

# Farm Credit Competencies Needed and Possessed by Selected Nebraska Young Farmers/Ranchers

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Agriculture has changed a great deal, particularly during the past five years. Lower prices for commodities and higher production costs, including higher interest rates, have made it necessary for farmers to become better financial managers. "The farm of the future will be treated financially like any other business--it will have to demonstrate profitability before a bank will finance its operations" (Congress of the United States, 1986).

The Iowa Department of Agriculture (1985) and others concluded that rapid economic and social change is not a new phenomenon in agriculture. Agriculture has in fact been adjusting to conditions of greater efficiency since the beginning of recorded history. What is occurring in agriculture at the present time (farms failing because equity is exhausted or operating credit is denied), has little to do with efficiency but rather the amount of debt that is held is excessive as measured by the economic environment of the 1980's.

Harl (1985) expanded upon the present crisis by addressing the massive adjustment taking place in agriculture and the increased demand for educational services for adults remaining in farming. He feels strongly about the heavy emphasis needed in the areas of management skills, cost structure, financial management, financing arrangements, utilization of non-farm sourced equity capital and marketing skills.

The investigator found no current studies that had researched the financial management competencies needed to succeed in agriculture. Additionally, the review of literature revealed no current studies that dealt with the specific competencies required for the successful use of farm credit. This lack of research, in combination with the current ongoing farm credit crisis, magnifies the need for a study in this area.

## Purpose of Study

The purpose was to identify and determine differences between the mean level of competencies possessed and the mean level of competencies needed in farm credit for members of the Nebraska Young Farmer/Ranchers Education Association. Stated as a null hypothesis, there is no significant difference between the mean level of competencies possessed and the mean level of competencies needed in farm credit by Nebraska Young Farmers/Ranchers Education Association members.

## Research Method and Procedure

The 687 current members of the Nebraska Young Farmers/Ranchers Education Association, as identified in 1985-86 membership directory, were the target population for the study. A random sample stratified across the state was used for subject selection. The 150 Nebraska Young Farmers/Ranchers Education Association members selected for the sample represented 21% of the target population.

The questionnaire used in the study was a modified version of an instrument originally used by Anderson (1962) in Iowa. A panel of 16 farm credit specialists was used to validate the questionnaire. Members of the panel included representative farmers, agricultural economists, and several professional farm credit officers. Initially, a form was sent to each panel member asking each to list the competencies needed by farmers in farm credit. When all of the suggested competencies had been received, a sub-committee of the panel, composed of a banker and an agricultural economist, combined the individual lists into a complete list of competencies. The competencies were then divided into the two groups defined as understandings and abilities.

The composite list of competencies was sent to all panel members for their final recommendations. The revised questionnaire consisted of 43 competencies, (17 abilities and 26 understandings) to which the respondents were asked to respond using a Likert-type scale in evaluating the degree to which competencies were needed and possessed (1 = None to 5 = Very Much). Before the questionnaire was sent to the random sample, it was pilot tested to check for reliability. The reliability for the final instrument yielded a alpha of .94.

A cover letter, the questionnaire, and a self-addressed postage-paid envelope were sent to the random sample of 150 Nebraska Young Farmers/Ranchers. Approximately two weeks later, a follow-up letter was sent to the non-respondents. Ten days after the follow-up letter was mailed, a telephone call was placed to a 20% random sample of the 55 participating members who had not returned their questionnaire. A comparison of respondents and nonrespondents indicated that there were no significant differences between the two groups. Of the 150 questionnaires sent, 103 (68% ) were returned.

The data analysis included frequencies, means and standard deviations. The analysis also included the **t-test** and a one-way analysis of variance. A Tukey-HST post-hoc test was used to identify significance at both the .05 and .01 levels.

### Findings

To assist in data reporting, the competencies were divided into two groups; abilities and understandings. Table 1 shows the mean scores and  $\alpha$ -values for understanding of competencies needed and competencies possessed by the Nebraska Young Farmers/Ranchers Educational Association members. Of the 26 competencies identified as understanding, three were statistically significant, with more understanding needed than possessed (.05 alpha level). These three were: (a) the importance of a good credit rating, (needed,  $x = 4.42$ ; possessed,  $x = 4.25$ ); (b) the need for consolidation of all loans (needed,  $x = 3.47$ ; possessed,  $x = 3.22$ ); and, (c) the ratio of gross income to liabilities (needed,  $x = 4.01$ ; possessed,  $x = 3.51$ .) At the .01 level, 20 of the 26 competencies dealing with understandings were significantly different, In all but one case, mean scores of needed competencies were reported as greater than those possessed. Understanding of family living expenses showed a higher possessed mean score (3.70) than needed (3.58). Understanding of repayment capacity (4.54) and cash flow statements (4.50) showed the most need.

Table 1

Mean Scores and t-values for "Understanding of" Competencies Needed and Possessed by Members of The Nebraska Young Farmers/Ranchers Education Association

Rank	Competencies	M	Mean Score		t-Value
			Needed	Possessed	
1	Your repayment capacity	4.54	3.81	7.03**	
		SD	0.99		
2	A cash flow statement	4.50	3.81	5.89**	
		0.88	1.13		
3	The importance of a good credit rating	4.42	4.25	2.15**	
		0.84	0.71		
4	Risk and uncertainty of using credit	4.38	3.65	6.71**	
		0.67	0.92		
5	Repayment of terms and options	4.29	3.63	6.47**	
		0.82	0.90		
6	Your own attitude toward "being in debt"	4.23	4.03	1.71	
		1.01	0.83		
7	Importance of adequate operating reserves	4.22	3.41	6.71**	
		0.93	0.97		
8	Legal terms concerning notes, mortgages	4.21	3.34	7.03**	
		0.93	0.97		
9	Net farm income	4.20	3.85	3.36**	
		0.87	0.91		
10	Relation of net cash income to liabilities	4.18	3.52	5.28**	
		0.89	1.06		
11	Priority of claims on income	4.13	3.36	7.90**	
		0.68	1.11		
12	Ratio of assets to liabilities	4.12	3.59	4.38**	
		0.19	1.12		
13	Procedure used in farm loans	4.10	3.64	4.04**	
		0.92	0.90		
14	Capital and its relation to other farming resources	4.06	3.29	8.80**	
		0.72	0.83		
15	Loan Security requirements	4.03	3.54	4.75**	
		0.75	0.94		
16	Purchase contracts for land, implements, etc.	4.05	3.31	7.14**	
		0.89	1.03		
17	Ratio of gross income to liabilities	4.01	3.51	4.13**	
		0.85	1.08		
18	Sales contracts for soybeans, beef, etc.	3.96	3.25	6.86**	
		0.89	1.17		
19	Methods of charging interest	3.95	3.39	4.93**	
		0.81	1.09		
20	Rental and leasing arrangements	3.92	3.35	5.96**	
		0.69	0.89		
21	Availability of government emergency loans	3.68	2.73	7.35**	
		1.03	1.21		
22	Crop insurance as a means of reducing risk	3.66	3.47	1.77	
		1.10	1.19		
23	Family living expenses	3.58	3.70	-1.30	
		0.85	0.86		

(table continues)

Rank	Competencies	Mean Score		&-Value
		Needed	Possessed	
24	Credit life insurance	3.55	3.17	3.33**
		0.87	1.23	
25	Need for consolidation of all loans	3.47	3.22	2.55**
		0.89	1.03	
26	Relationships between farm and home (consumer) credit	3.44	3.11	2.71**
		0.89	0.99	

**Note.** 1 = none; 5 = very much. \*  $p < .05$ ; \*\*  $p < .01$ .

Sixteen of the 17 competencies identified as abilities (Table 2) were found to be statistically significant at the .01 alpha level. The only ability competency that was not statistically significant was the ability to differentiate between short term, intermediate, and long term credit (needed,  $x = 3.93$ ; possessed,  $x = 3.85$ ). Keeping complete and accurate farm records was reported as being the most in need with respect to ability.

Table 2  
Mean Scores and t-values for "Abilities" Competencies Needed and Possessed by Members of the Nebraska Young Farmers/Ranchers Education Association

Rank	Competencies	Mean Score		&-Value
		Needed	Possessed	
1	Keep complete and accurate farm records	4.56	3.86	7.48*
		0.70	1.08	
2	Analyze and interpret farm records and results	4.43	3.60	8.76*
		0.80	0.92	
3	Gain confidence of lenders	4.38	3.80	6.86*
		0.76	0.92	
4	Prepare and interpret a net worth statement	4.25	3.72	4.64*
		0.85	1.03	
5	Plan repayment schedules to fit expected income	4.23	3.57	8.15*
		0.86	0.93	
6	Effectively communicate with credit representatives	4.22	3.73	5.48*
		0.88	1.01	
7	Budget anticipated costs and returns	4.18	3.41	8.02*
		0.85	0.97	
8	Distinguish between actual needs and mere desires	4.16	3.81	2.87*
		0.95	1.05	
9	Prepare (profit and loss) statement from current year	4.15	3.51	6.89*
		0.87	1.18	
10	Determine total "least cost" credit sources for financing	4.15	3.25	8.84*
		0.96	1.09	
11	Relate present credit plans to long-term plans	4.12	3.42	7.24*
		0.88	1.05	
12	Determine own credit strengths and weaknesses	4.11	3.51	6.08*
		0.82	0.95	

(table continues)

Rank	Competencies	Mean Score		t-Value
		Needed	Possessed	
13	Plan credit needs on an annual basis	4.11	3.55	5.78*
14	Evaluate available credit sources	4.04	3.37	6.07*
15	Compute management returns	4.00	3.25	7.53*
16	Differentiate between short, intermediate, and credit	0.83	0.94	
17	Computer true interest rate	3.93	3.85	0.85
		0.90	0.85	
		3.71	2.91	7.20*
		0.89	1.14	

**Note.** 1 = none; 5 = very much; \*  $p < .01$ .

The null hypothesis was rejected. Respondents had a much greater need for 38 of the 43 competencies than they possessed.

#### Conclusions and Recommendations

There was a great need for additional training and understandings with regard to 36 competencies relating to farm credit. Of the 43 competencies included in both of the areas of abilities and understandings, three were significant at the .05 level and 36 were significant at the .01 level.

The author recommends that a summary of this study should be made available to the Executive Secretary of the Nebraska Young Farmers/Ranchers Education Association, and to all Nebraska Vocational Agriculture teachers, county extension agents, and to others in Nebraska who are concerned with Nebraska Young Farmers/Ranchers Education Association member competency needed in farm credit. Inservice workshops and/or training sessions should be made available to teachers of vocational agriculture and county extension agents with respect to addressing the need for farm credit competencies. The Nebraska Young Farmers/Ranchers Education Program should provide instruction to help meet the need for educational programs related to competencies needed in farm credit.

#### References

Anderson, O.J., (1962). Competencies in Farm Credit Needed by Farmers. Unpublished M.S. thesis. Iowa State University, Ames.

Congress of the US, (1986). Technology, Public Policy, and the Changing Structure of American Agriculture. Washington, D.C.: Office of Technology Assessment.

Harl, N.B. (1985). The Changing Rural Economy: Implications for Rural America. Paper presented at The National Rural Education Forum, Kansas City, MO.

Iowa Department of Agriculture, Iowa State University and Iowa Crop Reporting Service, (1985). 1985 Iowa Farm Finance Survey. Des Moines, Iowa.