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# Perceptions regarding motivation to participate in educational programs

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Perceptions regarding motivation to participate in educational programs

by

Awoke Desta Dollisso

A thesis submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of  
**MASTER OF SCIENCE**

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Major Professor: Dr. Robert A. Martin

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Graduate College  
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This is to certify that the Master's thesis of  
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Signatures have been redacted for privacy

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## ABSTRACT

The main purpose of this study was to assess the perceptions of young farmers regarding motivation to participate in educational programs and to draw implications to program planning in agricultural education.

Respondents perceived that motivation to learn was driven by multiple factors. Farmers were motivated by intrinsic and extrinsic motivational factors.

Regardless of demographic differences, respondents were motivated by the following factors to participate in educational programs: desire to increase profitability, desire to learn the latest technology, relevant material, and accessibility of the educational programs. Respondents wanted educational programs to help them increase their profitability.

Respondents used a variety of sources for obtaining agricultural information. This study confirmed that magazines were the favorite source for agricultural information by farmers followed by the Extension Services.

The findings show that farmers in this study preferred to learn by hands-on activities and through trial and error whether it is individually or in-groups. For tours, the respondents preferred breaking down into smaller groups. Over all, the participants of this study preferred to learn through a variety of methods.

The study revealed that many respondents were leading extremely busy lives, working full-time or part-time jobs besides operating their farms. For farmers, lack of time was a major barrier to participation in educational programs. Respondents had to make day to day decisions whether or not to engage in various activities based on priorities. Participation in educational programs was not perceived as an immediate need or a high priority for many



respondents. Lack of time, inaccessibility, irrelevant programs and poor advertisements were found to be barriers to participation in educational programs by farmers.

## CHAPTER I. INTRODUCTION

Choice or preference for one stimulus object over another, presents the individual with two or more options in which he or she selects one course of action over another. At any given time, we typically face a large number of options from which to choose. For instance, you can read this book, go to the refrigerator for a drink, pick up the phone to call a friend, take a nap, hit the remote control to watch television, and so on. Preference of one course of action over another expresses an underlying motive. (Reeve, 1997, p.8)

Individuals are believed to be active organisms rather than passive tools. Deci and Ryan (1985) stated that "...human beings act on their internal and external environments to be effective and to satisfy the full range of their needs. In the process, behavior is influenced by internal structures that are being continually elaborated and refined to reflect ongoing experiences" (p.8). This situation indicates that humans are intrinsically motivated to achieve their desired goals. To make their point, Deci and Ryan used little children as an example, indicating that children "...pick things up, shake them, smell them, throw them across the room, and keep asking, 'what's this?' They are unendingly curious, and they want to see the effects of their actions."

On the other hand, individuals could be motivated by external factors to do something, in other words, rewards could motivate people to engage in activities people otherwise might not engage. Cherrington and Wixom (1983) stated that motivation theories could be generalized to a common principle of human behavior that people do what they are reinforced or rewarded for doing. They further identified five key elements of most

successful motivational recognition programs: a recognition symbol, an attractive means of display, a meaningful presentation, effective promotion and periodic evaluation.

All human actions have foundations of motives whether the outcome is desirable or not. It is the 'want' to achieve a goal or 'desire' to experience and explore something that defines the motive of an action. Stipek (1988, p.12) stated that it is difficult to discuss motives without referring to goals because individuals are motivated to achieve particular goals even if the goals vary.

Whether or not persons will choose to participate in a particular activity depends on what the activity means to them (Russel & Carole, 1984, p. 23). All individuals have time, energy, and abilities; besides they bring experience, information and knowledge to any situation, that could be an educational setting, a social group or workplace. The issue is not whether individuals have motivation or not. They have the motivation. It is how they choose to invest it. Motivation is a resource like money (Martin and Carol, 1996)

### **Statement of the Problem**

Blackburn (1994) explained that program planners are concerned about a long-term goal; and extension agents are concerned about what they need to do next month; and a farmer's concern is that whether or not the program is worth attending. For adult educators, encouraging their clientele to have the motivation to participate in educational programs is a continuous challenge. The clients may choose to participate in certain programs and avoid others even though the programs are considered practical and helpful to them. Why do clients participate in some educational programs but avoid others? Marriam and Caffarella (1991) indicated that "In fact, one of the field's biggest mysteries is why more adults -- especially

those who might benefit the most -- are not involved in adult education” (p. 87). Barker (1997) pointed out that "Our understanding of how learning affects behavior seems to be intimately connected to our understanding of what motivates our behavior" (p.287).

### **Purpose of the Study**

The primary purpose of this study was to identify and analyze the perceptions of members of Iowa young farmers regarding motivation to learn, preferred learning methods, motivational factors of participation and barriers to participation in educational programs. The secondary goal of this study was to provide research-based information to improve future educational programming to meet the needs of adult Iowa farmers. Specific objectives of this study were to:

1. Identify adult learner perceptions regarding motivation to learn
2. Identify adult learners preferred learning methods
3. Identify motivational factors (incentives) for participation in adult education programs
4. Identify barriers to participation in adult education programs
5. Determine a socio-demographic profile of adult participants in adult farmer programs.

### Need for the Study

Before they make any programming decisions, it is vital for program planners to learn about their clients' needs, motivations, learning preferences and barriers that are related to their participation in educational programs. Cross (1981) stated:

It is just as important to know why adults do not participate as why they do. Indeed, since it is usually the people who "need" education the most, the poorly educated, who fail to participate, understanding the barriers to participation has been a subject of special interest to researchers and policymakers. Unfortunately it is even harder to find out why people do not do something than why they do. (p. 97)

Anderson and Darkenwald (1979) studied eleven variables that were associated with participation and persistence in adult education. They found that "only 10 percent of the variables associated with participation and persistence could be accounted for statistically. In other words, 90% of whatever it is that leads adults to participate in and drop out from adult education has not been identified by this or by other similar studies." (p. 5)

On the contrary, Dimmock (1986) found different results regarding socio-demographic variables that were associated with participation. She revealed that 78 to 83 percent of the variables related to visiting science and technology museums accounted for age, education, other forms of participation, and interest in science and technology.

Cervero and Kirkpatrick (1990) studied the notion that previous education is the strongest correlate of participation and found that participants' educational attainment an unnecessary variable in explaining noncredit forms of participation.

The inconsistencies in research findings and the need to increase adult learners' participation in educational programs through better programming calls for more research.

This research would answer the following questions:

1. What are the adult perceptions of motivation?
2. What are adult learner's preferred learning methods
3. What are the factors that are motivating adult learners to participate in educational programs?
4. What are the barriers that deter adult learners from participating in educational programs?
5. What are the socio-demographic characteristics of the farmers who participated in the study?

This study was designed to help researchers understand more about the underlying factors that influence the clients' decision to participate in learning experiences by learning more about their perceptions regarding motivation to learn, motivational factors that increase their participation, adult learners' learning preferences and barriers that deter them from participating in educational programs. The findings of this study will contribute to both theoretical (body of knowledge) and practical aspects (program planning) of adult learning.

### **Implications and Educational Significance**

This investigation was a population study of Iowa Young Farmers Educational Association. The objective of this organization is to provide continuing educational opportunities to its members in agriculture to make sure that they stay current with the changing technology. Educational activities are provided through seminars, speakers, field tours, educational videos and sharing individual experiences. Therefore, the primary beneficiaries of this research work will be the Iowa Young Farmer's Educational Association--Board of Directors, Iowa Department of Education, agricultural teachers and Extension professionals. Secondary beneficiaries will be farmers themselves and agribusiness companies.

Merriam and Cunningham (1989) noted that:

Interest in the literature on systematic planning has remained high throughout the ... years because of the need to design educational programs--a complex decision-making process that can be substantially aided by ... models or frameworks .... (p. 233)

Programs that are designed on a foundation of a true understanding of adult learners' motivation to learn and barriers to participation in educational programs may satisfy the needs of clients. As a result of learning more about the phenomena, educational programs may be improved to enhance motivation to learn and participation in educational programs may increase or at least an understanding of the issues involved will be clearer.

## Summary

Learning about issues that are related to motivation and participation of adult learners in educational programs has become a key to improve programming. It is difficult for programmers to predict or control the level of motivation and participation in educational programs. Programs that are considered practical and helpful by programmers may miss the target completely.

This study has important implications to agricultural education. The findings will benefit Iowa Young Farmer's Educational Association members, program planners, educators and administrators of educational programs.

## Operational Definitions

Program planning: “In its most general sense, planning refers to the process of determining the ends to be pursued and the means employed to achieve them. In adult education, planning is a decision-making process and a set of related activities that produce educational program design specifications for one or more adult learners.” (Merriam and Cunningham (1989), p. 233)

Educational programs: Programs that are planned and organized by any providing agent for specific purpose(s), for example, training someone on how to solve a specific problem, technical skills, communication skills, ..etc., to assist adults in meeting their needs, whatever that may be.

Adult education: “Adult education refers to any activity or program deliberately designed by a providing agent to satisfy any learning need that may be experienced at any stage in his life by a person who is over the normal school-leaving age and no longer a full-time student. Its



ambit spans non-vocational, vocational, general, formal, non-formal and community education, and it is not restricted to any academic level.” (Organization for Economic Cooperation and Development, 1975, p. 12)

Learning: “a more or less permanent change in behavior resulting from personal experiences with an environment.” (Baker, 1997, p.3)

Motivation: “Motivation involves the internal processes that give behavior its energy and direction. Energy means that behavior is relatively strong, intense, and persistent; direction means that behavior aims itself toward achieving a particular purpose or goal.” (Reeve Johnmarhall, 1996, p.2)

Extrinsic Motivation: “Behavior that is motivated by rewards and/or punishments administered by outside forces is extrinsically determined.” (Reber, 1985, p.262)

Intrinsic Motivation: “Intrinsic motivation usually derives from feelings of satisfaction and fulfillment, not from external rewards.” (Reber, 1985, p.262)

Perception: “An immediate judgement or process of knowing objectives, facts, etc., either by sense(s) or by thought. The ability to link what is sensed with past events in order to give meaning to situations as well as awareness, feeling, and understanding of a situation” (Van Dalen, 1979).

Young farmer: A full or part-time farmer who is between 18 and 45 years of age. He/she may own or rent land from a landlord, and his/her farm operation(s) could be focused on livestock, crops or both.

Participation: Active engagement of adult learners in educational programs that are designed by the providing agents to benefit adult learners.

## CHAPTER II. LITERATURE REVIEW

A success of any adult education program is dependent on the participation of the clientele. For many reasons, adults may or may not participate in educational programs. Understanding the reasons why adults participate or don't participate is the key to developing a program that may attract clients. This study focused on this issue from the point of view of young farmers in the state of Iowa.

The overall purpose of this study was to assess the perceptions of young farmers regarding motivation to participate in educational programs. The specific objectives of this study were to: 1) determine adult learners' perceptions regarding motivation to learn; 2) identify preferred adult learning methods; 3) identify motivational factors for participation in adult education programs; 4) identify barriers to participation in adult educational programs; and 5) determine the socio-demographic characteristics of the participants.

The purpose of this chapter was to review the relevant literature concerning adult learners' motivation to participate in educational programs and barriers to participation in educational programs in order to present a theoretical framework for the study.

### Adult Motivation and Learning

The first significant research in adult motivational orientation of participation was done by Houle and published in *The Inquiring of Mind* (1961). Houle conducted interviews with a sample of twenty-two adults who were engaged in learning activities. After the analysis of the data, Houle found three learning orientations that are held by adults he interviewed. Houle described his findings as follows:

The first, or, as they will be called, *the goal-oriented*, are those who use education as a means of accomplishing fairly clear-cut objectives. The second, *the activity-oriented*, are those who take part because they find in the circumstances of the learning a meaning which has no necessary connection, and often no connection to the announced purposes of the activity. The third, *the learning-oriented*, seek knowledge for its own sake. (1979, p. 15)

Cross (1981) identified the works of four scholars on the motivation for adult education as promising. The four theories were: 1. Force field analysis: Harry L. Miller; 2. Expectancy-Valence paradigm: by Kjell Rubenson; 3. Congruence Model: Roger Bohier; and 4. Anticipated benefits by Allen Tough.

Force field analysis theory was mainly developed on the basis of "the needs of hierarchy" of Maslow. Maslow classified the basic needs that motivate human behavior into five categories ranging from basic to higher level. These are the physiological needs, the safety needs, the belonging and love needs, the esteem needs, and the self-actualization needs. Maslow (1970) stated that people can not be concerned for recognition, achievement and self-actualization until they meet their basic needs for survival, safety and belonging. This theory implies that adult learners who are of lower social class members will be motivated to participate in educational programs that help them meet their basic needs. On the other hand, adult learners who are members of the middle class are motivated to participate in educational programs meet their needs of achievement, recognition and self-actualization.

The Expectancy-Valence paradigm theory was developed by Rubenson (1977, cited by Cross, 1981) stated that "expectancy" has two components, one being expectation of personal success in educational activity, and the other being positive consequences from learning activities. The "valence" depends on the anticipated consequences of participation, for example, "participation in adult education can lead to higher pay, but it can also mean seeing less of the family." (p. 116)

Tough (1968) identified that each adult learner engages in a learning activity for multiple reasons and to use the knowledge or skill to take an action. "Human motivation is not unitary; it is a configuration of many components" (Warren, 1973, p. 2). Burgess' (1971) survey results revealed seven motivational desires: 1. to know, 2. to reach a personal goal, 3. to reach a social goal, 4. to reach religious goal, 5. to escape, 6. to take part in a social activity, and 7. to comply with a formal requirement.

Oaklief and Oaklief's (1982) findings showed that adults participate in educational programs for non-economic benefits, that is to improve their interest and skill to learn more. Hey (1976) stated that adult learners' motivation is related to basic human curiosity besides other factors.

Progressivism has had a major impact on adult education in the United States of America. Elias and Merriam (1980) clearly stated the connection between the two:

Elements of progressive thoughts are found in the writings of all major theorists in the field of adult education including Knowles, Rogers, Houle, Tyler, Lindeman, Bergevin and Freire. Many forms of adult education were inspired by progressive ideals: adult vocational education, extension

education, ...and education for social action. In addition some of the basic principles in adult education originated in progressive thought: needs and interests, the scientific method, problem solving techniques, the centrality of experience, pragmatic and utilitarian goals, and the idea of social responsibility. (p. 45)

Knowles (1977) stated that a new idea was infused into Extension to give more emphasis on the full scope of life problems of all the people, problems that are related to agriculture, politics, social and moral issues. (p. 49) Knowles (1980) identified the following five characteristics of adult learners:

1. As a person matures, he or she becomes an independent and self-directed human being.
2. An adult has a reservoir of experience that can be used as a resource for learning.
3. An adult learner's readiness to learn is related to the developmental task of his or her social role.
4. There is a change in time perspective as people mature for future application of knowledge to immediacy of application. Thus an adult is more problem-centered than subject-centered in learning. (Knowles, 1980, pp. 44-45)
5. Adults are motivated to learn by internal factors rather than external ones.

(Knowles, 1984, p. 12)

Lindeman (1926) laid a foundation for adult learning that adults look for useful knowledge to solve real life problems:

Every adult person finds himself in specific situations with respect to his work, his recreation, his family-life, his community-life, et cetera –situations which call for adjustments. Adult education begins at this point. Subject matter is brought into education, is put to work, when needed. Texts and teachers play a new and secondary role in this type of education; they must give way to the primary importance of the learner. (pp. 8-9)

Elias & Merriam (1980) stated that progressives gave education a new focus by broadening the view of education to include the personal experiences and interactions of students—the learners with their personal needs, interests, experiences, and desires.

Bergevin (1967) called for adult education to use problem-centered or situational approaches. Lindeman (1956, p.160), and Benne, (1957, p.149) asserted that adults learn facts not for the purpose of accumulation of knowledge but to solve problems they face in real-life situations. Johnstone and Rivera's (1965) findings show that adult learners prefer “practical over academic; applied over theoretical; and skill over knowledge or information.” (p. 3) Mezirow (1985) described the process of learning and problem solving as instrumental learning, whereby adult learners use the new skill or knowledge to adapt to their changing environment.

Merriam and Caffarella (1991) describe the voluntary nature of adult education that unlike pre-adult education, adult education has been mainly voluntary activity. They further

stated that providers of adult education need to know who is and who is not involved, and why. Wlodkowski (1985) stated that when adults are given what they need and desire, "they will tend to be highly motivated." Marriam & Cunningham (1989) noted that the relationship between the adult learner and teacher is considered collaborative. The needs assessment practice in adult education for the purpose of program planning is based on the concept of the learner's needs because the adult learner is "a self-directing organism with initiative, intentions, choices, freedom, energy and responsibility" (Tough, 1971, p. 5).

A common thread in the literature concerning adult learning is the premise that adult educators or program planners should respond to the needs, interests and real-life problems of adult learners. Customers go to a business that satisfies their needs. The same is true with adult learners. Educators and program planners should understand that they are failing to come up with the programs that could satisfy their clients' needs.

Boshier and Collins (1985) noted that, "Both researchers and practitioners are interested in the motives or orientations that impel people into adult education programs"(p.114). Martindale & Drake (1989) reported that participation is important to adult education, and "measuring motivations and deterrents to participation helps adult educators create viable, responsive programs." (p. 63) Viechnicki, Bohlin and Milheim (1990) stated that most adult learners participate in learning situations voluntarily, thus it is important to know what motivated them and what kind of environment maintained their motivation in a learning activity.

Keller and Suzuki (1988) and Keller and Kopp (1987) identified four motivational factors for learning: attention, relevance, confidence and satisfaction. Beder & Valentine (1990) focused their research on low-literate adults' participation in Adult Basic Education (ABE). They found ten motivational factors or reasons why adults participate in (ABE)

programs: a) Self Improvement; b) Family Responsibilities; c) Diversion; d) Literacy Development; e) Community/Church Involvement; f) Job Advancement; g) Launching; h) Economic Need; I) Educational Advancement; and j) Urging of others. Using sociodemographic variables, Beder and Valentine (1990) reduced the categories to six: personal, education-related, employment-related, family and home, social and cognitive variables. They asserted that motivational factors are diverse and multidimensional.

Byrne and Caskey (1985) found that 4-H volunteers participate in educational programs mainly because they want to be with their children. For both, volunteers and Extension staff having children in the 4-H program and the pleasure of working with children were the main reasons for participation. The most important incentive for volunteers was knowing that they have done a good job and made a contribution to something important. For the Extension staff, receiving an expression of appreciation was the most important incentive.

Jensen's (1989) findings indicated that economic benefit is the number one motivating factor for Extension clients. Jensen focused his study mainly on economic incentives, particularly to find out whether the clients like to invest in solar energy for reasons such as: fuel cost reduction, environmental improvement and oil import reduction. In this case, fifty-seven percent of the respondents rated the fuel cost reduction as their number one priority.

Brundage and Mackeracher (1980) reported that motives arise internally. They recommended the following four steps for educators to use to maintain a high level of learner motivation:

1. Discovering, through consultation, what the prime motives and specific learning needs of each individual learner are;



2. Assisting the learner to establish specific objectives which can be translated into specific behaviors and hence into specified feedback;
3. Providing feedback on the basis of these decisions; and
4. Allowing the feeling of success and satisfaction from these processes to be the major reinforces of learning. (p.40)

Knowles (1984) argued that the process of adult education program planning should carry seven tasks:

First, is the task of creating an appropriate and comfortable physical environment, such as mutual respect, collaborativeness, trust, supportiveness, openness and authenticity, pleasure, and humanness. It is believed that physical or psychological discomfort could interfere with the learners' motivation.

Second, he believed in mutual planning of the learner and program planner. Knowles argued that people feel committed to any activity when they had participated in the decision. Therefore, participation in planning is an important factor to increase motivation.

Third, Knowles believed that participants should be involved in identifying their own needs. Learners should also be aware of the ascribed needs of the sponsoring organization. Unclear objectives may lead learners to misunderstanding and mistrusting educator's intentions or goals.

Forth, he found linkage between motivation and involving learners in identifying their own learning objectives. This ensures that learners are clear with what they want to achieve. Early agreement on the objectives will enhance enthusiasm and motivation toward achieving the learning goals.

Fifth, Knowles believed that individualizing instruction based on individual learning-style would benefit learners more although it is more work for the educators.

Sixth, Knowles believed that flexibility to adjust to conditions as they change could help maintain the motivation of learners.

Finally, Knowles believed that learners should evaluate themselves comparing their achievements with the original objectives. When learners evaluate and see their own achievements, they would be motivated to undertake more.

Wlodkowski (1985) lists five critical assumptions about adult motivation to learn:

1. People are always motivated. They may not be motivated to learn, but they are motivated to do something.
2. People are responsible for their own motivation. We cannot directly motivate learners. We can make things stimulating and attractive. We can provide opportunities and incentives.
3. If anything can be learned, it can be learned in a motivating manner. There must be some degree of motivation to formally learn anything, even if that influence is limited to merely paying attention.
4. There is no one best way to instruct.
5. Every instructional plan needs a motivational plan. More often than not, the unstable variables that interfere with and complicate learning are human variables-the needs, emotions, impulses, attitudes, expectancies, irrationalities, beliefs, and values of people. (pp. 12-15)

Blackburn (1994) stated that Extension educators design, conduct and evaluate educational programs to improve the quality of life of the people in their communities. He

pointed out that unlike their counterparts in formal education who may expect their students to give the correct answers on their exams, Extension educators care for both mastery and application of the new knowledge. Learners may acquire the expected knowledge, however, they may not apply it because they don't believe it is applicable to their own situation. In Blackburn's words, "Indeed, those who apparently lack the motivation to apply the knowledge that is being dispensed often do not perceive their situation in the same way as those who attempt to teach them." (p. 27)

Knowles (1970) asserted that, regardless of the quality of the program, "if it is not what an individual wants and needs, he will not be satisfied with it" (p.208). Peter's (1990) analysis indicated that problem solving and learning associated with the problem are a part of everyday life. Hay (1976) stated that adults are motivated to participate in learning activities to consolidate personal skills and to increase efficiency in solving the problems of daily living. Therefore, it is important for educators and program planners to be able to design and conduct programs that may fulfill the perceived needs of the adult learners in order to enhance the participation of the adult learners in educational programs and application of the new knowledge. Viechnicki, Bohlin and Milheim (1990) stated that for adult learners, "most often, learning is a means to an end, not an end in itself." (p.10)

### **Barriers to Participation in Educational Programs**

Why do clients attend some educational programs but avoid others? In Marriam's and Caffarella's (1991) words, "In fact, one of the field's biggest mysteries is why more adults -- especially those who might benefit the most -- are not involved in adult education." (p. 87)

The list of barriers to participation could be quite large, but researchers put them in three major clusters: situational barriers, institutional barriers and dispositional barriers. Situational barriers arise from everyday life while institutional barriers consist of procedures and requirements that are imposed on the learners. Dispositional barriers are closely related to self-perceptions and attitudes.

### **Situational Barriers**

Some examples of situational barriers could be: shortage of time or getting too busy, shortage of money, lack of transportation, lack of support from family, family responsibilities and so on. Cross (1988) noted that lack of time deters a large number of potential learners in the 25- to 45-year old age group, while lack of money deters young people and lack of childcare deters young parents. Roger (1993) found the following four top reasons for not attending educational programs: 1. "time is not convenient," 2. "can't take time from other duties," 3. "too far to travel," and 4. "irrelevant topic." Reed and Beaudin (1993) discussed that personal problems, cost, personal priorities and lack of course relevance as barriers to adult participation in organized education. Eschenmann's and Olinger's (1991) findings showed that family commitments, cost, distance, age and physical limitations were barriers to participation for adult learners. Leis (1994) identified isolation, increased expense due to travel, long distance, ...and limited relevant materials as barriers to participation in educational programs for adult learners.

Lack of time is a problem for adult learners. A lot of activities compete for their time: job outside home, family responsibilities and social and religious commitments. Lack of time could be a barrier as much as the lack of money. Cross and Zusman (1979) revealed that the

time problem is mentioned more by people in their 30s and 40s than younger or older adults, more often by highly educated, high income people than poorly educated, low income people. Jordan (1995) found that lack of time was consistently a top barrier to participation.

Both lack of money and time are the leading barriers to participation in educational programs. Johnstone's and Rivera's (1965) findings showed that people who have time lack money; and people who have money lack time to participate in educational programs. Bishop's and Van Dyk's (1977) findings showed that reducing tuition from \$400 to zero doubled the college attendance rate for local adults.

### **Institutional Barriers**

Inconvenient schedules can easily exclude many adult learners from participation. The location, amount of time required, amount of money paid relative to the benefits and credits of the educational activities could be included in this group. "Of these, potential learners complain most about inconvenient location and schedules and about the lack of interesting or relevant courses." (Cross, 1988, p.104) Darkenwald and Marriam (1982) subdivide institutional barriers into two, one being institutional failure to communicate available information to adults, and the other being failure of many adults, particularly, the poor and least educated, to seek out or use available information. Eschenmann's and Olinger's (1991) findings showed that scheduling and study time were barriers to adult participation in educational programs.

### **Dispositional Barriers**

These barriers may consist of age, level of education, lack of energy and motivation and lack of interest to sit in a classroom. Wilcox's, Saltford's, and Veres's (1975) findings show that lack of interest was a leading barrier to participation. Cross(1988) stated that age reveals clearly certain social perceptions about the role of education at different stages of life. Eschenmann's and Olinger's (1991) findings showed that lack of motivation was a barrier to participation.

Educational programs serve as a medium by which scientific findings, skills, and knowledge are transferred from educational and research institutions to farmers to improve their productivity, profitability, and living standard. In order to achieve these goals, it is important that farmers participate in educational programs. "Interest in the literature on systematic planning has remained high throughout the intervening years because of the need to design educational programs--a complex decision-making process...." (Merriam and Cunningham 1989, p. 233)

### **Summary**

This review of literature shows strong rational for the need to consider various factors in program planning in order to achieve desired adult learners' participation levels. To sustain successful educational programs, programmers must first learn the needs and wants of the learners. Learning the motives and barriers of participation would help programmers to design responsive and attractive programs that may stimulate further participation of clients. Many reasons exist both as motives and barriers to participation in educational programs. By identifying and understanding them, we could design successful programs. Besides, the

findings will build on Houle's and other researchers' findings expanding the body of knowledge for researchers and programmers.

### CHAPTER III. METHODS AND PROCEDURES

Understanding the relation between adult motivation to learn and participation level in educational programs plays an important role to help improve program planning.

The overall purpose of this study was to assess the perceptions of young farmers regarding motivation to participate in educational programs. The specific objectives of this study were to: 1) determine adult learners' perceptions regarding motivation to learn; 2) identify preferred adult learning methods; 3) identify motivational factors for participation; 4) determine barriers to participation; and 5) determine the socio-demographic characteristics of participants.

#### Design

Merriam and Simpson (1984) precisely stated that:

Descriptive research is the most common form of research used in adult education. Because of immediate need to define and describe the fields of practice, this methodology will continue to be important in advancing knowledge ...One obvious advantage or strength of the descriptive method is its ease of use. It produces data that are accurate and representative (p. 63).

The research design used in this study was descriptive. Fraenkel and Wallen (1996) indicated that "descriptive studies describe a given state of affairs fully and carefully as possible" (p. 13). Ary, Jacobs, and Razavieh (1990) stated that a descriptive study is directed towards determining the existing situation at the time of the study. The findings of this



descriptive research study may assist adult education programmers and educators in planning responsive and attractive programs for adult learners.

### **Population and Sample**

The population for this study consisted of all the members of Iowa Young Farmers Educational Association during the summer of 1997. According to the records of the Iowa Young Farmers Educational Association, there were 148 members. The membership list was obtained from the executive chairman of Iowa Young Farmers Educational Association. The whole population was surveyed.

### **Instrumentation**

Data for this study were collected using a mailed questionnaire. The instrument for the study was developed by the researcher based on a literature review, interview information from five Iowa young farmers, and suggestions from selected faculty members in the Iowa State University College of Agriculture. To help establish face and content validity of the instrument, the researcher's Program of Study Committee, along with selected adult learners in agriculture served as a panel of experts.

The instrument was designed to measure farmer perception of motivation to learn, learning preference, motivational factors, and barriers to participation in educational programs.

Addressing the stated objectives required the collection of four frames of data. The first frame consisted of data on *perceptions of motivation to learn* by adult learners. This

section had 11 questions that measured adult learners' perceptions regarding motivation to learn.

The second frame consisted of data on adult learners' *learning profile*. This section had 4 questions that helped identify adult learners' preferred way of learning.

The third frame consisted of data on *motivational factors* of participation in educational programs. This section had 10 questions that helped identify motivational factors to participate in educational programs.

The fourth frame consisted of data on barriers of participation in educational programs. This section had 9 questions that identify the barriers to participation by adult learners in educational programs.

The fifth frame consisted of data on *demographic characteristics* of the adult farmers who participated in the study. Obtaining background data is a critical step toward understanding the types of farmers who held particular motivational perceptions. This section contained 10 socio-demographic questions. Besides a question on program planning, one question on farmers' preferred source of educational information and one open-ended question for comments were included. The characteristics variables included items such as age, education, sex, type of farm, size of farm, ..etc.

The questions regarding motivation to learn, preferred learning style, motivational factors and barriers were formulated into a five-point, Likert-type scale items with 1 = strongly disagree, 2 = disagree, 3 = unsure, 4 = agree, and 5 = strongly agree. The socio-demographic factors were formed into multiple choice items. The instrument was three pages long and contained a total of forty-five questions.

The committee on the Use of Human Subjects in Research at Iowa State University reviewed and approved the data collection instrument. The reliability of the instrument was tested using selected adult learners in agriculture not included in the study. The alpha coefficient for the first section was 0.54; alpha for the second section was 0.67; alpha for section three was 0.74; and alpha for section four was 0.83.

### **Data Collection**

The instrument was mailed to 148 Iowa Young Farmers' Educational Association members on August 23, 1997. A cover letter on the first page of the survey instrument explained the nature of the study and assured anonymity of responses. A piece of chewing gum was included with each questionnaire as an incentive for participants to complete the instrument. Participants were asked to complete the questionnaire and return it within five days using the enclosed stamped envelope. Each questionnaire was coded with a number on the back of the last page of the instrument for identification and follow-up purposes.

The first follow-up reminder letter was mailed on September 8, 1997 to all participants who had not yet responded. As of September 10, 1997, the response rate was 69 (47%) questionnaires being returned. The total response rate as of September 27, 1997 was 86 (58%). The second reminder was mailed on September 25, 1997. After the second reminder, the total response jumped to 103 (69.6%). Data collection was completed by November 10, 1997.

Qualitative data was collected by conducting a focus group interview of five selected members of the Iowa Young Farmer Educational Association on June 27, 1997. The five farmers represented different parts of the state of Iowa. These farmers varied in their farm

occupations. They represented diversity of farm operations that are going on in the state of Iowa. Prior to conducting the interview, the researcher sent a letter that stated the subject, conditions of the interview and the purpose of the research to the potential interviewees. The interview was conducted after the obtaining approval of the executive director of Iowa Young Farmer's Educational Association and agreement of the focus group members. Participation of the farmers was voluntary. The confidentiality of the individuals was guaranteed by the researcher. The interview was conducted in person for 45 minutes, taped and transcribed to determine major ideas and themes discussed by the participants.

### **Data Analysis**

To determine if there was a difference between the respondents and non-respondents to the written questionnaire, the researcher did a telephone survey of 22% of the non-respondents. The t-test analysis indicated no significant differences between respondents and non-respondents.

The Statistical Package for the Social Sciences (SPSS) computer program was used to analyze the data with a 0.05 significance level set a priori. Descriptive statistics consisting of means, standard deviations, percentages and analysis of variance were used to describe the population.

### **Assumptions**

For the purpose of this study, the following basic assumptions were made:

1. Farmer responses were honest and accurate on each item in the questionnaire.

2. The most appropriate questions were asked about farmer perceptions regarding motivation, learning preference, motivational factors to participation in educational programs and barriers to participation in educational programs.
3. The farmer responses to this questionnaire will be useful to the: Iowa Young Farmer's Educational Association--Board of Directors, Iowa Department of Education, agricultural teachers, Extension professionals, agribusiness companies and farmers themselves.

### **Limitations of the Study**

The findings of this study may indicate what farmers in this organization perceive to be true about motivation to participate in adult education, but the findings are not generalizable to all farmers. The needs and motivations of farmers in general to participate in extension education programs may not be the same as that of farmers in the Iowa Young Farmer's Educational Association. This was a population study, and the population was relatively small. The primary goal of the Iowa Young Farmer's Educational Association was providing educational opportunities to its members. Therefore, this may not be typical for farmers in Iowa.

## CHAPTER IV. FINDINGS

The overall purpose of this study was to assess the perceptions of young farmers regarding motivation to participate in educational programs. The specific objectives of this study were to: (1) identify adult learners' perceptions of the motivation to learn; (2) identify educational methods by which adult learners prefer to learn; (3) identify motivational factors for participation; (4) identify barriers to participation; and (5) identify the socio-demographic characteristics of the participants; (6) identify sources of information the respondents use frequently.

The findings are divided into six sections:

1. Profile of farmers
2. Perceptions regarding motivation to learn
3. Preferred learning methods
4. Motivational factors for participation in educational programs
5. Barriers to participation in educational programs

To examine the level of internal consistency and stability of items in the instrument, Cronbach's alpha procedure was used as a part of data analysis. The alpha coefficient for the first section was 0.54; alpha for the second section was 0.67; alpha for section three was 0.74; and alpha for section four was 0.83. The alpha coefficient values were sufficient to proceed with analysis and interpretation the data.

This section describes the demographic characteristics of the respondents in terms of their educational level, gender, age, marital status, occupation, land ownership, farm type and number of years farmed. Ninety three participants provided usable data for this study.

Over 91 percent (N=85) of the respondents were male, and less than 7 percent (N=8) were female.

The data in Table 1 present the distribution of respondents by educational level. A majority of the respondents (over 95%) had high school or higher levels of education. Sixty two percent of the respondents had a two-year college education or more. One respondent (1.1%) did not identify his or her educational level.

The data in Table 2 present the distribution of respondents by age. A majority (87.1%) of respondents were between the age of 21 and 45. Less than 13 percent of the respondents were age 46 or older.

Table 1. Frequencies and percentages of young farmers in Iowa Young Farmer Educational Association by educational level (N=93).

Educational level	Frequency	Percent
<12 <sup>th</sup> grade	4	4.3
12 <sup>th</sup> grade	31	33.7
12 + 2 years	28	30.4
12 + 4 years	19	20.7
17 or > years	10	10.9
Missing	1	1
Total	93	100

Table 2. Frequencies and percentages of young farmers in Iowa Young Farmer Educational Association by age (N=93).

Age	Frequency	Percent
21 - 45	81	87.1
46 and above	12	12.9
Total	93	100

The distribution of respondents by marital status is reported in Figure 1. Participants were classified as single, single parent, married but no children and married with children. Seventy-two percent of the respondents were married with children. Thirteen percent of the respondents were married but had no children. None of the respondents were single parents. Fourteen (15.1%) respondents were single.

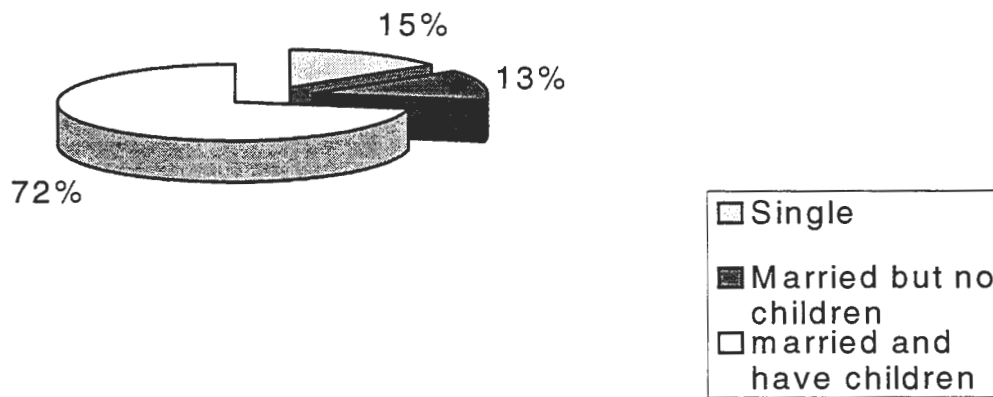


Figure 1. Marital status of young farmers in Iowa Young Farmers Educational Association (N=93)

The data in Table 3 shows the distribution of respondents by occupation. Forty-three (46.2%) were full-time farmers while 17 (18.3%) part-time and 32 (34.4%) full-time farmers and full-time off farm employed. One (1.1%) of the respondents did not indicate his or her occupation.

Table 3. Distribution of respondents by occupation (N=93)

Occupation	Frequency	Percent
Full-time farmer	43	46.2
Part-time farmer	17	18.3
Full-time farmer and full-time off farm employment	32	34.4
Missing	1	1.1
Total	93	100



Data regarding the distribution of respondents by level of participation in educational programs is reported in Figure 2. Only 11 (11.8%) of the respondents participated once a month in educational programs. Twenty-four (25.8%) of the respondents participated six times a year, and 18 (19.4%) participated four times a year. Thirty (32.3%) respondents participate only twice a year. Nine (9.7%) of the respondents didn't participate in educational programs at all. One of the respondents (1.1%) did not indicate his or her level of participation in educational programs.

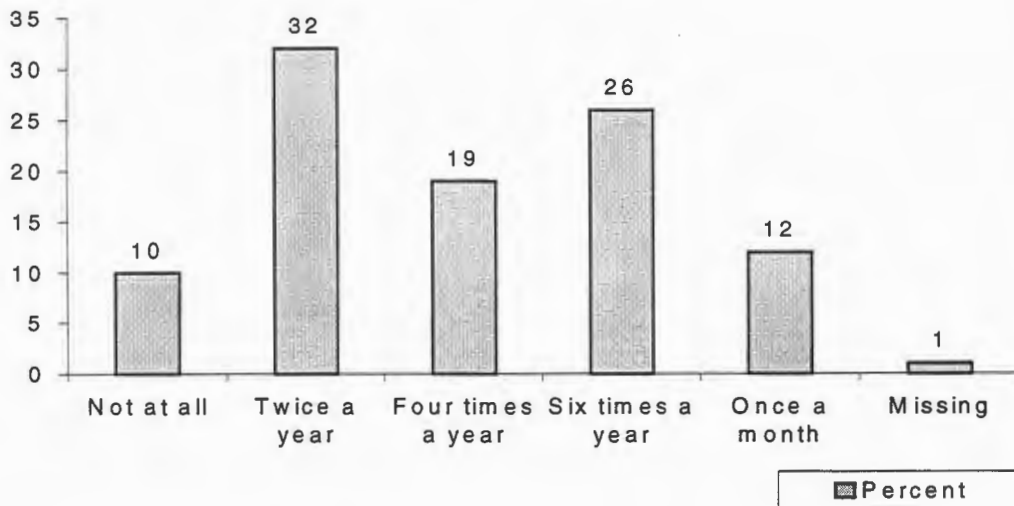


Figure 2. Level of participation in educational programs by young farmers in the Iowa Young Farmer's Educational Association (N = 93).

Distribution of respondents by land ownership is reported in Table 4. Nineteen (20.4%) of the respondents owned 300+ acres of land. Exactly the same percentage (20.4%) of the respondents owned 100 – 199 acres while 10 (10.8%) owned 200 – 299 acres. Eighteen (19.4%) of the respondents did not own land.

Table 4. Frequencies and percentages of young farmers in the Iowa Young Farmers Educational Association by land ownership (N=93).

Land ownership in acres	Frequency	Percent
None	18	19.4
1 – 99	27	29
100 – 199	19	20.4
200 – 299	10	10.8
300+	19	20.4
Total	93	100

Data in Table 5 indicates distribution of respondents by rented land. A large portion of the respondents 43 (46.2%) rented 300+ acres from other landowners. Eleven (11.8%) rented 200 – 299 acres of land from landlords. Exactly the same number of respondents rented 100 – 199 acres of land from landlords. Eighteen (19.4%) of respondents rented no land. Four (4.3%) of the respondents did not indicate whether they rented land from landlords or not.

Table 5. Frequencies and percentages of young farmers in the Iowa Young Farmer's Educational Association with rented land (N=93)

Rented land in acres	Frequency	Percent
None	18	19.4
1 – 99	7	7.5
100 – 199	11	11.8
200 – 299	11	11.8
300+	43	46.2
Missing	4	4.3
Total	93	100

Figure 3 indicates the distribution of respondents based on their perception whether their involvement in program planning would increase their participation. Over thirty-three percent of the respondents believed that their participation in program planning would increase their participation in educational programs. Twenty-two percent of the respondents

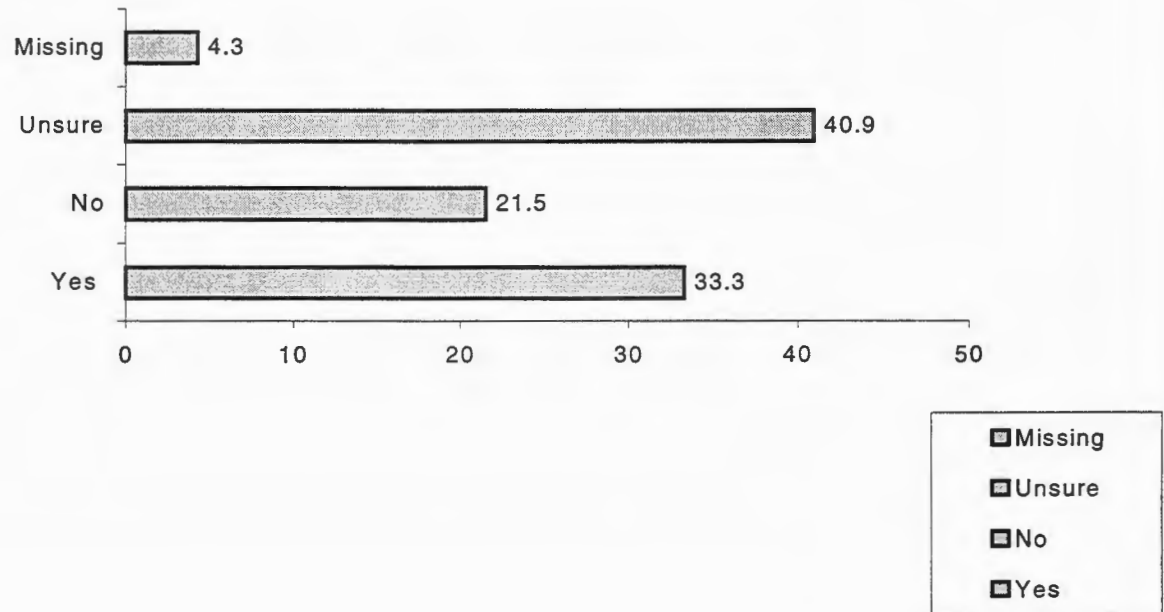


Figure 3. Level of participation in educational programs based on involvement in planning reported by young farmers in Iowa Young Farmers Educational Association (N = 93).

did not believe that their participation in program planning would increase their participation in educational programs while forty-one percent of the respondents were unsure.

Figure 4 shows the distribution of respondents by farm type. A majority (78.5%) of the respondents were engaged in both livestock and crop production. Fourteen (15.1%) of the respondents were engaged only in crop production while five (5.4%) of the respondents were engaged only in livestock production.

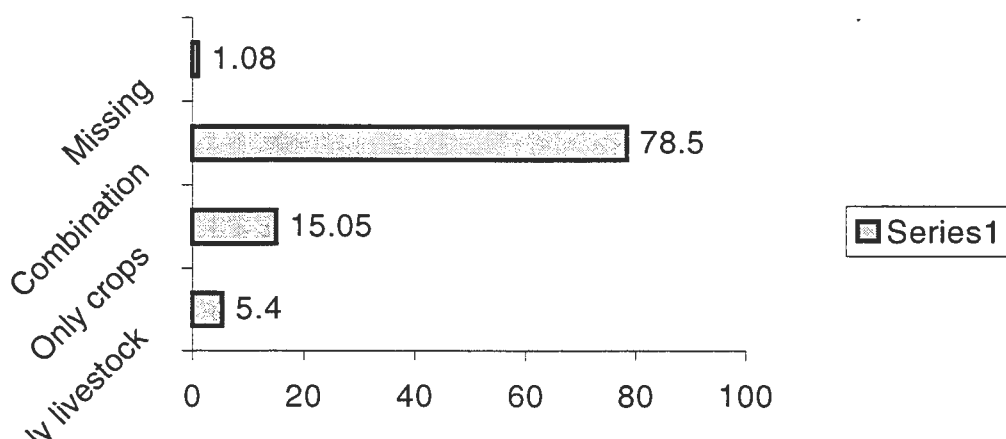


Figure 4. Farm enterprises of young farmers in the Iowa Young Farmers Education Association (N=93).

Table 6. Farming experience of young farmers in Iowa Young Farmer's Educational Association (N=93).

Number of years farmed	Frequency	Percent
1 – 7	26	28
8 – 14	22	23.7
15 – 21	19	20.4
22 +	26	28
Total	93	100

Data in Table 6 indicates the frequency distribution of respondents' farming experience. Twenty-eight percent of the respondents had one to seven years of farming experience. The same percentage of the respondents had twenty-two plus years of farming experience. Almost twenty-four percent of the respondents had eight to fourteen years of work experience. The remaining twenty percent of the respondents had fifteen to twenty one years of farming experience.

Data in Table 7 indicates the mean ratings of sources where farmers obtain information related to their farming operations. Ratings were made on a scale of 1 to 8, with 1 being most frequently used source and 8 being least frequently used source. Over 38% of the respondents' reported that magazines represented the number one source for information with a mean rating of 2.80. Neighbors ranked second as a source of information with a mean rating of 3.74. Extension, with a mean rating of 3.93, ranked third. Radio ranked fourth with a mean rating of 4.24. Relatives ranked fifth as a source of information with a mean rating of 4.77. DTN, TV and the Internet were rated sixth, seventh and eighth, respectively. The Internet was reported by these respondents as the least frequently used source of information for their farming operations.

Table 7. Mean ratings of sources of information for farmers in the Iowa Young Farmers' Educational Association (N = 93).

Source	Mean Rating
Magazines as a source of information	2.80
Neighbors as a source of information source	3.74
Extension as a source of information	3.93
Radio as a source of information	4.24
Relatives as a source of information	4.77
DTN as a source of information	4.98
TV as a source of information	5.14
Internet as information source	6.93

Scale: Frequency order, 1 = most frequently used, 8 = least frequently used source

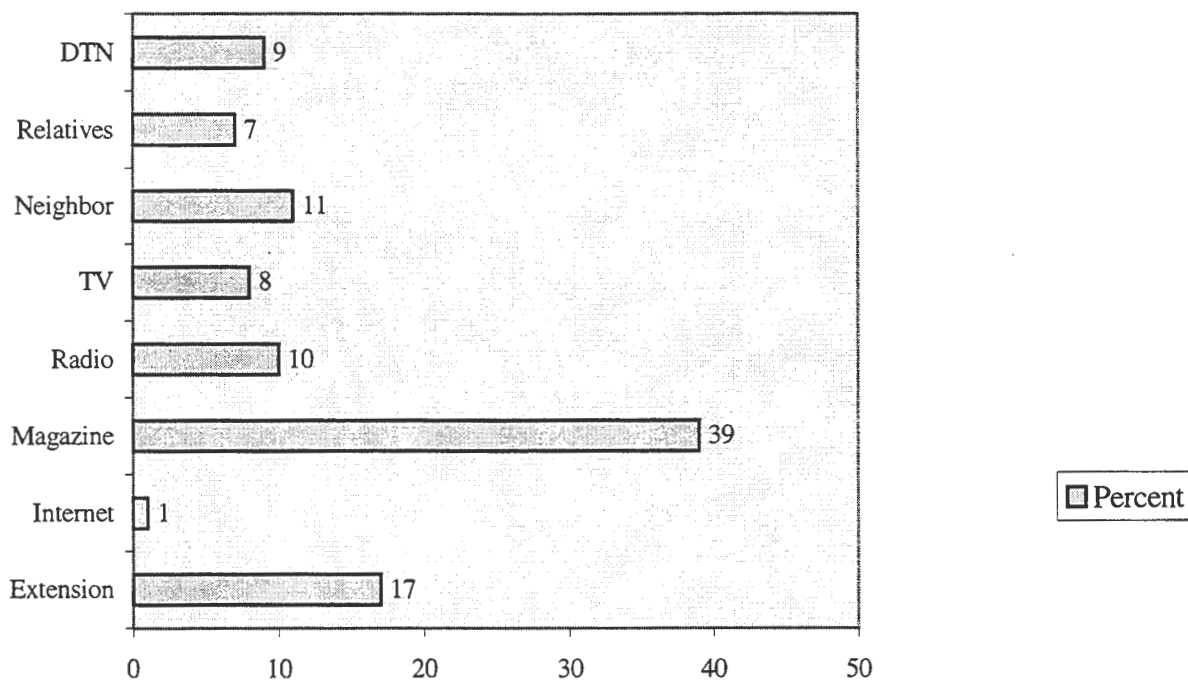


Figure 5. The number one source of information as indicated by farmers in the Iowa Young Farmers Educational Association (N = 93).

Figure 5 shows the distribution of respondents by their number one choice of an information source. Thirty-nine percent of the respondents chose magazines as their number one choice of an information source while seventeen- percent chose Extension as their number one choice of an information source. Neighbors, radio, DTN, TV and relatives were chosen as the number one choice of information source by 11, 10, 9, 8 and 7 percent of the respondents, respectively.

Table 8 indicates the mean ratings and standard deviations for the perception statements regarding motivation. The item "I believe motivation to learn is directly related to ambition to succeed," had the highest mean rating of 4.39. "I believe motivation to learn is directly related to personal desire to learn" was the second highest item with a mean rating of

4.35. "Usefulness of the content" was the third rated item in a rank with a mean rating of 4.26. Statements, "immediacy of the need;" and "satisfaction from achievement" were fourth and fifth with the mean ratings of 4.17 and 4.14, respectively. All of the perception items had means rating of 3.45 and 3.53, respectively.

Data in Table 9 indicates the learning method preference for young Iowa farmers in Iowa. The highest rated item was "I like to learn by hands on experience," with a mean rating of 4.61. " I like to learn with a variety methods" rated second with a mean rating of 4.28.

Table 8. Means and standard deviations of perception statements regarding the motivations to learn as reported by members of Iowa Young Farmer's Educational Association (N = 93).

<b>Statements</b>	<b>Mean</b>	<b>Standard Deviation</b>
I believe motivation to learn is directly related to:		
1. ambition to succeed	4.39	.66
2. personal desire to learn	4.35	.75
3. usefulness of the content	4.26	.64
4. immediacy of the need	4.17	.81
5. satisfaction from achievement	4.14	.72
6. attention capturing ability of the presenter	3.95	.97
7. confidence of the learner	3.85	.86
8. clearly stated goal	3.75	.90
9. external incentives	3.53	.84
10. getting pleasure	3.45	.85

Scale: The level of agreement statements were rated 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

Table 9. Mean and standard deviations of learning preference statements as reported by the members of Iowa Young Farmer's Educational Association (N = 93).

<b>Statements</b>	<b>Mean</b>	<b>Standard Deviation</b>
I like to learn:		
1. by hands on experience	4.61	0.59
2. with a variety of methods	4.28	0.73
3. individuality	4.03	0.77
4. in groups	3.95	0.83

Scale: The level of agreement statements were rated 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

The third statement was, "I like to learn individually," with a mean rating of (4.03). "I like to learn in groups" was the fourth method with a mean rating of 3.95.

Data reported in Table 10 indicates the mean ratings and standard deviations regarding factors that may motivate educational program participants as perceived by members of Iowa Young Farmers Educational Association. The top rated factor that may encourage participation in educational programs was "increasing profitability" with a mean rating of 4.35. "I participate in educational programs to learn the latest technology," and "to learn something new" both followed with the same mean rating of 4.29. "Relevance" was the third rated motivational factor with a mean rating of 4.03. "Increasing job options" and "accessibility" were rated fourth with a mean rating of 3.76. "I participate in educational programs because of time convenience" was rated the lowest with a mean rating of (3.33).

Data reported in Table 11 indicates the time barrier had the highest mean rating (4.18) compared to the rest of the statements. "Accessibility" was the second barrier. "I don't participate in educational programs because of irrelevant material," was the third highest mean rating at 3.82. Surprisingly, the statement "I don't participate in educational programs



because I am unaware of the possible programs" was fourth with a mean rating of 3.64. Too much lecturing was fifth at a mean rating of 3.58. "Cost" was sixth with a mean rating of 3.53. The statement, "I don't participate in educational programs because of institutional credibility" had with a mean rating of 2.89.

Table 10. Means and standard deviations regarding factors that may motivate farmers to participate in educational programs as reported by members of Iowa Young Farmer's Educational Association (N =93).

<b>Statements</b>	<b>Mean</b>	<b>Standard deviation</b>
I participate in educational programs:		
1. to increase profitability	4.35	.74
2. to learn the latest technology	4.29	.67
3. to learn something new	4.29	.67
4. because of relevance	4.03	.68
5. to increase my job options	3.76	1.04
6. because of its accessibility	3.76	.76
7. because of affordability	3.47	.88
8. to maintain my job status	3.43	1.03
9. because of time convenience	3.33	.89

Scale: The level of agreement statements were rated on a Likert-type of scale 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

The analysis of variance (ANOVA) based on differences in perceptions based on respondents' demographic data showed no significant differences in the perceptions about motivation to participate in educational programs, learning preferences, motivational factors related to participation and barriers to participation by respondents.

Table 11. Mean rating and standard deviations of statements regarding barriers to participation in educational programs as reported by members of Iowa Young Farmers Educational Association (N = 93).

Statements	Mean	Standard deviation
I don't attend some educational programs because of:		
1. time	4.13	.83
2. accessibility	3.75	.85
3. irrelevant material	3.72	1.05
4. unaware of possible programs	3.64	.81
5. too much lecturing	3.58	.91
6. cost	3.53	1.03
7. negative previous experience	3.21	1.06
8. institutional credibility	2.89	1.07

Scale: The level of agreement statements were rated on a Likert-type scale 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

### General Written Comments by Respondents about Educational Programs

The last section in the questionnaire was an open ended question, "Do you have any comments about adult education programs in general?" Sixteen respondents made the following comments:

- "Most are put on by people who may be well educated but who have no common sense and no idea what's it like in the real world."
- "We have a very good young farmer program in our town. Would not like to go too much further."

- "My fields are my most important classrooms. I dig, observe, smell and ask why. All I produce is due to the condition of my soil."
- "Educational programs need to be up-to-date with the changes occurring in agriculture. A good educational program is a step ahead of the other program down the road."
- "It is extremely hard to get people out to programs no matter how good they are."
- "I think they can be very informative if topics match what you need. Time is probably why they don't make it to more of what is available."
- "Seems to be many options available between ISU Extension, Iowa Young Farmers, Farm Bureau, producer organizations (corn growers, pork producers, ...etc.), and all the seminars put on by agribusiness which are product related."
- "Time to do when you are involved in so many organizations. Most material is at a level below where I feel I am at. I still try to participate because I think I can help others learn."
- "I strongly feel at times that parts of the extension service need to join the real world and come up with things more in tune with profitability."
- "Money would motivate agricultural teacher to have adult classes today."
- "Most farmers I know over 35 are not receptive to new ideas or innovations unless it reduces physical input or it is very beneficial economically. Most will scoff at anyone who pioneers new concepts."
- "I used to attend a lot of them. Lately not so many. As the saying goes-- been there, done that."
- "Getting what I need and want."

- "Rural areas need more programs offered (Satellite, etc.)."
- "They are very helpful."
- The need is not being met. Extension is spread too thin. ISU is failing to prepare students. Area schools draw from about one half (close in) at their areas. Iowa Department of Education does not support secondary adult education.

### Qualitative Results

A focused interview was conducted with five selected members of the Iowa Young Farmer Educational Association on June 27, 1997. The five farmers represented different parts of the state of Iowa. Prior to conducting the interview, the researcher sent a letter that stated the subject, conditions of the interview and the purpose of the research to the potential interviewees. Participation was voluntary. The interview was conducted in person for 45 minutes, taped and transcribed to determine major ideas and themes discussed by the participants. The researcher guaranteed confidentiality by reporting the answers to the following questions. The responses are summarized under the questions.

1. As an adult learner, how do you learn best? Or when do you learn best?
  - "Hands on." "Trial and error."
2. What factors motivate you to participate in educational programs?
  - "It has to be something of interest."
  - "Working together like hands-on activities."
  - "Short."

3. What barriers stop you from participating in educational programs?

- "Other activities."
- "Time constraints."
- "Involvement in other organizations or groups."

4. Why do you chose to attend some educational programs over others?

- "Interest, I would say. Whatever interests you, I guess."
- "Probably that which benefits you most at the time; interest."

5. What is the most important reason for you to attend educational programs?

- "Self motivation."
- "You want to learn more."
- "You want to be better at what you are doing."

6. What is the most difficult barrier that deters you from attending educational programs?

- "Probably cost."
- "Time, more than anything."
- "Distance, three hours to drive is quite a ways. It could be free but still it takes hours, it takes extra time."
- "In the winter, you can not do a lot of stuff. It is tough to plan anything."  
"Everybody is so busy. You want to go to stuff, but you don't want to waste your vacation too when you don't know what is coming up."
- "You have to balance it out with family, too. That is probably the biggest thing."

7. How many of you work off the farm in addition to the farming?

- "I work 40 hours and another 40 hours plus the farming. That is true for other farmers, too. Either they farm or do both farming and another job."
- "In my area, most farmers do something besides farming. They work at places like cooperatives or wherever."

8. What improvements do you think program organizers should make to increase participation?

- "They need to get out the message what the organization is and what is it about."
- "More funding or sponsorship to allow more advertising"
- "Use all of the free advertising available. Marketing is a big issue."
- "Local colleges should advertise through the agriculture programs to the classes."
- "Instructors should talk more about it. I have never heard the instructors talking about going to farmer education programs."
- "You need a marketing plan."

9. What improvements do you think educators should make to increase participation?

- "They need to identify what the needs are first; topics that are relevant to what is going on in agriculture."
- "Keep it interesting; like up-to-date material."
- "Technology is changing so fast; need to do a lot of reading to stay ahead on what is new"

- "Like this meeting, we sat down and made a plan but things changed so fast. You need to be flexible for changes."

10. Of the educational programs that you have seen or heard recently, what made them good to you?

- "They were of interest, farm related."
- "They talked to us like we were someone, not a face in a 150 people crowd."
- "Tour was broken down to smaller groups so we could ask more questions on an individual basis."

11. To what educational sources do you go to get information you need related to agricultural technology?

- "Iowa State Extension initially, probably mainly."
- "Head implement dealers; chemical dealers.";
- "Publications, anything that can help"
- "If you shop around, you hear one set of stories from one dealer and other side from somebody else. Piece them together to form your own opinions on it, what you think of it."
- "I think quite a bit of it comes from farmer-to-farmer. We may read about something or hear about something, but we may not take interest unless some one relates that they have used this technology. They put more value to that. That is why young farmers' tours and seminars are more interesting, a hands-on tour is really good. Fellow farmers have more credibility."

- "I think extension has lost a lot of credibility. Extension publications are outdated. Maybe it depends on the county, they need to look in to their marketing, too."

12. Do you get information from the Internet or satellite?

- "Like I said it boils down to time. It takes a lot of time to read through that thing."
- "Marketing stuff, I get quite a bit off of DTN."
- "I use Farm Data. A lot of guys play with the Internet. I don't know how much value you can get off of that."
- "You can ask questions and other farmers answer your questions or they give you their thoughts on it. Get more of a broad opinion that way. A lot of it is asking your neighbor."
- "A lot of education goes on in a non-formal way through interaction with other farmers. When we go to national conventions, get people across the nation that have the same problem but may be raising different kinds of livestock. It is amazing how you can help each other out with ideas. Networking is what I am talking about."

13. Tell us about your farming situation.

- "I have a family operation of 2700 acres of grain and run about 8000 head of hogs."
- "I work at a grain elevator and have 50 sows, and farm a 300-acre operation"



- "We have about 750 acres of corn and soybeans, finish about 90 head of cattle, furrow 30 sows and feed out 400 head of pigs"
- "I have got a 40 cow-calf operation and about 200 head of hogs and I have a 40-hour full time job at John Deere, and I have a 40 hr. per week lawn care business."
- "Mine is mainly livestock, about 50 head of ewes; about 30 head of cows; 70 head of cattle for finishing. Working with young farmer activities and things like that."

14. In a teaching and learning environment, what are the things that encourage you to participate in the learning process? What strategies do you like to see the presenter use?

- "Opportunity on how to get there from here."
- "How to take home what he is saying to the farm, how to use it."
- "Maybe using a variety of presentation methods, keeping it interesting. Things like pictures and models are helpful. Humor doesn't hurt either."

15. In a teaching and learning environment, what are the things that discourage you from participating in the learning process?

- "One speaker, lectures."
- "Cost of seminars, time factor (length of the program) again."

16. How many of you, if you are going for loan money have lending agencies that attach requirements to attend educational workshops? Do you have to get involved in programs such as FHA loans?

- "Some of them don't and some do. I know a bank down in our area that they are very much encouraging, if not requiring, the pork producer to attend the pork workshop. I think you may see more and more of that. It is a schooling type of thing. It is a financial management course."
- "I know persons in Denmark, I am not sure if any other European countries do this but you can get a loan at a lower interest rate if you have what they call a green card obtained through the agricultural college. At the national level, we have the EAA program (Education for American Agriculture) that is giving points to farmers participating in young farmer activities and you receive a degree. This is recognition for achieving a level of education."

17. What would you suggest that we do to improve the educational programs for farmers?

- "Make it a kind of open-ended suggestion rather than telling them how to do it. I guess farmers are a very independent group and they don't want to be told. Agriculture works in a lot of areas and there are a lot of ways you can possibly do it. There are many examples and ways of doing something and still be successful. It doesn't matter how you do it. Whenever there is profit. You can make money in many different ways. How you do the job and how you make money are two different things. Whatever works for you."
- "I think we need to motivate either agriculture instructors or community colleges. "They need to motivate the constituency or young farmers to adult farmers." "To create a program and to give them ownership so they

can create what is best for their needs. They need education, but farmers have to have some control."

- "Farmers pick and choose what they want to hear, what they want the information on. Instructors can set up all kinds of meetings, which may be interesting, but people don't come if they don't have a sense of ownership. That is why we are using an advisory committee to develop those topics."

18. If you were trying to project down the road the next 10 to 15 years, you are trying to vision the best educational program for farmers, what would it look like?

- "It is hard to say what it is going to look-like after 15 years. From what I got from the Elsworth College, I got the absolute most from this one class we went on farm tours every Wednesday. We toured the buildings. We talked to the farmers not to the workers. We learned everything we could about that farm. I think we learned the most doing it that way. So you got to pick their brains. The instructor was asking questions. He was not giving a presentation. He was just one of us."
- "There are certain things you just can not teach in a class. It has to be out there hands-on, for example, how to grease a car and how to change oil. How do you know when the sow is going to farrow? That type of thing. Those are the things you need to interact with other people on. You can't learn operating a machine in a classroom."

19. Research shows that farmers rely on magazines a lot to get their information. Do you people rely on that?

- "Yes."

- "You might get information from a radio, too, while you are in your tractor."
- "No library use because of time constraints."

20. What does motivation mean to you?

- "Motivation and leadership go hand in hand, a good leader can motivate people. He has to learn how to motivate other people."
- "Motivation means willingness to do something, to participate, be interesting."

### Summary

The findings of this study indicated that respondents were mostly in agreement with the perception statements regarding motivation to learn. However, the focus group interview results and written comments from the respondents showed variation in the perceptions regarding motivation to participate in educational programs, motivational factors and barriers. Although the name of the organization is stated as "Iowa Young Farmers' Educational Association," the age of the respondents ranged from 21 to 71 years of age and the majority of the members were men. The majority of the respondents had both crop and livestock operations indicating some similarities within the group.

The number of years in farming, age and educational level of the farmers appeared to have an impact on their perceptions of motivation to participate in educational programs particularly in written suggestions given by respondents. The results of interview reflect the farmers' interest and motivation when the material is practical to their own situation. The

survey results show that over forty percent of the respondents use magazines as their number one choice of agricultural information.

## CHAPTER V. DISCUSSION

The overall purpose of this study was to assess perceptions of the members of Iowa Young Farmer's Educational Association regarding their motivation to participate in educational programs. No studies examining farmer perceptions of this subject area were discovered during the review of literature. This chapter will discuss major findings of the study.

### Farmers' Perceptions Regarding Motivation to Learn

The farmers in this study perceived that motivation to learn is directly related to ambition to succeed, personal desire to learn, usefulness of the content material, immediacy of the need and satisfaction from achievement. The findings revealed that multiple variables are involved in adult motivation. Warren (1973) stated that human motivation is not unitary, but rather it is a configuration of many factors. Ambition to succeed was the highest-ranking item with a mean rating of 4.39, followed by personal desire to learn with a mean rating of 4.35. The means of the remaining five items ranged from 3.45 to 3.95. There is no limit to the number of reasons why adults might want to learn something, as long as adults feel a sense of choice (Knowles, 1980). Ambition to succeed, personal desire to learn and satisfaction from achievement are internal sources of motivation. This shows that adults are primarily motivated by internal factors either to learn or to do other things. On the other hand, usefulness of the content and immediacy of the need are extrinsic sources of motivation. This shows that adults are motivated to learn by both intrinsic and extrinsic factors. These findings are in agreement with the findings of Deci and Ryan (1985) and Knowles (1980) that adults are motivated to learn by internal and external factors.

Internal and external sources of motivation appear to inseparable. One might have personal desire to learn, but this desire may be linked to ambition to succeed materially. This may not be true in every situation, but it is human nature to think what a person might gain from participation in any activity. For example, people make contributions for religious reasons, because they expect rewards after this life or even in this life. It is a human behavior to expect reward from any given activity.

Interview results from the focus group regarding motivation to learn showed similar results. The five young farmers who participated in a focus group interview were asked to answer a question, "What is the most important reason for you to attend educational program?" The responses were:

"Self-motivation."

"You want to learn more."

"You want to be better at what you are doing."

"It has to be something of interest."

The interview results also support that these farmers are motivated both intrinsically and extrinsically. The first two statements, "self-motivation," and "you want to learn more" are intrinsic motivators. The last two statements that indicate bettering skills or expertise and something of interest (benefit) could be either internal or external motivators. A person may want to improve his/ her skill for an artistic reason or economic gain. Something of interest may imply economic, social recognition or other personal need indicating yet links between the external and internal sources of motivation.

### **Farmers' Preferred Learning Methods**

The results of this study show that Iowa farmers prefer to learn by hands-on activities. The statement "I like to learn by hands on" was number one with a mean rating of 4.61. This shows that these farmers are highly interested in practical knowledge rather than being given a lecture. The qualitative results also show that farmers prefer to learn by "hands on" or "trial and error" methods rather than regurgitation of concepts. The second ranking item was " I like to learn with a variety of methods" with a mean rating of 4.28. Farmers preferred short presentations rather than long lectures. The item, " I like to learn in groups" was last with a mean rating of 3.95. For field tours, these farmers preferred breaking down into smaller groups so that they may ask individual questions. Interest to learn individually rated third. Overall, these farmers preferred to learn through a variety of methods individually. However, they emphasized hands-on learning methods whether done individually or in-groups.

### **Motivational Factors**

Regarding the factors that may motivate farmers to participate in educational programs, the members of Iowa Young Farmer's Educational Association who participated in this study rated "increasing profitability" as the number one factor in motivation with a mean rating of 4.35. "I participate in educational programs to learn the latest technology," and "to learn something new" both followed with the same mean rating of (4.29). These farmers were very conscious of the speed of technological changes and were motivated to learn to catch up with the technological advancement in agricultural industry. "Relevance" was the third rated motivational factor with a mean rating of 4.03. Qualitative results also show that farmers are motivated when they get what they "want" and "need."



### **Barriers to Participation in Educational Programs**

The time barrier had the highest mean rating (4.18) compared to the rest of the statements. The lack of time was identified as major barrier to adult participation in educational programs by Cross (1988) and Roger (1993). "Accessibility" was the second barrier. Written statements of the respondents indicated that when the educational program is held out of town, farmers are not motivated to travel far. "Irrelevant material," was the third barrier. This shows that when these farmers believe the material is irrelevant to their situation, their participation diminishes. Surprisingly, unawareness of the possible programs was the fourth barrier. Qualitative findings revealed that farmers are not aware of many programs that are going on. The Extension service was considered weak in promoting its programs.

The interview results revealed these main barriers:

- Other activities.
- Time constraints.
- Involvement in other organizations or groups.
- Distance.

Everyday activities are priorities and as a result become barriers to participation in educational programs. Time was identified as a barrier in both qualitative and quantitative segments of this study. Specially, during spring, summer and fall seasons, farmers are busy in farm activities. These farmers expressed that they have more time during the winter season to participate in educational programs. Organizing educational programs when farmers are busy, simply guarantees poor participation.

Besides their farming operations, farmers are usually involved in church and other organizations, which may compete for their extra times. These farmers expressed that although they had interest in participating in educational programs, they had to make choices among immediate family needs, farm operation needs and other social demands. Farmers in the focus group stated that they had part-time or full-time jobs in addition to their farm operations. The immediacy of the need and the consequences of ignoring it may be too costly, therefore, it gets priority. The literature confirms the fact that adult learners are divided between many choices (Cross, 1981, Reeve, 1997, Rubenson, 1977). The further away the program is located the less motivated farmers are to participate in it.

The general written comments by sixteen of the respondents showed a great deal of variation. These comments indicated that these farmers were very independent in their views. Some of the respondents perceived that the program planners are detached from real-life experiences of farmers. Therefore, the respondents perceived that the programs that are designed by program planners are not relevant to their needs. Some of the respondent perceived that the knowledge they gain from their own farm experiences is more important than programs that are given by providers. Others perceived that no matter how good or important the program is, it is hard to get people to attend educational programs. Younger farmers perceived that older farmers are not open to new innovations and ideas. On the other hand, older farmers perceived themselves as experts and capable of teaching others. The older farmers perceived that they knew everything they needed to know to run their farm operations. Farmers have already formed their attitudes through their own experiences, and these attitudes have become barriers to participation in educational programs.

Some of the comments revealed that these farmers perceived that educational programs are not up-to-date and extension programs don't match with farmers needs regarding profitability. On the other hand, some respondents' comments revealed that they have positive attitudes about educational programs. They like to see more help to extension agents and more programs to rural areas. However, they showed some concern about time constraints and irrelevance of the material to their situations.

### **Demographic Characteristic**

Demographical differences did not influence the perceptions of the respondents regarding their motivation to participate in educational programs. Differences in gender, age, educational level, marital status, etc, didn't indicate statistically significant differences.

### **Summary**

Participants of this study perceived that motivation to learn is driven by both internal and external factors. Demographic differences had no influence on the perceptions of the respondents. These farmers identified magazines as their preferred source of agricultural information. They did not seem to relate that the information they get from magazines was coming from extension experts and university professionals. Directly or indirectly, information that farmers get through magazines, radios, television, etc., comes from University Extension.

Farmers in this study indicated that they prefer to learn by hands-on activities and through trial and error whether it is individually or in-groups. For tours, the respondents

preferred breaking down into smaller groups. Over all, the participants of this study preferred to learn through a variety of methods.

The respondents of this study said "increasing profitability" was the number one motivational factor. Increasing profitability was followed by desire to learn the latest technology. This actually matches with the objective of the Iowa Young Farmer's Educational Association, "to stay current with the changing technology." Relevance of the material was also an important motivational factor.

Time was a leading barrier to participation in educational programs. Distance, irrelevant material and being unaware of available programs were also important barriers to participation. Farmers also stated that they have to make choices between their family's immediate needs and educational programs although they know that they are available and helpful to them.

Written statements of the farmers revealed that farmers consider themselves as experts specially as they farm longer and get older. Some perceived that they knew everything they needed to know. However, others stated that educational programs are beneficial, and they would like to see more of them.

## CHAPTER VI. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the study, major findings, conclusions and recommendations based on the findings, and implications and educational significance of the study.

### Summary

Adult learner participation and learning is directly linked to motivation. For adult educators, motivating their clientele to participate in educational programs is a constant challenge. It is difficult to predict adult learner's behavior. Marriam and Caffarella (1991) indicated that it is a mystery why adults don't participate in educational programs that are designed to help them. Barker (1997) pointed out that learning is intimately connected to human motivation. To achieve any success in participation and learning, program planners need to learn about their clients' needs, motivations, learning preferences and barriers that are related to their participation in educational programs.

The primary purpose of this study was to identify and analyze the perceptions of members of Iowa Young Farmer's Educational Association regarding motivation to learn, preferred learning methods, motivational factors regarding participation and barriers to participation in educational programs. The secondary purpose of this study was to provide research-based information to program planners and educators to improve future educational programming to meet the needs of farmers. The specific objectives of this study were to: 1. Identify adult learner perceptions regarding motivation to learn; 2. Identify adult learners preferred learning methods; 3. Identify motivational factors (incentives) for participation in

adult education programs; 4. Identify barriers to participation in adult education programs; and 5. Determine a socio-demographic profile of adult participants in adult farm programs.

### **Summary of the Methods**

The population of this study consisted of the 148 members of Iowa Young Farmers Educational Association. The population for this study consisted of all the members of Iowa Young Farmers Educational Association during the summer of 1997. The membership list was obtained from the executive chairman of Iowa Young Farmers Educational Association. The whole population was surveyed.

The instrument for the study was developed by the researcher based on a literature review, interview information from five Iowa young farmers, and suggestions from selected faculty members in the Iowa State University College of Agriculture. This instrument was designed to measure farmer perception regarding motivation to learn, learning preference, motivational factors, and barriers to participation in educational programs. The instrument was mailed to 148 Iowa Young Farmers' Educational Association members on August 23, 1997. A cover letter on the first page of the survey instrument explained the nature of the study and assured anonymity of responses. The total response for the study was 103 (69.6%) farmers. Data collection was completed by November 10, 1997.

Qualitative data was collected by conducting a focus group interview of five selected members of the Iowa Young Farmer Educational Association on June 27, 1997. The five farmers represented different parts of the state of Iowa. They represented diversity of farm operations that are going on in the state of Iowa. Prior to conducting the interview, the researcher sent a letter that stated the subject, conditions of the interview and the purpose of

the research to the potential interviewees. The interview was conducted in person for 45 minutes, taped and transcribed to determine major ideas and themes discussed by the participants.

To determine if there was a difference between the respondents and non-respondents, the researcher did a telephone survey of 22% of the non-respondents. The t-test analysis indicated no significant difference between respondents and non-respondents.

The Statistical Package for Social Science (SPSS) computer program was used to analyze the data with a 0.05 significance level set a priori. Descriptive statistics consisting of means, standard deviations, percentages and analysis of variance were used to describe the population.

### **Summary of the Findings**

Analysis of quantitative and qualitative data of this study revealed the following findings:

1. The majority (91%) of the respondents were male.
2. The majority (95%) of the respondents had completed high school or higher level of education.
3. Sixty-two percent of the respondents had a two-year college education or more.
4. The majority (87.1%) of the respondents were between the age of 21 and 45.
5. The majority (72%) of the respondents were married and had children.
6. Over thirty-seven percent of the respondents participated in educational programs six or more times in a year.

7. Forty-six percent of the respondents were full-time farmers; 18.3% part-time; and 34.4% reported they did a full-time job farming and a full-time off-farm employment.
8. Forty one percent of the respondents owned 100+ acres of land; 18% did not own land.
9. Over 46% of the respondents rented 300+ acres.
10. Over thirty-three percent of the respondents believed that their participation in program planning would increase their participation in educational programs.
11. Forty-one percent of the respondents were unsure whether their participation in program planning would increase their participation in educational programs.
12. Over seventy-eight percent of the respondents were engaged in both livestock and crop production.
13. Seventy-two percent of the respondents had eight or more years of farming experience.
14. Thirty-nine percent of the respondents reported magazines as their number one source of agricultural information. The Extension service was rated second.
15. The respondents perceived that motivation to learn is related to multiple factors. They rated ambition to succeed as a leading reason for engaging in educational activity, closely followed by personal desire to learn, usefulness of the content and immediacy of the need, respectively.
16. The respondents preferred to learn through hands-on activities or trial and error methods. They also like to learn through a variety of methods. When given a



choice, they slightly favored learning individually than in-groups. For field tours, they preferred breaking down to smaller groups.

17. These farmers were motivated by multiple factors to participate in educational programs. The highest scoring factor was a desire "to increase profitability." A desire "to learn the latest technology" and "to learn something new were rated a close second. Relevance and accessibility of the educational programs, and increasing their career options were also rated as important motivational factors.
18. For these farmers, time was found to be the primary barrier to participation, followed by lack of accessibility, irrelevant material and unawareness of possible educational programs, respectively.
19. These farmers perceived themselves as experts because of their practical farm experience.
20. Younger farmers perceived that older farmers are not open to new innovations.
21. Older farmers perceived that they have a lot to share and help others learn.
22. Some farmers felt that the Extension service should join the real world and should be in tune with the need for profitability.
23. Some of the farmers felt educational programs are very helpful, and they like to see more programs in the rural areas.
24. These farmers had to make choices and priorities among the family needs, farm operation needs, social responsibilities and educational programs.
25. These farmers were motivated both internally and externally.
26. These farmers have more open times during winter season, and they would like to see more programs in the wintertime.

27. Most of these farmers have part-time or full-time work besides farming.
28. These farmers perceived that educational programs were not well advertised.
29. These farmers used various sources for agricultural information: University Extension, chemical dealers, publications and other farmers.
30. These farmers preferred farmer-to-farmer information in the case of new technology transfer.
31. Some of the farmers perceived that Extension publications are outdated.
32. These farmers perceived themselves as an independent group of people.

### **Conclusions**

The objectives of this study were to identify the perceptions of members of Iowa Young Farmer's Educational Association regarding motivation to learn, preferred learning methods, motivational factors, barriers to participation in educational programs and identifying the demographic characteristics of respondents. Based on the findings of this study, the following conclusions were drawn:

1. Analysis of demographic characteristics of quantitative segment of the study did not show any differences in perceptions of respondents regarding motivation to participate in educational programs. However, the qualitative segment of the study revealed perception differences between the older and younger farmers. Farmers who farmed longer and who were older perceived themselves as experts and showed no interest in participating in educational programs.
2. Respondents participated in educational programs only few times in one year.

3. Respondents stressed that they were leading extremely busy life working full-time or part-time jobs besides their farm operations. For farmers, time constraint is a barrier to participation in educational programs.
4. Respondents believed that their involvement in program planning would increase their participation in educational programs.
5. Respondents used variety of sources for agricultural information. Magazines were their favorite sources of agricultural information followed by Extension services.
6. Respondents' motivation to learn was driven by multiple factors. Those motivational factors were both internal and external.
7. Respondents preferred variety of learning methods including hands on.
8. Regardless of demographic differences, respondents were motivated by the following factors to participate in educational programs: 1. desire to increase profitability, 2. desire to learn the latest technology, 3. relevant material, and 4. accessibility of the educational programs. Respondents wanted Extension to help them increase their profitability.
9. Lack of time, inaccessibility, irrelevant programs and poor advertisements were some of the barriers to participation in educational programs.
10. Respondents had to make day to day decisions to engage in various activities based on priorities. Participation in educational programs is not immediate need and priority for many respondents.

## Recommendations

The following recommendations were made based on the findings and conclusions drawn from this study: The results of this study should be shared with the Iowa Young Farmer's Association leadership, program planners, Iowa Department of Education, Extension agents and agricultural teachers.

1. Farmers are extremely busy people, therefore, program providers should take the farmers' schedule into consideration, plan programs convenient to the farmers by involving them directly in the planning process, and provide programs in time management.
2. Program providers should get more aggressive and creative in their program promotion and advertisement.
3. Respondents are interested in the profitability of their businesses. Programs that are designed to increase profitability may attract farmers to participate in them. Increasing profitability may serve as a selling point to educational programs. It is recommended that program planners should maintain profitability as integral part of all educational programs designed for farmers.
4. Accessibility of educational programs could be increased in many ways. Designing distance education programs through videotapes, WWW based courses, course packets, communication network, etc. would remove the distance and time barriers.
5. Respondents were well aware of the influence of technology, and they like to keep up with latest technology. Computers are increasingly becoming popular among the younger farmers. Learning computer skill could motivate farmers to

come to educational programs. Opening computer labs for the training purposes in various rural locations may open the door for various educational programs.

6. Program planners should go out and interact with the farmers and identify real world challenges of farmers and design programs that would provide practical solution to the problems.
7. The program material should be of interest to farmers and current. Providers must make sure the educational material is the latest and relevant to the situation.
8. Program planners should incorporate more hands-on learning activities into programs. Farmers are interested in problem solving. Providers must make sure that participants got something to take home with them.
9. Designing programs that could involve the whole family of the farmers. Activity oriented and entertaining programs may attract more farmers to the program.
10. Designing programs that would create an environment whereby farmers could share their experiences and experts among themselves with the facilitation of Extension workers.
11. Repackaging Extension publications. Extension should go beyond merely interpreting and publishing the results of scientific findings rather must relate and evaluate the economic and social trends of the time and future and matches the needs.
12. Program providers could work in partnership with other publishers, radio and television broadcasters to provide special programs occasionally.

### **Recommendations for Further Research**

1. The findings of this study showed that a time constraint was the main barrier regarding participation in educational programs. A study of underlying time use and prioritizing activities would enhance our understanding of the problem and open a way to find a solution.
2. The findings of this study revealed that farmers mainly use magazines for their agricultural information. A study of why farmers prefer magazines for their source of agricultural information rather than other publications would help define the packaging problems.
3. The results of this study showed that educational programs have not been well advertised. A study of promotional and advertisement methods that are being used currently would help in identifying the weaknesses and strengths of marketing.

### **Implications and Educational Significance of the Study**

This study has provided important information about the perceptions held by members of Iowa Young Farmer Educational Association regarding their motivation to learn, preferred learning methods, motivational factors and barriers to participation in educational programs.

The results of this study may assist the Iowa Young Farmer's Educational Association board of directors to improve their program planning and provide programs that meet the needs of farmers, and as a result improve farmer participation. Other farmer associations and extension agents may also benefit from the findings of this study.

The findings regarding preferred learning methods could enhance our understanding of farmers' learning methods. The findings regarding adult learners' choices, show that practical and useful information is preferred by farmers. These farmers were found to be independent, and wanted educators to play a facilitator role rather than lecture role. Based on these findings, using a combination of progressive and humanistic philosophical approach may fit best in teaching the adult learner. These findings could be incorporated in teaching methods classes to enrich the content of teaching materials.

**APPENDIX A. HUMAN SUBJECTS REVIEW COMMITTEE**  
**APPROVAL FORM**

Last name of Principal Investigator Dollisso

Checklist for Attachments and Time Schedule. The following are attached (please check):

12.  Letter or written statement to subject indicating clearly:
- a) the purpose of the research
  - b) the use of any identifier codes (names, numbers), how they will be used, and when they will be removed (see item 17)
  - c) an estimate of time needed for participation in the research
  - d) if applicable, the location of the research activity
  - e) how you will ensure confidentiality
  - f) in a longitudinal study, when and how you will contact subjects later
  - g) that participation is voluntary; non-participation will not affect evaluations of the subject
13.  Signed consent form (if applicable)
14.  Letter of approval for research from cooperating organizations or institutions (if applicable)
15.  Data-gathering instruments

16. Anticipated dates for contact with subjects:

First contact: 7/3/97

Last contact: 8/25/97

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased: 9/15/97

18. Signature of Departmental Executive Officer

*[Signature]* date 8/12/97 Department or administrative unit AGEDS

19. Decision of the University Human Subjects Review Committee:

- Project Approved     Project Not Approved     No Action Required

Patricia M. Keith, Committee Chairperson

6/23/97  
(date)

*PM Keith*  
(signature of committee chairperson)



**APPENDIX B. COVER LETTER AND DATA  
COLLECTION INSTRUMENT**

Department of Agricultural Education  
and Studies  
201 Curtiss Hall  
Ames, Iowa 50011-1050

**Dear Farmer,**

***We need your help!!*** As an adult farmer, you have valuable insights in the motivation of adult farmers to participate in educational programs in your community. Your views are crucial in helping educators to plan educational programs that are relevant and beneficial to you and other Iowa farmers. The results of this survey will be used to improve programs that are designed for farmers across the state of Iowa.

This survey may only take approximately 10 minutes to complete, but the results may very well guide many of our decisions for years to come. Therefore, it is extremely important that you respond to the questionnaire in terms of your views. We assure you that your responses will be confidential. The surveys are coded for mailing purposes only in order to follow-up non-respondents. Only group data will be reported. All instruments will be destroyed after analysis of the data. The data will be used to complete a master's degree.

While your participation is strictly voluntary, you are one of a select number of farmers who have been chosen to participate in this study. Therefore, it is very important that you complete and return your survey to assure that the study is representative of farmers' views. Please return the completed questionnaire in a self-addressed envelope ***within five days.***

Thank you for taking the time from your busy schedule to complete this questionnaire. Without your assistance it would be impossible to get this much-needed information.

**Sincerely,**

**Awoke D. Dollisso  
Graduate Student**

**Robert A. Martin  
Professor**

## Adult Motivation for Learning Questionnaire

To what extent do you agree with the statements below? Please circle your choices.

The Key:

SD = Strongly Disagree   D = Disagree   NS = Not Sure   A = Agree   SA = Strongly Agree

### Part I

	<u>SD</u>	<u>D</u>	<u>NS</u>	<u>A</u>	<u>SA</u>
<b>I believe motivation to learn is directly related to:</b>					
1. immediacy of the need	1	2	3	4	5
2. ambition to succeed	1	2	3	4	5
3. satisfaction from achievement	1	2	3	4	5
4. benefit from the knowledge	1	2	3	4	5
5. confidence of the learner	1	2	3	4	5
6. attention capturing ability of the presenter	1	2	3	4	5
7. clearly stated goal	1	2	3	4	5
8. usefulness of the content	1	2	3	4	5
9. personal desire to learn	1	2	3	4	5
10. getting pleasure	1	2	3	4	5
11. external incentives	1	2	3	4	5
12. other: write your own response, if any	1	2	3	4	5

### Part II

<b>I like to learn:</b>					
1. individually	1	2	3	4	5
2. in groups	1	2	3	4	5
3. by hands on experience	1	2	3	4	5
4. with a variety of methods	1	2	3	4	5
5. other: write your own response, if any	1	2	3	4	5

**Part III**

<b>I participate in educational programs:</b>					
1. to learn the latest technology	1	2	3	4	5
2. to maintain my job status	1	2	3	4	5
3. to increase my job options	1	2	3	4	5
4. because of its accessibility	1	2	3	4	5
5. to learn something new	1	2	3	4	5
6. because of time convenience	1	2	3	4	5
7. because of affordability	1	2	3	4	5
8. because of relevance	1	2	3	4	5
9. to increase profitability	1	2	3	4	5
10. other: write your own response, if any	1	2	3	4	5

**Part IV**

<b>I don't attend some educational programs because of:</b>					
1. too much lecturing	1	2	3	4	5
2. cost	1	2	3	4	5
3. time	1	2	3	4	5
4. accessibility	1	2	3	4	5
5. irrelevant material	1	2	3	4	5
6. negative previous experience	1	2	3	4	5
7. unaware of possible programs	1	2	3	4	5
8. bad institutional credibility	1	2	3	4	5
9. other: write you own response, if any	1	2	3	4	5

**Part V****Demographics:**

**Please circle the option that is appropriate to your situation for each question.**

1. Your educational level is:

a) <12th grade b) 12th grade c). 12 + 2 yrs. d). 12 + 4 yrs. e). 17> yrs.

2. Your gender:

a). Female b). Male

3. Do you work off the farm?

a). None b) Part-time c) Full-time

4. How often do you participate in educational programs?  
 a). Not at all    b). Twice a year    c). Four times a year    d) Six times a year  
 e). Once a month
5. Your age in years is: \_\_\_\_\_.
6. Marital status:  
 a). Single    b). Single parent    c). Married but no children  
 d). Married and have children
7. Land you own in acres:  
 a). None    b). 1 - 99    c). 100 - 199    d) 200 - 299    e). 300+
8. Land you rent in acres:  
 a) None    b). 1 - 99    c). 100 - 199    d) 200 - 299    e). 300+
9. Your farm involves  
 a). Only livestock    b). Only crops    c). Combination
10. Number of years you have been farming: \_\_\_\_\_.
11. Do you believe your involvement in planning educational programs would increase your participation in these programs?  
 a) Yes    b) No    c) unsure
12. From what source(s) do you get educational information? Please put them in the frequency order: 1 = most frequently used, 8 = least frequently used source.
- \_\_\_\_\_ Extension offices
  - \_\_\_\_\_ Internet
  - \_\_\_\_\_ Magazines
  - \_\_\_\_\_ Radio
  - \_\_\_\_\_ TV
  - \_\_\_\_\_ Neighbors/friends
  - \_\_\_\_\_ Relatives
  - \_\_\_\_\_ DTN

Do you have any comments about adult education programs in general?

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### Interview Schedule

Focus group: Five members of Iowa Young Farmer Educational Association

Interviewers: 1. Awoke D. Dollisso 2. Dr. Robert A. Martin

Date: 6/27/97

1. As an adult learner, how do you learn best? Or when do you learn best?
2. What factors motivate you to participate in educational programs?
3. What barriers stop you from participating in educational programs?
4. Why do you chose to attend some educational programs over others?
5. What is the most important reason for you to attend educational programs?
6. What is the most difficult barrier that deters you from attending educational programs?
7. How many of you work off the farm in addition to the farming?
8. What improvements do you think program organizers should make to increase participation?
9. What improvements do you think educators should make to increase participation?
10. Of the educational programs that you have seen or heard recently, what made them good to you?
11. To what educational sources do you go to get information you need related to agricultural technology?
12. Do you get information from the Internet or satellite?
13. Tell us about your farming situation.
14. In a teaching and learning environment, what are the things that encourage you to participate in the learning process? What strategies do you like to see the presenter use?

15. In a teaching and learning environment, what are the things that discourage you from participating in the learning process?
16. How many of you, if you are going for loan money have lending agencies that attach requirements to attend educational workshops? Do you have to get involved in programs such as FHA loans?
17. What would you suggest that we do to improve the educational programs for farmers?
18. If you were trying to project down the road the next 10 to 15 years, you are trying to vision the best educational program for farmers, what would it look like?
19. Research shows that farmers rely on magazines a lot to get their information. Do you people rely on that?
20. What does motivation mean to you?

**APPENDIX C. FOLLOW UP LETTER**

September 8, 1997

Dear Farmer,

Recently we mailed you a questionnaire regarding motivation for adult learners to participate in educational programs. Unfortunately, we have not yet received your reply.

We understand this is one of the busiest times on the farm. However, we still need your participation. Please help us by completing and returning the questionnaire by September 18, 1997. If you have already completed the questionnaire, please disregard this letter, and we thank you for your cooperation.

Your participation is voluntary. If you choose not to take part in this study, please return the blank questionnaire in the envelope provided earlier as soon as possible.

Should you have any questions, please call us at (515)-294-0896. We appreciate your participation in this important study.

Thanks for your cooperation.

Sincerely,

Awoke D. Dollisso  
Research Assistant

Robert A. Martin  
Professor, Agricultural Education

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