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**ABSTRACT**

Conducted as part of a Farm Management Education Research and Development Project which was examining the use of variations of the Farm Management Education Program in meeting the managerial needs of agribusinesses, the descriptive study reported here was done to determine attitudes of 359 farm implement dealership managers in North Dakota towards their needs for selected areas of management education. Chapter I briefly discusses the background, significance, purpose, objectives, and delimitations of the study, while chapter II is a review of the literature. A brief description of the population, the research methodology (designing and mailing questionnaires), and data analysis, including a computer program using the chi square test for independence, comprise chapter III. Chapter IV summarizes profile data of the implement dealership managers, including position, tenure, age, educational level, and size of business. Chapter V presents the mean scores for responses to 32 items regarding the importance of selected management skill areas in an educational program, and chi square values for association between these responses and selected managerial profile data. The responses to a questionnaire item requesting that varied types of educational agencies be rated as possible program sources are presented in chapter VI. Chapter VII summarizes the findings and presents nine conclusions. The questionnaire, a summary of frequency responses to the 32 skill area questions, and a summary of chi square values are appended. (EM)

## Report of the Research Study

ATTITUDES OF NORTH DAKOTA IMPLEMENT DEALERSHIP MANAGERS  
 TOWARDS A CONTINUING MANAGEMENT EDUCATION  
 PROGRAM

U.S. DEPARTMENT OF HEALTH  
 EDUCATION & WELFARE  
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The Farm Management Education Record Analysis  
 Systems Research and Development Project

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 In Cooperation With

North Dakota State Board for Vocational Education  
 Research Coordinating Unit

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## CHAPTER I

### INTRODUCTION

Agribusiness sales and services are an important part of the agricultural community in North Dakota. Today, with the high degree of mechanization needed to farm, it is essential that these services and products be available to the farmer on a continuing basis in sufficient quantity and quality to meet his ever growing needs.

It is necessary for sales and service organizations to meet the demands of today's farmer or face the economic alternative of the farm dollar going elsewhere. Good business management is essential in developing, maintaining and expanding a successful agribusiness firm. Educational programs to enhance the managerial ability of managers to provide needed goods and services are a benefit to individuals who operate agribusinesses and to farmers needing the materials and services.

#### Significance of the Study

This study was in partial fulfillment of the objectives of a Farm Management Education Research and Development Project, funded by the North Dakota State Board for Vocational Education and carried out by the Department of Agricultural Education at North Dakota State University.

As stated in the proposal, the objective was, "to examine the use of variations of the farm management education program for other business management needs."<sup>1</sup> It was decided, after consultation with Dr. Donald

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<sup>1</sup>Farm Management Education Research and Development Project (Unpublished research project proposal, North Dakota State University, Fargo, 1972), p. 1.

Priebe, Research Project Director, to select the North Dakota implement dealership managers as the group with which to begin to examine the possible applications of variations of the farm management education program to off-farm agricultural businesses.

### Statement of the Problem

It was the purpose of this study to determine attitudes of the farm implement dealership managers in North Dakota towards their needs for selected areas of management education. The specific objectives of the study were:

- a. To determine the attitude of North Dakota farm implement dealership managers toward their need for selected areas of management education.
- b. To determine the attitudes of North Dakota farm implement dealership managers toward various agencies or groups as possible sources of management education.
- c. To obtain profile information of the North Dakota farm implement dealership managers as to their:
  - age
  - level of formal education
  - management tenure
  - size of business
  - type of business managed
- d. To compare the attitudes of North Dakota farm implement dealership managers toward their need for management education with:
  - number of full-time employees
  - age
  - levels of education
  - management tenure

### Delimitations of the Study

This study was limited to managers of the North Dakota farm implement dealerships as of January 22, 1973. The study was descriptive and no inference was made to other samples or populations. It was also limited to gathering the information needed to attain the stated objectives.

For the purpose of this study the following terms are defined:

Small Business: a firm with \$2.5 million or less in assets,  
\$5 million or less in annual sales or 250  
or fewer employees.

Business Size: is determined by levels of full-time employees.

Full-Time Employee: a worker employed eleven or more months per  
year.

Part-Time Employee: a worker employed less than eleven months  
per year.

North Dakota farm implement dealership manager: an individual  
who has managerial control of a farm im-  
plement dealership in North Dakota.



## CHAPTER II

### REVIEW OF LITERATURE

Small business plays an important role in the total economic structure of the United States. Small independent firms account for approximately 40 percent of the nation's total business activity.<sup>2</sup> Ninety-one percent of all manufacturing establishments in the United States employ fewer than 100 people and 68 percent have fewer than 20 employees.<sup>3</sup>

Non-farm agribusiness represents an expanding part of the small business picture. Smith and Moeller report growth rates for off-farm purchases of off-farm inputs by farmers to be in excess of 5 percent annually and for some products much greater increases are predicted.<sup>4</sup>

Musselman and Hughes report the growth in the numbers of small businesses in the United States to be approximately 15,000 new firms per year. They also report that approximately 13,500 businesses fail during their first year of operation.<sup>5</sup> Many business analysts and economic ex-

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<sup>2</sup>L. L. Steinmetz and others, Managing the Small Business (Homewood, Richard D. Irwin, Inc., 1968), p. 1.

<sup>3</sup>Pearce C. Kelly and others, How to Organize and Operate a Small Business, (Englewood Cliffs, Prentice Hall, 1968), p. 1.

<sup>4</sup>Frank J. Smith and Robert J. Moeller, "What Makes A Successful Farm Store Operation?" Farm Store Merchandising, (Minneapolis, The Miller Publishing Co., March 1964), p. 15.

<sup>5</sup>Vernon A. Musselman and Eugene H. Hughes, Introduction to Modern Business, (Englewood Cliffs, Prentice Hall, 1969), p. 165.

perts agree that management of the small firm is an important ingredient for success.

According to Musselman and Hughes, good management is a prerequisite for the successful operation of a small business. "In large concerns, it is the professional manager, rather than the owner who carries the management responsibility, but in small firms, it is the owner or manager who must make all the business decisions."<sup>6</sup> Much of the success or failure of a small business can be traced to the quality of management.

Failure to satisfactorily solve management problems is a primary cause of small business failures. This conclusion is supported by a Dun and Bradstreet study which reports almost 93 percent of the failures of small business were due to a lack of managerial skills.<sup>7</sup>

Another study of agribusiness farm supply stores, by the same firm, indicated that management factors accounted for 91 percent of all business failures.<sup>8</sup> Lack of adequate managerial experience and competence were cited as the most prevalent reason for business failures.

Hartog reported the educational level of farm supply store managers to be quite low. He states: "The retail farm supply manager has less of the initial educational inputs, and because of geographical dispersion of small firms, has fewer opportunities to participate in formal programs to upgrade his managerial skills."<sup>9</sup>

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<sup>6</sup>Ibid., p. 160.

<sup>7</sup>"Business Failures", Dun's Review and Modern Industry, Vol. 90, No. 3, 1967, p. 13.

<sup>8</sup>E. T. Siverten, Farm Supply Stores: Operating Results in 1956, Dun and Bradstreet, New York, 1957.

<sup>9</sup>Edward C. Hartog, "Development of a Method to Determine Educational Content of Farm Supply Store Management" (Unpublished Ph. D. thesis, University of Minnesota, Minneapolis, 1969), p. 10.

Yelland, in a study of farm supply cooperatives, found that 72 percent of the managers had a high school education or less.<sup>10</sup> Amann and Kroller, in a study of retail outlets of regional cooperatives, found that fewer than half of the 52 managers in the study had finished high school.<sup>11</sup>

Managers attendance at management education sessions appear to be limited. Volkin and Griffin, in a management training study of 9404 cooperatives, with a 43 percent return, reported only 26 percent of the managers had attended management training sessions.<sup>12</sup>

Kelley et al.,<sup>13</sup> Steinmetz et al.,<sup>14</sup> and Musselman and Hughes,<sup>15</sup> as well as other authors have stressed a need for continuing the managers education. They concluded that a program of management education is a most important key to business success in a constantly changing world.

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<sup>10</sup>Robert Yelland, "A Study of Managerial Performance Patterns in Cooperatives," (Unpublished Masters thesis, University of Minnesota, Minneapolis, 1968), p. 25.

<sup>11</sup>Victor F. Amann and Fred E. Koller, "Some Aspects of Management in Farm Supply Cooperatives," Minnesota Farm Business Notes, No. 430, St. Paul, June, 1961.

<sup>12</sup>David Volkin and Nella Griffin, Management Training Among Farmer Cooperatives, Farmers Cooperative Service General Report, No. 65, USDA, Washington, D.C., 1959.

<sup>13</sup>Kelley and others, op. cit., p. 25.

<sup>14</sup>Steinmetz and others, op. cit., p. 600.

<sup>15</sup>Musselman and Hughes, op. cit., p. 309.

## CHAPTER III

### RESEARCH METHOD AND PROCEDURE

The information included in this chapter describes the method of research used for this study and the procedure used in completing the project.

#### Population

The population selected for this study included all of the North Dakota farm implement dealership managers actively managing a business as of January 22, 1973. There were a total of 359 managers located throughout the state of North Dakota.

The names of the farm implement dealership managers were obtained through the cooperation of Mr. Roger Williams, Field Services Manager of the North Dakota Implement Dealers Association, Fargo, North Dakota. A list of association members, which was approximately 98 percent of the total names, and a list of managers names who were not members were supplied by the association.

#### Questionnaire Design

It was decided, after consultation with Dr. Donald Priebe, Project Director, to use a direct mail questionnaire to gather the data. The questionnaire was designed to secure the information needed to reach the objectives of this study. Dr. Donald Priebe, Professor Shubel Owen, and Dr. David Cobia were consulted about the content and construction of the questionnaire. Dr. Josephine Ruud and Mr. Thomas Ostenson were also

utilized as resource personnel. Mr. Keith Howard, Executive Secretary, and Mr. Roger Williams, Field Services Manager of the North Dakota Implement Dealers Association, also reviewed the questionnaire prior to its mailing.

#### Data Gathering

The questionnaire, an explanatory cover letter and a self-addressed stamped envelope were mailed to the implement dealers on April 13, 1973. A follow-up letter was mailed to the non-respondents on April 25, 1973. On May 3, 1973, a second follow-up letter containing another questionnaire, explanatory letter and self-addressed stamped envelope were mailed to those individuals who had not responded to the first two letters.

A total of 188 usable questionnaires were received by May 15, 1973. This represented a 52.4 percent return from the 359 letters mailed.

#### Analysis of Data

The final analysis methods were chosen after a count of some of the personal profile information was completed and data grouping trends had been examined. Dr. Donald Priebe, Research Project Director, and Dr. Robert Carlson, Statistitian for the North Dakota Agricultural Experiment Station, were consulted regarding possible analysis methods.

The data were processed at the North Dakota State University Computer Center. A program using the chi square test for independence was run on the comparison portions of the data. All mean scores, frequency counts and percentages were computed at the computer center. Data were then tabulated and included in this report.

## CHAPTER IV

### PROFILE DATA OF NORTH DAKOTA IMPLEMENT DEALERSHIP MANAGERS

The information presented in this chapter relates to the personal profile of the implement dealership managers returning usable questionnaires. The profile included the following information: nature of managerial positions, management tenure, size of business managed, number of part-time employees, availability and involvement in management programs, level of formal education and age.

#### Types of Managerial Positions

Managerial positions were separated into four categories as shown in Table I. The largest group, 160 managers or 85.1 percent of the respondents, either partially or completely owned the business they managed. The smallest group of managers reporting, 6 or 3.2 percent, worked in a private business they did not own. There were 14 or 7.4 percent of the managers who managed a company owned store and 8 or 4.3 percent indicated they managed a local cooperative machinery dealership.

#### Years of Experience as an Implement Dealership Manager

There were a total of 40 managers or 21.3 percent who indicated they had 5 to 10 years management experience in the implement business. An inspection of Table II will show this to be the largest number of respondents in any one tenure group. The second largest group, 35 managers or 18.6 percent, indicated they had 26 or more years of management experience.

TABLE I

NATURE OF MANAGERIAL POSITIONS HELD BY 188  
NORTH DAKOTA IMPLEMENT DEALERSHIP MANAGERS

Nature of Managerial Position	Number of Managers in Group	Percent of Total
Owner - Manager	160	85.1
Line Company Store Manager	14	7.4
Cooperative Store Manager	8	4.3
Private Business Manager	6	3.2
TOTAL	188	100.0

N = 188

TABLE II

YEARS OF MANAGERIAL EXPERIENCE OF 188 NORTH  
DAKOTA FARM IMPLEMENT DEALERSHIP MANAGERS

Years of Management Experience	Number of Managers in Group	Percent of Total
4 or fewer	29	15.4
5 to 10	40	21.3
11 to 15	29	15.4
16 to 20	30	16.0
21 to 25	25	13.3
26 or more	35	18.6
TOTAL	188	100.0

N = 188

There were three experience groups which had similar numbers of respondents reporting. The experience groups 16 to 20 years, 4 or fewer years and 11 to 15 years experience had 30, 29 and 29 managers reporting in each respective group. The group with the fewest managers, 25 or 13.3 percent, had indicated from 21 to 25 years management experience.

#### Number of Full-Time Employees

The number of full-time employees per business, as illustrated in Table III, was used as a measure of business size. A full-time employee, as described in the questionnaire, was defined as a worker who was employed eleven or more months per year.

Nearly half of the implement managers, 44.1 percent, indicated they employed 5 to 10 full-time workers. One-fourth, 25.5 percent of the dealerships, had 4 or fewer full-time employees. There were 38 managers or 20.2 percent who employed 11 to 15 full-time workers. Almost nine-tenths of the managers, 89.8 percent, responding to the questionnaire employed 15 or fewer full-time employees.

A total of 19 dealerships employed 16 or more full-time workers. Of these 19, managers of 11 dealerships had 21 or more full-time employees.

TABLE III

#### NUMBER OF FULL-TIME EMPLOYEES OF 188 NORTH DAKOTA FARM IMPLEMENT DEALERSHIP MANAGERS

Number of Full-Time Employees	Number of Dealerships in Groups	Percent of Total
4 or fewer	48	25.5
5 to 10	83	44.1
11 to 15	38	20.2
16 to 20	8	4.2
21 or more	11	6.0
TOTAL	188	100.0

N = 188



### Mean Number of Part-Time Employees Per Dealership

The pattern of employment for part-time help was seasonal in nature. June, July and August were the peak part-time employment months. There were averages of 1.56 part-time employees per dealership employed in July, while in June and August 1.45 and 1.54 part-time workers were employed per dealership respectively. The sharpest decline in part-time help occurred between August and September. A drop of .6 of an average part-time worker per dealership was reported.

The fewest part-time workers were employed during November. The managers reported hiring an average of .35 part-time employees during that month. December and January were the next lowest hiring months with .38 and .45 part-time laborers hired respectively.

Seasonal hiring did not play a large part in the total employment picture. The average part-time help maintained throughout the year was .88 workers per dealership. Figure 1 and Table IV illustrate the mean number of part-time workers employed per dealership on a monthly basis.

TABLE IV  
MEAN NUMBER OF PART-TIME EMPLOYEES PER  
DEALERSHIP BY MONTHS

January	.45	July	1.56
February	.49	August	1.54
March	.73	September	.97
April	1.02	October	.55
May	1.17	November	.35
June	1.45	December	.38

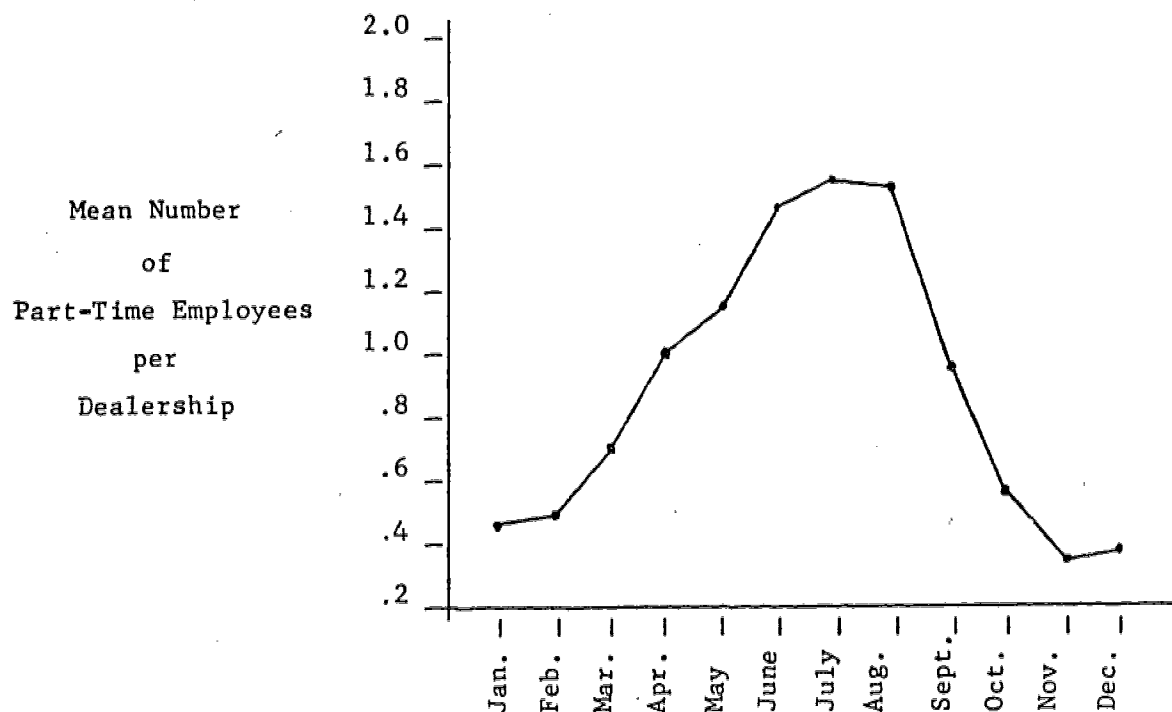


Figure.1

MEAN NUMBER OF PART-TIME EMPLOYEES PER  
DEALERSHIP BY MONTHS

Knowledge of the Availability and Extent of Participation in Management  
Education Programs

The managers were asked to respond on a yes or no basis if a management education program was available from the line company with which they were affiliated. Eighty-eight managers or 46.8 percent reported there were management programs available while 98 respondents or 52.1 percent indicated the companies did not have such a program. Two managers or 1.1 percent did not answer the question.

There were 44 managers or 23.4 percent of the respondents who had participated in a management education program within the past two years or were currently enrolled in such a program.

TABLE VI

LEVEL OF FORMAL EDUCATION OF 188 NORTH  
DAKOTA IMPLEMENT DEALERSHIP MANAGERS

Level of Formal Education	Number of Managers in Group	Percent of Total
Eighth grade or less	18	9.6
Grade 9, 10 or 11	10	5.3
High school graduate or equivalent	58	30.9
Trade, technical or business school	18	9.6
Some college - no bachelors degree	45	23.9
Bachelors degree	30	15.9
Bachelors degree plus other professional education	9	4.8
TOTAL	188	100.0

N = 188

Age of Managers

More than half, 54.9 percent, of the implement managers indicated they were between the ages of 35 and 54 years of age. Of this group, 49 managers or 26.2 percent were 35 to 44 years old and 28.7 percent or 54 managers were 45 to 54 years of age. Thirty-one managers or 16.4 percent reported being 34 years of age or younger.

There were 54 managers in the 55 year and older category. Nineteen of the 54 managers or 10.1 percent indicated they were 65 years of age or older. One manager in this group reported managing his business for 50 years.

TABLE VII  
AGE DISTRIBUTION OF 188 NORTH DAKOTA  
IMPLEMENT DEALERSHIP MANAGERS

Age Group of Managers in Years	Number of Managers in Groups	Percent of Total
25 or less	2	1.0
26 to 34	29	15.4
35 to 44	49	26.2
45 to 54	54	28.7
55 to 64	35	18.6
65 and over	19	10.1
TOTAL	188	100.0

N = 188

## CHAPTER V

### MEAN SCORES AND CHI SQUARE VALUES OF IMPLEMENT MANAGERS RESPONSES TO 32 MANAGEMENT SKILL AREA QUESTIONS

The information contained in this chapter is a presentation of mean scores for the 32 questions asked of the farm implement managers regarding the importance of selected management skill areas in an education program. Chi square values for association between question responses for selected profile groupings are also included.

#### Data Treatment

Mean scores were compiled for the responses to each of the 32 management skill areas. A chi square test of independence, a statistical analysis method for comparing separate groups of information as to their probability of being independent, was used to compare the responses to the skill areas to responses of selected profile groups. A score was computed for each skill question according to: manager's age, level of formal education, years of management experience and size of business.

The response frequency for each management skill area is presented in Appendix B.

#### Basis for Establishing Mean Scores for Management Skills

The mean score was based on five possible responses to the 32 management skill areas. The type of responses available were: essential, very important, somewhat important, important, and not useful. These responses were in reply to questions as to whether a particular management skill would be a desirable part of a management education program if

such a program were available to the implement dealers. The answers were given a numerical value from one to five with a five point value being assigned to an "essential" response. Mean scores were then computed on the basis of the number of responses and the number value assigned to the responses. The mean scores of the management skill areas are presented in numerically decending order in Table VIII.

#### Management Skill Areas with Mean Scores Exceeding 4.00

There were a total of seven skill areas which the implement dealers considered to be very important or which had a score value of 4.00 or higher. The area of inventory management and control received the highest mean score of 4.42. The scores had a possible maximum value of 5.00. Salesmanship, managing accounts receivable and human relations followed with mean scores of 4.35, 4.27 and 4.16 respectively.

Other areas managers considered very important in a management education program available to them were: decision making 4.15, profit planning 4.11, and purchasing with a mean of 4.09.

#### Selected Management Skill Areas with Mean Scores Exceeding 3.00 but Less Than 4.00

A mean value from 3.00 to 3.99 was considered "important" based on the numerical values given for the possible responses. The managers rated source of funds and handling problem customers the highest in this area with mean scores of 3.99 and 3.98 respectively. The implement managers also rated these skills above a mean score of 2.85: directing employee leadership, price determination, financial analysis of business, budget planning, and employee motivation. This group represents one-third of the management skills found in the "important" category.

TABLE VIII  
 MEAN SCORES FOR 32 MANAGEMENT SKILL  
 AREAS AS RATED BY IMPLEMENT  
 DEALERSHIP MANAGERS

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1. Inventory Management and Control . . . . .	4.42
2. Salesmanship. . . . .	4.35
3. Managing Accounts Receivable. . . . .	4.27
4. Human Relations . . . . .	4.16
5. Decision Making . . . . .	4.15
6. Profit Planning . . . . .	4.11
7. Purchasing. . . . .	4.09
8. Source of Funds . . . . .	3.99
9. Handling Problem Customers . . . . .	3.98
10. Directing Employee Leadership . . . . .	3.92
11. Financial Analysis of Entire Business . . . . .	3.89
12. Price Determination . . . . .	3.89
13. Budget Planning Cost Control and Analysis . . . . .	3.86
14. Employee Motivation . . . . .	3.85
15. Bookkeeping Methods . . . . .	3.82
16. Employee Training . . . . .	3.80
17. Managing the Manager's Time . . . . .	3.79
18. Development of General Business Policy. . . . .	3.77
19. Product Promotion . . . . .	3.75
20. Managing the Business for Short and Long Range Goals . . . .	3.74
21. Capital Planning and Investment . . . . .	3.73
22. Office Management . . . . .	3.72
23. Organizing and Staffing a Business . . . . .	3.72
24. Labor Relations . . . . .	3.67
25. Problem Identification . . . . .	3.59
26. Business Control Guides . . . . .	3.40
27. Transportation Problems . . . . .	3.09
28. Insurance Management . . . . .	3.06
29. Business Law Needs . . . . .	2.97
30. Marketing Segments (special groups of customers). . . . .	2.93
31. Security (shop lifting, other theft and employee pilfering)	2.85
32. Computerized Records . . . . .	2.46

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Possible mean score range 1.00 to 5.00

A mean score of 5 represents an "essential" management skill area.....a  
 score of 1 represents a "hot useful" management skill area.

There were a total of ten skill areas which received mean scores from 3.82 to 3.67. They are arranged in decending order: bookkeeping methods, employee training, managing the manager's time, development of general business policy, product promotion, managing the business for short and long range goals, capital investment and planning, organizing and staffing a business, office management and labor relations.

There were four skill areas which did not rate as high relative to other skills in the "important" classification. These four skills: problem identification, business control guides, transportation problems, and insurance management received mean scores of 3.59, 3.40, 3.09 and 3.06 respectively.

#### Management Skill Areas with Mean Scores of Less Than 3.00

There were only four skill areas which had a mean score of less than 3.00. The "somewhat important" category in which they were located had a value range of 2.00 to 2.99. Business law needs, marketing segments, and security had mean scores of 2.97, 2.93 and .85 respectively.

The area of computerized records received the lowest mean score, 2.46, of all the questions. This mean score, however, was still midway between the "somewhat important" and the "important" rating levels.

#### Chi Square Comparisons Between Responses to the 32 Management Skill Areas by Selected Managerial Groupings.

The chi square test of independence was used to determine relationships between frequency of responses of related profile groups to the 32 management skill area questions. The test of independence was based on R x C contingency tables. This test measures the independence or conversely the association between the row, or question responses and



the column categories or profile groupings. A significant association will indicate a differential response pattern for the various groups within the profile category.

#### Association Between Responses to the 32 Management Questions and Years of Management Experience Groupings

Chi square values were computed by comparing the responses of managers with varying years of management experience, taken from the personal profile section, to the 32 skill area questions. Four of the 32 management skills; employee motivation, organizing and staffing a business, budget planning and managing accounts receivable were not independent of management experience at the .05 level of probability. Human relations and bookkeeping methods were dependent on management tenure at the .01 level.

The chi square values for management skill question responses as compared with selected groups of management tenure are shown in Table IX.

#### Association Between Responses to the 32 Management Questions and Selected Age Groupings

Chi square values for these groupings, located in Table X, were computed by comparing the responses within the four selected age categories, taken from the personal profile section of the questionnaire.

Only two of the 32 skill areas were statistically significant at the .05 level of probability or below. Labor relations was not independent of the managers age at the .05 level of probability. The other management skill in which there was a significant difference in responses was employee motivation. This area received a chi square value which indicated it was dependent upon age at the .01 level of significance.

TABLE IX

CHI SQUARE VALUES FOR COMPARISON OF ASSOCIATION\* BETWEEN  
RESPONSES TO THE 32 MANAGEMENT SKILL AREA QUESTIONS  
AND YEARS OF MANAGEMENT EXPERIENCE GROUPINGS

(N = 188, Degrees of Freedom = 20)

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A. GENERAL	
1. Inventory Management and Control.....	18.48
2. Development of General Business Policy.....	15.22
3. Profit Planning.....	18.79
4. Decision Making.....	17.83
5. Problem Identification.....	25.45
6. Business Control Guides.....	24.65
7. Managing the Business for Short and Long Range Goals.....	28.27
8. Managing the Manager's Time.....	20.96
9. Security (shop lifting, other theft and employee pilfering).....	20.22
10. Business Law Needs.....	18.24
11. Insurance Management.....	22.43
12. Transportation Problems.....	20.71
B. MARKETING STRATEGIES	
1. Price Determination.....	19.78
2. Product Promotion.....	24.42
3. Marketing Segments (special groups of customers).....	22.64
4. Purchasing.....	20.96
5. Salesmanship.....	15.54
C. CUSTOMER SERVICE	
1. Human Relations.....	38.12 xx
2. Handling Problem Customers.....	26.62
D. PERSONNEL MANAGEMENT	
1. Directing Employee Leadership.....	21.96
2. Office Management.....	29.26
3. Labor Relations.....	30.14
4. Employee Motivation.....	33.86 x
5. Organizing and Staffing a Business.....	33.25 x
6. Employee Training.....	24.24
E. FINANCE MANAGEMENT	
1. Budget Planning Cost Control and Analysis.....	37.78 x
2. Source of Funds.....	18.98
3. Managing Accounts Receivable.....	34.32 x
4. Bookkeeping Methods.....	37.85 xx
5. Capital Planning and Investment.....	26.58
6. Financial Analysis of Entire Business.....	29.99
7. Computerized Records.....	28.61

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\* x = statistically significant chi square value at .05 level  
 xx = statistically significant chi square value at .01 level  
 xxx = statistically significant chi square value at .001 level

TABLE X

CHI SQUARE VALUES FOR COMPARISON OF ASSOCIATION\* BETWEEN  
RESPONSES TO THE 32 MANAGEMENT SKILL AREA QUESTIONS AND  
SELECTED AGE GROUPINGS OF MANAGERS

(N = 188, Degrees of Freedom = 12)

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<b>A. GENERAL</b>	
1. Inventory Management and Control.....	16.65
2. Development of General Business Policy.....	8.68
3. Profit Planning.....	12.68
4. Decision Making.....	8.78
5. Problem Identification.....	9.87
6. Business Control Guides.....	8.96
7. Managing the Business for Short and Long Range Goals.....	9.20
8. Managing the Manager's Time.....	17.94
9. Security (shop lifting, other theft and employee pilfering).....	16.01
10. Business Law Needs.....	10.73
11. Insurance Management.....	16.67
12. Transportation Problems.....	16.20
<b>B. MARKETING STRATEGIES</b>	
1. Price Determination.....	6.03
2. Product Promotion.....	8.42
3. Marketing Segments (special groups of customers).....	14.32
4. Purchasing.....	15.11
5. Salesmanship.....	10.50
<b>C. CUSTOMER SERVICE</b>	
1. Human Relations.....	7.15
2. Handling Problem Customers.....	6.01
<b>D. PERSONNEL MANAGEMENT</b>	
1. Directing Employee Leadership.....	16.21
2. Office Management.....	8.85
3. Labor Relations.....	23.49 x
4. Employee Motivation.....	26.71 xx
5. Organizing and Staffing a Business.....	15.14
6. Employee Training.....	18.43
<b>E. FINANCE MANAGEMENT</b>	
1. Budget Planning Cost Control and Analysis.....	13.18
2. Source of Funds.....	15.13
3. Managing Accounts Receivable.....	5.60
4. Bookkeeping Methods.....	6.24
5. Capital Planning and Investment.....	11.47
6. Financial Analysis of Entire Business.....	7.10
7. Computerized Records.....	18.91

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\* x = statistically significant chi square value at .05 level

xx = statistically significant chi square value at .01 level

xxx = statistically significant chi square value at .001 level

Association Between Responses to the 32 Management Skill Areas Questions and Selected Size of Business Grouping

Size of business was determined by using selected categories of full-time employees. The chi square values, found in Table XI, were derived by comparing the managers responses to the management skill questions within the size of business categories.

Responses to five management skills were found to be dependent on business size at the .05 level of significance. They are: managing the manager's time, labor relations, employee motivation, employee training and budget planning. Development of general business policy, organizing and staffing a business were dependent upon business size at the .01 level. There were two skills, bookkeeping methods and marketing segments, that were found to be statistically significant at the .001 level of probability.

An inspection of the frequency count data indicated five management skill areas; development of general business policy, managing the manager's time, employee motivation, organizing and staffing a business and budget planning were directly related to business size. As the business increased in size, the managers regarded these management skill areas as more important.

Association Between Responses to the 32 Management Skill Areas Questions and Selected Levels of Formal Education Groupings

The chi square values were computed by comparing the implement managers responses to the management skills by selected levels of education. These levels were: less than a high school graduate, high school graduate or equivalent, trade-technical-business school or some college, and a bachelors degree or more professional education.

TABLE XI

CHI SQUARE VALUES FOR COMPARISON OF ASSOCIATION\* BETWEEN  
 RESPONSES TO THE 32 MANAGEMENT SKILL AREA QUESTIONS AND  
 SELECTED SIZE OF BUSINESS GROUPINGS

(N = 188, Degrees of Freedom = 12)

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A. GENERAL		
1. Inventory Management and Control.....	18.14	
2. Development of General Business Policy.....	26.74	xx
3. Profit Planning.....	18.21	
4. Decision Making.....	14.02	
5. Problem Identification.....	9.37	
6. Business Control Guides.....	16.15	
7. Managing the Business for Short and Long Range Goals.....	20.99	
8. Managing the Manager's Time.....	22.91	x
9. Security (shop lifting, other theft and employee pilfering).....	16.54	
10. Business Law Needs.....	18.74	
11. Insurance Management.....	20.99	
12. Transportation Problems.....	11.70	
B. MARKETING STRATEGIES		
1. Price Determination.....	13.26	
2. Product Promotion.....	10.90	
3. Marketing Segments.....	34.15	xxx
4. Purchasing.....	10.69	
5. Salesmanship.....	13.56	
C. CUSTOMER SERVICE		
1. Human Relations.....	8.89	
2. Handling Problem Customers.....	9.46	
D. PERSONNEL MANAGEMENT		
1. Directing Employee Leadership.....	11.25	
2. Office Management.....	20.84	
3. Labor Relations.....	25.06	x
4. Employee Motivation.....	23.75	x
5. Organizing and Staffing a Business.....	27.45	xx
6. Employee Training.....	21.17	x
E. FINANCE MANAGEMENT		
1. Budget Planning Cost Control and Analysis.....	23.13	x
2. Source of Funds.....	15.77	
3. Managing Accounts Receivable.....	16.29	
4. Bookkeeping Methods.....	44.16	xxx
5. Capital Planning and Investment.....	17.73	
6. Financial Analysis of Entire Business.....	18.92	
7. Computerized Records.....	9.80	

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\* x = statistically significant chi square value at .05 level

xx = statistically significant chi square value at .01 level

xxx = statistically significant chi square value at .001 level

Managers responses to two skill area questions, business law needs and marketing segments, were not independent of educational level at the .05 level of significance. Employee motivation was dependent on level of education at the .01 level. The only skill which was dependent upon educational background at the .001 level of probability was security.

The chi square scores of management skill responses compared with in the levels of education are found in Table XII.

Inspection of the frequency count data indicated managers concern for employee motivation increased as the level of formal education increased.

TABLE XII

CHI SQUARE VALUES FOR COMPARISON OF ASSOCIATION\* BETWEEN  
RESPONSES TO THE 32 MANAGEMENT SKILL AREA QUESTIONS AND  
SELECTED LEVELS OF FORMAL EDUCATION GROUPINGS

(N = 188, Degrees of Freedom = 12)

<b>A. GENERAL</b>	
1. Inventory Management and Control.....	19.16
2. Development of General Business Policy.....	7.71
3. Profit Planning .....	15.65
4. Decision Making .....	12.40
5. Problem Identification .....	18.22
6. Business Control Guides.....	11.73
7. Managing the Business for Short and Long Range Goals.....	7.28
8. Managing the Manager's Time .....	7.35
9. Security (shop lifting, other theft and employee pilfering) ..	36.67 xxx
10. Business Law Needs.....	22.46 x
11. Insurance Management.....	15.07
12. Transportation Problems.....	16.42
<b>B. MARKETING STRATEGIES</b>	
1. Price Determination .....	14.58
2. Product Promotion .....	12.21
3. Marketing Segments (special groups of customers).....	22.97 x
4. Purchasing .....	10.95
5. Salesmanship.....	17.43
<b>C. CUSTOMER SERVICE</b>	
1. Human Relations .....	9.38
2. Handling Problem Customers .....	15.76
<b>D. PERSONNEL MANAGEMENT</b>	
1. Directing Employee Leadership.....	13.61
2. Office Management.....	9.80
3. Labor Relations .....	12.35
4. Employee Motivation .....	29.16 xx
5. Organizing and Staffing a Business .....	12.97
6. Employee Training .....	12.23
<b>E. FINANCE MANAGEMENT</b>	
1. Budget Planning Cost Control and Analysis.....	8.66
2. Source of Funds.....	20.94
3. Managing Accounts Receivable.....	15.78
4. Bookkeeping Methods.....	20.42
5. Capital Planning and Investment .....	11.60
6. Financial Analysis of Entire Business .....	15.34
7. Computerized Records.....	8.98

\* x = statistically significant chi square values at .05 level

xx = statistically significant chi square values at .01 level

xxx = statistically significant chi square values at .001 level

## CHAPTER VI

### RESPONSE OF IMPLEMENT MANAGERS TO POSSIBLE SOURCES OF MANAGEMENT EDUCATION PROGRAMS

The information in this chapter was based on a question asking the implement managers which educational agencies they would look to as possible sources of a management education program. The questionnaire listed eight agencies to which the managers could indicate their preference regarding the part each agency should play in providing an education program. An open end question allowing respondents to write in other agencies and rate them was also included.

The ratings managers selected from were: (1) agency should provide this program, (2) maybe this agency should provide this program, (3) this agency should assist other agencies in providing this program, (4) agency should not be involved in this program. The response frequencies are shown in Table XIII.

#### Implement Managers Ratings of Educational Agencies as Possible Sources of Management Education Programs

The implement managers rated junior colleges and vocational-technical schools as the agencies they would look to most often as a source of management education programs. Almost 67 percent of the managers thought junior colleges and vocational-technical schools "should provide" or "maybe provide" an educational program. Only 8 percent of the respondents indicated they "should not be involved." The remaining 24.5 percent of the managers preferred that these agencies should assist in providing such a program.



TABLE XIII

RESPONSE FREQUENCY OF 188 FARM IMPLEMENT MANAGERS TOWARD SELECTED  
EDUCATIONAL AGENCIES AS A POSSIBLE SOURCE OF A MANAGEMENT  
EDUCATION PROGRAM

	<i>* Should Provide Program</i>		<i>Maybe Should Provide Program</i>		<i>Should Assist Others</i>		<i>Should Not Be Involved</i>		<i>Other</i>	
	Fqn.	%	Fqn.	%	Fqn.	%	Fqn.	%	Fqn.	%
a. Local or area public school	25	13.3	34	18.1	65	34.6	59	31.4	5	2.7
b. state junior college or vocational- technical school	71	37.8	54	28.7	46	24.5	15	8.0	2	1.1
c. state college or state university	65	34.6	55	29.3	45	23.9	20	10.6	3	1.6
d. private business or technical school	39	20.7	69	36.7	50	26.6	28	14.9	2	1.1
e. North Dakota Cooperative Extension Service	26	13.8	53	28.2	64	34.0	40	21.3	5	2.7
f. Small Business Administration	20	10.6	44	23.4	60	31.9	61	32.4	3	1.6
g. The line company (John Deere, Case, International Harvester, etc.) with which your firm currently does large portion of its business	59	31.4	39	20.7	68	36.2	18	9.6	4	2.1
h. North Dakota Implement Dealers Association	38	20.2	49	26.1	76	40.4	20	10.6	5	2.7
i. other	3	1.6	0	0	5	2.7	7	3.7	173	92.0
TOTAL	188	100.0	188	100.0	188	100.0	188	100.0	188	100.0

\*N for each agency = 188

State colleges or universities were chosen almost 64 percent of the time by managers in favor of these agencies "providing" or "maybe providing" a management program. Nearly 24 percent of the respondents indicated state colleges should assist. The managers indicating state colleges "should not be involved" in providing a management education program comprised only 10.6 percent of the group.

Private business or technical schools were the third preference of implement managers in selecting the educational agency they would look to regarding management education. Fifty-eight percent of the managers were in favor of having private business or technical schools "provide" or "maybe provide" management education. There were 26.6 percent of the respondents who indicated these agencies "should assist" others in providing such a program. Nearly 15 percent of the managers did not prefer this agency to be involved in presenting a management education program.

The line companies were selected by 52.1 percent of the managers to "provide" or "maybe provide" management education. Thirty-six percent of the respondents indicated they would like the line companies to assist in a management program. Only 9.6 percent of the managers did not feel this agency should be involved in a management education program.

Forty-six and three tenths percent of the respondents indicated they would look to their professional organization, the North Dakota Implement Dealers Association, to "provide" or "maybe provide" a management educational program. Seventy-six or 40.4 percent of the group replying preferred that this agency "assist" others in providing such a program. There were 20 managers or 10.6 percent who indicated the association "should not be involved" in conducting a management education program.

The North Dakota Cooperative Extension Service was chosen by 41 percent of the respondents to "provide" or "maybe provide" a management education program. Thirty-four percent or 64 managers indicated they would expect the Cooperative Extension Service to "assist" other agencies in conducting a management education program. There were 40 managers or 21.3 percent of this group who did not want this agency to be involved in a management program.

The implement managers gave the Small Business Administration and the local public schools almost similar ratings in the three major categories. There were 31.4 percent of the managers who indicated local schools "should provide" or "maybe provide" a management education program and 34 percent who responded to the same categories for the Small Business Administration. The local schools and the Small Business Administration were given ratings of 34.6 and 21.9 percent respectively by managers when asked if they agency "should assist" others with such a program. Thirty-one and four tenths percent of the managers indicated local schools "should not be involved" and 32.4 percent did not look to the Small Business Administration for a management education program.

Fifteen managers responded to the open end question regarding other possible sources of management education programs. The replies to this question were too divergent to properly summarize in this study.

## CHAPTER VII

### SUMMARY AND CONCLUSIONS

#### Significance of Study

This study was done in partial fulfillment of one of the major objectives as stated in the proposal of the Farm Management Education Research and Development Project. This project was funded by the State Board for Vocational Education and conducted by the Agricultural Education Department, North Dakota State University, Fargo, North Dakota. The specific objective states: "to examine the use of the variation of the Farm Management Education Program for other agricultural businesses management needs."<sup>16</sup>

#### Statement of the Problem

It was the purpose of this study to determine the attitudes of the farm implement dealership managers in North Dakota towards their needs for selected areas in management education. The specific objectives of the study were:

- a. To determine the attitude of North Dakota farm implement dealership managers toward their need for selected areas of management education
- b. To determine the attitudes of North Dakota farm implement dealership managers toward various agencies or groups as possible sources of management education
- c. To obtain profile information of the North Dakota implement dealership managers as to their:
  - age
  - level of formal education
  - management tenure
  - size of business
  - type of business managed

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<sup>16</sup>Farm Management Education Research and Development Project (Unpublished research project proposal, North Dakota State University, Fargo, 1972), p. 1.

- d. To compare the attitudes of North Dakota farm implement dealership managers towards their need for management education according to:

- number of full-time employees
- age
- level of education
- management tenure

### Questionnaire

Direct-mail questionnaires were sent to 359 farm implement dealership managers in North Dakota on April 13, 1973. One hundred and eighty-eight usable replies were received.

### Characteristics of Implement Managers

1. Most managers in this study, 85.1 percent, either partially or completely owned the implement businesses which they managed. Fourteen or 7.4 percent of the managers managed a company owned store and 8 or 4.3 percent managed for a local cooperative. Only 6 or 3.2 percent of the managers returning questionnaires managed for a private implement store they did not own.

2. There were 29 managers or 15.4 percent who reported having 4 or fewer years of experience managing an implement business. An identical number of managers were recorded in the 10 to 15 year group. Forty managers or 21.3 percent reported having had 5 to 10 years of managerial experience and 16 percent indicated they had 16 to 20 years experience. There were 60 managers or 31.9 percent of the total group who had 21 or more years experience in managing an implement business.

3. Forty-four percent of the respondents indicated their businesses employed 5 to 10 full-time workers employed eleven or more months. There were 25.5 percent of the implement managers who reported 4 or fewer full-time personnel. Twenty percent stated they had 10 to 15 people employed

and only 10.1 percent of the managers reported having more than 16 full-time workers. The average part-time help per dealership throughout the year was .88 workers.

4. There were 28 or 14.9 percent of the managers reporting who indicated they had not completed high school. Thirty-one percent had finished high school but had not received any formal post secondary education. Almost 34 percent indicated they had received some trade, technical, business or college education. Twenty and seven tenths percent of the respondents reported they had received a bachelors degree or bachelors degree plus other professional education.

5. Thirty-one or 16.5 percent of the managers replying were 34 years of age or younger. There were 49 managers or 26.1 percent included in the 35 to 44 year age group and 28.7 percent of the managers were in the 45 to 54 year old age category. Fifty-four managers or 28.7 percent reported being 55 years of age or older.

#### Mean Scores of 32 Management Skill Areas as Rated by Implement Dealership Managers

Seven management skills had a mean score above 4.00. The skills managers felt were "very useful" in an education course were: inventory management and control, profit planning, decision making, salesmanship, human relations, purchasing and managing accounts receivable.

One-third of the 21 skill areas with a mean score between 3.00 and 3.99 were above a mean of 3.84. Seventeen of the 21 management skill areas had a mean score in excess of 3.65. The general areas managers indicated were "important" dealt with the personnel and financial aspects of the implement business. These areas included the importance of employee leadership, employee motivation, labor relations, training and office man-

agement as well as investment planning, business analysis, funds sources, budget planning and bookkeeping methods.

Management skills in which managers had the least interest were computerized records, security, special marketing segments and business law needs. All had mean scores of less than 3.00 and ranged to a low of 2.46 for computerized records.

#### Chi Square Values for Association Between Management Skill Area Question Responses with Selected Managerial Groupings

Chi square values were derived by comparing the managers responses to the 32 management skill area questions by the managers' age, size of business, years of management experience and level of education.

There were a total of 128 chi square values computed and of this group, 21 management skills were found to be dependent on either size of business, level of education, years management experience or managers' age at the .05 percent level of probability or lower.

There were 9 management skills dependent at the .05 level of significance or lower when responses to the management skill areas were compared by size of business, 6 skill areas by management tenure, 4 when compared by educational levels and 2 when compared by age categories.

The associations of six management skills responses were statistically significant at the .05 percent level of probability or lower with more than one managerial grouping. They are; bookkeeping, budget planning and cost control, organizaing and staffing a business, employee motivation, labor relations and marketing segments.

Only one management skill question, employee motivation, was associated at the .05 level of significance or below in more than two

of the managerial groupings. It was found to have a significant chi square value in all four managerial groupings used for comparisons.

Frequency Response of Managers Toward Educational Agencies as Possible Sources of Management Education Programs

The implement managers were asked to respond to questions regarding educational agencies as possible sources of management education programs. The managers were asked to respond to each specific agency on the following basis: 1. agency should provide a management program, 2. maybe this agency should provide a management program, 3. this agency should assist and 4. agency should not be involved in presenting a management program.

Sixty-six percent of the managers indicated junior colleges and vocational-technical schools "should" or "maybe should" provide a management education program while 63 percent reported a state college or university "should provide" or "maybe provide" such a program. There were 57.4 percent of the managers who indicated private trade and business schools "should" or "maybe should" participate and 52.1 percent of the respondents who reported the implement line companies "should" or "maybe should" provide a management program. Eighty-seven managers or 46.3 percent indicated their professional organization, the North Dakota Implement Dealers Association, "should" or "maybe should" provide a program and 40.4 percent suggested they "assist" some other agency. The North Dakota Cooperative Extension Service was selected 41 percent of the time as a management education source and 34 percent of the managers indicated they "should assist" another agency.

The Small Business Administration and local public schools were



rated about equally. Approximately one-third of the managers selected both agencies to "provide" or "maybe provide" a program, one-third indicated they "should assist" and the remaining one-third of the managers reported they did not feel these agencies should be involved in a management education program.

### Conclusions

1. All management skill areas were regarded by implement managers as being relatively important in a management education program. The managers rated 31 of 32 management skill areas above the midpoint of the "somewhat important" and "important" rating categories.

2. Farm implement managers indicated the most interest in including the following management skill areas in a management education program: inventory management and control, managing accounts receivable, salesmanship, and human relations.

3. Approximately two-thirds of the implement managers regard junior colleges, vocational-technical schools, state colleges and state universities as a possible source of management education programs. Other sources, arranged in descending order of preference as a management program source, are: private trade and business schools, implement line companies, North Dakota Implement Dealers Association, North Dakota Cooperative Extension Service, local public schools and Small Business Administration.

4. Nearly 29 percent of the implement managers in this study were 55 years of age or older. It is very probable that one-fourth to one-third of these positions will turn-over in the next decade.

5. More than 85 percent of the managers either partially or completely owned the business they managed. Other implement managers were

employed by company owned stores, local cooperatives or private implement stores in which they had no equity.

6. One-fourth of the managers reported having four or fewer full-time employees. Sixty-nine percent of the managers employed ten or fewer workers and 89 percent indicated their business employed 15 or fewer employees in their farm implement dealership.

7. Almost one-third of the managers in this study had finished high school but had not received more formal education. More than one-third of the respondents indicated receiving post high school education other than a four year college degree, of some type. Approximately 20 percent of the implement managers reported having a bachelors degree or four year degree plus other professional education.

8. In analyzing managerial groupings by size of business and years of management experience, there are more differences regarding opinions concerning needed management skill areas to be included in a management education program than in analyzing managerial groupings by age or level of education.

9. Five management skill areas directly related to the size of business are: development of general business policy, managing the manager's time, employee motivation, organizing and staffing a business and budget planning. As the size of business increased, managers indicated more concern about these skill areas being included in a management education program.

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APPENDIX A  
LETTERS AND QUESTIONNAIRE

NORTH DAKOTA STATE UNIVERSITY  
OF AGRICULTURE AND APPLIED SCIENCE  
FARGO, NORTH DAKOTA 58102

April 11, 1973

TO: Members of the North Dakota Implement Dealers Association  
FROM: Marvin Kleene and Dr. Donald Priebe, Agricultural Education Dept.

We need some information only you can provide. Your opinion! We hope to determine which areas of management skills you feel are important in an agribusiness management education program and who you would look to for providing such programs.

Will you please take a few minutes to complete the enclosed questionnaire. Your ideas are needed.

This survey is being conducted by the Department of Agricultural Education, North Dakota State University, in cooperation with the North Dakota Implement Dealers Association. The information compiled from this survey may be useful in planning future agribusiness management education programs.

Your kind cooperation is much appreciated.

- I. Assume that an agricultural business management education program were available for you in your community or area. Please rate each of the following management skills based on how important you believe it to be as a part of such an educational program. Check only one box for each management area listed.

Essential  
Very Important  
Important  
Somewhat Important  
Not Useful

A. GENERAL

1. Inventory Management and Control.....
2. Development of general business policy.....
3. Profit Planning.....
4. Decision Making.....


5. Problem Identification.....
6. Business Control Guides.....
7. Managing the Business for Short and Long Range Goals.....
8. Managing the Manager's Time.....


9. Security (shop lifting, other theft and employee pilfering).....
10. Business Law Needs.....
11. Insurance Management.....
12. Transportation Problems.....


B. MARKETING STRATEGIES

1. Price Determination.....
2. Product Promotion .....
3. Marketing Segments (special groups of customers).....
4. Purchasing .....
5. Salesmanship.....


C. CUSTOMER SERVICE

1. Human Relations.....
2. Handling Problem Customers.....


D. PERSONNEL MANAGEMENT

1. Directing Employee Leadership.....
2. Office Management.....
3. Labor Relations.....
4. Employee Motivation.....
5. Organizing and Staffing a Business.....
6. Employee Training.....


E. FINANCE MANAGEMENT

1. Budget Planning Cost Control and Analysis...
2. Source of funds.....
3. Managing Accounts Receivable.....
4. Bookkeeping Methods.....
5. Capital Planning and Investment.....
6. Financial Analysis of Entire Business.....
7. Computerized Records.....


- II. Again assume that an agribusiness management education program was to be offered in your community or surrounding area. Such a program could possibly be offered by different agencies or combinations of agencies. Please rate each of the following agencies according to the part you believe each should play in providing the management education program.

Ratings are:

1. Agency should provide program.
2. Maybe this agency should provide this program.
3. Agency should assist another agency in providing this program.
4. Agency should not be involved in the program.

Circle only one number for each category below.

- |  |   |   |   |   |
|--|---|---|---|---|
| a. Local or area public school.....  | 1 | 2 | 3 | 4 |
| b. State junior college or vocational-technical school..   | 1 | 2 | 3 | 4 |
| c. State college or state university..   | 1 | 2 | 3 | 4 |
| d. Private business or technical school.....   | 1 | 2 | 3 | 4 |
| e. North Dakota Cooperative Extension Service.....   | 1 | 2 | 3 | 4 |
| f. Small Business Administration.....  | 1 | 2 | 3 | 4 |
| g. The line company (John Deere, Case, International Harvester, etc.) with which your firm currently does a large portion of its business..... | 1 | 2 | 3 | 4 |
| h. North Dakota Implement Dealers Association.....   | 1 | 2 | 3 | 4 |
| i. Other _____   | 1 | 2 | 3 | 4 |

III. OTHER INFORMATION: Please complete the following questions.

1. Which category best describes your current managerial position? Check only one.
  - a. \_\_\_\_\_ Manager of company store.
  - b. \_\_\_\_\_ Manager of private business but do not own.
  - c. \_\_\_\_\_ Manager of business you partially or completely own.
  - d. \_\_\_\_\_ Manager for local cooperative.
2. How many total years have you been employed as a manager in a farm implement business?
 

a. _____ 4 or less	c. _____ 11 to 15	e. _____ 21 to 25
b. _____ 5 to 10	d. _____ 16 to 20	f. _____ 26 or more
3. Number of full-time employees working eleven months or more including yourself? Check only one.
 

a. _____ 4 or less	c. _____ 11 to 15	e. _____ 21 or more
b. _____ 5 to 10	d. _____ 16 to 20	
4. How many seasonal or part-time employees have you employed in the past year in each of the following months?
 

_____ January	_____ May	_____ September
_____ February	_____ June	_____ October
_____ March	_____ July	_____ November
_____ April	_____ August	_____ December



- 5.a. Does the company with which you are affiliated (International Harvester, John Deere, Case, etc.) have a management training program available which is designed to up-grade and expand your skills as a manager?

\_\_\_\_ yes                      \_\_\_\_ no

- 5.b. Are you now or have you been enrolled in such a program in the past two years?

\_\_\_\_ yes                      \_\_\_\_ no

6. Level of your formal education. Check only one.

- a. \_\_\_\_ 8th grade or less
- b. \_\_\_\_ Grade 9, 10 or 11
- c. \_\_\_\_ High school graduate or equivalent
- d. \_\_\_\_ Trade, technical or business school
- e. \_\_\_\_ Some college, but less than a Bachelors degree
- f. \_\_\_\_ Bachelors degree
- g. \_\_\_\_ Bachelors degree plus other professional education

7. Your age group.

- |                                    |                               |
|------------------------------------|-------------------------------|
| a. ____ 25 years of age or younger | d. ____ 45 to 54              |
| b. ____ 26 to 34                   | e. ____ 55 to 64              |
| c. ____ 35 to 44                   | f. ____ 65 years old or older |

NORTH DAKOTA STATE UNIVERSITY  
OF AGRICULTURE AND APPLIED SCIENCE  
FARGO, NORTH DAKOTA 58102

TO: Members of the North Dakota Implement Dealers Association

FROM: Marvin Kleene and Dr. Donald Priebe  
Agricultural Education Department, North Dakota State University

DATE: April 25, 1973

About two weeks ago you received a questionnaire which is being used to gather information about management skills you feel are important in a management education program.

We realize this is a busy time of the season and you may not have had time to reply. Your reply is important. You are the only person who can give us your ideas, and we need your ideas. Please take a few minutes to complete the questionnaire and return it in the enclosed self-addressed stamped envelope.

This study is being done by the Agricultural Education Department, North Dakota State University, in cooperation with the North Dakota Implement Dealers Association.

Your prompt return of the questionnaire will be much appreciated.

NORTH DAKOTA STATE UNIVERSITY  
OF AGRICULTURE AND APPLIED SCIENCE  
FARGO, NORTH DAKOTA 58102

TO: Members of the North Dakota Implement Dealers Association

FROM: Dr. Donald Priebe and Marvin Kleene, Department of Agricultural  
Education, North Dakota State University

DATE: May 3, 1973

About three weeks ago you received a questionnaire which is being used to gather information about management skills you feel are important in a management education program.

We realize this is a busy time of the season and you may have mislaid your questionnaire or have not had time to reply. Your reply is important. You are the only person who can give us your ideas, and we need your ideas. Enclosed is another questionnaire. Please take a few minutes to complete the survey and return it in the enclosed self-addressed, stamped envelope.

This study is being done by the Agricultural Education Department, North Dakota State University, in cooperation with the North Dakota Implement Dealers Association.

Your prompt return of the questionnaire will be much appreciated. If you have already returned your survey, thank you for your help.

## APPENDIX B

### SUMMARY OF FREQUENCY RESPONSES OF 32 MANAGERIAL SKILL AREA QUESTIONS

FREQUENCY OF RESPONSES TO THE 32 MANAGEMENT  
SKILL AREA QUESTIONS

	<i>Essential</i>	<i>Very Important</i>	<i>Important</i>	<i>Somewhat Important</i>	<i>Not Useful</i>
<b>A. GENERAL</b>					
1. Inventory Management and Control.....	117	43	21	4	3
2. Development of General Business Policy.....	42	72	62	5	4
3. Profit Planning.....	76	68	33	5	4
4. Decision Making.....	81	65	31	6	3
5. Problem Identification.....	42	56	65	19	5
6. Business Control Guides.....	28	52	78	21	6
7. Managing the Business for Short and Long Range Goals.....	43	71	58	10	4
8. Managing the Manager's Time.....	57	60	47	13	7
9. Security (shop lifting, other theft and employee pilfering).....	13	31	67	64	10
10. Business Law Needs.....	16	39	63	63	6
11. Insurance Management.....	18	39	78	40	12
12. Transportation Problems.....	17	40	78	46	6
<b>B. MARKETING STRATEGIES</b>					
1. Price Determination.....	58	67	49	7	5
2. Product Promotion.....	34	85	56	8	3
3. Marketing Segments (special groups of customers)...	15	31	76	49	12
4. Purchasing.....	69	78	34	4	3
5. Salesmanship.....	96	67	20	4	1
<b>C. CUSTOMER SERVICE</b>					
1. Human Relations.....	78	71	25	9	2
2. Handling Problem Customers.....	66	73	31	13	4
<b>D. PERSONNEL MANAGEMENT</b>					
1. Directing Employee Leadership.....	53	78	45	7	3
2. Office Management.....	40	70	63	12	2
3. Labor Relations.....	39	66	68	12	3
4. Employee Motivation.....	52	67	55	8	3
5. Organizing and Staffing a Business.....	46	65	54	16	4
6. Employee Training.....	44	75	58	7	3
<b>E. FINANCE MANAGEMENT</b>					
1. Budget Planning Cost Control and Analysis.....	63	58	47	11	7
2. Source of Funds.....	70	64	38	11	4
3. Managing Accounts Receivable.....	84	74	24	2	2
4. Bookkeeping Methods.....	57	57	60	12	2
5. Capital Planning and Investment.....	43	66	63	11	3
6. Financial Analysis of Entire Business.....	62	61	50	10	4
7. Computerized Records.....	13	20	52	55	46

N = 188

APPENDIX C  
SUMMARY OF CHI SQUARE VALUES

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52

CHI SQUARE VALUES FOR COMPARISON OF ASSOCIATION BETWEEN THE 32 MANAGEMENT SKILL  
AREA QUESTIONS AND SELECTED MANAGEMENT CATEGORIES  
(N = 188)

	Years Management Experience 20 <sup>0</sup> Freedom	Size of Business 12 <sup>0</sup> Freedom	Level of Education 12 <sup>0</sup> Freedom	Age 12 <sup>0</sup> Freedom
1. Inventory Management and Control	18.48	18.14	19.16	16.65
2. Development of General Business Policy	15.22	26.74 xx	7.71	8.68
3. Profit Planning	18.79	18.21	15.65	12.68
4. Decision Making	17.83	14.02	12.40	8.78
5. Problem Identification	25.45	9.37	18.22	9.87
6. Business Control Guides	24.65	16.15	11.73	8.96
7. Managing the Business for Short and Long Range Goals	28.27	20.99	7.28	9.20
8. Managing the Manager's Time	20.96	22.91 x	7.35	17.94
9. Security (shop lifting, other theft and employee pilfering)	20.22	16.54	36.67 xxx	16.01
10. Business Law Needs	18.24	18.74	22.46 x	10.73
11. Insurance Management	22.43	20.99	15.07	16.67
12. Transportation Problems	20.71	11.70	16.42	16.20
13. Price Determination	19.78	13.26	14.58	6.03
14. Product Promotion	24.42	10.90	12.21	8.42
15. Marketing Segments (special groups of customers)	22.64	34.15 xx	22.97 x	14.32
16. Purchasing	20.96	10.69	10.95	15.11
17. Salesmanship	15.54	13.56	17.43	10.50
18. Human Relations	38.12 xx	8.89	9.38	7.15
19. Handling Problem Customers	26.62	9.46	15.76	6.01
20. Directing Employee Leadership	21.96	11.25	13.61	16.21
21. Office Management	29.26	20.84	9.80	8.85
22. Labor Relations	30.14	25.06 x	12.35	23.49 x
23. Employee Motivation	33.86 x	23.75 x	29.16 xx	26.71 xx
24. Organizing and Staffing a Business	33.25 x	27.45 xx	12.97	15.41

(table continued)

# CHI SQUARE VALUES (continued)

	Years Management <u>Experience</u> 20 <sup>0</sup> Freedom	Size of <u>Business</u> 12 <sup>0</sup> Freedom	Level of <u>Education</u> 12 <sup>0</sup> Freedom	Age <u>12<sup>0</sup> Freedom</u>
25. Employee Training	24.24	21.17	12.23	18.43
26. Budget Planning Cost Control and Analysis	37.78 x	23.13 x	8.66	13.18
27. Source of Funds	18.98	15.77	20.94	15.13
28. Managing Accounts Receivable	34.32 x	16.29	15.78	5.60
29. Bookkeeping Methods	37.85 xx	44.16 xx	20.42	6.24
30. Capital Planning and Investment	26.58	17.73	11.60	11.47
31. Financial Analysis of Entire Business	29.99	18.92	15.34	7.10
32. Computerized Records	28.61	9.80	8.98	18.91

x = .05 probability level

xx = .01 probability level

xxx = .001 probability level