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A STUDY OF SELECTED FACTORS RELATED TO DIFFERENTIAL  
PARTICIPATION OF MEMBERS IN A SAMPLE  
OF SOUTH DAKOTA PURCHASING  
COOPERATIVES IN 1958

BY  
DONALD F. NOVEY

A thesis submitted  
in partial fulfillment of the requirements for the  
degree Master of Science, Department of  
Economics, South Dakota State  
College of Agriculture  
and Mechanic Arts

December, 1959

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**PARTICIPATION OF MEMBERS IN A SAMPLE  
OF SOUTH DAKOTA PURCHASING  
COOPERATIVES IN 1958**

This thesis is approved as a creditable, independent investigation by a candidate for the degree, Master of Science, and acceptable as meeting the thesis requirements for this degree; but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Advi

## ACKNOWLEDGMENTS

It would be difficult to give credit to all the people who have contributed to this study. However, the following persons deserve special acknowledgment:

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D. F. N.



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## CHAPTER I

## INTRODUCTION

## STATEMENT OF THE PROBLEM

There were 317 farmers' purchasing, marketing, and service cooperatives in South Dakota in the 1955-1956 fiscal year.<sup>1</sup> These associations had an aggregate membership of 167,530, including duplications.

Farmers have faced an increasingly severe cost-price problem since shortly after the close of World War II.<sup>2</sup> Coupled with this-- and very likely one of the factors contributing to the above situation-- has been the political emphasis for a more self-reliant agricultural industry. Marketing and purchasing cooperatives are a self-help device which farmers can use to assist in ameliorating the above situation. However, one of the important factors limiting the expansion and success of these cooperatives is the lack of or limited participation of a large proportion of the membership.

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<sup>1</sup>Anne L. Gessner, Statistics of Farmer Cooperatives 1955-1956, pp. 5-9, Farmer Cooperative Service, General Report 48, United States Department of Agriculture: Washington, D. C., July, 1958.

<sup>2</sup>With the exception of a short period during the Korean War, the parity ratio--a ratio of the index of prices received by farmers to the index of prices paid by farmers--has steadily declined over the past ten years. The descent has been from a high of 115 in 1947 to a low of 82 in 1956 and 1957. Source: United States Department of Agriculture, Agricultural Statistics 1958, pp. 430-431, United States Government Printing Office: Washington, D. C., 1959.

## Reasons for the Study

This study examined the differential participation of members in an attempt to determine some of the factors associated with it.

It is hoped that this report will at least partially fulfill the following needs: (1) to provide extension workers and leaders of cooperatives with an objective foundation upon which to build their membership relations programs, and (2) to lay the research ground work for further study of cooperatives of this type in South Dakota. Ideally, and it is hoped practically, these factors should assist farmers in arriving at more rational decisions concerning participation in their cooperatives and solving some of their economic problems.

## Objectives and Hypotheses

### Objectives

This study had three main objectives:

- (1) To determine the members' levels of participation in their cooperatives.
- (2) To determine the members':
  - (a) levels of understanding of cooperative principles,
  - (b) levels of satisfaction with the cooperative,
  - (c) levels of knowledge of facts about cooperatives,
  - (d) levels of inaccurate knowledge about cooperatives,
  - (e) methods of acquisition of membership in the association.
- (3) To determine the relationship between the above factors and the members' levels of participation in their cooperatives.

### Hypotheses

The major hypothesis of this study was that members' participation in cooperatives is related

- (1) positively with members' understanding of cooperative principles,
- (2) positively with members' satisfaction with the association,
- (3) positively with members' knowledge of facts about cooperatives,
- (4) negatively with members' inaccurate knowledge about cooperatives, and
- (5) positively with members' identity with the association.

### Source of Data

This study was one aspect of a research study of cooperative activity in South Dakota under Experiment Station Project 306 entitled Member Understandings and Attitudes and Their Relation to Patronage in Farmer Purchasing Cooperatives. The other aspects were: (1) A survey of cooperative managers to determine (a) some of the problems they face in the management of the association, (b) their knowledge of cooperative theory, and (c) their opinions as to what members should know about cooperatives; and (2) A survey of members to determine what they felt an inter-cooperative education program should contain. Because of the inadequacy of the data, this latter phase of the study was not included in this report.

The population studied was the 140 cooperative oil associations in the state. A list of these associations was prepared from the 1955-1956

South Dakota Annual Statistical Report for the Petroleum Industry.<sup>3</sup>

A stratified random sample of 50 cooperative oil associations was selected from the entire state for the survey of managers. The associations were stratified upon the basis of the total gallonage of gasoline, kerosene, distillate, and power fuel each of them imported into South Dakota during the fiscal year ending June 30, 1956. A subsample of 10 associations was selected on a similar stratified random basis for the survey of members. However, data from one of the 10 was excluded because of a discrepancy in the selection of alternate respondents.

The membership of these nine cooperatives ranged from 170 to 1450. A 1.5 percent sample or 10 members, whichever was larger, was selected from each association on a simple random basis. This resulted in a total sample of 104 individuals. Data were obtained by personal interview during August and September, 1958. No refusals were encountered.

#### Procedure of Analysis

The data from the schedules were tabulated and each respondent was scored upon the basis of the six quantitative measures used in the study. These measures were: (1) the cooperative understanding index, (2) the cooperative satisfaction index, (3) the knowledge of facts about

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<sup>3</sup>This report was published by the South Dakota Independent Oil Men's Association, Sioux Falls, South Dakota.



cooperatives index, (4) the index of inaccurate knowledge, (5) the acquisition of membership index, and (6) the cooperative participation index.

The cooperative participation index was used as the dependent variable in the study. Simple, partial, and multiple correlation analyses were used between the participation index and the other indexes to measure and test the hypothesized relationships. Multiple regression analysis was used to describe the relationships between the dependent and independent variables.

## CHAPTER II

### THE MEASUREMENT OF MEMBER PARTICIPATION IN COOPERATIVES

An examination of research on cooperatives reveals that the following elements have been used to measure formal participation in these organizations: (1) membership or non-membership, (2) attendance at meetings, (3) patronage or proportion of business done with the cooperative, and (4) voting on major policy decisions.<sup>4</sup>

Stern included a measure of informal participation; it consisted of determining whether or not the member discussed the cooperative with neighbors. The Anderson and Sanderson analysis probed member discussions further to determine if members were promoting the cooperative. The criteria used were whether members encouraged non-members to patronize and join the association.

There has been almost no attempt to integrate these elements of

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<sup>4</sup>J. K. Stern, Membership Problems in a Milk Marketing Organization, Pennsylvania Agricultural Experiment Station Bulletin 256, 1930; J. K. Stern, Membership Problems in Farmers' Cooperative Purchasing Associations, Pennsylvania Agricultural Experiment Station Bulletin 268, 1931; J. K. Stern and H. F. Doran, Farmers' Support of Cooperatives, Pennsylvania Agricultural Experiment Station Bulletin 505, 1948; M. E. John, Factors Influencing Farmers Attitudes Toward a Cooperative Marketing Organization, Pennsylvania Agricultural Experiment Station Bulletin 457, 1943; W. A. Anderson and Dwight Sanders, Membership Relations in Cooperative Organizations, New York Agricultural Experiment Station, Department of Rural Sociology Mimeograph Bulletin 9, 1943; A. W. McKay, Member Knowledge and Attitudes - Calavo Growers of California, United States Department of Agriculture, Farm Credit Administration Circular C 137, 1950; Gerald E. Korzan, Member Attitude Toward Cooperatives, Oregon Agricultural Experiment Station Bulletin 509, 1952.

participation into any kind of score or meaningful whole despite the number of studies related to them. Beal found that, "in most cases these elements have been used as the independent variable to predict member understanding of facts or satisfactions."<sup>5</sup>

Stern and Doran in their 1948 study utilized measures which dealt with proportion of business done with the cooperative, meeting attendance, holding office, voting on policy decisions or delegates, and whether or not the member helped organize the cooperative. Although no attempt was made to integrate these factors into a whole, they found that, "In almost every case there was a positive correlation between the use which members made of their cooperatives and their participation in other membership activities of the organization."<sup>6</sup>

More recent studies have placed focal emphasis upon participation. One method used was to integrate the elements of participation into an index and consider it as the dependent variable.<sup>7</sup> This approach has been followed in this study.

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<sup>5</sup>George M. Beal, Factors Related to Participation in Farmer Cooperatives, p. 37, Unpublished Ph.D. Thesis, Iowa State College: Ames, Iowa, 1952.

<sup>6</sup>Stern and Doran, op. cit., pp. 9-14.

<sup>7</sup>Beal, op. cit., pp. 50-74; John Harp, Differential Participation of Members in Cooperatives in Communities of Iowa and Manitoba, pp. 21-27, Unpublished Master's Thesis, Iowa State College: Ames, Iowa, 1956.

# The Cooperative Participation Index

The measure of participation developed by Harp was expanded by the inclusion of additional elements to further refine the measurement of member participation in the cooperative. The cooperative participation index used in this study consisted of 10 topics (Table I).

TABLE I. LIST AND SCORES OF MEASURES OF MEMBER PARTICIPATION IN THE COOPERATIVE, NINE SOUTH DAKOTA COOPERATIVE OIL ASSOCIATIONS, 1958\*

Measurements of member participation	Scores
Percentage of business done with the cooperative	1-6
Attendance at cooperative meetings	0-3
Participation at meetings	0-1
Acceptance of office in the association	0-4
Sources of current cooperative information	0-7
Pursuit of information	0-1
Discussion of the cooperative with neighbors	0-1
Communication with the manager and directors	0-1
Reaction to dissatisfaction with the cooperative	0-1
Solicitation of cooperative membership	0-1

\*For the questions used, their sequence, and the scored responses, see the Appendix.

### Proportion of Patronage

The approach to this element was to determine the percent of potential business each member did with his cooperative. The actual question asked was, "Of those commodities and services sold by the co-op that you use, what proportion do you buy there?" Respondents were scored from one to six according to their percentage of purchases from the cooperative (Table II). Harp used gradations of 0 to 100 with

TABLE II. GRADATIONS AND SCORES OF MEMBER BUSINESS DONE WITH  
THE COOPERATIVE, NINE SOUTH DAKOTA COOPERATIVE  
OIL ASSOCIATIONS, 1958

Percentage of purchases from the cooperative	Points scored
0	1
1 - 24	2
25 - 49	3
50 - 74	4
75 - 99	5
100	6

intervals of 10.<sup>8</sup> However, it is doubtful if the member can refine his patronage to this degree during the interview situation. It might be possible to obtain more precise information upon patronage by asking the interviewee whether or not he uses each category of products sold by the

<sup>8</sup>Ibid., p. 23.

cooperative and what proportion of each he purchases there (See the Appendix, Question #1).

### Participation in Decision Making

The attendance at the annual meeting is an extremely important aspect of participation since it provides the setting for the member to exercise his voice in the association. The question asked was, "How often do you attend your co-op's annual meetings?". Respondents were scored from zero to three according to frequency of attendance (Table III).

TABLE III. CATEGORIES OF MEMBER ATTENDANCE AT ANNUAL MEETINGS  
AND POINTS SCORED, NINE SOUTH DAKOTA COOPERATIVE  
OIL ASSOCIATIONS, 1958

Attendance at annual meeting	Points scored
Never	0
Occasionally	1
Usually	2
As often as held	3

In addition, the following questions were asked in an attempt to determine the participation of members in the deliberation and decision making while at the meeting: (1) "In the past two years, have you raised a question for change or improvement in your co-op at the annual meeting?" (2) "Have you ever been on the board of directors?" (3) "If yes, were you chairman of the board?" (4) "Have you ever served on a committee in your co-op?" (5) "If yes, have you ever held a committee chairmanship?" one

point was scored for each affirmative answer. The process of giving credit for officership might be further refined by inquiry into the part that these persons have played in the deliberation and decision making of the boards and committees.

### Participation to Get Facts and Understanding

Seven sources of current information were listed in an open end question which read as follows: "Where do you get your current information about co-ops?" One point was given for each source mentioned by the respondent. The question, "Do you make an effort to keep informed and get facts about your co-op?" was an attempt to go beyond the mere receipt of information. One point was scored for an affirmative response.

### Participation in Organizational Maintenance

Beal defines a cooperative as:

In economic terms, a cooperative may be thought of as an association of firms or households organized for business purposes. These participating firms agree to conduct coordinately or jointly some activity common to them. This agreement runs multilaterally among the participating firms, rather than between each of the firms and the joint activity.<sup>9</sup>

In light of this concept, it is apparent that communication among members is essential to the smooth functioning of the cooperative. Each member was asked if he talked to his neighbors about the association. He was scored one point if he did so.

Members not only have the responsibility to communicate with each

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<sup>9</sup>Beal, op. cit., p. 46.

other, but if they have criticisms or suggestions about their cooperative, these should be made known to the proper people in the association so that decisions can be made in the best interests of the membership. Members were asked, "Have you discussed the co-op with a manager or director during the past year or so?" A positive response was scored one point. Members were further asked what they did when they were dissatisfied with the cooperative. If they took their criticism to the manager or the board, they were scored one point.

Another aspect of organizational maintenance is the solicitation of membership. The question was asked: "Within the last two years, have you tried to get anyone to join the co-op?" The member who encouraged others to join was scored one point.

#### The Distribution of Members by Participation Scores

Though the possible range on the member participation index was from 1 to 26, the actual range of scores was from 3 to 18. The mean score was 9.81. Fifty-seven respondents scored above and 47 below the mean (Table IV). The largest number (39) fell into the 10 to 13 class.



TABLE IV. DISTRIBUTION OF MEMBERS BY PARTICIPATION  
INDEX SCORES, NINE SOUTH DAKOTA COOPERATIVE  
OIL ASSOCIATIONS, 1958

Member participation index scores*	Number of members
1 - 5	13
6 - 9	34
10 - 13	39
14 - 17	16
18 - 21	2
22 - 26	<u>0</u>
Total	104

\*The mean score was 9.81.

## CHAPTER III

THE RELATIONSHIP BETWEEN MEMBER UNDERSTANDING  
OF COOPERATIVE PRINCIPLES AND MEMBER  
PARTICIPATION IN THE COOPERATIVE

Many of the cooperative membership relations studies prior to Beal's study made inquiry into the members' knowledge of specific facts about the cooperative.<sup>10</sup> Beal also examined members on their knowledge of facts<sup>11</sup>, but in an effort to determine rational meaningful participation, he designed and used a measure of the members' understanding of basic cooperative principles and the responsibilities associated with cooperative membership.<sup>12</sup> Harp used a similar approach.<sup>13</sup> Both studies obtained highly significant<sup>14</sup> correlation between participation and understanding.<sup>15</sup>

In his justification for the development and use of this measure, Beal stated that it seems logical to assume that if a member is going to participate in all the elements of cooperative activity, he must have a

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<sup>10</sup>Several of these studies will be discussed in a subsequent chapter.

<sup>11</sup>Op. cit., pp. 233-245.

<sup>12</sup>Ibid., pp. 185-191.

<sup>13</sup>Harp, op. cit., pp. 27-31.

<sup>14</sup>Significant at the one percent level.

<sup>15</sup>Beal, op. cit., pp. 190-191; Harp, op. cit., p. 37.

good understanding of basic cooperative principles.<sup>16</sup> This reasoning seems sound, for unless the member is familiar with the principle of democratic control and responsibility, he will probably not participate in the decision making processes of the organization. Unless he is aware of his ownership in the association and the responsibility this entails, he will find it difficult to understand why he should bear risk and contribute to the financing of the cooperative. If adversity should develop within the organization, or if he can obtain a more favorable price elsewhere, the uninformed member very likely will cease to patronize his cooperative. Unless he is aware of the importance of an enlightened membership, he may not make an effort to inform himself, or at least not to the degree that he would were he aware of this; he will probably fail to understand why it is necessary to hold a portion of his patronage refund within the organization for educational purposes.

On the basis of the evidence from the review of literature and the discussion, the proposition was advanced that there would be a significant positive relationship between member participation scores and member understanding scores.

#### The Cooperative Understanding Index

The cooperative understanding index was developed following the same general procedure used in development of the participation index. The underlying consideration in the construction of this index was to

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<sup>16</sup> Deal, op. cit., p. 187.

develop a measure of the member's understanding of cooperative principles and his understanding of his role in the association. The index used in this study could, perhaps, have been subdivided into three indexes: (1) a knowledge and understanding of cooperative principles index; (2) an agreement with cooperative principles index; and (3) a knowledge and understanding of cooperative practices index. It is suggested that a more precise demarcation of the measuring instrument be attempted in future research.

Thirty-two items were used to measure members understanding of cooperative principles (Table V). These items were combined into the previously mentioned cooperative understanding index. An understanding score was calculated for each respondent.

The cooperative understanding index in this study was similar to that used by Harp.<sup>17</sup> Only those items which have been added to or modified from it will be discussed in the sections which follow.

### Control

In a study of the problems faced by managers in the operation of the cooperative business, the major problem managers most often mentioned was that of the extension of credit and the collection of credit accounts.<sup>18</sup> In view of this, it was decided to expand the important element of control by the addition of items to tap the members knowledge

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<sup>17</sup>Harp, op. cit., pp. 27-31.

<sup>18</sup>Unpublished data, Economics Department, South Dakota Agricultural Experiment Station Project 306, 1958.

TABLE V. LIST AND SCORES OF MEASURES OF MEMBER UNDERSTANDING  
OF COOPERATIVE PRINCIPLES, NINE SOUTH DAKOTA  
COOPERATIVE OIL ASSOCIATIONS, 1958\*

Measures of member understanding of cooperative principles	Scores
Who should be permitted to vote in a cooperative?	0-1
How should they vote?	0-1
Should all members vote on all important questions concerning the cooperative?	0-1
Who should determine the credit policy?	0-1
Who should enforce the credit policy?	0-1
Who should have the right to determine what should be done with savings in your cooperative?	0-1
How much say should it have? <sup>1</sup>	0-1
Does the member look at the co-op as an extension of his own business off the farm?	0-1
Does the member look at the co-op as his agent in buying or as another business place competing for his dollar?	0-1
In the event of a loss on business operations, who should bear this loss?	0-1
If a loss results because of selling at too low prices, should the stockholders bear the loss or should it be made up on the basis of patronage?	0-1
Who should provide the money to start a co-op?	0-1
In the year to year operations, is it a member's responsibility to finance his co-op?	0-1
What is a revolving surplus fund?	0-2
Which of the following statements best describes your idea of a revolving surplus fund?	0-1

(Continued)

TABLE V. LIST AND SCORES OF MEASURES OF MEMBER UNDERSTANDING  
OF COOPERATIVE PRINCIPLES, NINE SOUTH DAKOTA  
COOPERATIVE OIL ASSOCIATIONS, 1956

Measures of member understanding of cooperative principles	Scores
If yes, to what extent? <sup>2</sup>	0-2
How should savings be distributed in a co-op?	0-1
How may savings be returned to patrons?	0-3
What is a dividend?	0-1
Are the earnings of a cooperative referred to as savings or profit?	0-1
Should co-ops pay income tax on member business?	0-3
Does a co-op pay taxes similar to an individual proprietorship or partnership?	0-1
Do patrons pay income tax on dividends?	0-1
Do co-ops pay income tax on non-member business if refunds are not paid to non-members?	0-1
Do co-ops pay income tax upon any unallocated savings?	0-1
What is meant by double taxation?	0-1
Is the income of corporations double taxed?	0-1
Are co-ops opposed to the double taxation to which corporations are subjected?	0-1
Why do farmers organize purchasing cooperatives?	0-2
Does the member have responsibilities in the co-op?	0-1
Is it your duty to get facts and information about the co-op?	0-1
Does the co-op wholesale produce any benefits for the co-op member?	0-1

(Continued)

TABLE V. LIST AND SCORES OF MEASURES OF MEMBER UNDERSTANDING  
OF COOPERATIVE PRINCIPLES, NINE SOUTH DAKOTA  
COOPERATIVE OIL ASSOCIATIONS, 1958

Measures of member understanding of cooperative principles	Scores
Does the local co-op have any responsibilities to the wholesale co-op?	0-1

\*For the sequence of the questions and the scored responses, see the Appendix.

<sup>1</sup>On the interview schedule, this question followed, "How much say does the wholesale have in running the local co-op?"

<sup>2</sup>On the interview schedule, this question followed, "Does the member have a responsibility to patronize his co-op?"

of his role and the manager's role in this area. The questions asked were: (1) "Who should determine credit policy?" and (2) "Who should enforce credit policy?"

Since wholesale cooperatives<sup>19</sup> are very important in the vertical integration activities of cooperatives, several questions were asked concerning members knowledge and understanding of this phase of cooperation. Inquiry was made into the member's knowledge of the existence of wholesale cooperatives, what he thought of the quality of their products, his opinion and knowledge of the benefits of the wholesale, his opinion and knowledge of local responsibilities to the

<sup>19</sup>In this discussion, the term "wholesale cooperatives" refers not only to those cooperatives which are engaged in the business of selling to local associations, but also to those cooperative organizations which extract, refine, manufacture, and perform other related processes.

wholesale, and the receipt of dividends from the wholesale.<sup>20</sup> Since one occasionally hears the complaint that the wholesale has undue influence in the control of the local, a question of fact was asked concerning the say that the wholesale has in running the local.<sup>21</sup> This was followed by a question which attempted to ascertain the member's knowledge of theory in this area: "How much say should it have?". If the member answered "no say", it was felt that this indicated further knowledge of the principle of democratic control. He was scored one point.

### Risk and Ownership

Harp did not include the agent concept as part of his understanding measurement.<sup>22</sup> Instead, he treated it individually.<sup>23</sup> He found that member participation scores differed significantly when compared upon this basis. In this study, items were not treated individually. They were included in the appropriate index.

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<sup>20</sup>These questions will be dealt with in the appropriate indexes which follow. For the actual questions asked, their sequence, and responses, see Appendix.

<sup>21</sup>This question was incorporated into knowledge of facts about cooperatives index.

<sup>22</sup>The agent concept refers to the member's consideration of the association as an off-the-farm extension of his agricultural operation. The member who holds this view should look upon the cooperative as his hired agent rather than a business place vying with other businesses for his trade.

<sup>23</sup>Ibid., pp. 96-98.



## Savings

The first objective in this area was to inquire into member's basic knowledge of the distribution of savings. That is, that savings are distributed upon the basis of the amount of business the individual has done with the association rather than as a return upon the amount of capital invested. The distribution of savings topic was then pursued to determine the member's knowledge of the forms in which savings may be returned--the deferred dividend, the certificate of indebtedness, and the certificate of equity.

Another question designed to inquire into the member's basic knowledge was, "Are the earnings of a cooperative referred to as savings or profit?". The designation of the earnings of a cooperative as savings rather than profit is a fundamental principle of cooperative philosophy. It is the principle upon which the theory and practice of cooperative taxation is based. Since the cooperative is a multilateral agreement between members rather than an agreement between the member and the joint activity, it follows that the management and other employed personnel are merely hired men who have been commissioned to purchase commodities and services for their employers. If at the end of the accounting period, it is found that the costs of the transactions were not as high as anticipated, then the collections above these costs will be returned to the employer. This is a savings which has accrued to them as a result of their participation in this activity, rather than purchasing goods and services from a concern in which they have no ownership.

## Taxation

Beal only touched upon the subject of taxation by asking if cooperatives should pay income taxes upon member business.<sup>24</sup> Harp excluded the subject of taxation because the majority of his study was done in Canada where the taxation of cooperatives is not a paramount issue.<sup>25</sup>

The subject of cooperative taxation is a highly controversial, highly emotional issue in the United States, perhaps more so than any other surrounding the cooperative movement. Several questions were devoted to inquiry into members' knowledge and understanding in this area:

1. The substance of the initial question, "Should co-ops pay income tax upon member business?" is covered in the above discussion dealing with the designation of cooperative earnings as savings. If the respondent answered that cooperatives should not pay such tax, he was asked to explain why not. The scored responses were, "they would be paying twice on the same income" and "they make no profits". Maximum possible score for these questions was three points.

2. Since there is so much misinformation concerning the tax advantage that cooperatives enjoy relative to other forms of business organization, the question was asked, "Does a co-op pay taxes similar to an individual proprietorship or a partnership?". One point was

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<sup>24</sup>Beal, op. cit., p. 357.

<sup>25</sup>Harp, op. cit., pp. 29-30.

scored for the affirmative answer.

3. Unless the individual has already paid personal income tax upon the money involved in the transaction or unless the refund is from the purchase of consumer goods, it is subject to income tax. To test the member's knowledge of this, the question, "Do patrons pay income tax upon refunds?" was asked. An affirmative response was scored one point.

In the area of taxes paid by members, inquiry might well have been made into the member's knowledge concerning the payment of income tax upon interest received from stock. However, this was overlooked at the time of the construction of the interview schedule.

4. If profits are made upon non-member business, and if these profits are not distributed to the non-members as patronage refunds, the cooperative incurs corporate income tax liability upon them. If the respondent were aware of this, he was scored one point.

5. Savings which are not allocated to members are taxed similarly to the undistributed profits of a corporation. The question asked was, "Do co-ops pay income tax upon any unallocated savings?". If the member answered correctly, he received one point.

6. In this study, double taxation has reference to the practice of taxing the same income upon the corporate level and upon the stockholder level. Three questions were asked relative to it. The first was: "What is meant by double taxation?". If the respondent knew, he was scored one point and asked, "Is the income of corporations double taxed?". If he answered correctly, he was scored one point and asked, "Are co-ops

opposed to the double taxation to which corporations are subjected?". If he answered affirmatively, he was scored an additional point for a total of three upon the double taxation topic.

It may be argued that these were not questions of cooperative principles or practices. Yet, it seems reasonable to assume that an individual who was familiar with the theory and practice of cooperative taxation would be familiar with the controversy surrounding it and corporate taxation. Therefore, it was felt that it would be relevant and justifiable to include these questions in testing member's knowledge in this area.

### General

It was felt that several of the questions dealing with cooperative principles and practices would better fit into a general category rather than into one of the preceding more specific classifications:

1. The first of these concerned the reasons for cooperative associations.

The cooperative movement has grown out of the economic and social needs for such organizations. The cooperative form of enterprise supplements, competes with, or displaces other forms of business organizations when those organizations are not providing adequate goods and services or when the costs of those goods and services are injurious to the payee. This and the farmer's position as a retail buyer and a wholesale seller are the reasons that cooperative people give for their vertical integration efforts.

It was felt that it is important for members to know something of the reasons for the formation of the cooperative and that knowledge of this might be a factor associated with differential participation. On the basis of the preceding discussion, it seemed logical to include the following question as a test of member's knowledge of cooperative principles and practices: "Why do farmers organize purchasing cooperatives?". One point was scored for each of the following answers: "to provide more goods and services" and "to provide the same goods and services at lower cost."

2. The general question, "Does the member have responsibilities in the co-op?", was asked. If the respondent answered "yes", he was scored one point and asked what these responsibilities were. The structured responses were: "attend meetings and vote," "patronize," "help finance," "bear risk," and "keep informed." If he did not recall these, specific questions were directed at determining whether or not the member was aware of these responsibilities. The more specific questions have been included in the appropriate preceding sections. One has been included here: "Is it your duty to get facts and information about the co-op?". If the member felt it was, he was scored one point.

3. In an attempt to determine the member's understanding of the relationship between the local cooperative and the wholesale, two questions were asked. They were: "Does the co-op wholesale produce any benefits for the co-op member?" and "Does the local co-op have responsibilities to the co-op wholesale?". In each case, the affirmative response was scored one point.

## Analysis of Data

The possible range on the understanding index was from 0 to 40. Actual scores ranged from 12 to 33 (Table VI). The mean score was 21.38. Respondents were equally divided above and below the mean. Thirty-six of the 52 members who scored above the mean understanding score also scored above the mean participation score. Twelve of the 13

TABLE VI. DISTRIBUTION OF MEMBERS BY UNDERSTANDING INDEX SCORES AND PARTICIPATION INDEX SCORES, NINE SOUTH DAKOTA COOPERATIVE OIL ASSOCIATIONS, 1958

Understanding index scores*	Participation index scores					Total
	1-5	6-9	10-13	14-17	18-21	
	(Number of members)					
12	1	0	0	0	0	1
13-15	5	6	4	0	0	15
16-18	4	6	7	0	0	17
19-21	1	8	8	2	0	19
22-24	1	8	6	3	0	18
25-27	1	5	10	5	0	21
28-30	0	1 <sup>a</sup>	4	3	1	9
31-33	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>4</u>
Total	13	34	39	16	2	104

\*The mean score was 21.38.

<sup>a</sup>This observation represents a participation score of 7.

highest understanding scores were above the mean participation score. Thirty-one of the 52 members who scored below the mean understanding score also scored below the mean participation score. All of the 12 lowest understanding scores fell below the mean participation score.

There was a significant positive relationship between participation scores and understanding scores. The coefficient of simple correlation was  $+0.587$  where significance at the 1 percent level was  $.0254$ . The coefficient of partial correlation between participation scores and understanding scores with satisfaction scores, knowledge of facts scores, and acquisition of membership scores held constant was  $+0.211$  (Table VII). Significance at the 5 percent level was  $.194$ . Inaccurate knowledge scores were excluded from the partial analysis because they were not significantly related to understanding scores (Table VIII).

TABLE VII. COEFFICIENTS OF PARTIAL CORRELATION BETWEEN PARTICIPATION INDEX SCORES AND SCORES OF SELECTED INDEXES, NINE SOUTH DAKOTA COOPERATIVE OIL ASSOCIATIONS, 1958

Scores of selected indexes	Participation index scores
	(Coefficients of partial correlation)
Satisfaction	$r_{12.34}^* = +.270^a$
Understanding	$r_{13.246} = +.211^b$
Knowledge of facts about cooperatives	$r_{14.236} = +.372^c$
Acquisition of membership	$r_{16.34}^* = +.059^d$

\*Acquisition of membership index scores and satisfaction index scores were not significantly related (Table VII). Therefore they were excluded from these partial analyses.

<sup>a</sup>Significant at the 1 percent level.

<sup>b</sup>Significant at the 5 percent level.

<sup>c</sup>Significant at the 1 percent level.

<sup>d</sup>Not significant at the 5 percent level.



TABLE VIII. COEFFICIENTS OF SIMPLE CORRELATION BETWEEN SCORES OF SELECTED INDEXES, NINE SOUTH DAKOTA COOPERATIVE OIL ASSOCIATIONS, 1958

Scores of Selected Indexes						
Participation	Satisfaction	Understanding	Knowledge of facts about cooperatives	Inaccurate knowledge	Acquisition of membership	
(Coefficients of simple correlation)*						
Participation	1.0					
Satisfaction	+.485	1.0				
Understanding	+.587	+.521	1.0			
Knowledge of facts about cooperatives	+.591	+.345	+.640	1.0		
Inaccurate knowledge	-.044	+.026	-.054	-.052	1.0	
Acquisition of membership	+.278	+.126	+.276	+.382	-.062	1.0

\*Significance at the 1 percent level is .254; significance at the 5 percent level is .194.

## CHAPTER IV

THE RELATIONSHIP BETWEEN MEMBER SATISFACTION WITH THE  
COOPERATIVE AND MEMBER PARTICIPATION  
IN THE COOPERATIVE

The concept of satisfaction probably has a different meaning to each person who seeks to define it. In regard to its relationship with participation in the cooperative, it seems reasonable to assume that the more satisfied member will participate more actively than the less satisfied member. It is quite probable that the more active member's closer association with the cooperative will disclose to him some things of which he will disapprove and wish to see changed. But more important, this closer association should enhance his opportunity to examine the various facets and functions of the organization. It should enable him to examine not only the amount of the patronage refund and the short run price--very likely the factors upon which the less active member is basing his satisfaction--but also the factors of control, management, finance, efficiency, and education. This examination should enable him to predicate his overall satisfaction upon an approval or disapproval of these factors. If he experiences substantial dissatisfaction with many of them, it seems likely that he will participate only to a limited degree if he participates at all.

Support for the above assumption is gained from the findings of several earlier investigations. In his rural participation study, Lindstrom examined farm workers' attitudes toward organizations of

business and educational character.<sup>26</sup> He concluded that "those who did not participate comprise the bulk of those with unfavorable attitudes; whereas the participating members of business and educational organizations are in general favorably disposed to them".<sup>27</sup>

Stern and Doran measured attitudes upon the following topics: the future of cooperatives, the contributions of cooperatives to agriculture, the ability of cooperative leaders, the ability of farmers who support cooperatives, and the voice that members have in running the cooperative.<sup>28</sup> They found that: (1) higher attitude scores were usually associated with those who did a greater percentage of business with their cooperatives, (2) there was a high correlation between favorableness of attitude and the extent to which a member participated in the activities of his organization, and (3) lack of participation and unfavorable attitude went hand in hand.

Beal probed satisfaction by inquiry into members' feelings concerning benefits received from the cooperative, the price and service influence the cooperative exerted, the quality of cooperatively produced goods, and the price savings of the association. His coefficient of correlation between participation scores and satisfaction scores was

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<sup>26</sup>Organizations studied included cooperatives, farm bureau, home bureau, and 4-H clubs.

<sup>27</sup>D. E. Lindstrom, Forces Affecting Participation of Farm People in Rural Organization, pp. 114-116, Agricultural Experiment Station Bulletin 423, University of Illinois: Urbana, Illinois, 1936.

<sup>28</sup>Stern and Doran, op. cit., pp. 27-35.

highly significant.<sup>29</sup>

On the basis of the above discussion and the findings of the preceding studies, it was hypothesized that there would be a significant positive relationship between member participation scores and member satisfaction scores.

Member satisfaction with the cooperative was measured by obtaining member's opinion upon 15 topics concerning the cooperative (Table IX). These topics were combined into an index and a satisfaction score was calculated for each member.

The index used in this study differed from the index used by Harp by the inclusion of additional items to measure member's attitude toward the manager, the board of directors, their voice in the cooperative, the credit policy, the costs of operation, the financial condition of the association, and the expansion of the educational program.<sup>30</sup>

The possible range on the satisfaction index was 0 to 15. Actual scores ranged from 1 to 15 (Table X). The mean score was 11.90. Forty-nine of the 70 respondents who scored above the mean satisfaction score also scored above the mean participation score. Fifteen of the 23 highest satisfaction scores were above the mean participation score. Twenty-six of the 34 respondents who scored below the mean satisfaction score also scored below the mean participation score. Twelve of the 14 lowest satisfaction scores fell below the mean participation score.

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<sup>29</sup>Beal, op. cit., p. 251.

<sup>30</sup>Harp, op. cit., p. 32.

TABLE IX. LIST AND SCORES OF MEASURES OF MEMBER SATISFACTION,  
NINE SOUTH DAKOTA COOPERATIVE OIL  
ASSOCIATIONS, 1958\*

Measure of member satisfaction	Scores
Opinion that he received some benefit from his cooperative	0-1
Opinion that the cooperative exerted a favorable competitive price influence in the market	0-1
Opinion that the cooperative exerted a favorable competitive service influence in the market	0-1
Stated satisfaction with price savings at the cooperative	0-1
Opinion that the costs of operation of the cooperative compared favorably with private firms' costs of operation	0-1
Opinion that the cooperative was financially sound	0-1
Stated satisfaction with the credit policy	0-1
Opinion that cooperative products were as good or better than name brand competitors	0-1
Stated satisfaction with the manager of his cooperative	0-1
Opinion that the cooperative manager is as efficient as the managers of non-cooperative competitors	0-1
Opinion that the manager's salary was too low	0-1
Stated satisfaction with the board of directors of his cooperative	0-1
Opinion that the board of directors considered members views and wishes in making the policy of the cooperative	0-1
Opinion that he had a say in running the cooperative	0-1
Opinion that the educational program should be expanded via the employment of a fieldman	0-1

\*The questions and the scored responses can be found in the Appendix.

TABLE X. DISTRIBUTION OF MEMBERS BY SATISFACTION INDEX  
SCORES AND PARTICIPATION INDEX SCORES, NINE  
SOUTH DAKOTA COOPERATIVE OIL  
ASSOCIATIONS, 1958

Satisfaction index scores*	Participation index scores					Tot#1
	1-5	6-9	10-13	14-17	18-21	
(Number of members)						
1	0	1	0	0	0	1
2 - 3	0	0	0	0	0	0
4 - 5	2	0	0	0	0	2
6 - 7	1	0	0	0	0	1
8 - 9	3	5	2	0	0	10
10 - 11	3	11	4	2	0	20
12 - 13	1	12	25	8	1	47
14 - 15	<u>3</u>	<u>5</u>	<u>8</u>	<u>6</u>	<u>1</u>	<u>23</u>
Total	13	34	39	16	2	104

\*The mean score was 11.90.

There was a highly significant relationship between participation scores and satisfaction scores. The coefficient of simple correlation was +.485 where significance at the 1 percent level was .254. The coefficient of partial correlation between participation scores and satisfaction scores with understanding scores and knowledge of facts scores held constant was +.270 where significance at the 1 percent level is .254 (Table VII). Inaccurate knowledge scores and acquisition of membership scores were excluded from the partial analysis because they

were not significantly related to satisfaction scores (Table VIII).

Perhaps a note of caution should be introduced at this time. In the measurement of something as subjective as satisfaction, one is deeply concerned about the validity and reliability of the measuring device. Coupled with this are the problems peculiar to the interview situation. The respondent may be reluctant to express criticisms to the interviewer, a stranger, who is asking personal questions concerning cooperative personnel and operations. Or if very good rapport is established, he may attempt to give the answers he thinks the interviewer wants. Of course, the competent interviewer will keep the above situations to a minimum, but it is doubtful if they can be avoided completely. Perhaps a way to improve measurement in the attitude and satisfaction area would be to use an indirect approach such as the "error-choice" method.<sup>31, 32</sup> Consideration might also be given to the designing of questions to accommodate a test of unidimensionality, such as the Guttman scale method.<sup>33</sup> It is suggested that future investigators examine these methods.

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<sup>31</sup>Murray A. Straus, Direct, Indirect, and Disguised Measurement in Rural Sociology, pp. 9-11, Washington Agricultural Experiment Station Technical Bulletin 26, State College of Washington: Pullman, Washington, 1957.

<sup>32</sup>In this method, the inquiry is described as a test of information. The respondent, however, is offered a choice between two alternatives which are equally wrong, but in opposite directions from the correct answer.

<sup>33</sup>For further discussion of Guttman scaling, see Denton E. Morrison and G. Albert Kristjanson, Personal Adjustment Among Older Persons, pp. 18-29, Rural Sociology Department Technical Bulletin 21, South Dakota Agricultural Experiment Station, South Dakota State College: Brookings, South Dakota, June, 1958.

## CHAPTER V

THE RELATIONSHIP BETWEEN MEMBER KNOWLEDGE OF FACTS ABOUT  
COOPERATIVES AND MEMBER PARTICIPATION  
IN THE COOPERATIVE

In the introduction to Chapter III, mention was made that many studies have investigated the relationship between knowledge of facts about cooperatives and participation in cooperatives.

Losey inquired into members' knowledge of how to acquire membership, the rights of patron members, who elects the board of directors, who selects and elects the local and the general manager, the powers and duties of the local advisory committee, and the use of profits.<sup>34</sup> He found a high relationship between knowledge of facts and meeting attendance and a significant relationship between knowledge of facts and regular patronage.

Stern and Doran measured member's knowledge of the volume of business, size of present membership, how membership was attained, evidence of membership, who is manager, who is president, reason for organization of the cooperative, date of organization, facilities of the association, who owns the facilities, and the location of the headquarters.<sup>35</sup> They found that "the best informed members were the ones who

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<sup>34</sup>J. Edwin Losey, Membership Relations of a Cooperative Purchasing Association, p. 227, Unpublished Ph.D. Thesis, Cornell University, Ithaca, New York, 1940.

<sup>35</sup>Stern and Doran, op. cit., p. 16-17.



made the most use of their cooperatives."<sup>36</sup>

Anderson and Sanderson found that in every instance the patron-member, the regular patron, and the farmer who attended meetings had more accurate knowledge of how membership is acquired, what the member's rights are, and "how local profits are used."<sup>37</sup> They stated further that "participation and knowledge are shown to be associated in almost every situation."

The knowledge of facts score used by Beal consisted of questions which inquired into member's knowledge of the manager's salary, the existence of wholesale cooperatives, whether or not the cooperative had an educational fund, and whether the association was partially financed by the revolving fund method.<sup>38</sup> He found a highly significant relationship between participation scores and knowledge of facts scores.

From the above discussion, it seems evident that there would be a significant positive relationship between member knowledge of facts scores and member participation scores.

Fifteen items were used to measure member's knowledge of facts about cooperatives (Table XI). These items were combined into a knowledge of facts about cooperatives index. A score was calculated for each respondent.

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<sup>36</sup>Ibid., p. 19.

<sup>37</sup>Anderson and Sanderson, op. cit., p. 30.

<sup>38</sup>Beal, op. cit., pp. 233-239.

TABLE XI. LIST AND SCORES OF MEASURES OF MEMBER KNOWLEDGE  
OF FACTS ABOUT COOPERATIVES, NINE SOUTH DAKOTA  
COOPERATIVE OIL ASSOCIATIONS, 1938

Measures of member knowledge of facts about cooperatives	Scores
Who owns the co-op?	0-1
Where does your co-op buy its goods?	0-1
Are there wholesale co-ops from which your co-op could buy?	0-1
Who owns the co-op wholesale?	0-1
Has your co-op ever received dividends from the wholesale?	0-1
How much say does the wholesale have in running the local co-op?	0-1
What is your manager's name?	0-1
How are the members of the board of directors chosen?	0-1
Who are the present members of the board?	0-5
About how long has each of these members served on the board?	0-1
Who is responsible for the day to day operation of the co-op?	0-1
Who is responsible for making this policy between annual meetings?	0-1
Who is responsible for making the overall policy of the co-op?	0-1
Does your co-op have a credit policy?	0-1
Does your co-op spend any money on educational work or membership relations?	0-1

The possible range on the knowledge of facts about cooperatives index was from 0 to 19. Actual scores ranged from 2 to 18 (Table XII). The mean score was 10.48. Forty-one of the 56 respondents who scored above the mean knowledge of facts score also scored above the mean participation score. Of the 17 highest knowledge of facts scores, only 1 fell below the mean participation score. Thirty-two of the 48 respondents who scored below the mean knowledge of facts score also scored below the mean participation score. Of the 19 lowest knowledge of facts scores, only 3 were above the mean participation score.

There was a highly significant relationship between participation scores and knowledge of facts about cooperatives scores. The coefficient of simple correlation was  $+0.591$  where significance at the 1 percent level was  $.254$ . The coefficient of partial correlation between participation scores and knowledge of facts scores with satisfaction scores, understanding scores and acquisition of membership scores held constant was  $+0.372$ . Significance at the 1 percent level was  $.254$  (Table VII). Inaccurate knowledge scores were excluded from the partial analysis because they were not significantly related to knowledge of facts scores (Table VIII).

TABLE XII. DISTRIBUTION OF MEMBERS BY KNOWLEDGE OF FACTS ABOUT  
COOPERATIVES INDEX SCORES AND PARTICIPATION INDEX  
SCORES, NINE SOUTH DAKOTA COOPERATIVE  
OIL ASSOCIATIONS, 1958

Knowledge of facts about cooperatives index scores*	Participation index scores					Total
	1-5	6-9	10-13	14-17	18-21	
	(Number of members)					
2	1					1
3 - 4	4	3	1 <sup>a</sup>			8
5 - 6	2	6	2 <sup>b</sup>			10
7 - 8	2	6	6	1		15
9 - 10	1	7	4	2		14
11 - 12	3	9	10 <sup>c</sup>	1	1	24
13 - 14		2	9	4		15
15 - 16		1 <sup>c</sup>	5	3		9
17 - 18	—	—	<u>2</u>	<u>5</u>	<u>1</u>	<u>8</u>
Total	13	34	39	15	2	104

\*The mean score was 10.48.

<sup>a</sup>This observation represents a participation score of 11.

<sup>b</sup>These observations represent participation scores of 10 and 11.

<sup>c</sup>This observation represents a participation score of 8.

## CHAPTER VI

THE RELATIONSHIP BETWEEN MEMBER INACCURATE KNOWLEDGE  
ABOUT COOPERATIVES AND MEMBER PARTICIPATION  
IN THE COOPERATIVE

Is there a relationship between member inaccurate knowledge about cooperatives and member participation in the cooperative? This was not considered at the inception of the study. However, as the survey progressed, it was felt there might be a relationship between these factors. Cooperative participation research has neglected this particular area of inquiry. Only one slightly relevant study was discovered during the examination of previous literature.

In the Anderson and Sanderson analysis, a question concerning the amount of the salary of the president of the Dairymen's League was asked.<sup>39</sup> It was found that members who had accurate knowledge were more favorable to the organization than members who did not and especially so when compared with those who had an exaggerated idea of his salary. The conclusion made was that inaccurate, exaggerated, or no knowledge resulted in lack of support.<sup>40</sup>

In an examination of milk marketing agencies covered by the same study, Anderson and Sanderson found further evidence to support their conclusion. They found that those members who attended meetings most

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<sup>39</sup>Anderson and Sanderson, op. cit., pp. 29-30.

<sup>40</sup>What was meant by lack of support was not clearly explained.

frequently had much more accurate knowledge of the service performed by their cooperatives and this lead to more support. Members knew, more accurately than past members of those who had never been members, about the services offered by the organizations and consequently gave more positive support. Anderson and Sanderson concluded that lack of such knowledge was associated with withdrawal from or failure to join an organization.<sup>41</sup>

The preceding discussion suggests that there would be a significant inverse relationship between participation scores and inaccurate knowledge scores.

Fifteen items were used to measure member's inaccurate knowledge about cooperatives (Table XIII). These items were combined into an index of inaccurate knowledge. A score was calculated for each respondent.

The index of inaccurate knowledge was constructed by the selection of questions whose responses could be used to indicate incorrect knowledge from the knowledge of facts about cooperatives index and the cooperative understanding index. Although it was recognized that in their primary function these indexes measured different qualities, it was felt that in the measurement of inaccurate knowledge, the inaccuracy or incorrectness of the response overrode the difference in the orientation of the instrument.

The possible range on the index of inaccurate knowledge was from

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<sup>41</sup>Ibid., p. 30.

TABLE XIII. LIST AND SCORES OF MEASURES OF MEMBER INACCURATE  
KNOWLEDGE ABOUT COOPERATIVES, NINE SOUTH DAKOTA  
COOPERATIVE OIL ASSOCIATIONS, 1958

Measures of inaccurate knowledge	Scores
Who owns the co-op?	0-1
Where does your co-op buy its goods?	0-1
If "don't know" or "private wholesale", are there wholesale co-ops from which your co-op could buy?	0-1
Who owns the co-op wholesale?	0-1
Has your co-op ever received dividends from the wholesale?	0-1
Who are the present members of the board?	0-5
About how long has each of these members served on the board?	0-1
Who is responsible for the day to day operation of the co-op?	0-1
A co-op operates in accordance with some particular policy. Who is responsible for making this policy between annual meetings?	0-1
Who is responsible for making the overall policy of the co-op?	0-1
Does your co-op have a credit policy?	0-1
Does your co-op spend any money on educational work or membership relations?	0-1
Does a co-op pay taxes similar to an individual proprietor- ship or a partnership?	0-1
Do patrons pay income tax upon dividends?	0-1
Do co-ops pay income tax upon non-member business if refunds are not paid to non-members?	0-1

(Continued)

TABLE XIII. LIST AND SCORES OF MEASURES OF MEMBER INACCURATE KNOWLEDGE ABOUT COOPERATIVES, NINE SOUTH DAKOTA COOPERATIVE OIL ASSOCIATIONS, 1958

Measures of inaccurate knowledge	Scores
Do co-ops pay income tax upon any unallocated savings?	0-1
Are the earnings of a cooperative referred to as savings or profit?	0-1
Is the income of corporations double taxed?	0-1
Are co-ops opposed to the double taxation to which corporations are subjected?	0-1

0 to 22. Actual scores ranged from 0 to 6 (Table XIV). The mean score was 1.78. Twenty-seven of the 46 respondents who scored below the mean inaccurate knowledge score also scored above the mean participation score. Thirteen of the nineteen lowest inaccurate knowledge scores were above the mean participation score. Thirty of the 58 respondents who scored above the mean inaccurate knowledge score also scored above the mean participation score. Eight of the 11 highest inaccurate knowledge scores fell below the mean participation score.

participation score, and inaccurate knowledge scores were not significantly related. The coefficient of correlation was  $-0.044$  where significance at the 5 percent level was  $.194$ .

Although the original proposition that there would be a significant inverse correlation between participation scores and inaccurate knowledge scores was not supported, it is important to note that the



TABLE XIV. DISTRIBUTION OF MEMBERS BY INDEX OF INACCURATE KNOWLEDGE SCORES AND PARTICIPATION INDEX SCORES, NINE SOUTH DAKOTA COOPERATIVE OIL ASSOCIATIONS, 1958

Index of inaccurate knowledge scores*	Participation index scores					Total
	1-5	6-9	10-13	14-17	18-21	
	(Number of members)					
0	3	3	10	3	0	19
1	5	8	9	4	1	27
2	3	11	13	5	1	33
3	2	4	5	3	0	14
4	0	6	1	0	0	7
5	0	0	1	1	0	2
6	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>
Total	13	34	39	16	2	104

\*The mean score was 1.78.

correlation was in the negative direction. It should be remembered that the measurement of inaccurate knowledge was not one of the original objectives of this inquiry--that an instrument specifically designed for measurement in this area was not constructed. As a result, only a limited number of inaccurate responses--a mean of 1.78 per respondent--were obtained. Therefore, caution should be observed in generalizing from this analysis.

The data and the discussion of incorrect knowledge are presented here primarily as an inducement to further investigation in this area rather than as a contribution to this study.

## CHAPTER VII

THE RELATIONSHIP BETWEEN MEMBER IDENTITY WITH THE COOPERATIVE  
AND MEMBER PARTICIPATION IN THE COOPERATIVE

Beal found highly significant differences when participation scores were compared upon the basis of member "we feeling" or member identity with the cooperative.<sup>42</sup> Members who exhibited the greater amount of "we feeling" had the higher participation scores.

The definition and measurement of this concept is highly subjective. Beal relied almost entirely upon the evaluation of the interviewer. Perhaps some objectivity was gained by notation of the respondents use of such words as "we", "our", and "us" as compared to "they", "them", "he", and "those guys" when referring to the cooperative and its personnel.

The method by which the individual acquired membership in the cooperative might be a more objective measure of his identity with it (Table XV). It would seem logical to assume that the individual who acquired membership via payment of the stock or membership fee and the individual who patronized with the intent of becoming a member would feel closer identity with cooperatives than that person who had acquired membership without a particular interest in doing so. This closer identity should result in more active participation.

Stern and Doran in their 1948 Pennsylvania study found farmers

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<sup>42</sup>Beal, op. cit., p. 213.

TABLE XV. METHODS BY WHICH RESPONDENTS ACQUIRED MEMBERSHIP  
AND SCORES, NINE SOUTH DAKOTA COOPERATIVE  
OIL ASSOCIATIONS, 1958

Method of acquisition of membership	Scores
By patronizing without a view toward becoming a member	1
By patronizing with a view toward becoming a member by the allocation of patronage refunds to defray the membership fee or to purchase stock	2
By paying the membership fee or purchasing stock	3

who had membership in cooperatives but failed to recognize the fact and consequently did not describe themselves as members.<sup>43</sup> Though they discussed these individuals no further, it would seem reasonable to assume that these members are inactive participators, that they feel little or no identity with the association. If similar conditions arise in this study, members of this type will fall into the category of those individuals who possess membership but who did not actively seek it.

On the basis of the preceding discussion, the proposition was suggested that there would be a significant relationship between member participation scores and method of acquisition of membership scores. Individuals who were interested in acquiring membership would have the higher scores.

<sup>43</sup>Starn and Doran, op. cit., p. 3.

### The Acquisition of Membership Index

The method by which individuals could acquire membership in the cooperative were: (1) by patronizing without a view toward becoming a member, (2) by patronizing with a view toward becoming a member by the allocation of patronage refunds to defray the membership fee or to purchase stock, and (3) by outright payment of the membership fee or purchase of stock. The acquisition of membership index was constructed by the assignment of values of 1, 2, and 3 respectively to the above methods.

### Analysis of Data

Acquisition of membership scores ranged from 1 to 3 (Table XVI). Only two of 15 respondents with acquisition scores of 1 scored above the mean participation score (their scores were 11 and 13). Twenty-seven of the 43 respondents with acquisition scores of 2 scored above the mean participation score. Of the 46 respondents with acquisition scores of 3, 28 scored above and 18 below the mean participation score.

The relationship between participation scores and acquisition of membership scores was not significant. Although the coefficient of simple correlation was +.278 where significance at the 1 percent level was .25, partial correlation analysis between participation scores and acquisition scores with understanding scores and knowledge of facts scores held constant revealed a coefficient of +.059 (Table VII). Significance at the 5 percent level was .194. Satisfaction scores and

TABLE XVI. DISTRIBUTION OF MEMBERS BY ACQUISITION OF  
MEMBERSHIP INDEX SCORES AND PARTICIPATION INDEX  
SCORES, NINE SOUTH DAKOTA COOPERATIVE  
OIL ASSOCIATIONS, 1958

Acquisition of membership index scores*	Participation index scores					Total
	1-5	6-9	10-13	14-17	18-21	
	(Number of members)					
1	6	7	2 <sup>a</sup>	0	0	15
2	4	12	20	6	1	43
3	<u>3</u>	<u>15</u>	<u>17</u>	<u>10</u>	<u>1</u>	<u>46</u>
Total	13	34	39	16	2	104

\*The mean score was 2.30.

<sup>a</sup>These two observations represent participation scores of 11 and 13.

inaccurate knowledge scores were excluded from the partial analysis.

They were not significantly related to acquisition of membership scores (Table VIII).

## CHAPTER VIII

THE MULTIPLE CORRELATION AND MULTIPLE REGRESSION ANALYSES  
 BETWEEN PARTICIPATION SCORES AND SATISFACTION SCORES,  
 UNDERSTANDING SCORES, AND KNOWLEDGE OF FACTS  
 ABOUT COOPERATIVES SCORES

Multiple correlation and multiple regression analyses were performed between the participation index scores and all the index scores which partial correlation analysis revealed were positively and significantly<sup>44</sup> related to participation index scores (Table VII). These indexes were the satisfaction index, the understanding index, and the knowledge of facts index. The objective of the multiple correlation analysis was to determine the proportion of the variance in participation scores that was explained by these factors. The objective of the multiple regression analysis was to determine the constants in the regression equation and to evaluate their use in the prediction of participation in the cooperative.

The coefficient of multiple correlation was .6821. An F test of the form,  $F = \frac{R^2 (n-k-1)}{(1-R^2)k}$ , was employed to ascertain the significance of the multiple coefficient.<sup>45</sup> The F value was 29.007. Significance at the 1 percent level with 3 degrees of freedom for the numerator and

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<sup>44</sup>The level of significance necessary for inclusion in the multiple correlation and multiple regression analyses was 5 percent.

<sup>45</sup>Frederick C. Mills, Statistical Methods, pp. 627-629, Third edition, Henry Holt and Company: New York, 1955.

100 degrees of freedom for the denominator was 3.98. The coefficient of multiple correlation was highly significant.

The square of the coefficient of multiple correlation was .4653. This indicates that 46.53 percent of the variance in participation scores was explained by the variance in satisfaction scores, understanding scores, and knowledge of facts scores.

The regression equation was of the form  $X_1 = a + b_{12.34}X_2 + b_{13.24}X_3 + b_{14.23}X_4$ . The variables in the equation represented these factors:

$X_1$  = participation index scores

$X_2$  = satisfaction index scores

$X_3$  = understanding index scores

$X_4$  = knowledge of facts index scores.

Calculation of the constants resulted in the equation  $X_1 = -2.126 + .3885X_2 + .173X_3 + .3446X_4$ . The standard error of regression was 2.7968.

The partial correlation coefficients<sup>46</sup> and the net regression coefficients indicate that satisfaction with the cooperative and knowledge of facts about cooperatives are more important than understanding of cooperative principles in the prediction of participation in the cooperative. The net regression coefficients showed that an increase of 1 in the satisfaction index score was associated with an increase of .3885 in the participation index score; an increase of 1

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<sup>46</sup>Pages 27, 34, and 39 or Table VII.

in the knowledge of facts index score was associated with an increase of .3446 in the participation index score; and an increase of 1 in the understanding index score was associated with an increase of .173 in the participation index score.



## CHAPTER IX

## SUMMARY

This study examined the differential participation of a sample of members of nine South Dakota cooperative oil associations in an attempt to determine some of the factors related to differential participation.

The major hypothesis tested in this study was that member participation in cooperatives was related

- (1) positively with member understanding of cooperative principles,
- (2) positively with member satisfaction with the association,
- (3) positively with member knowledge of facts about cooperatives,
- (4) negatively with member inaccurate knowledge about cooperatives, and
- (5) positively with member identity with the association.

The nine cooperative oil associations studied were selected on a stratified random basis from the 140 cooperative oil associations in the state. A total of 104 schedules were taken from the farmer members of these nine cooperatives during August and September, 1958. Members were selected from each of the cooperatives on a simple random basis.

Each respondent was scored upon the basis of the six quantitative measures used in the study. These measures were: (1) the cooperative understanding index, (2) the cooperative satisfaction index, (3) the knowledge of facts about cooperatives index, (4) the index of inaccurate knowledge, (5) the acquisition of membership index, and (6) the

cooperative participation index.

The cooperative participation index was used as the dependent variable in the study. Simple, partial, and multiple correlation analyses were used to measure and test the hypothesized relationships. Multiple regression analysis was used to describe the relationships.

Significant positive coefficients of simple correlation were found in the following cases:

- (1) Between member participation scores and member understanding of cooperative principles scores,
- (2) Between member participation scores and member satisfaction scores,
- (3) Between member participation scores and member knowledge of facts about cooperatives scores,
- (4) Between member participation scores and method of acquisition of membership scores.

The numerical value of the coefficient of simple correlation between participation scores and knowledge of facts scores was +.591. This was the highest simple coefficient obtained in the study. The coefficient of correlation between participation scores and understanding scores was only slightly smaller. It had a value of +.587. The lowest significant simple coefficient obtained was between participation scores and method of acquisition of membership scores. Its value was +.278.

The negative coefficient of simple correlation between member participation scores and member inaccurate knowledge scores was not significant at the 5 percent level.

Significant positive partial correlation coefficients were found in the following cases:

(1) Between member participation scores and member understanding scores with member satisfaction scores, member knowledge of facts scores, and member acquisition of membership scores held constant. This was the lowest partial coefficient obtained in the study. Its numerical value was  $+0.211$ .

(2) Between participation scores and satisfaction scores with understanding scores and knowledge of facts scores held constant.

(3) Between participation scores and knowledge of facts scores with satisfaction scores, understanding scores, and acquisition of membership scores held constant. This was the highest partial coefficient obtained. Its numerical value was  $+0.372$ .

Multiple correlation and multiple regression analyses were performed between the participation index scores and all the index scores which partial correlation analysis revealed were positively and significantly related to participation index scores. These indexes were the understanding index, the satisfaction index, and the knowledge of facts index. The numerical value of the coefficient of multiple correlation was  $.6821$ . This was significant at the 1 percent level. The square of the multiple correlation coefficient was  $.4653$ . This indicates that 46.53 percent of the variance in participation scores was explained by the variance in understanding scores, satisfaction scores, and knowledge of facts scores. The net regression coefficients indicate that satisfaction with the cooperative and knowledge of facts

about cooperatives are more important than understanding of cooperative principles in the prediction of participation in the cooperative.

Although these findings indicate that satisfaction with the cooperative, knowledge of facts about cooperatives, and understanding of cooperative principles are important factors in predicting participation in the cooperative, an unexplained variance of 36.43 percent remains. This would seem to indicate the desirability of further study to more precisely investigate the factors in this analysis and to uncover other significant factors related to differential participation.

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**APPENDIX**

## INTERVIEW SCHEDULE

(Including the Scored Responses)

ConfidentialCooperative Oil Association Member Survey

Member \_\_\_\_\_ Number of Years Co-op Member \_\_\_\_\_

Number of Years Member This Co-op \_\_\_\_\_ Interviewer \_\_\_\_\_

1. What commodities and services does the \_\_\_\_\_ Co-op sell?

- |                                |                              |
|--------------------------------|------------------------------|
| _____ 1. Petroleum Products    | _____ 7. Feeds and Seeds     |
| _____ 2. TBA                   | _____ 8. Machinery and Parts |
| _____ 3. Major Farm Appliances | _____ 9. Hardware            |
| _____ 4. Mechanic Service      | _____ 10. L. P. Gas          |
| _____ 5. Mobile Tire Repair    | _____ 11. _____              |
| _____ 6. Fertilizer            | _____ 12. _____              |

\*This question was not part of the analysis in this study.

2. Of those commodities and services sold by the Co-op that you use, what proportion do you buy there? (Read answers)

- |                         |         |
|-------------------------|---------|
| 1. _____ 0 _____        | 1 _____ |
| 2. _____ 1 - 24% _____  | 2 _____ |
| 3. _____ 25 - 49% _____ | 3 _____ |
| 4. _____ 50 - 74% _____ | 4 _____ |
| 5. _____ 75 - 99% _____ | 5 _____ |
| 6. _____ 100% _____     | 6 _____ |



## 3. Where does your co-op buy its goods?

_____ Co-op wholesale or regional	<u>2*</u>
_____ Private wholesale	<u>1*</u>
_____ Don't know	<u>0</u>

\*Only one response was scored.

If "don't know" or "private wholesale", are there wholesale co-ops from which your co-op could buy?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

## 4. Who owns the co-op wholesale?

_____ Local co-ops	<u>1</u>
_____ Other	<u>0</u>
_____ Don't know	<u>0</u>

## 5. Does the co-op wholesale produce any benefits for the co-op member?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

## 6. Has your co-op ever received dividends from the wholesale?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

7. Does the local co-op have any responsibilities to the co-op wholesale?

_____ Yes	_____ 1
_____ No	_____ 0
_____ Don't know	_____ 0

8. How much say does the wholesale have in running the local co-op?\*

_____ Much say	_____
_____ Some say	_____
_____ No say	_____
_____ Don't know	_____

\*This question not included in the analysis.

9. How much say should it have?

_____ Much say	_____ 0
_____ Some say	_____ 0
_____ No say	_____ 1
_____ Don't know	_____ 0

10. How does the quality of cooperatively produced goods compare with the quality of other name brands?

_____ As good	_____ 1*
_____ Better	_____ 1*
_____ Poorer	_____ 0
_____ Mixed--some poorer, some as good, some better	_____ 1*
_____ Don't know	_____ 0

\*Only one response was scored.

11. What is your manager's name?

_____ Knew	<u>1</u>
_____ Didn't know	<u>0</u>

12. In view of the job to be done, do you think his salary is:

_____ About right	<u>0</u>
_____ Too high	<u>0</u>
_____ Too low	<u>1</u>

13. Do you think he is as efficient as the managers of other oil stations in this area?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

14. Are you satisfied with the way the co-op manager does his job?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

15. Who are the present members of the board?

_____ Knew none	<u>0</u>
_____ Knew 1 - 24%	<u>1</u>
_____ Knew 25 - 49%	<u>2</u>
_____ Knew 50 - 74%	<u>3</u>
_____ Knew 75 - 99%	<u>4</u>
_____ Knew 100%	<u>5</u>

16. How are the members of the board of directors chosen?

_____ Elected by membership at annual meeting	1
_____ Don't know	0

17. About how long has each of these members served on the board?

_____ Know	1
_____ Didn't know	0

18. Do you believe that the members of this board take your views and wishes and the views and wishes of the other members into consideration when they make the policies of the Co-op?

_____ Yes	1
_____ No	0
_____ Don't know	0

19. Are you satisfied with the way the members of the board carry out their duties?

_____ Yes	1
_____ No	0
_____ Don't know	0

20. Do you believe that you have a say, or have no say, in running this co-op?

_____ Have a say	1
_____ Have no say	0
_____ Don't know	0

21. Why do farmers organize purchasing cooperatives?

_____ To provide more goods or services	1*
_____ To provide the same goods or services at lower cost	1*
_____ Don't know	0

\*Both responses were scored.

22. Does the member have responsibilities in the Co-op?

_____ Yes	1
_____ No	0
_____ Don't know	0

If yes, what are the member's responsibilities? (Recall)\*

_____ Attend meetings and vote	_____
_____ Patronize	_____
_____ Help finance	_____
_____ Bear risk	_____
_____ Keep informed	_____

\*This question was not a part of the analysis.

23. Who should be permitted to vote in a co-op?

_____ All members	1
_____ All people doing business with the co-op	0
_____ Other	0
How should they vote?	
_____ One member, one vote	1
_____ On the basis of patronage	0
_____ One vote per share of stock held (more stock, more votes)	0

\_\_\_\_\_ Don't know 0

24. Should all cooperative members vote on all important questions concerning the co-op?

\_\_\_\_\_ Yes 1

\_\_\_\_\_ No 0

\_\_\_\_\_ Don't know 0

25. Who is responsible for the day to day operation of the co-op?

\_\_\_\_\_ Manager 1

\_\_\_\_\_ Board 0

\_\_\_\_\_ Members 0

\_\_\_\_\_ Don't know 0

26. A co-op operates in accordance with some particular policy. Who is responsible for making this policy between annual meetings?

\_\_\_\_\_ Board 1

\_\_\_\_\_ Manager 0

\_\_\_\_\_ Members 0

\_\_\_\_\_ Don't know 0

27. Who is responsible for making the overall policy of the co-op?

\_\_\_\_\_ Members 1

\_\_\_\_\_ Board 0

\_\_\_\_\_ Manager 0

\_\_\_\_\_ Don't know 0

28. Who should determine credit policy?

_____ Members (at annual meeting)	1
_____ Board	0
_____ Manager	0
_____ Don't know	0

29. Who should enforce credit policy?

_____ Manager	1
_____ Board	0
_____ Members	0
_____ Don't know	0

30. Does your co-op have a credit policy?

_____ Yes	1
_____ No	0
_____ Don't know	0

31. Do you have any criticism of the credit policy?

_____ Yes	0
_____ No	1
_____ Don't know	0

(Ask only if not answered upon earlier responsibility question.)

32. Does the member have a responsibility to patronize his co-op?\*

_____ Yes	_____
_____ No	_____
_____ Don't know	_____

\*This question was not included in the analysis.

33. If yes, to what extent?

_____ 100%	2
_____ Fairly consistently	1
_____ Give the co-op first chance	1

34. Does the member look at the co-op as his agent in buying or as another business place competing for his dollar?

_____ Agent	1
_____ Business place	0

35. Who should provide the money to start a co-op?

_____ Members	1
_____ Banks for co-ops	0
_____ Credit facilities of regional co-ops	0
_____ Private banks	0
_____ Government	0
_____ Don't know	0

36. In the year to year operations, is it a member's responsibility to finance his co-op?

_____ Yes	1
_____ No	0
_____ Don't know	0

37. Do you feel that the \_\_\_\_\_ Co-op is financially sound?

_____ Yes	1
_____ No	0
_____ Don't know	0



38. What is a revolving surplus fund?

_____ Knows	2
_____ Some idea	1
_____ Doesn't know	0

39. Which of the following statements best describes your idea of a revolving surplus fund?

_____ A method by which member savings are held in the co-op to finance its activities	1
_____ A method by which member dividends are held against their wishes	0

40. What is a dividend?

_____ A payment to members to get them to patronize	0
_____ A return of the surplus earnings of the cooperative to the members who own it	1

41. How should savings be distributed in a co-op?

_____ Returned to members on basis of their patronage	1
_____ Paid out as interest on shares	0
_____ Don't know	0

42. How may savings be returned to patrons?

_____ Deferred dividends	1*
_____ Certificates of indebtedness	1*
_____ Certificates of equity	1*
_____ Don't know	0

\*All three responses were scored.

43. Who should have the right to determine what should be done with savings in your co-op?

_____ Members	<u>1</u>
_____ Board	<u>0</u>
_____ Manager	<u>0</u>
_____ Don't know	<u>0</u>

44. Do you think you derive benefit from this co-op?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

45. Do you think the co-op saves you money?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

If yes, are you satisfied with the savings made?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

46. Do you think competitors' services would be as good if co-ops were not in the market?

_____ Yes	<u>0</u>
_____ No	<u>1</u>
_____ Don't know	<u>0</u>

47. Do you think competitors' prices would be as low if co-ops were not in the market?

_____ Yes	0
_____ No	1
_____ Don't know	0

48. How did you think your cooperative's costs compare with costs of private oil stations?

_____ Higher	0
_____ Same	1*
_____ Lower	1*
_____ Don't know	0

\*Only one response was scored.

49. Who owns the co-op?

_____ Members	1
_____ Board of directors	0
_____ Manager	0
_____ Others	0
_____ Don't know	0

50. In the event of a loss on business operations, who should bear this loss?

_____ Members	1
_____ Directors	0
_____ Manager	0
_____ Government	0
_____ Don't know	0

51. If a loss results because of selling at too low prices, should the stockholders bear the loss, or should it be made up on the basis of patronage?

_____ Stockholders	<u>0</u>
_____ Patronage	<u>1</u>
_____ Both	<u>0</u>
_____ Don't know	<u>0</u>

52. Does the member look at the co-op as an extension of his own business off the farm?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

53. Should co-ops pay income tax on member business?

_____ Yes	<u>0</u>
_____ No	<u>1</u>
_____ Don't know	<u>0</u>

If no, why not?

_____ Be paying twice on the same income	<u>1*</u>
_____ They make no profits	<u>1*</u>
_____ Farmers pay enough taxes	<u>0</u>
_____ Cooperatives still need help (government aid)	<u>0</u>

\*Both responses were scored.

54. Does a co-op pay taxes similar to an individual proprietorship or partnership?

_____ Yes	<u>1</u>
_____ No	<u>0</u>

\_\_\_\_\_ Don't know \_\_\_\_\_ 0 \_\_\_\_\_

55. Do patrons pay income tax upon dividends?

\_\_\_\_\_ Yes \_\_\_\_\_ 1 \_\_\_\_\_

\_\_\_\_\_ No \_\_\_\_\_ 0 \_\_\_\_\_

\_\_\_\_\_ Don't know \_\_\_\_\_ 0 \_\_\_\_\_

If no, why not? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

56. Do co-ops pay income tax on non-member business if refunds are not paid to non-members?

\_\_\_\_\_ Yes \_\_\_\_\_ 1 \_\_\_\_\_

\_\_\_\_\_ No \_\_\_\_\_ 0 \_\_\_\_\_

\_\_\_\_\_ Don't know \_\_\_\_\_ 0 \_\_\_\_\_

57. Do co-ops pay income tax upon any unallocated savings?

\_\_\_\_\_ Yes \_\_\_\_\_ 1 \_\_\_\_\_

\_\_\_\_\_ No \_\_\_\_\_ 0 \_\_\_\_\_

\_\_\_\_\_ Don't know \_\_\_\_\_ 0 \_\_\_\_\_

58. Are the earnings of a cooperative referred to as saving or profit?

\_\_\_\_\_ Saving \_\_\_\_\_ 1 \_\_\_\_\_

\_\_\_\_\_ Profit \_\_\_\_\_ 0 \_\_\_\_\_

\_\_\_\_\_ Don't know \_\_\_\_\_ 0 \_\_\_\_\_

59. What is meant by double taxation?

\_\_\_\_\_ A method by which the same income is taxed twice 1  
 \_\_\_\_\_ Don't know 0

60. Is the income of corporations double taxed?

\_\_\_\_\_ Yes 1  
 \_\_\_\_\_ No 0  
 \_\_\_\_\_ Don't know 0

61. Are co-ops opposed to the double taxation to which corporations are subjected?

\_\_\_\_\_ Yes 1  
 \_\_\_\_\_ No 0  
 \_\_\_\_\_ Don't know 0

62. How did you become a member of the \_\_\_\_\_ Co-op?

\_\_\_\_\_ By paying the membership fee or purchasing stock 3  
 \_\_\_\_\_ By patronizing with a view toward becoming a member by the allocation of patronage refunds to defray the membership or stock fee 2  
 \_\_\_\_\_ By patronizing without a view toward becoming a member 1

63. How often do you attend your co-op's annual meetings?

\_\_\_\_\_ Never 0  
 \_\_\_\_\_ Occasionally 1  
 \_\_\_\_\_ Usually 2  
 \_\_\_\_\_ As often as held 3

64. In the past two years, have you raised a question for change or improvement in your co-op at the annual meetings?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

65. If you are dissatisfied with some operation of the co-op, what do you do about it?

_____ Contact manager	<u>1*</u>
_____ Contact board	<u>1*</u>
_____ Contact other members	<u>0</u>
_____ Do nothing	<u>0</u>

\*Only one response was scored.

66. Have you discussed the co-op with the manager or a director during the past year or so?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

67. Do you talk with your neighbors about the co-op?

_____ Yes	<u>1</u>
_____ No	<u>0</u>

68. Within the past two years, have you tried to get any of them to join the co-op?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

69. Is it your duty to get facts and information about the co-op?

_____ Yes	1
_____ No	0
_____ Don't know	0

70. Do you make an effort to keep informed and get facts about your co-op?

_____ Yes	1
_____ No	0

71. Where do you get your current information about co-ops?

_____ Neighbors and friends	1
_____ Directors	1
_____ Manager	1
_____ Fieldman	1
_____ Newsletter	1
_____ Annual meeting	1
_____ Other	1

72. Does your co-op spend any money on educational work or membership relations?

_____ Yes	1
_____ No	0
_____ Don't know	0



73. Do you think there should be a co-op fieldman to work on co-op education?

_____ Yes	<u>1</u>
_____ No	<u>0</u>
_____ Don't know	<u>0</u>

74. Have you ever been on the board of directors?

_____ Yes	<u>1</u>
_____ No	<u>0</u>

If yes, were you chairman of the board?

_____ Yes	<u>1</u>
_____ No	<u>0</u>

75. Have you ever served on a committee in your co-op?

_____ Yes	<u>1</u>
_____ No	<u>0</u>

If yes, have you ever held a committee chairmanship?

_____ Yes	<u>1</u>
_____ No	<u>0</u>