations. Several research studies, however, were previously directed

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[3]Furman Preston Bowers, "Farmers' Knowledge of and Attitudes Toward the Eastern Dark Fired Tobacco Growers' Association and the Government Programs." Master's thesis, University of Tennessee, 1951.

toward problems in the area of business administration and in describing the historical perspective of the cooperative movement in Tennessee.

Scope of Present Study and Procedure

The validity of scientific inquiries depends on the scientific method employed. Today the issue of what are the best scientific methods is not yet adequately settled. It is believed by Pearson[4] and some of of his colleagues that scientific method is (1) the classification of great variety and great number of facts, (2) use of disciplined imagination, and (3) self criticism.

On the other hand, Salter[5] and some of his colleagues believe that scientific method is the organization of the situation as a problem and the formulation of a possible method of resolution as a beginning hypothesis. Data are then collected which are necessary for the acceptance or rejection of the hypothesis. During that procedure, the major hypothesis can be revised and secondary ones formulated. In this thesis Salter's definition of the scientific method has been adopted.

The recent growth of purchasing cooperatives in Tennessee has been very important with respect to supplying Tennessee farmers with feed, seed, fertilizer, petroleum products, hardware, building materials,

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[4]Karl Pearson, The Grammar of Science, J. M. Dent and Sons, London, pp. 7-37.

[5]Leonard A. Salter, Jr., A Critical Review of Research in Land Economics, The University of Minnesota Press, Minneapolis, 1948, pp. 68-69.

and insecticides. In 1949 the cooperative share of the total volume of seed, feed, and fertilizer sold in Tennessee was as follows:[6]

Feed	7 percent (approximately)
Seed	15 percent (approximately)
Fertilizer	16 percent (approximately)

Raskopf[7] in his study of Tennessee farmers' purchasing cooperatives indicates that "In both 1938 and 1947, about half the purchasing cooperatives reported the need for a more aggressive educational program to improve interest, stimulate membership participation, and improve members with better knowledge of the functions and services of the cooperatives."

The reason for undertaking this study was the belief that before the formulation of an aggressive educational program, it was important to understand something about the factors that cause farmers to patronize or not patronize a farmers' purchasing cooperative. An educational program could then be organized on the basis of the strategic factors affecting cooperative patronage, rather than on some hit or miss basis. It is not the purpose here, however, to actually formulate a proposed educational program.

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[6]These figures are calculated from (1) the 1950 United States Census of Agriculture, (2) a report of the fertilizer tonnage used in Tennessee during the fiscal year ending June 30, 1949 compiled by the Tennessee Department of Agriculture Division of Feeds, Seeds, and Fertilizers; (3) Thomas Whatley's "Agricultural Adjustments in the Southern Brown Loam Area of West Tennessee," Ph.D. thesis, 1953, Purdue University; (4) unpublished materials from J. Warren Mather, Farmer Cooperative Service.

[7]B. D. Raskopf, Tennessee Farmers' Purchasing Cooperatives, Their Business Problems and Practices, University of Tennessee Rural Research Series 241, Knoxville, 1949, p. 14.

The areas selected for study in this thesis were economic areas designated by the United States Census as areas four and five located in Middle Tennessee. Donald J. Bogue says,[8] "The economic areas are designed to permit the formal testing of hypotheses concerning the relationship between behavior and the environment, and between variables under varying environmental factors."

These selected economic areas, with reasonably uniform economic and social conditions, provided a relatively homogeneous population with respect to cultural and economic factors. Eight counties from these areas, and one from area three which was similar to the counties in area four and five, were selected for the sample.

The principles employed in the selection of these counties were:

1. Counties with a successful cooperative store.[9] By selecting all successful stores, the bias in comparing relationships in stores of different financial status was eliminated.

2. Counties predominately agricultural. This would exclude all counties classified as metropolitan areas. As such a more homogeneous sample with regard to number and distance of competing retail and wholesale outlets could be attained.

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[8]Donald J. Bogue, Economic Areas as a Tool for Research and Planning, Crips Foundation for Research in Population Problems, American Sociological Review, Vol. 15, June 1950, p. 409.

[9]The counties that were selected had cooperatives with a record of continuous growth and some operating surplus during the previous fiscal year. Assistance of the general manager's office in these selections is gratefully acknowledged.

3. Counties with no cotton culture. The amounts of farm supplies purchased by the farmer depends greatly on the type of farming. By excluding cotton farms it was possible to concentrate on livestock and general farms for a more homogeneous population. From each county, twelve farmers--eight patrons and four non-patrons--were selected for interviewing.

By selecting patrons and non-patrons, some of the factors leading to the degree of patronage among the two groups of farmers could be observed. The following principles in the sample selection of farmers were followed.

1. Interview only farmers on a diagonal paved cross-county road or the intersecting dirt roads.

2. Select a cross-county road that gives a reasonably good cross section of the types of farming and topography of the county and distance to the cooperative and alternative sources of farm supplies, mainly feed, seed, and fertilizer.

3. Divide the cross-county road into twelve equal parts and interview one patron in each of these parts. Distance variation of different farms could be achieved by using this principle.

4. Select every other farm on a dirt surfaced road closest to the hard surfaced road.

5. Every fourth farmer interviewed should be a non-patron. Distance distribution of non-patrons could be accomplished in this way.

6. All part-time farmers, tenant operators, farms below forty acres in size, and those above six hundred acres were excluded. In cases

where the farm was excluded, the farm nearest it was substituted. The part-time farmers were excluded because of the wide variety of experiences among them in purchasing farm supplies, and the special considerations affecting their operations.

Tenant operators were excluded because of numerous types of tenure arrangements with respect to the purchase of farm supplies on their farm operation.

Farmers having farms of less than forty acres in size were not included in the sample due to the limited amount of farm supplies purchased, and farms above six hundred acres were also excluded because of the large amounts of supplies purchased. These large farm operators were probably buying many of their supplies from wholesale outlets and operating under highly atypical conditions.

Before taking any schedules from farmers in these counties, the cooperative store was visited and detailed data were obtained from the manager on the history and background development of the cooperative and the economic structure of the area.

Formulating Hypotheses

Previous studies on membership relation problems were examined in order to become familiar with the scientific approach and method employed in examining the problems.

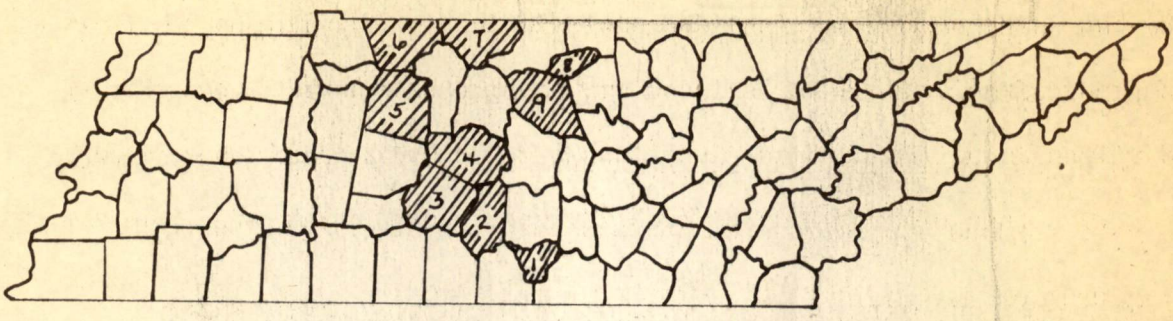
After studying these inquiries, it was observed that a great many of the studies were primarily descriptive, describing <u>what</u> farmers thought and did about cooperatives, and not <u>why</u> farmers acted the way they did.

In other words, these studies examined the activities of the farmer, but failed to observe the causal factors or stimuli. The approach to this study was one directed toward the examination of acts in regard to their stimuli and not toward the acts as such. In order to formulate hypotheses pertaining to this approach, an examination of the subject of human nature and conduct was made.

Collecting Data or Evidence

This study was designed to be of a preliminary nature. Its purpose was to develop, if possible, a set of concepts appropriate to analysis of membership relations. It was not intended that the relationships derived should be generalized to the entire population of the state or of the counties covered. It was felt to be desirable to preserve the total identity and uniqueness of each case.

Much of the data collected was the result of informal conversation with the farmer which was not uniform among all the cases. However, some data of general use in classifying farms and farmers was collected from all respondents.



Counties

1. Moore
2. Marshall
3. Maury
4. Williamson
5. Dickson
6. Montgomery
7. Robertson
8. Trousdale
9. Wilson

Figure 1. The location of nine counties in Middle Tennessee included in the study, 1955.

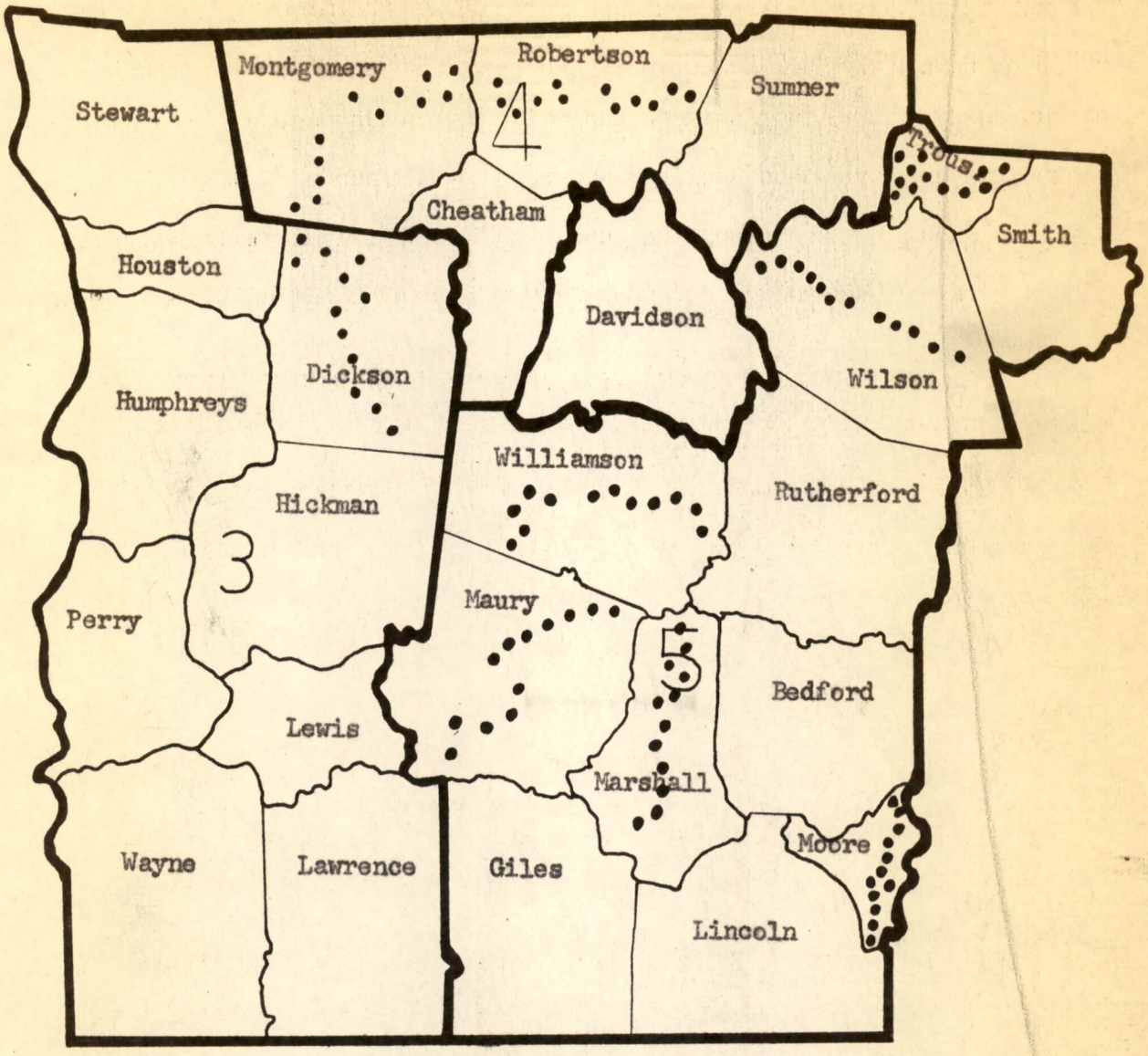


Figure 2. The approximate location of 107 farmers interviewed in nine counties in Middle Tennessee, 1955.

CHAPTER II

COOPERATION IN AGRICULTURE AND PURCHASING COOPERATIVES IN TENNESSEE

Birth of Cooperation and the Rochdale Society of Equitable Pioneers

It is very difficult to trace back through the years the birth of cooperatives. To cooperate ("to act or to operate jointly with another or others")[1] was necessary to fulfill the urge of human society to face problems together. "Cooperatives" used in the broadest sense identifies all those organizations using cooperation as a means for reaching a goal. But cooperation in this broad sense has been used by sundry organizations. Without it, there would be no communication, no achievement of purpose or progress. But cooperative business organizations with which we are concerned started with the birthday of "The Rochdale Society of Equitable Pioneers." Their principles were used by many cooperatives and in many business endeavors. Today they characterize the cooperative movement. Cooperation and cooperatives, the terms, used hereafter will refer to cooperative business organizations only.

Agricultural Cooperatives

An agricultural cooperative as Bogardous[2] defines it is "an

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[1] Webster's New Collegiate Dictionary.

[2] Emory S. Bogardous, Dictionary of Cooperation, The Cooperative League of the United States of America, New York, Chicago, Washington, 1945.

organization of farmers for the mutual benefit of its members as producers." A more concrete definition treats cooperatives as "business organizations which are owned and controlled by farmers for their benefit as users."

Agricultural cooperatives are divided into several different types. Ward W. Fetrow and R. H. Elsworth[3] in their discussion of the types of farmers' cooperatives believe that cooperatives should be classified according to their characteristics, such as volume of business, area covered, type of membership, legal status, and functions performed. In this thesis, the cooperatives studied were classified according to the functions they perform, namely: (1) production, (2) marketing, (3) purchasing, and (4) service. This study is specifically concerned with purchasing cooperatives.

Farmers' purchasing cooperatives, as defined by Ward and Elsworth, are associations that provide farmers with the supplies required in their farm operations.[4] In general, farmers obtain their farm supplies through middlemen, sales representatives of big corporations, and from private partnerships or proprietorships. Some of the farmers pool their purchasing power and buy cooperatively. Cooperative purchasing is collective purchasing.

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[3]Ward W. Fetrow and R. H. Elsworth, Agricultural Cooperation in the United States, Farm Credit Administration, U. S. Department of Agriculture Bulletin 54, Washington, D. C., 1947, p. 13.

[4]Ibid., p. 14.

Farmers' Organizations and Importance of Farmers' Purchasing Cooperatives in the United States

Farmers' purchasing cooperatives in the United States date back to 1850, when farmers first attempted to organize purchasing cooperatives in Illinois.[5] The Grange Movement, the Farmers' Alliance, the Farmers' Union, the American Society of Equity, and the American Farm Bureau carried on cooperative purchasing endeavors for their members. In the year 1915, 275 purchasing associations existed with 59,503 members doing a volume of business of $11,678,000. The number of associations from 1915 to 1945 increased ten times, reaching the number of 2,750, with 1,610,000 members doing an 810 million dollars volume of business.[6]

Tennessee Farm Bureau Sponsored Cooperatives

As was mentioned in the previous chapter, the history of cooperative purchasing is very closely related to the development of general farm organizations. Fischer[7] indicated that the two movements, cooperative purchasing of farm supplies and general development of farmer organizations "have paralleled one another fairly closely." Fischer also indicated the following historical periods in the growth of the cooperative movement in Tennessee.

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[5]Petrow and Elsworth, Op. cit., p. 141.

[6]Ibid., p. 141.

[7]John Louis Fischer, "The Economics of Cooperative Purchasing of Farm Supplies in Tennessee, with Emphasis on the Financial Aspects," Ph.D. thesis, (Unpublished), University of Wisconsin, 1955, p. 3.

The National Grange of the Patrons of Husbandry was established shortly after the Civil War.[8] During the first period of the cooperative movement in Tennessee, the Grange was strong.[9] As happened in other states, the cooperative movement sponsored by the Grange started to decline by 1880. Two succeeding farmers' movements, the Farmers' Alliance and Farmers' Union, which sponsored cooperative endeavors, also declined.

Cooperative purchasing in Tennessee, however, expanded after the impetus given to the movement by the Tennessee Farm Bureau Federation. Fischer reported that a ten-member committee of outstanding farmers, extension workers, and Farm Bureau leaders was appointed in early 1940 to look into the possibilities of cooperative purchasing and marketing. In the Farm Bureau annual meeting in 1944, this committee recommended the establishment of a state-wide federated system of independent county units.[10] Emphasis was to be given first to purchasing and later to marketing activities. Present evidence indicates that the cooperative movement in Tennessee has grown tremendously since 1950.

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[8]Ward W. Fetrow and R. H. Elsworth, op. cit., p. 141.

[9]John Louis Fischer, op. cit., p. 3.

[10]Ibid., p. 5.

CHAPTER III

HABIT, DELIBERATION, AND FARMERS' PURCHASING ACTIVITIES

After a brief examination of the general problem and the method of procedure to be adopted in this study, it is necessary to proceed to a discussion of the concepts of habit and deliberation as they are related to farmers' purchasing activities. This discussion is important in order to get a better insight into the specific problem concerning the factors relating to patronage of purchasing cooperatives.

Farmers are involved in certain purchasing activities for obtaining necessary supplies for their farm businesses. Certain supplies are purchased at regular intervals, while other supplies are purchased irregularly. For example, feed, seed, and fertilizer are more regularly purchased than machinery.

Before farmers purchase their supplies, certain questions may be raised in their minds concerning the kind of supplies they would like to purchase and the places from which they would like to purchase.

By understanding why farmers choose one supply outlet rather than another, we might be able to formulate hypotheses concerning the causes of cooperative patronage. The limiting factors to cooperative patronage relating to membership relations perhaps then could be identified and policies of purchasing cooperatives formulated accordingly.

A careful examination of the concepts of habit and deliberation is very important for an understanding of the reason why farmers do and do not patronize purchasing cooperatives.

A purchasing activity is a form of human behavior which can be the result of different degrees of deliberation. Nondeliberative behavior is the same as habitual behavior. Purchasing activities can be either nondeliberative (habitual) or deliberative. However, many purchasing activities are neither completely habitual or highly deliberative. Therefore, purchasing activities are the product of different degrees of deliberation, starting from zero degree of deliberation (purely habitual purchasing activity) to a high degree of deliberation.

Habit in Relation to Purchasing Activities of Farmers

What Constitutes a Habit

Habits grow from necessities with which human beings are faced from the beginning of life. The necessity to communicate with one's fellow man is the cause for the development of the habit of speech and writing. The necessity to protect one's self from the elements develops the habit of using clothing. The need to satiate hunger brings about the habit of eating. Speaking, writing, dressing, and eating are activities that are repeated at regular intervals in order to fulfill a necessity. The particular kind of activities performed in fulfilling a necessity are selected partly through trial and error and partly through a conscious anticipation of the outcome. For example, dressing is a series of activities--putting on a shirt and then a coat. One selects the right sequence of the activities of dressing that have been most satisfactory. This satisfaction induces a person to repeat the same act again and again. The repetition of an activity at regular intervals with apparently

satisfying consequences then forms a habit. This habitual activity was probably highly deliberative when first performed, but because of repetition again and again the same way, became an habitual activity. Tying a tie at first is an activity that requires much thinking, choosing the right way from proposed alternatives. Later on, however, when the same activity has been repeated for many times at regular intervals, the tying of a tie does not require much thinking. It is, as one says, "just automatic."

Purchasing Activity and Habit

Purchasing is a social activity that is repeated more or less at regular intervals, and habits are established from this repetition of activity.

Farmers are involved in purchasing activities; therefore, they may acquire certain purchasing habits. Buying a particular brand of fertilizer from a particular place can develop the habit of always buying the same brand at the same place. At first, this activity may have required much thinking for choosing the most satisfactory store and brand, but later on, due to the repetition of the activity, buying became habitual, rather than deliberative. If the potential patrons are highly habitual, special problems are posed for any other supply firm which attempts to compete with the established outlet, be it cooperative or non-cooperative. The strategic problem may be, for the new firm, to find some means of stimulating reappraisal of these activities, rather than simply to furnish information on which to base the appraisal or deliberation about the matter.

In measuring the extent of habitual buying among patrons,[1] non-patrons and split purchasers, certain hypotheses concerning purchasing habits could be formulated.

Before measuring the extent of habitual buying, it is necessary to say a few words about the fixity and rigidity of farmers' purchasing habits.

For example, in some communities, the attitude of individualism has become accepted and given social sanction. A member of that community risks the disrespect of the other members of the community if he participates or advocates any form of collective action. The society then will have solidified or strengthened the habit of individual enterprise. But the cooperative is a form of collective action. Therefore, it requires the formation of a new habit--such as the habit of pooling their purchasing power to decrease cost--to substitute for the existing habit.

Social Habits, Customs, and Choices

Social habits that might be called customs can have a great effect on farmers' decisions. Americans today feel that competition is responsible for the progress and civilization of this country. Competition should be preserved for the betterment of society, they reason. Competition, then, is the accepted way of doing business. The person born in a

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[1]Patrons--farmers buying most of their supplies (feed, seed, fertilizer) from the cooperative. Non-patrons--farmers purchasing most of their supplies from other outlets than the cooperative. Split purchasers--those buying from both the cooperative and from other outlets.

community with this typical feeling about competition comes to the point where he accepts his neighbors' ideas and is educated--or indoctrinated--with its beliefs.

In the capitalistic system, purchasing cooperatives have been many times called communistic, socialistic, or subversive, and farmers influenced by these notions will fail to patronize the cooperative association.

In order to measure the degree of habitual activity among the farmers purchasing farm supplies (feed, seed, and fertilizer) an examination of the degree of deliberation used in purchasing activities is necessary.

Deliberation in Relation to Purchasing Activities of Farmers

The Concept of Deliberation

Conflicting situations arise when habitual action does not produce satisfactory results. Any change in the environment caused by the provision of information, new associations, unexpected results from an habitual action, etc., may cause re-evaluation of the habit.

This re-evaluation of the habit is brought about by thought which is stimulated by change. Thought, then, which is the activity of a human being in observing, recalling, and forecasting the results of activity, becomes the artist, modifying habit and redirecting activity. Thought, furthermore, gives impetus to an intelligent activity.

Knowledge, constituting the foundation of intelligent activity, plays an important role in deliberation. It is knowledge that makes it

possible for people to think constructively about the different relationships and outcomes of alternative ways of acting, and then to decide on their final behavior. Knowledge, then, makes deliberation, i.e., weighing and examining reasons for and against a choice or measure, possible.[2]

By choosing a particular activity through the act of deliberation, future fulfillments are anticipated. These fulfillments anticipated, or the expectations for future outcomes resulting from present activities, are products of past knowledge.

Before farmers make their final decision concerning the place from which they will buy, or the kinds of supplies they would like to buy, they may be involved in deliberation. During the process of deliberation, they use past knowledge, which is the product of experiences. By understanding the important criteria that farmers use in their deliberation, one gains insight into the experiences that lead them to patronize the cooperative or to abstain from patronage. Purchasing cooperatives understanding these criteria then would be in a position to provide the farmers with experiences conducive to cooperative patronage.

In bringing together the ideas on habitual and deliberative activities, it can be concluded that the process of deliberation consists of steps or degrees. At the lowest step, zero degree of deliberation, activities are habitual, nondeliberative, and impulsive. At the highest step, activities are highly deliberative.

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[2] Webster's New Collegiate Dictionary.

Farmers' purchasing activities can be categorized from habitual activities to highly deliberative ones. An understanding of the extent of habitual and deliberative buying among patrons, non-patrons, and split purchasers can provide some answers to the original question posed.

The Measurement of Deliberation

In order to measure the degree of deliberation among farmers in their purchasing activities, certain criteria of deliberation were formulated and observations were made to see how farmers compared on the basis of these criteria.

Deliberative farmers were expected to obtain information before purchasing feed, seed, and fertilizer. Possible sources of information were thought to be such as newspapers, radio, friends, etc. Seeking information, then, could be one criterion in determining the extent of deliberative activity. This and other criteria could be formulated and assigned quantitative values. In assigning quantitative values to the criterion of information-seeking, for example, it was necessary to derive a scale of the degrees of information-seeking starting from zero to a point of very active information-seeking.

One of the problems faced in the development of such a scale was the accuracy of farmers' accounts concerning their process of deliberation. The degree of information-seeking might not have been reported by the farmer as it actually happened. His own account concerning the degree of information-seeking might have been biased. A farmer indicating that he read and compared the different purchasing outlets before purchasing his supplies might have paid less attention than a person who said, "Yes,

sir! The A store compared with B and C had these advantages..."

In order to avoid such bias in the response of the interviewee and in the interpretation of responses by the interviewer, the interview was conducted in such a way that in addition to specific questions asked, general questions preceded the specific questions as to why farmers purchased from a particular outlet or happened to buy from both outlets at the same time, their sources of information, etc. By a careful recording of the account of the respondent, bias of this kind was minimized.

Four criteria of deliberation. To determine the degree of deliberation among the farmers, the following criteria were used as indicators.

1. The extent of information-seeking (number of sources used).
2. The degree of price consideration before purchasing.
3. The degree of quality consideration before purchasing.
4. The degree of consideration of dividends and refunds before purchasing.

In order to incorporate each item of the response in the scale, several numerical values were assigned to each. For example, it was thought that in order to measure the extent of information-seeking activity of a farmer, each of the information sources used by the farmer should be assigned a numerical value. In doing that, the extent of information-seeking activity of a farmer could be measured. A farmer using no information concerning the purchasing outlets and his alternatives was credited with zero points on the scale for that criterion. On the other hand, the farmer who used two or more information media was credited with a matching score of three (equal to 100 percent) on that criterion.

Then each criterion was equally weighted on a scale of four and the maximum possible score was 16.

It is true that in addition to the four criteria of deliberation, other criteria could be developed and used in the study because of the multiplicity of factors distinguishing deliberative from habitual activity. However, it was thought that the four criteria used were the most strategic ones in determining deliberation. Another reason for limiting the number of criteria to four was the lack of adequate information in hand.

In order to visualize the contrast between a deliberative and an habitual farmer, the following interviews were briefly summarized.

Exhibiting careful deliberation before purchasing. A farmer owning 230 acres with 80 acres of cropland, 37 head of beef cattle, 60 sheep, and 60 marketable hogs per year gets his information concerning the purchasing outlets from the state marketing bulletin and the radio. He said, "The cooperative does not sell as good feed as the other outlets in town. The state marketing bulletin indicated that the Missouri Feed Mill from which the cooperative purchases does not include in the formula as high a percentage of quality ingredients as Purina does." (He showed me the bulletin.)

The farmer furthermore indicated that he listened to the radio about information concerning seed and fertilizer sold in the co-op. Deliberating about prices, he said:

1. "When you compare your yields from the co-op's seed and the homegrown seed, you find no justification in paying so much money for seed in the cooperative."

2. "You get a better price in the cooperative for only some supplies. Lubricating oil, for example, is a bit cheaper down at the cooperative."

Considering quality, he indicated:

1. "You can get many kinds of fertilizer in the cooperative; the other stores don't have a wide variety."

2. "Before the cooperative came into the picture, the fertilizer sold was of low analysis. After the co-op came in, everyone jumped in selling high analysis."

Considering dividends and refunds:

1. "I trade with the co-op because I get some money back in dividends and refunds at the end of the year. You don't get anything back from the other purchasing outlets."

Exhibiting no deliberation before purchasing. A farmer owning 85 acres with five acres in cropland, with 20 marketable hogs, eight milk cows, and a mule, said:

1. "I buy my feed from Purina. I have always bought from there."

2. "The Purina manager said last Saturday that I was the first buyer of Purina feed in L____. He is a really good pal."

3. "My farm belonged to my great-grandfather. My father has farmed the place also."

4. "My daddy didn't used to buy much fertilizer. I buy fertilizer now from wherever I happen to be."

The Logic Employed in Selecting the Scale Value of Each of the Criteria of Deliberation

Information-seeking Activity

It was thought that farmers seeking information were more apt to weigh the proposed alternatives and come to an intelligent decision concerning their purchasing outlets. Farmers who would seek no information, or very little information, were thought to be highly habitual buyers.

The problem of measuring the extent of information-seeking by the farmers was one of many confronted in this thesis. Two farmers who consulted the newspaper concerning their purchasing outlets might have paid different degrees of attention to that medium of information dissemination and still be counted with the same degree of deliberation. In order to eliminate such biased evidence, it was thought that open-end questions should be asked in order to determine the actual extent of information-seeking activity. The farmer was not asked, "Do you read the paper?", but during the interview an attempt was made to determine the logic of the farmer's decision, and the extent of use of the newspaper in order to be informed about the purchasing outlets. Following this procedure, it was possible to record the strategic and more important media of information that were used during the process of deliberation.

Five possible channels or media of information dissemination were selected and each channel was credited according to its importance. Farmers who used none of the channels were credited with zero; those who only talked to neighbors and friends before making purchasing decisions

were credited with one point; those who used any one of the other four channels were credited with two points. Those who were thought to have been influenced by two or more of the information sources were credited with three points on the information scale.

The following sources or channels of information were thought to be the most important:

1. Information from neighbors and friends. Farmers very often discuss with neighbors and friends the different supply outlets. Their opinions concerning the outlets the farmer should patronize played a great part in the farmer's decision and choice. Despite the fact that often these opinions were invalid and unscientific, the attempt to discuss with others the alternatives for the available purchasing outlets should be an indication of deliberative activity. In the cases where farmers were utilizing information from neighbors and friends concerning their purchasing outlets, they were credited with one point on this scale.

The method used in gathering this evidence may be questioned as to statistical validity. No direct questions were put to the farmers as to whether they used any information sources and, if so, what kind. For example, farmers were not asked, "What are the most important sources of information that you used before your decision about where to purchase?", or "Do you inquire from your friends and neighbors about purchasing outlets?" On the contrary, the interviewer attempted to find the answer by a series of indirect questions during the interview. In order to find whether the farmer consulted his friends and neighbors before his decision to purchase, open-end questions like those were asked. "How

did you happen to buy from the co-op?" "Are your neighbors co-op men?" "From where do your neighbors purchase?"

In the course of the conversation, questions were directed in such a way as to unveil the importance of friends and neighbors as an information source. No attempt was made to merely check up a "yes" or "no" under "information from neighbors or friends;" rather a careful recording of the high points in the conversation about neighbors and friends was made.

This method of inquiry was used in obtaining the evidence in all of the four criteria of deliberation.

2. Information from newspapers. Farmers who consulted newspapers regularly concerning their purchasing outlets were credited with a higher degree of deliberation than those who used no information from newspapers prior to their purchasing activities. Two points out of a possible three were credited to those farmers who used the newspaper as a primary source of information. Consulting a newspaper concerning purchasing outlets is an indication of an attempt to consider alternatives of choice; such a consideration is a fairly concrete sign of deliberation.

The number of farmers who could not read was so insignificant that all farmers were assumed to have reading ability and access to newspapers.

3. Information from radio. Farmers who listened regularly to the radio concerning the purchasing cooperative and other purchasing outlets and considered it a primary source of information were thought of as farmers who could be classified as being more deliberative than those who failed to use such means for obtaining information.

It was assumed that almost all of the farmers had access to the radio, and that the information obtained from the radio was information rather than propaganda. Two out of a possible three points were credited to those farmers who used the radio as a source of information.

4. Effective written information received from the purchasing cooperative or other sources. All farmers who had received written information from the purchasing cooperative or other sources and had reported having considered the written material rather than tossing it aside were expected to be more deliberative than the others.

It has been mentioned previously but must be mentioned again that the distinction of one farmer from another was not based on direct questions such as, "Do you think that the information you received from the purchasing cooperative or the other outlets was effective?" Rather, it was based on the analysis of his response during the interview. This response was volunteered or was given in answer to questions raised during the course of the conversation. Two points out of a possible three were credited to those who used written information in their deliberation.

5. Information from unclassified sources. All farmers indicating other sources of obtaining information from, for instance, the managers of the stores, magazines, road signs, etc., were credited with a higher degree of deliberation than those who didn't use other sources of information.

It was thought that those farmers who made an attempt to obtain more information from other sources were probably farmers who would consider all possible alternatives before their purchasing decision, and consequently farmers exercising a greater degree of deliberation prior

to their purchasing activity. Two points out of a possible three were credited to each case in this category.

The Extent of Consideration of Prices Before Purchasing

It has been assumed that farmers who considered the prices of feed, seed, and fertilizer at different purchasing outlets had been more deliberative than those who did not consider prices.

Farmers who indicated a general consideration of price without considering quality at the various prices, and didn't deliberate as to the determinants of prices in the community were credited with one point on the price scale.

Farmers were also credited with one point if they considered the effect of cooperatives on prices charged by other stores in the community, but failed to consider prices at the different stores.

Two points were given to those who considered prices in two or more stores and deliberated about the effect of cooperatives on prices charged by other stores in the community. Farmers who considered quality of supplies at the various prices were also credited with two points.

Three points were credited to those who considered prices and quality and deliberated about the effect of cooperatives on the prices charged by the other stores in the community. The maximum score was 3; i.e., three was equal to 100 percent.

The distinction among the farmers who deliberated about prices and those who did not was not made from direct questions such as, "Do you consider prices when you buy from the cooperative or the other stores," but during the interview, the farmer had the opportunity to indicate his

consideration of prices by answering such questions as, "Did you find any differences in the prices of feed, seed, and fertilizer in town when you went to purchase?" Other times, the farmer would indicate his consideration of prices voluntarily by discussing the store that set the price scale in town or the extent of monopoly in the fertilizer business.

The Extent of Consideration of Quality Before Purchasing

This criterion of deliberation attempted to distinguish those farmers who purchased with careful consideration of quality from those who paid no attemtion to quality and were buying habitually from a particular firm under a particular label.

Deliberative farmers knowing the existing differences in the quality of feed, seed, and fertilizer were thought to be more apt to purchase supplies which constituted "the best buy" and to realize more profits than those buying with no consideration of quality.

Since it was thought that because there might be varying degrees of consideration of quality of goods to be purchased, it was not possible to separate farmers precisely into groups which did incorporate quality in their deliberation and those which did not. Hence, a scale was needed to give recognition to the fact that these varying degrees of correlation of quality were possible.

Farmers who indicated a general consideration of quality at one store were credited with one point out of a possible score of four. These were farmers who in the course of conversation or in answering a definite question about quality, indicated consideration of the quality of feed, seed, and fertilizer at the co-op or some other store.

Two points out of a possible score of four were given to those farmers who compared the quality of supplies between stores and then purchased. The same number of points was credited to those farmers who considered the quality of specific supplies at one store. For example, farmers in this category would consider the quality of feed specifically, let's say, and not the quality of feed, seed, and fertilizer in a general way.

Three points out of four were credited to those farmers who considered the quality of specific commodities at only one store but at the same time also considered their specific prices.

Four points, the maximum score, was credited to those who, in addition to considering quality and price of specific commodities in one store, also compared the quality and the specific prices of two or more stores.

The distinction in various degrees among the farmers who deliberated about quality is again not subject to statistical proof because of the method and approach used. Direct questions on quality were not asked in every case; instead, the extent of quality consideration was determined after a careful recording of conversation about quality. During the conversation, the interviewer covered in every case the subject of quality but not necessarily in a specific and direct way. The approach and questions asked differed in each case.

The maximum score in this criterion was four.

The Extent of Consideration of Dividends and Refunds Before Purchasing

A consideration of future outcomes from present activities indicates foresight and thinking ability. When farmers consider dividends and

refunds before purchasing, it means that they are thinking of their future returns from their purchases of feed, seed, and fertilizer.

The more habitual farmers, it would appear, would not think about these indirect benefits in the form of dividends and refunds. Therefore, it was assumed that deliberative farmers included the consideration of dividends and refunds in their purchasing activities, while habitual farmers failed to do so. Farmers who one way or the other indicated a consideration of dividends and refunds were credited with one point, or in this case, the maximum score.

It can be said here that cooperative patrons had a greater chance to consider dividends and refunds than the non-patrons. However, it was observed that approximately an equal number of patrons and non-patrons considered dividends and refunds one way or another.

The method and approach followed relating to the subject of dividends and refunds was the same as in the other criteria.

Examination of the Four Criteria of Deliberation

The relative importance of the four factors of information, price, quality, and dividends in the deliberation process of farmers can be appraised by comparing the frequency with which each factor was considered. The examination of the number of farmers scoring zero on each of the four criteria can indicate which of the criteria was the most frequently incorporated in farmers' deliberative processes. From the evidence in table I it can be seen that twenty-one farmers did not consider price in their deliberative process, while in the other three criteria, the number falling into the same category was 51 for the extent of dividends and

refunds consideration, 52 for the extent of information-seeking activity, and 58 for the extent of quality consideration.

This evidence indicates that prices comprised the most important area of consideration by the farmers before purchasing. On the other hand, the importance of consideration of dividends and refunds, the extent of information-seeking activity, and the extent of quality consideration were considered with approximately equal frequency by the farmers. It is interesting to note that a very small number of farmers thoroughly considered quality before purchasing. Only 12 out of 107 scored above 50 percent of the maximum score.

As for the extent of price consideration, it can be observed that the number of those highly deliberative about price was larger than that of those who did not consider prices at all--33 compared to 21. However, most of those who considered prices fell in the intermediate group--53 under the scale values of one and two.

In the criterion of information-seeking activity, half of the total number of farmers used no information sources prior to their purchasing decisions. The other half was divided equally between the highly deliberative about information, with a score of three in the value scale, and the somewhat deliberative with scores of one and two.

Under the criterion of the extent of dividends and refunds consideration, the farmers were divided about equally in two groups: those who considered dividends and refunds, and those who didn't.

From these observations the following conclusions can be made.

TABLE I

INDEXES TO FOUR CRITERIA OF DELIBERATION FOR 107 FARMERS IN NINE COUNTIES IN MIDDLE TENNESSEE, 1955

Extent of information-seeking activity (number of information sources)		Extent of price consideration		Extent of quality consideration		Extent of dividends and refunds consideration	
Index scale value	Number of farmers	Index scale value	Number of farmers	Index scale value	Number of farmers	Index scale value	Number of farmers
				4	2		
3	28	3	33	3	10		
2	16	2	13	2	17		
1	11	1	40	1	20	1	56
0	52	0	21	0	58	0	51
Total number farmers	107	Total number farmers	107	Total number farmers	107	Total number farmers	107

1. In each of the four criteria, there was a lack of adequate use of sources of information and a general lack of thorough consideration of prices, quality, and dividends and refunds.

2. In all criteria but prices, almost half the farmers scored zero on the scale.

3. More consideration was given to prices than any of the other factors by farmers before purchasing feed, seed, and fertilizer.

The Construction of the Over-all Deliberation Scale and the Distribution of the Total Number of Farmers Along the Scale

In order to construct an over-all deliberation scale, every criterion was weighted equally. The proportion of maximum score in each one was multiplied by four. The maximum score in the over-all deliberation scale, then, was 16, which resulted from an addition of four points for each of the four criteria.

In table II, figure 3, it is observed that farmers ranged from zero degrees of deliberation to 16.0. Thirty-four of the farmers were distributed from zero to 4.0 degrees, eleven farmers from 12.1 to 16.0 and the remaining sixty-two from 4.1 to 12.0.

The very highly deliberative farmers (12.1 to 16.0 score on the scale) were less numerous than the highly habitual (0 to 4.0 score on the scale) and the farmers with a medium score of 4.1 to 12.0 on the deliberation scale were the most numerous.

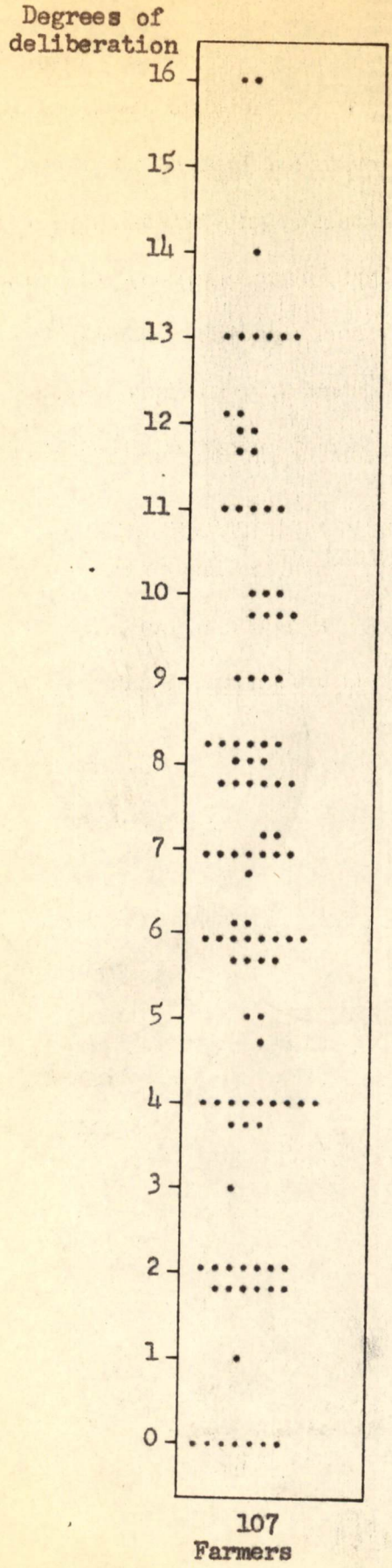


Figure 3.

TABLE II

THE DISTRIBUTION OF 107 FARMERS IN NINE COUNTIES IN MIDDLE TENNESSEE ALONG THE OVER-ALL DELIBERATION SCALE, 1955

Degrees of Deliberation	Farmers
16.0 - 12.1	11
12.0 - 8.1	20
8.0 - 4.1	42
4.0 - 0	34
Total	107

CHAPTER IV

THE DIVISION OF THE 107 FARMERS INTO HIGHLY HABITUAL AND HIGHLY DELIBERATIVE AND THE DISTRIBUTION OF PATRONS, NON-PATRONS, AND SPLIT PURCHASERS ALONG THE OVER-ALL DELIBERATION SCALE

In order to get a more vivid and contrasting picture of the deliberative versus the habitual farmers, the total sample of 107 farmers was divided into three classes (see table III, figure 4).

A. Thirty-seven "deliberative" farmers, ranging from 8.0 to 16.0 degrees of deliberation.

B. Thirty-three farmers ranging from 5.1 to 7.9 on the over-all deliberation scale.

C. Thirty-seven "habitual" farmers, having from 0 to 5.0 degrees of deliberation.

The information used and the construction of the index were necessarily so crude that finer distinctions were not warranted in this case.

Each class was divided into three groups, patrons, non-patrons, and split purchasers (see table IV, figure 5). This division was necessary for comparing the degree of deliberativeness among the three groups. In this comparison the following observations were made.

In the patrons group, the bulk of the farmers, 51 percent, was in the B class of the non-highly deliberative and the non-highly habitual. The second largest group among patrons, 30 percent, was in the A class of the highly deliberative farmers. The smallest group was in the C class of the highly habitual farmers.

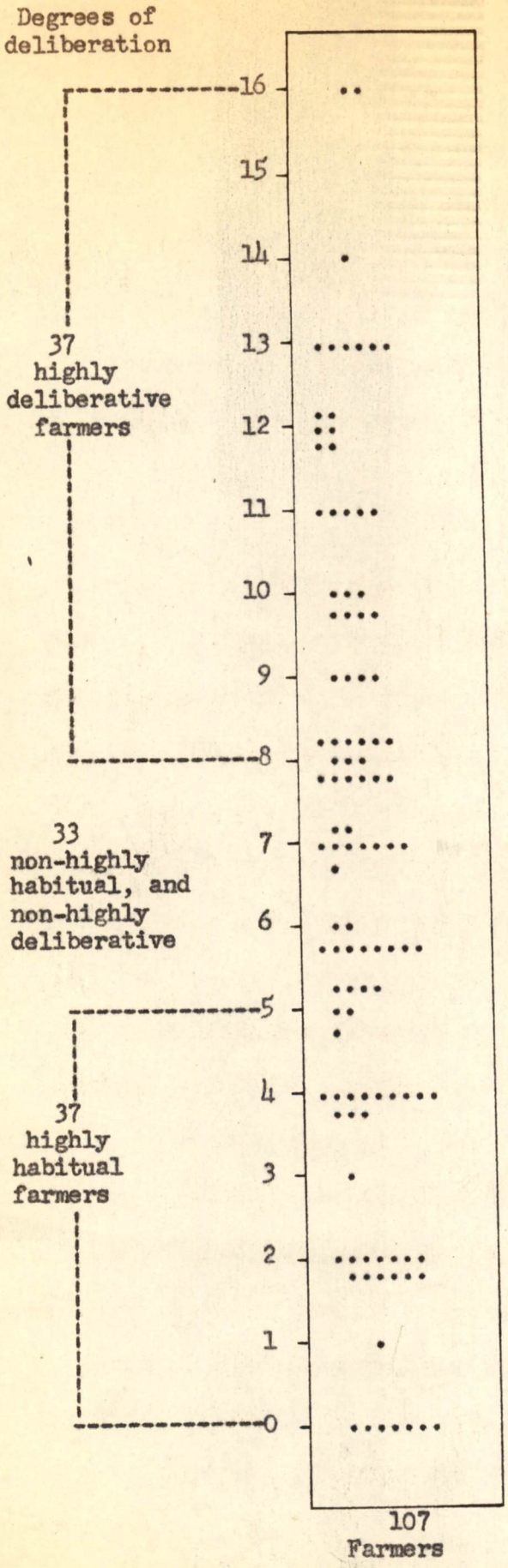


Figure 4.

TABLE III

THE DISTRIBUTION OF 37 HIGHLY DELIBERATIVE, 37 HIGHLY HABITUAL, AND 33 NON-HIGHLY HABITUAL AND NON-HIGHLY DELIBERATIVE FARMERS ALONG THE OVER-ALL DELIBERATION, NINE COUNTIES IN MIDDLE TENNESSEE, 1955

Degrees of Deliberation	Farmers
16.0 - 8.0	37
7.9 - 5.1	33
5.0 - 0	37
Total	107

In examining the non-patrons and split purchasers, it was observed that the bulk of the non-patrons group, 56 percent, was in the C class of the highly habitual farmers.

In the split purchasers group, 46 percent of the farmers were distributed in the A class of the highly deliberative farmers.

The average deliberation score in each of the groups was: for the split purchasers, 7.5 points; the patrons, 7.1 points; and the non-patrons, 5.1.

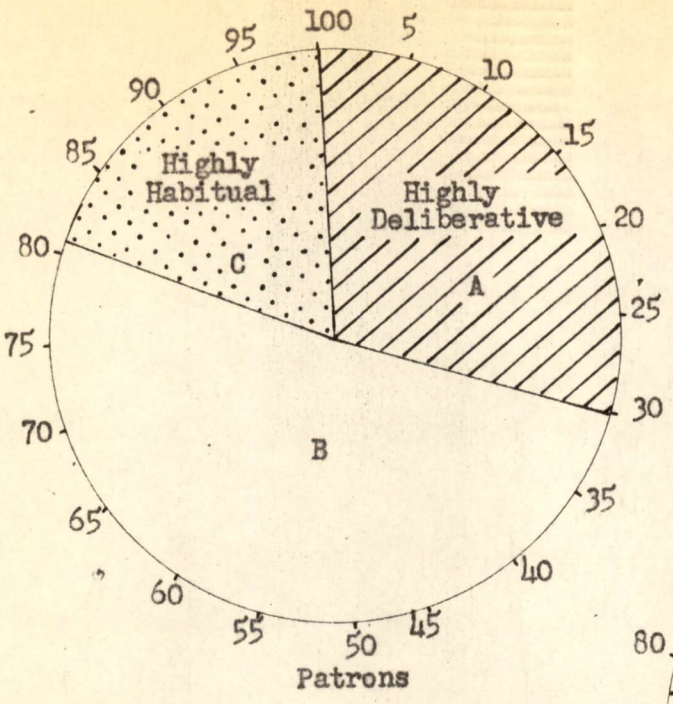
This evidence indicates that the split purchasers, the ones who purchased most of one class of goods from the cooperative but most of other classes elsewhere, tended to be more deliberative than the other two groups, but ranked only slightly above the patrons group. The difference between the average score of the patrons and split purchasers is of doubtful significance in view of the data and crudity of the index. The non-patrons were the least deliberative.

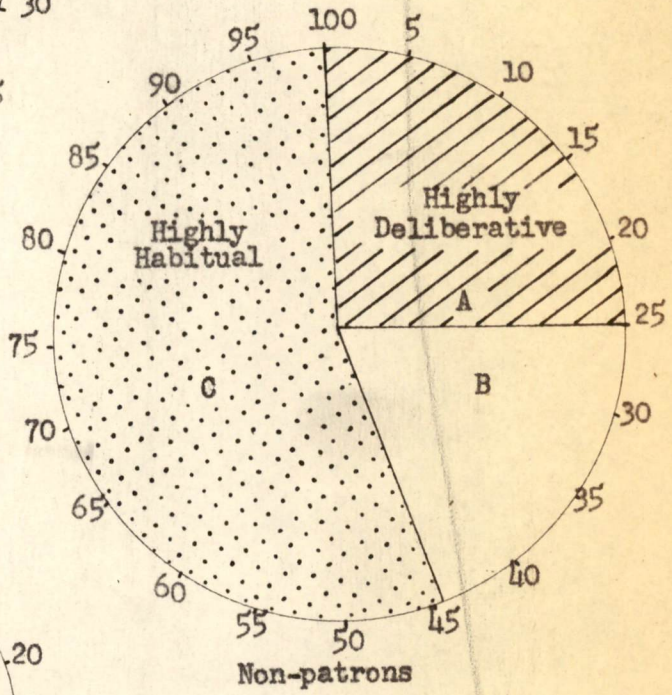
For reasons stated previously, generalizations drawn from this evidence concerning all deliberative and nondeliberative farmers are of doubtful validity. However, assuming that the pattern of opportunities facing the deliberative and nondeliberative farmers was similar, the evidence would appear to suggest that the more deliberative farmers more frequently take advantage of opportunities presented by the cooperative than do the nondeliberative farmers. This, in turn, suggests that one of the important problems facing cooperative managers and directors is to find means which will stimulate nondeliberative farmers to consider the possibilities offered by the cooperative.

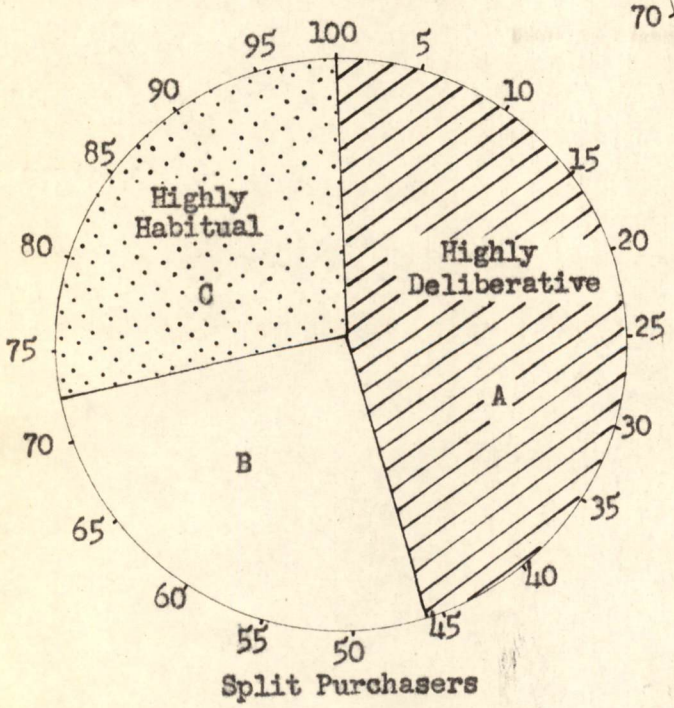
TABLE IV

CLASSIFICATION OF PATRONS, NON-PATRONS AND SPLIT PURCHASERS BY DELIBERATION SCORE, NINE COUNTIES IN MIDDLE TENNESSEE, 1955

Degrees of deliberation	Patrons		Non-patrons		Split purchasers	
	Number	Percent	Number	Percent	Number	Percent
A. 16.0 - 8.0	8	30	9	25	20	46
B. 7.9 - 5.1	14	51	7	19	12	27
C. 5.0 - 0	5	19	20	56	12	27
Total	27	100	36	100	44	100
Average deliberation score	7.1		5.1		7.5	







Source: Adapted from appendix table II.

Figure 5. Classification of patrons, non-patrons and split purchasers by deliberation score, nine counties in Middle Tennessee, 1955.

CHAPTER V

CHARACTERISTICS OF DELIBERATIVE AND NONDELIBERATIVE OR HABITUAL FARMERS

In order to identify deliberative from nondeliberative farmers, it was thought that certain characteristics probably could be used as indicators of deliberativeness. These characteristics were probably the results of the unique circumstances and situations the farmers were in.

No inference can be drawn from the following findings in making generalizations as to the major characteristics of all deliberative and habitual farmers. However, it can be said with some certainty that the findings provide evidence of the characteristics of deliberative and habitual farmers within the group of 107 farmers in Middle Tennessee. Furthermore, it is believed that these findings can be used as beginning hypotheses for further investigation concerning characteristics of deliberative and habitual farmers.

Three characteristics that were thought to be of importance in distinguishing deliberative from habitual farmers were: (1) the volume of business, (2) formal education and (3) age.

Volume of Business

The total number of farms was divided into nine distinct categories[1]

---

[1]

	1	2	3	4	5	6	7	8	9
Cleared land	S	S	S	M	M	M	L	L	L
Animal units	S	M	L	S	M	L	S	M	L

Cleared land:
S = 0-99 acres; M = 100-179 acres; L = 180-419 acres.
Animal units; S = 0-10; M = 11-25; L = 26-75.

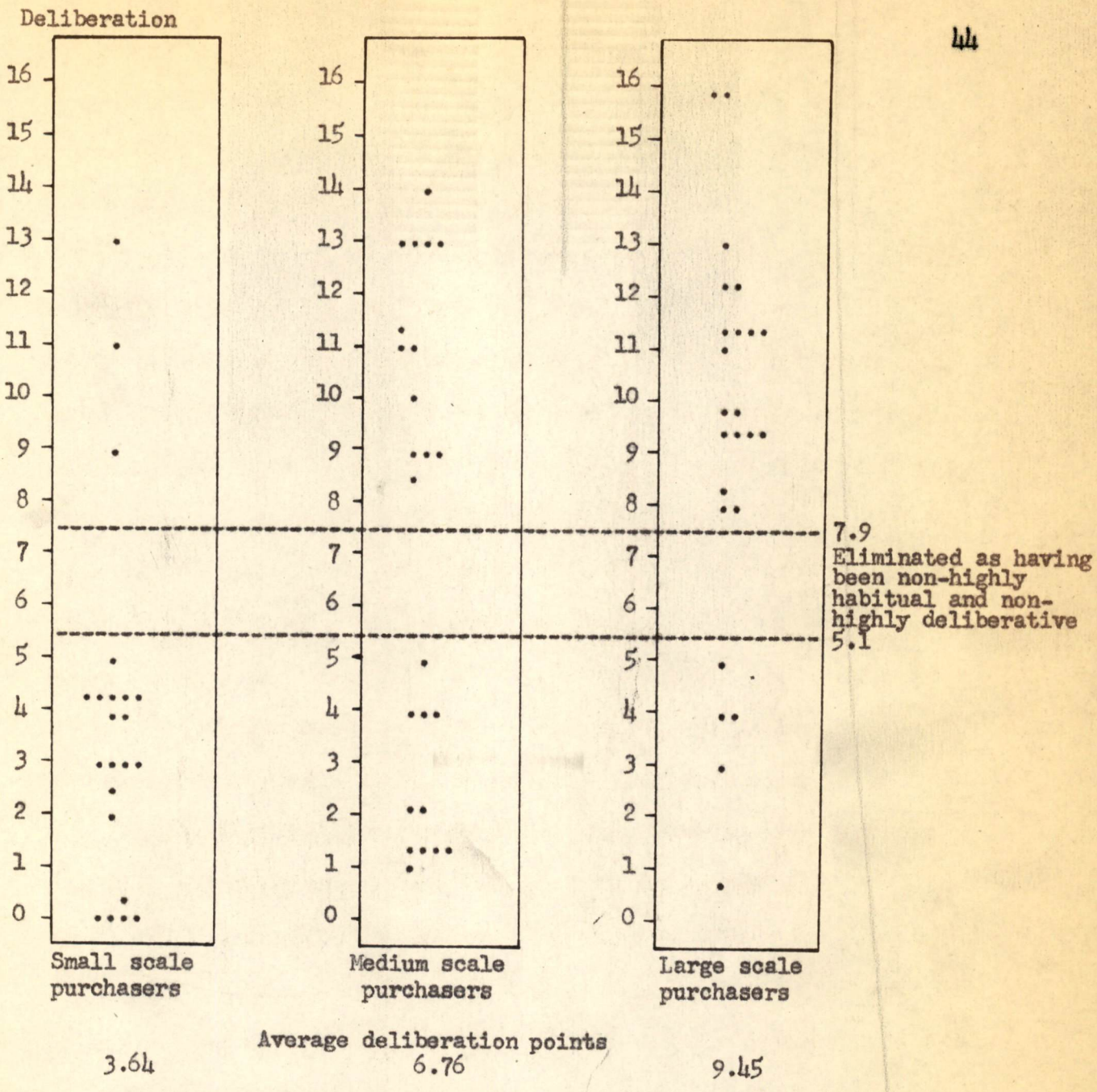
according to their combination of cleared land and animal units. The purpose for the classification was to get a very rough estimate of the amount of feed purchased by the different categories of farmers. The estimate for the amount of seed and fertilizer purchased could then be measured by the amount of cleared land.

The nine categories were combined into three, measuring roughly the relative amount of feed, seed, and fertilizer purchased. Farmers purchasing on a small scale had a small acreage of cleared land and a small to medium number of animal units. Farmers purchasing on a medium scale had a small acreage of cleared land, but a larger number of animal units or medium acreage of cleared land with small, medium, and large numbers of animal units.

Farmers purchasing on a large scale had a large acreage of cleared land and small, medium, and large number of animal units.

The small scale purchasers might be expected to be relatively habitual in their purchasing activity. Due to the small amount of purchasing of feed, seed, and fertilizer, they would be less apt to consider carefully all alternatives and deliberate about purchasing outlets. The "cost" of shopping for better buys is high relative to returns therefrom. Certain well-established habits determining the place and brand of their supplies might therefore be expected to be prevalent in this group of farmers.

On the other hand, the large scale purchasers might be expected to consider carefully all alternative purchasing outlets and after a careful deliberation about prices, quality, and future returns, to choose the price and quality which they thought could bring them the highest returns. This



Source: Adapted from appendix table I.

Figure 6. Farmers with low and high deliberation scores by volume of total purchasers class, with individual deliberation score, nine counties in Middle Tennessee, 1955.

tendency to exercise careful deliberation would probably be essential to their success in farming. The hypothesis to be tested then is that deliberation is directly correlated with the amount of purchasing.

In figure 6, it can be observed that small-scale purchasers were concentrated in the low scales of deliberation, in the range of the "habitual" farmers, while the large-scale purchasers were concentrated in the high scales of deliberation in the range of the "deliberative" farmers.

In the small scale purchasers group, there were over six times as many classified as highly habitual farmers as were classified as deliberative. In the medium scale purchasers group, there were about as many highly deliberative as highly habitual. In the large scale purchasers group, there were about four times as many classified as highly deliberative as highly habitual.

It can be said with some certainty that in this sample deliberation was directly correlated with the amount of purchases, i.e., that the large scale farmers were the more deliberative on the average.

Formal Education

The formal education of all farmers was recorded in order to estimate its effect on deliberation.

Farmers with higher education were thought to be more deliberative than those with less education because in the very nature of the educative process the capacity and the tendency to deliberate should be cultivated. Thus, farmers with higher than average education would, one would think, be apt to consider alternative purchasing outlets and deliberate about prices,

quality and future returns.

The concept of education as such is the cultivation of tendencies and capacities for deliberation. To be truly educated means to be deliberative. However, there is a question as to whether formal education is as conducive to deliberation as one might wish, and as to whether education is effective in the purchasing activity of a farmer. Formal education perhaps increases the ability of a person to deliberate about the outcomes of all activities in general and not necessarily about the outcomes of specific activities such as purchasing. A farmer, in order to deliberate about purchasing outlets, prices, quality, and future returns, perhaps needs to be educated about concepts and facts related thereto and not just to be educated in general. However, this is difficult to accept because formal education may not provide a farmer with specific ideas and concepts concerning purchasing outlets, prices, and quality, but provides him with a method and approach that can be used for determining the outcomes of specific activities, such as purchasing.

The following hypothesis may be entertained here: Deliberation is directly correlated with formal education.

In observing figure 7, it is evident that there is a slight tendency for the deliberative farmers to be concentrated in the upper scales of years of formal education. The average school years of formal education for the deliberative farmers was 6.94, and for the habitual, 4.16. This is particularly interesting in view of the fact that most of these farmers had less than eight years of schooling. We might have expected that the distinction between high school and grade school attainment

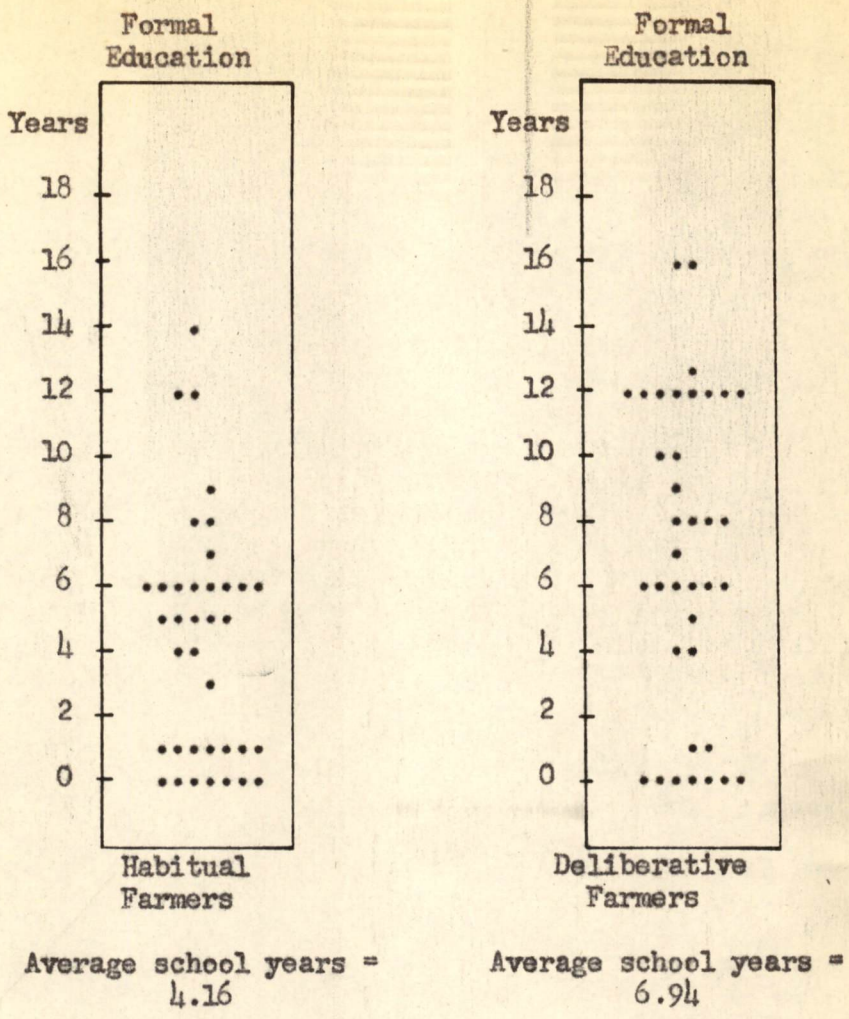


Figure 7. Farmers with low and high deliberation scores by school years completed in nine counties in Middle Tennessee, 1955.

would be the more important in this regard than a difference of three years in the grade school level of education.

Age

Age was thought to be another determining factor in deliberation. Younger farmers were expected to be more deliberative than older farmers. It was believed that younger farmers would not have had sufficient time to form the fixed habits of their elders. Younger farmers would also be more apt to be raised during a period of change in farming business, maybe during the last two decades when the subsistance type of farming changed to the commercial. This change, it would seem, would stimulate reconsideration of customary activity, the tendency to deliberate.

The distribution of the age of farmers within the deliberative and the habitual farmers gives very little evidence that the above statement is valid. Within the habitual group of farmers, the age ranged from 27 to 76 with a mean age of 51.1. In the deliberative group of farmers, the age ranged from 30 to 66 with a mean of 48.1 (figure 8).

It is true that a problem of intercorrelation may be present in this consideration of age. Old farmers who were farm operators during the war years and had increased their volume of business during those years were expected to have been positively influenced in their deliberative processes.

There is considerable doubt as to whether the three years' difference between the two groups warrants accepting the hypothesis that younger farmers are more deliberative.

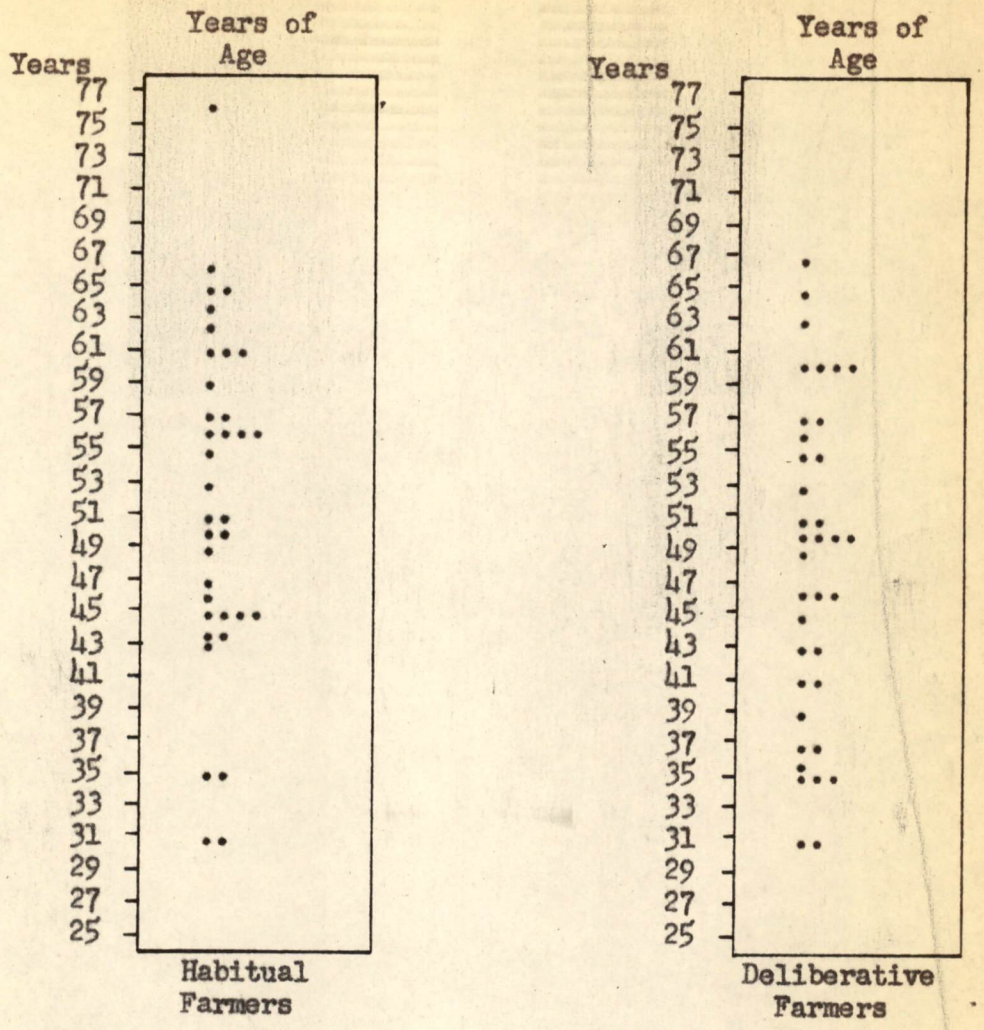
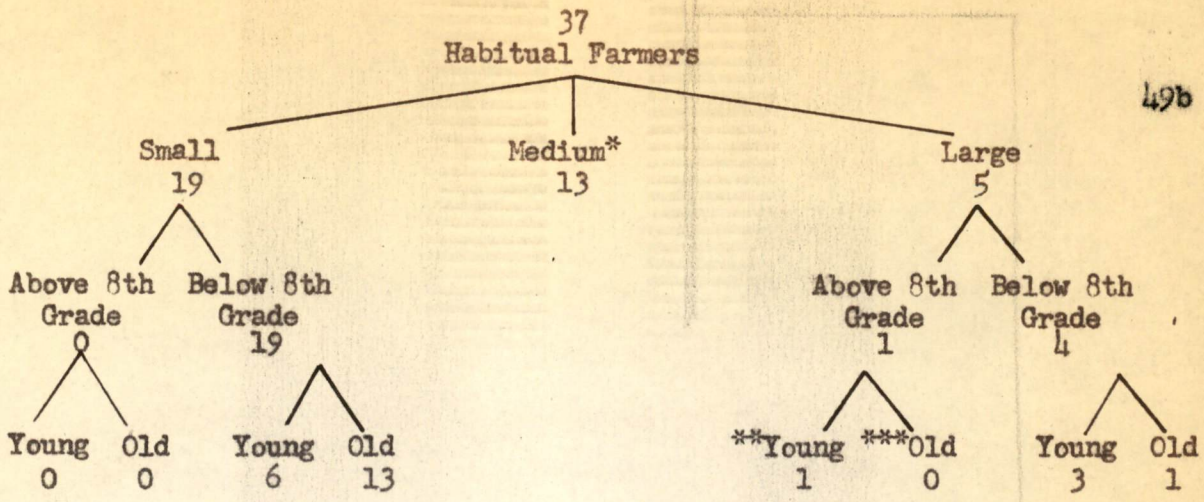


Figure 8. Farmers with low and high deliberation scores by school years completed by age in nine counties in Middle Tennessee, 1955.

In order to eliminate the effect of one characteristic on another, a tabular analysis was made. It was found (figure 9) that habitual farmers tended to be small scale purchasers with formal education below the eighth grade. Deliberative farmers tended to be large scale purchasers with a greater proportion of young farmers with education of eight years and above.



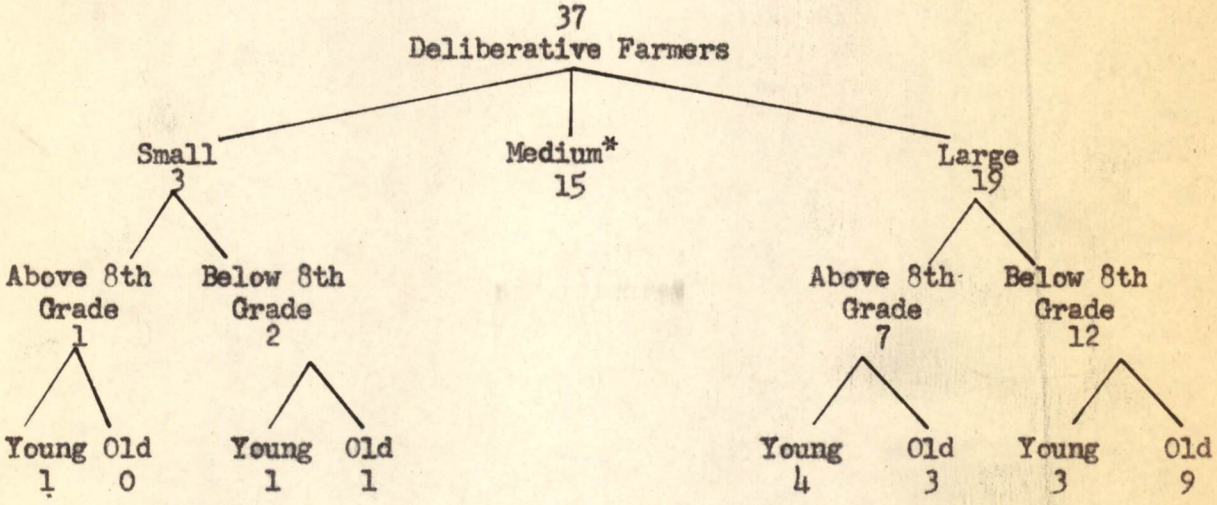


Figure 9. A tabular analysis of 37 deliberative and 37 habitual farmers relative to the amount of purchases, education and age, nine counties in Middle Tennessee, 1955.

*Medium scale purchasers were eliminated as belonging to either large or small scale purchasers group. This elimination was necessary in order to make the two groups (large and small) more discrete.

**Young farmers (25-45 years old)

***Old farmers (46 years old and above)

CHAPTER VI

FACTORS CONTRIBUTING TO THE FINAL DECISION OF DELIBERATIVE FARMERS AS TO WHERE TO PURCHASE, AND THE SIGNIFICANCE OF HABITUATION IN FARMERS' PURCHASING ACTIVITIES

In order to understand the reasons why deliberative and habitual farmers purchase from the cooperative or the other stores, the following analysis was made.

Deliberative patrons, non-patrons, and split purchasers were examined in order to determine the strategic factors used in their process of deliberation about where to purchase.

Habitual patrons, non-patrons, and split purchasers were also examined in order to determine the significance of habituation in their purchasing activities.

By understanding the strategic factors considered by deliberative patrons, non-patrons, and split purchasers in their deliberation, and the significance of habits of habitual farmers in the same groups, a cooperative could get an idea of some of the possible factors related to the degree of cooperative patronage.

The analysis of the strategic factors and significance of habits was made by comparing the frequency with which each factor or habit was mentioned by patrons, non-patrons, and split purchasers.

There is a question as to whether valid inferences can be drawn from such frequency distributions in view of the small sample. However, evidence from such distributions could probably be used as initial hypotheses for future investigations.

Thirty-seven farmers taken from the top scales of deliberation (8.0-16.0) constituted the group of deliberative farmers considered in this part of the study. (See table III, figure 4.)

In every case where the terms patrons, non-patrons and split purchasers are mentioned in this part of the thesis, it is meant that the deliberative patrons, non-patrons, and split purchasers are being discussed.

The Type of the Sources of Information Used Among Those Who Used Some Source of Information

The purpose of the examination of the different types of information sources used by the total number of deliberative farmers and by each of the three groups--patrons, non-patrons, split purchasers--was to measure the most frequently used source of information of all deliberative farmers in general and in particular groups. By knowing this, a cooperative could direct its educational program through the most frequently used information channels.

From table V, it may be observed that 79 percent of the deliberative farmers used some kind of written information in their deliberative processes.

Sixty-two percent of the total deliberative farmers were informed of the different purchasing outlets through unclassified sources. Information from neighbors and friends was used by 45 percent of the deliberative farmers, while information from radio was used by only 38 percent.

TABLE V

INFORMATION SOURCES THAT 37 DELIBERATIVE FARMERS USED IN DECIDING FROM WHERE TO PURCHASE, NINE COUNTIES IN MIDDLE TENNESSEE, 1955

	Total number of deliberative farmers		Deliberative patrons		Deliberative non-patrons		Deliberative split purchasers	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
1. Total number of cases	37		8		9		20	
2. Cases in which one or more sources of information were used:	29	100*	6	100*	6	100*	17	100*
3. The type of sources of information used:								
a. All written information used:	23	79	5	83	4	67	14	82
Newspapers:	9		4		2		3	
Other written material received from the co-operative:	26		4		2		11	
b. Neighbors and friends:	13	45	4	67	3	50	6	35
c. Radio:	11	38	4	67	2	33	5	29
d. Unclassified sources:	18	62	6	100	2	33	10	59

*Figures are rounded to the nearest percent.

In analyzing the total number of farmers with the three groups, patrons, non-patrons, and split purchasers, it can be observed that within the patrons group, 100 percent of those using information indicated that they received it from unclassified sources; 83 percent indicated that they received written information from the cooperative and/or through the newspaper; 67 percent indicated that they received information from neighbors, friends, and radio.

This evidence indicates that in the patrons group, the degree of importance of the different sources of information rates as follows: First, unclassified sources; second, all written information; third, information from neighbors, friends, and radio.

Within the non-patrons group, 67 percent of the farmers received some written information from the cooperative or used the newspaper, 50 percent used information from neighbors or friends, 33 percent from unclassified sources, and 33 percent from the radio. This indicates that written information received from the cooperative or obtained by reading a newspaper was the most frequently considered of information sources.

The question to be raised here is this: Why didn't non-patrons, who considered the written information which they received from the cooperative, patronize the co-op? One of the reasons might be that the kind and type of information received by non-patrons did not communicate any ideas that could cause the farmers to change their purchasing outlets. Maybe the deliberative non-patron was interested in prices and the information did not include prices.

Within the split purchasers group, written information from the co-op and the newspaper were the most frequently used sources of informa-

tion--82 percent. The question again arises here, why didn't split purchasers who received information from the co-op fully patronize the outlet? It can be assumed here again that there is a possibility that the information from the co-op did not include the right kind of material that the split purchasers were interested in reading. Also, there may be another possibility that split purchasers could get better buys on certain items elsewhere.

The second most frequently considered information sources were other unclassified sources, 59 percent, with neighbors and friends, and radio named by 35 percent and 29 percent, respectively.

From this evidence, it can be said that deliberative patrons, non-patrons, and split purchasers differ slightly as to the sources of information used. But deliberative farmers as a group used printed matter more frequently than any other class of media. Moreover, each individual class (patrons, non-patrons, and split purchasers) used printed media more frequently than any other single source of information. This corresponds exactly to the conclusions of Long, Hughes, and Bowers in a study of information sources.[2]

Factors Incorporated in the Deliberative Activity of 37 Farmers

From table VI it is observed that in all groups of deliberative farmers, price was the most important factor considered. The question to

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[2]E. J. Long, R. B. Hughes, Jr., F. P. Bowers, Elements in a Co-operative Membership Information Program (Bulletin 238, The University of Tennessee Agricultural Experiment Station) Knoxville, Tennessee, 1954, p. 5.

be raised, then, is this: What was the reason some deliberative farmers, after considering price, decided not to purchase from the cooperative?

In examining more closely the responses of deliberative farmers relative to this issue, it was observed that eight out of nine deliberative farmers who abstained from cooperative patronage indicated high prices in the cooperative as the reason they did not purchase from that outlet. Certainly there is no statistical proof as to whether farmers were justified in saying that the cooperative had high-priced merchandise. It might have been that other competitors had decreased prices below the normal level in order to break down the cooperative, or it may have been that economies of scale or other factors made it possible for them to price below the level of the cooperative. In any case, the fact is that eight out of nine non-patrons did not purchase from the cooperative because they believed that price differentials existed. If this belief is a result of erroneous or inadequate information, it suggests that cooperative management should provide deliberative farmers with frequent price information through effective channels. As indicated before, newspapers and other printed media seem to be the most frequently used sources of information.

The second most frequently considered factor during farmers' deliberative activity by almost all groups was quality (table VI). Four out of eight non-patrons indicated that the other stores in town had the same or better quality supplies than the co-op and that this influenced their purchasing decisions. This would seem to suggest that opinions about quality, whether valid or invalid, do influence purchasing behavior.

TABLE VI

STRATEGIC FACTORS CONSIDERED DURING FARMERS' DELIBERATIVE ACTIVITY AS TO WHERE TO PURCHASE, NINE COUNTIES IN MIDDLE TENNESSEE, 1955

	Farmers purchasing substantial proportion of their from the cooperative							
	Non-patrons		Patrons		Split purchasers		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total number of cases	9	100	8	100	20	100	28	100
1. Considering price	9	100	8	100	20	100	28	100
2. Considering quality	8	89	6	75	15	75	21	75
3. Considering dividends and refunds	3	33	5	62	7	35	12	43
4. Considering services and store facilities	4	44	5	62	11	55	16	57

The fact that there was not unanimity of opinion about quality is evidenced by the fact that a total of eight deliberative farmers (four non-patrons and four split purchasers) felt that the quality of cooperative merchandise was generally inferior, while three deliberative farmers (one in each group) held the opposite view. These farmers all indicated that their opinion influenced their choice of outlet somewhat. If cooperative merchandise is equal to or superior to that sold by competing outlets, it would seem that more information about quality would increase the patronage of these associations.

In the groups of patrons and split purchasers, eight out of twenty-one farmers indicated that the cooperative had high quality fertilizer, and that that was the reason they purchased from the co-op. Another eight farmers felt the same way about seed. Only three farmers out of twenty-one thought that the feed sold at the cooperative was of high quality. Due again to the small sample of cases, no firm generalization can be drawn from this evidence, but it can be observed that the quality of the cooperative's seed and fertilizer was considered as being good by patrons and split purchasers, while the quality of feed was not thought to be as high.

It was noted earlier that analyses published in a state marketing bulletin indicated that at various times the quality of ingredients in feed sold by the Tennessee Farmers' Cooperative has not been as high as some other open formula feeds sold in the state. Moreover, only seven percent of the total mixed feed bought in the state is purchased from T. F. C. co-ops; about 15 percent of the seed and 16 percent of the

fertilizer used by Tennessee farmers is purchased from T. F. C. Locals. This would seem to indicate a general feeling that, price considered, quality of co-op feed is inferior. Therefore, unless quality is improved, it is doubtful that information specifically about feed quality would increase sales even if directed to deliberative farmers.

Parenthetically, it should be noted that T. F. C. has changed sources of supply for mixed feed and in the near future contemplates manufacturing its own feeds. If in this process quality is improved, information about it will need to be broadcast to overcome the reputation for low feed quality that apparently now exists.

Dividends and refunds were important points in farmers' deliberative activity. Five out of eight patrons indicated that dividends and refunds from the cooperative were important in their savings and in their final decision about where to purchase, while only three out of nine non-patrons and seven out of twenty split purchasers considered this factor. Although certainly inconclusive, this does suggest that consideration of dividends did influence purchasing behavior somewhat.

This fact that dividends were not considered by about 60 percent of all deliberative farmers (patrons, non-patrons, and split purchasers) raises the question of why so few considered them. Is it because dividends have been relatively insignificant historically for some of these cooperatives? Or is it because farmers do not understand the operations of the cooperative and the fact that the net price of merchandise they purchase is determined by the amount of refunds? It might well be that published price information should include average dividends and

computed net prices similar to the schedules published by mutual insurance companies.

The consideration of service and store facilities was one of the two factors least considered of those shown in table VI. Many other miscellaneous factors were considered more frequently than service and facilities. The patrons mentioned more frequently than the other two groups that the co-op was providing the farmers with good service, while the non-patrons and split purchasers indicated that the cooperative had inadequate facilities.

In bringing together the points made in the discussion on factors incorporated in the deliberative activity of 37 farmers, this statement can be made. In several cases, question was raised as to whether the true facts were used by the farmers during their deliberative process concerning purchasing outlets. This is important. Unless deliberative farmers are provided with the real evidence about price, quality, dividends, and refunds, and service and store facilities, through the right information channels, there is little hope for the cooperative to maintain and increase its patronage.

Cooperatives Considered as Price Barometers

It was interesting to note that 28 out of 37 deliberative farmers considered a purchasing cooperative as a provider of competition and as being responsible for maintaining reasonable prices in the community. Twenty out of the 28 farmers were non-patrons and split purchasers. In other words, in spite of the outlet patronized, deliberative farmers

thought highly of the role cooperatives played in the community.

During the survey in Middle Tennessee, many farmers indicating the importance of cooperatives in promoting competition would state, "When the co-op came to town, prices were lowered," or, "If the co-op goes out of the picture, prices will climb way up."

The promotion and maintaining of such beliefs in the community is important for establishment of cordial atmosphere between the public and the cooperative.

A well-planned educational program plays an important role in the establishment of such an atmosphere because it is only through such a means that a cooperative can communicate to the community the true facts concerning its objectives and its role in the economy.

Habituation and Its Significance

In this section of the chapter, an attempt has been made to identify the most prevalent habits among the nondeliberative farmers, to indicate the significance of these habits, and to propose possible avenues for their elimination through stimulating farmers to deliberate.

Twenty-two out of 37 nondeliberative farmers indicated that they had been more or less continually patronizing a country store or a special outlet in town with no consideration of other alternatives such as the cooperative.

This habitual activity of patronizing just one store may have been highly deliberative at first, but due to its repetitive character, became later highly habitual. The problem facing the cooperative here is that

of stimulating these nondeliberative farmers to think about possible alternatives. Stimulation of thought in such a group of farmers about their purchasing alternatives is probably not possible through the adoption of the same methods used to communicate ideas to the deliberative. Price lists and high analysis fertilizer pamphlets may be of no use unless the farmer is stimulated to active inquiry about his alternatives. On the contrary, personal visits by the manager of the cooperative may be of much significance. Nondeliberative farmers with rather little formal education who are probably purchasing on a small scale will perhaps be more responsive to personal conversation than to impersonal written material because in this face to face contact it is easier to raise questions about their activity which had not been considered heretofore. This fact has been recognized by many private firms in Tennessee, (such as Purina) which have hired special personnel to perform the job of personal contact. In a few counties where the co-ops followed this method of personal visits, several farmers indicated that the reason they joined the cooperative was that they were visited by the manager and talked about the purchasing issue with him or the board of directors. In two cases where a manager visited the farm and took a soil test for the farmer, the comments were very favorable towards the cooperative and its objectives.

Seven nondeliberative farmers out of 37 indicated that they would always purchase on credit from stores other than the cooperative with no questions as to the interest rates paid. A farmer in one of the counties said, "When spring comes and I want some seed and fertilizer, I just go

in to the country store and buy it on credit from my old friend, George. In the fall when I harvest my tobacco, I give him the money."

The problem in hand is that of stimulating deliberative activity concerning store credit and its consequences in cases where farmers do not bother to consider alternative sources of capital and supplies. One of the possible answers lies in a better and closer cooperation between the cooperative and farmers' credit institutions such as the Production Credit Association. A team of cooperative and P. C. A. personnel can work together toward the objective of stimulating nondeliberative farmers to deliberate about their sources of credit. Written material such as information pamphlets, newsletters, etc., will probably be of little significance in the promotion of deliberative activity. A more personalized means of communicating ideas is needed.

Seven out of 37 nondeliberative farmers indicated that they patronized the cooperative because it was a farmers' store. These farmers gave no account as to why that was so. But it illustrates the idea that these factors may sometimes be meaningful to the farmer and perhaps should be included as part of an effective educational program.

However, it is important that a cooperative in such cases promote a better understanding of concepts like the one mentioned, because only such understanding can foster continuous loyalty to the cooperative. Again in these cases, personal visits and meetings with the farmers are probably valuable.

Six nondeliberative farmers (three non-patrons and three split purchasers) out of 37 indicated that cooperative leaders were not trust-

worthy. When these farmers were asked to elaborate on the issue, they were unable to state clearly what they meant by the term "not trustworthy," or else they would use distorted facts to justify their impressions. One farmer said, "Oh, this man is a crooked fellow. They caught him cheating in the books." The farmer was possibly somewhat right, but the allegedly crooked fellow, called "this man," was the old manager of the cooperative who was in charge of the outlet six years ago, indicating again that active deliberation about the alternatives was lacking.

From this brief discussion on habituation and its significance, the following statement can be made:

Nondeliberative farmers habituated in certain purchasing activities need stimulus to offset their habitual activity and instill in them the tendency to deliberate. Probably the best means of achieving this end are personal visits, conversations, and meetings with cooperative personnel.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The administration of cooperative associations is usually divided into two parts, business administration and membership administration, which includes the area of the maintenance of agreeable human relations. This thesis has been concerned in general with the second division, and specifically with the problem of determining some of the factors affecting cooperative patronage.

Data used in this analysis was collected by a non-random system from owner-operators located at two mile intervals along a major cross-county road in each of nine Middle Tennessee counties.

The study was designed to be of a preliminary nature. Its purpose was to develop, if possible, a set of concepts appropriate to analysis of membership administration, including the maintenance of agreeable human relations. The relationships derived were not intended to be generalizations about the entire population of the state or of the counties covered in the survey.

In order to formulate hypotheses concerning the factors relating to patronage of purchasing cooperatives, a study of habit, deliberation, and farmers' purchasing activities was made.

An attempt was made to understand the concepts of habit and deliberation and to find the extent to which farmers' purchasing activities were deliberative in nature or dominated by habit. In order to measure this extent of deliberativeness, a scale was constructed and the total

number of farmers was classified using this scale.

In comparing the average deliberation score among patrons, non-patrons, and split purchasers, it was found that split purchasers had an average of 7.5 points out of a possible 16, the patrons, 7.1 points, and the non-patrons, 5.1 points. This suggests that farmers with a higher degree of deliberation tended more frequently to take advantage of opportunities presented by the cooperative than the farmers who were less deliberative regarding the factors of price, quality, dividends and refunds.

In order to get a more vivid and contrasting picture of the deliberative versus the nondeliberative farmers, the total sample of 107 farmers was divided into the following three classes: (1) The highly deliberative, with 8.0 to 16.0 degrees of deliberation. (2) The medium group, ranging from 5.1 to 7.9 on the over-all deliberation scale. (3) The highly habitual farmers, ranging from 0 to 5.0 on the scale.

It was observed that the deliberative farmers were farmers with larger than average volume of total purchases, and had a higher than average number of years of formal education than the nondeliberative farmers.

This finding can be of significance to cooperative personnel in formulating an educational program. Deliberative farmers, probably, are responsive to kinds and media of information material that might get no response at all from the nondeliberative.

The last part of the study was devoted to a better understanding of the information sources used by 37 deliberative farmers, the factors

incorporated in their deliberative activity, and the significance of certain habits in the purchasing activity of 37 nondeliberative farmers.

It was found that deliberative patrons, non-patrons, and split purchasers differed slightly as to the sources of information used. But deliberative farmers as a group used printed matter more frequently than any other class of media.

As for the factors incorporated in deliberation, it was observed that much confusion existed among deliberative farmers concerning the true facts about price, quality, service-store facilities, and dividends-refunds. This is important, for there is little hope for the cooperative to maintain and increase its patronage unless the deliberative farmers are provided with the real evidence on the mentioned issues.

Nondeliberative farmers were found to be habitual in certain purchasing activities. Many of these farmers continue to patronize one outlet without considering alternatives, buying on credit without considering alternative sources of capital, condemning the cooperative personnel as not trustworthy without having adequate evidence to support their statements, etc.

These habituated farmers need a strong stimulus that will be able to offset their habitual activity and instill in them the tendency to deliberate.

From this evidence and the discussion of deliberative farmers, it can be concluded that educational programs need to be formulated in such a way as to convey the right ideas to the right group of farmers through the right media of communication. Frequent price lists, pamphlets concerning quality, and explanatory statements in the newspapers about the

objectives and policies of cooperatives may be of great significance in providing the deliberative farmers with true evidence and facts necessary for an intelligent purchasing decision, while visits and other personal means of communication can stimulate habitual farmers to think and to deliberate. Unless these facts are realized and educational programs formed accordingly, funds for educational purposes will continually be drained like the waters of a river down to an infertile sea.

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APPENDIX A

TABLE I

THE DETERMINATION OF THE MEAN DELIBERATION IN THE SMALL, MEDIUM, AND LARGE SCALE PURCHASERS, NINE COUNTIES IN MIDDLE TENNESSEE, 1955

Small Scale Purchasers		Medium Scale Purchasers		Large Scale Purchasers	
Farmers' Identification Number	Deliberation Score	Farmers' Identification Number	Deliberation Score	Farmers' Identification Number	Deliberation Score
100	13.00	95	11.00	72	16.00
24	11.00	81	13.00	20	10.00
104	9.00	82	13.00	91	8.32
9	4.00	17	9.00	35	13.00
99	4.00	65	8.00	54	11.36
63	4.00	34	14.00	61	8.00
76	4.00	39	10.00	77	9.32
11	.0	103	8.32	66	9.32
2	2.68	53	11.36	18	8.00
43	4.00	15	13.00	27	10.00
71	.0	52	8.00	93	11.32
70	1.32	28	11.00	31	12.68
48	2.68	25	9.00	19	16.00
73	.0	106	9.00	30	12.68
86	2.68	67	13.00	98	11.00
94	.0	5	4.00	62	9.32
87	2.68	13	4.00	64	9.32
8	2.68	96	2.68	36	11.00
83	.0	1	1.32	78	11.32
92	3.68	75	.0	14	4.00
101	4.68	47	5.00	84	5.00
80	4.00	89	4.00	59	3.00
		102	1.32	3	4.00
		22	1.00	4	3.00
Total	80.19	21	1.32		
		107	2.68		
Average Deliberation Points	3.64	42	1.32	Total	226.96
		79	.0		
				Average Deliberation Points	9.45
		Total	189.32		
		Average Deliberation Points	6.76		

TABLE II

THE DISTRIBUTION OF 27 PATRONS, 36 NON-PATRONS AND 44 SPLIT PURCHASERS ALONG THE OVER-ALL DELIBERATION SCALE, NINE COUNTIES IN MIDDLE TENNESSEE, 1955

Deliberation Scale	Number of Patrons	Number of Non-patrons	Number of Split Purchasers
0		6	1
1.00		1	
1.32	2	3	1
2.00			
2.68		5	2
3.00		1	
3.68	1		
4.00	1	3	7
4.68	1		
5.00		1	1
5.32	3	3	6
6.00	1		1
6.32	1		
6.68	3	1	3
7.00		2	
7.32	3	1	2
7.68	3		
8.00		1	3
8.32		1	1
9.00	2	1	1
9.32	2		2
10.00			3
11.00	2	2	1
11.32	1		1
11.36		1	1
12.00			
12.68		1	1
13.00	1	1	4
14.00			1
15.00			
16.00			1
Total number of farmers	27	36	44
Average deliberation points	7.08	5.06	7.51

APPENDIX B

FARMERS INTERVIEW SCHEDULE

CONFIDENTIAL

County_____ Schedule No._____

Community_____ Date of Interview_____

1. Name of Cooperator_____

   Address_____

2. Acreage Operated_____ Type of Farming_____
   Rot. Cropland____acres. Open Pasture____acres. Woodland_____
   Livestock_____

3. Owner_____, Tenant_____, Sharecropper_____.

4. Mem. Pat._____, Non. Pat._____, Non.Non._____.

5. Membership in other organizations: Farm Bureau_____, Commodity Assn._____, Other civic organizations_____.

6. From where do you buy:

	CO-OP			OTHER		
	Most	Some	None	Most	Some	None
Fertilizer						
Feed						
Seed						
Petroleum Products						
Building Materials						
Other Services						

7. Membership in other cooperatives_____.

8. Distance to the trading area: _____miles

9. Length of time farmed _____yrs.

10. Length of farming at present area _____yrs.

11. Member of co-op: Yes____, No____, Don't Know____.

12. Patronizing the co-op for ____yrs.

13. Reasons for becoming member.

14. Reasons for patronizing the cooperative.

15. Reasons for not patronizing the cooperative.

16. Accomplishments and criticisms of the co-op.

17. Information Sources.

18. Age___, Married___, Single___, Divorced___, Widow___, Schooling __yrs.

Recording highlights of the conversation.

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