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ABSTRACT

The purpose of this study was to determine whether higher levels of 4-H leadership positively correlate with higher levels of emotional intelligence. Also, this study sought to determine whether the Texas 4-H program enhances emotional intelligence through their character education program. A final purpose was to determine if these traits were reflected in the leadership of the 2005-2006 Texas 4-H Council.

When character development variables were measured against gender, only three were found to be significantly different. There was also little significance when the character development variables were measured against the type of school (public, private, home) the Council members attended. There was no relationship between character development and years in the 4-H program.

The Total EQ score obtained by the Texas 4-H Council members was about average (97). Usually a score in this range is obtained by a group that functions very well in some or most areas of emotional intelligence. A score of 100 represents effective emotional functioning. Overall, females on Council had higher scores for all five of the Emotional Quotient domains and, therefore, for the Total Emotional Quotient score. There was no relationship between emotional intelligence and years in the 4-H program and no difference in character education and emotional intelligence levels for Texas 4-H Council officers versus Texas 4-H Council members. However, the author did find that there was a positive relationship between character education and emotional intelligence.
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CHAPTER I

INTRODUCTION

Background and Setting

Emotional Intelligence “is a type of social intelligence that involves the ability to monitor one’s own and other’s emotions to discriminate among them and to use the information to guide one’s own thinking and action” (Mayer & Salovey, 1993).

While Intelligence Quotient (IQ) has long been used as a predictor of a student’s success, as the world enters the 21st Century, research shows that Emotional Intelligence (EI) is a better predictor of “success” than the more traditional measures of cognitive intelligence (EQ University, 2004). According to Pool (1997), IQ predicts only about 20 percent of career success while emotional intelligence predicts about 80 percent of a person’s success in life.

For example, research has shown that boys who are always in trouble and aggressive in the second grade are six to eight times more likely to be violent and commit crimes in their teen years, whereas girls in the sixth grade who confuse anger with anxiety and boredom with hunger are most likely to develop eating disorders (O’Neil, 1996).

Research also suggests that people with high levels of emotional intelligence “experience more career success, build stronger personal relationships, lead more effectively, and enjoy better health than those with low [emotional intelligence] EQ” (Cooper, 1997, p.32).
When discussing emotional intelligence, it is important to remember that emotional intelligence is learned. It can be developed over time through understanding (emotional intelligence assessment tools) and thoughtful effort (training and development) to realize even greater benefits in personal performance and ultimately success in all aspects of life (Lajoie, 2002). According to Stein and Book (2001), a person’s emotional intelligence quotient continues to rise with age.

In their study on including emotional intelligence in agricultural education curriculum, Marlatt (2003) recommended research be conducted on the relationship between leadership and emotional intelligence.

What is leadership? What is a leader? Although every researcher and research article seems to have a different definition, Fertman and van Linden (1999) have a definition that seems to be a consensus of many thoughts:

leaders are individuals who think for themselves, communicate their thoughts and feelings to others, and help others understand and act on their own beliefs. They influence others in an ethical and socially responsible way. For many, leadership is best described as a physical sensation: a need to share ideas, energy, and creativity, and to not let personal insecurities be an obstacle. Being a leader means trusting one’s instincts, when doing leadership tasks and when acting as a leader. (p.10)

Many youth programs, including 4-H, are focusing on the effectiveness of their leadership training. A general perception prevails that participation in a variety of activities or programs such as public speaking or holding office develops leadership life skills and self-understanding (Dormody & Seevers, 1994).

Boyd, Herring, and Briers (1992) stated that the level of 4-H participation was a significant predictor of leadership life skills development scores among 4-H youth in
Texas. They observed higher leadership life skills development for 4-H members than non-members. Being a member of the Texas 4-H Council is the highest level of leadership attained at the state level in the Texas 4-H and Youth Development program; therefore, suggesting that members of the Texas 4-H Council should have higher life skills development.

Miller (1976) organized the leadership life skills that youth developed in the 4-H program into seven categories: decision making, relationships, learning, management, understanding self, group processes, and communications. Bruce (2003) found that Texas 4-H Council members demonstrated a command of these seven leadership life skill categories.

Understanding and appreciating the complexity of leadership is a prerequisite to supporting and challenging adolescents to be the best leaders possible. Such understanding will also aid in integrating leadership development and character education (Fertman & van Linden, 1999).

Miller (2001) stated that character education and social and emotional intelligence share many overlapping goals. According to Elias et al. (1997), social and emotional education help students develop attitudes, behaviors, and cognitions that will make them “healthy and competent” overall – socially, emotionally, academically, and physically. Both character education and social and emotional education aspire to teach our students to be good citizens with positive values to interact effectively and behave constructively (Akers, 1998).
“Both leadership and character education can (and do) help young people in their struggle to answer the questions “Who am I?” and “How do I fit in?” Both focus on providing possible solutions for the issues and problems that have the strongest impact on adolescents” (Fertman and van Linden, 1999, p. 10).

4-H is considered to be a program in which the development of leadership, character and citizenship is emphasized in the development of young people. These are key components in emotional intelligence. However, no major study has been conducted to determine whether the level of 4-H leadership positively correlates with higher levels of emotional intelligence and whether 4-H enhances emotional intelligence in youth through character education and leadership development.

**Theoretical/Conceptual Framework**

“Leadership is one of the most observed and least understood phenomena on earth,” (Burns, 1978). However, there still exist numerous theories on leadership and leadership development that attempt to answer the highly debated question: are leaders born or made?

The trait theory that was very popular during the second part of the twentieth century suggests that the traits of successful leaders should be studied and emulated (Shriberg, Shriberg, & Lloyd, 2002). Gardner’s 14 Leadership Attributes are an example of the “traits” that a leader should possess: 1) physical vitality and stamina, 2) intelligence and action-oriented judgment, 3) eagerness to accept responsibility, 4) task competence, 5) understanding of followers and their needs, 6) skill in dealing with people, 7) need for achievement, 8) capacity to motivate people, 9) courage and
resolution, 10) trustworthiness, 11) decisiveness, 12) self-confidence, 13) assertiveness, and 14) adaptability/flexibility (Shriberg, Shriberg, & Lloyd, 2002).

The behavioral theory of leadership assumes that leader behaviors rather than personality characteristics are the elements exerting the most effect on followers. The Ohio State studies studied the effects of two dimensions of leader behavior: consideration and initiating structure (Shriberg, Shriberg, & Lloyd, 2002). Consideration refers to the leaders’ awareness of and sensitivity to others’ interests, feelings, and ideas. Leaders high in consideration are typically friendly, prefer open communications, focus on teamwork, and are concerned with the other person’s welfare.

Initiating structure is a leader behavior marked by attention to task and goals. This type of leader presents instructions and provides detailed, explicit timelines for task completion. The study concluded that those who exhibit lots of traits in both areas are the most successful (Shriberg, Shriberg, & Lloyd, 2002).

Kouzes and Posner (2003) state that leadership is an observable, learnable set of practices, therefore implying that the experiential learning theory would be another way in which leadership is developed. This theory emphasizes the key role that experience plays in the learning process. The experiential learning theory comes the closest of any theory to the way leadership is developed among youth in 4-H programs, although the behavioral and trait theories play a role.

The 4-H program takes leadership one step further by advocating that a specific skill set is learned within the larger context of leadership (Bruce, 2003). Miller
(1987) defined youth leadership life skills development as self-assessed and organization specific “development of life skills necessary to perform leadership functions in real life” (p. 2).

In *Dealing with Emotional Intelligence, a Key to Successful Leadership*, Goleman (1998), constructed a framework of emotional intelligence competencies that reflect how an individual’s potential for mastering the skills of Self-Awareness, Self-Management, Social Awareness, and Relationship Management would translate into on-the-job success. Emotional competencies are skills that can be learned and thus people have the potential to become skilled at these competencies (Cherniss & Goleman, 2001).

Goleman, Boyatzis, and McKee’s (2002) Framework of Emotional Intelligence Leadership Competencies include 18 emotional intelligence leadership competencies that fall within four clusters. The four clusters are Self-Awareness, Self-Management, Social Awareness, and Relationship Management. Each of the 18 competencies as well as the clusters have distinct characteristics, however, competencies within each of the four clusters should be related in some way and complement each other (Boyatzis, Goleman, and Rhee, 2000). The first two clusters are personal, while the second two are social and have to do with a person’s ability to manage relationships with others. Emotional competencies seem to operate most effectively in synergistic groupings, with the evidence suggesting that mastery of a “critical mass” or cluster of competencies is necessary for superior performance.

The first cluster in the *Personal Competence* area of emotional competencies is Self-Awareness. Self-Awareness is characterized by a deep understanding of one’s

Self-Management is the second cluster in the *Personal Competence* domain of emotional competencies and includes six competencies: self-control, transparency, adaptability, achievement, initiative, and optimism. Self-Management involves a person’s ability to control and regulate their emotions, their ability to stay calm, clear and focused when things do not go as planned, and the ability to self motivate and initiate (Davies, 2001).

Social Awareness is the first grouping in the *Social Competence* domain. Social Awareness is the understanding of others’ feelings, needs, and concerns which stem from the awareness of one’s own feelings. Social Awareness skills determine how you relate to others, specifically “your ability to sense other people’s feelings and read the mood of the group; to inspire and build relationships; to work in teams; to listen and communicate” (Exley, 2000, p. 96). Three competencies lie within the Social Awareness domain: empathy, organizational awareness, and service.

The second grouping in the Social Competence domain is Relationship Management. This cluster deals with a person’s ability to manage relationships with others and involves the ability to communicate, influence, collaborate, and work with colleagues (Davies, 2001). The Relationship Management focuses on essential social skills and includes the following competencies: inspiration, influence, developing others, change catalyst, conflict management, and teamwork and collaboration.
Research has provided evidence showing the crucial role emotional competencies play in individual, group and organizational success. The implication is clear: “We should be helping young people master these competencies as essential life skills”

(Cherniss & Goleman, 2001, p. 44)
Figure 1: 4-H Emotional and Leadership Life Skill Framework
Purpose and Research Questions

The purpose of the present study was to determine whether higher levels of 4-H leadership positively correlate with higher levels of emotional intelligence. Also this study sought to determine whether the Texas 4-H program enhances emotional intelligence through their character education program, and finally to determine if these traits are reflected in the leadership of the Texas 4-H Council.

Being a member of the Texas 4-H Council is the highest level of leadership attained at the state level in this organization. These youth have held offices at the local, county, and district levels. This group of youth was surveyed and tested at State 4-H Council workshop that was held January 13 - 15, 2006, at the Texas 4-H Center, in order to determine the following:

1. What is the relationship between leadership skills and emotional intelligence?
2. How does leadership development impact/affect emotional intelligence?
3. How does 4-H teach emotional intelligence?
4. Does the level of 4-H leadership positively or negatively correlate with higher levels of emotional intelligence?

The following null hypotheses, generated from the literature review, were also tested.

\[ H_{01} : \text{There is no relationship between character development and years in the 4-H program.} \]

\[ H_{02} : \text{There is no relationship between emotional intelligence and years in the 4-H program.} \]

\[ H_{03} : \text{There is no difference in character development and emotional} \]
intelligence for Texas 4-H Council Officers versus Texas 4-H Council members.

$H_04$: There is no relationship between character development and emotional intelligence.
CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of the review of literature is to look at information related to this study. This review is intended to outline the relationship between emotional intelligence, leadership and character education.

The Cooperative Extension Service

On May 8, 1914, the Smith-Lever Act was signed into law by President Wilson. This act established the Extension Service which completed the triad of the land-grant university, experiment station, and outreach effort known as the Cooperative Extension Service (Vines & Anderson, 1976). The original statement of the 1914 Smith-Lever Act did not mention federal funding for the organization of agricultural clubs for boys and girls as a basic Extension Service activity. However, later amendments to the Smith-Lever Act allowed Extension to include the 4-H program as part of its mission (Ladewig & Thomas, 1987). This was done because, as Hurt (1994) stated, USDA officials recognized that youth agricultural clubs could provide an excellent means to convey knowledge from the experiment stations and land-grant colleges to the farm.

Texas Cooperative Extension

Texas Cooperative Extension is a statewide educational agency and a member of The Texas A&M University System (TAMUS) linked in a unique partnership with the nationwide Cooperative Extension System and Texas county governments.
Texas Cooperative Extension provides quality, relevant education based on local needs to all 254 counties. Needs related to agriculture, community development, family and consumer sciences and youth development will be addressed through their goals to:

- Ensure a sustainable, profitable, and competitive food and fiber system in Texas.
- Enhance natural resource conservation and management.
- Build local capacity for economic development in Texas communities.
- Improve the health, nutrition, safety, and economic security of Texas families.
- Prepare Texas youth to be productive positive, and equipped with life skills for the future.
- Expand access to Extension education and knowledge resources.

The 4-H Program

4-H is a community-based program, organized as a three-way partnership among the federal, state and county Cooperative Extension Services. Volunteers organize local 4-H clubs, special interest groups, school enrichment programs, camps and individual study in more than 3,000 counties, with support from county extension staff and program leadership from land-grant universities (National FFA Organization, 1996). The 4-H program relies on the involvement of parents, volunteer leaders, and county extension agents to conduct "hands-on" educational programs and to transfer parts of the national cultural heritage (beliefs, attitudes, values, skills, knowledge, etc.) to American youth in their local communities or family settings (Ladewig & Thomas, 1987).
The Yearbook of Agriculture (1926) stated that the four "H's" signify the four things through which boys and girls must be trained to insure success in the club. The head must be trained to think, the heart must be kindly and sympathetic toward work and associations, health must be improved and kept good, and the hands trained to be skillful. Over 6 million boys and girls in 4-H clubs in the United States practiced these skills in 1997 (National 4-H Home Page, 1997) and over 45 million have been practicing these four abilities since the early 1900s (USDA Extension Service, 1990).

Through its formative years, 4-H had the benefits of inspired leadership to develop a sound educational system. The objectives of these early leaders were to engage 4-H members in hands-on activities while showing them a better way to do things. The purpose was not so much on the work the youth performs as on the development of the person (Reck, 1949). Today, those same objectives are at the heart of the 4-H program. Professional leaders and volunteers keep the spirit of the 4-H program alive by providing educational activities and experiences that assist youth in their process of developing into successful and productive members of society (Rasmussen, 1989).

The project/demonstration club was, and is currently, the foundation on which the traditional 4-H programs developed. Early clubs consisted of work in the areas of corn, pigs, poultry, tomatoes, bread, and canning (Reck, 1949). Although the areas in which 4-H members learn have changed, the learning experiences are obtained much the same as they were in the past - through the use of project clubs (Kieth, 1997). Four-H programs today include a variety of projects in areas such as citizenship, arts, consumer and family sciences, environmental education and earth sciences, healthy lifestyle education,
personal development and leadership, plant and animals, and science and technology (National 4-H Home Page, 1997). Four-H youth participate in these programs to build lifelong learning skills, competencies, self-esteem, and problem-solving skills (USDA/ES, 1991).

Texas 4-H Council

Youth involvement in program development at all levels is an essential aspect of successful 4-H programming. For this reason, the Texas 4-H Council provides for representative 4-H youth 16-19 years of age the opportunity to advise the state Extension staff on programs for 4-H youth, to maintain linkage with district 4-H councils, to assist with the development and implementation of state events and activities, to provide 4-H youth the opportunity to learn democratic principles and procedures, and to interpret the 4-H program to the public through effective and satisfying group organization. The Texas 4-H Council Standing Rules (2005) state that the purpose of the council shall be to act as a sounding board to identify needs and interests of 4-H youth, suggest and explore action programs that will meet the needs and interests of youth, and to advise in the determination of future 4-H programs.

Texas 4-H Council membership is open to all youth, regardless of race, color, disability, sex, religion, or national origin. It consists of two member delegates from each District 4-H Council and elected delegates-at-large. All are eligible to attain and hold membership on the council for only one year. Membership is open to enrolled members between the ages of 16 and 19 (Texas 4-H Council Standing Rules, 2005).
Youth Development

4-H is not the only program working toward youth development. In a review of youth development programs that had varying levels of success in promoting the attainment of developmental tasks, Hamburg (1989) found several commonalities. Successful programs taught youth skills in decision making, social skills such as communications, interpersonal strategies, and self-regulation. Several successful programs involved peer teachers and leaders, interaction with significant adults, and the use of cooperative learning to foster a teamwork attitude. Programs that were most effective involved parents and linked youth with the community.

Youth involved in experiential education programs entered into more meaningful relationships with adults, experienced more positive attitudes and behaviors, and placed a value on community participation. In addition, the youth also reported having developed more positive attitudes toward careers with better self-concepts and self-esteem in relation to others. A majority reported that they had learned more subject matter and developed empathy for others when compared to youth with no experiential education contact (Conrad & Hedin, 1981).

Weatherford and Weatherford (1987) noted several reasons why an experiential educational program such as 4-H can help adolescents develop life skills. Experiential education incorporates key elements of life skills programs such as problem solving, critical thinking, inter and intrapersonal skills, and connecting youth with adults and the community. They also noted that the model of learning provided by experiential
education is consistent with the stages of human growth because it allows for learning to occur appropriate for the learning style and developmental level of the individual.

**Youth Organizations**

Thompson (1973) identified the purposes of vocational student organizations as leadership and character development as well as promotion of scholarship, citizenship, service, and professionalism. Vocational student organizations provide numerous opportunities for developing leadership skills, but they also provide learning experiences beyond leadership development. Through organizational affiliation, there is also the potential for developing personal, social and educational skills (Spicer, 1982).

In the Handbook for Advisors of Vocational Student Organizations (Vaughn, 1999), former students found vocational student organizations to be of value for the following reasons: (a) creating interest in vocational education, (b) developing leadership, (c) helping young people find themselves, (d) providing for group activities, (e) helping students to develop initiative, (f) motivating and vitalizing students, (g) stimulating occupational experience programs, (h) achieving occupational competencies and social abilities, (i) promoting self-improvement and scholarship, and (j) providing for individual recognition.

Vaughn (1999) went on to state that despite the limitations of research that has been conducted in this area, a major finding that has been consistently reported which emphasizes the need for and the value of vocational student organizations is the importance of things learned. Some of the things learned are citizenship, cooperation,
leadership, tolerance, dependability, and initiative. Although these are hard to measure, most members who were actively involved in a student organization maintain that these characteristics were developed through participation in the organization. These traits were rated as extremely helpful later in life.

Each vocational youth organization possesses some goals and features unique and different from other vocational youth organizations. These differences exist according to the program goals and objectives that each serves (Spicer, 1982). Couch and Myers (1977) identified the following characteristics as common to all vocational student organizations:

1. all are an integral part of an instructional program in vocational education,
2. all provide learning opportunities,
3. all aid in career choice and preparation,
4. all focus on the development of leadership abilities,
5. all are concerned with citizenship awareness,
6. all promote cooperation and teamwork,
7. all help in the development of communication skills,
8. all include recreation and social activities,
9. all provide opportunities of personal growth, achievement, and recognition,
10. all enhance the general public awareness of the values of vocational education.

Bishop (1958) reported a positive relationship between participation in extracurricular activities and higher scores on the California Test on Personality. Students
who were active in student activities ranked higher on the six traits of trustworthiness, resourcefulness, leadership, disposition, independence, and enthusiasm.

As part of the 4-H Impact Study, Schlutt (1987) developed a path model to determine life skills impacts of 4-H and other youth organizations. He found that those who reported involvement in youth leadership programs were more likely to be contributing, responsible adult members of a community. Serving as a club officer or committee member was found to be positively correlated with the development of life skills. Attending youth program club meetings and participating in community service projects were also found to enhance the development of competency and contributory life skills. Networking with others and becoming involved in the community were identified as two major outcomes of 4-H participation.

**Life Skills Development**

Youth life skills development has been discussed in studies mentioned throughout the review of literature. In a 1996 study, Astroth found that 4-H clubs can be effective in helping youth develop critical life skills such as decision-making, responsibility, interpersonal skills, an ethic of service, and how to get along with others. Miller (1987) defined youth leadership life skills development as self-assessed and organization-specific "development of life skills necessary to perform leadership functions in real life” (p. 2).

In Ladewig and Thomas’ study (1987), Assessing the Impact of 4-H on Former Members they measured the effects of background characteristics and life skills on educational achievements. For 4-H alumni, satisfaction with their program’s challenges
and responsibilities had the most significant, positive effect on achieved levels of schooling and grades. Among other participants, respondents with urban backgrounds had more educational achievement, and those with less satisfaction from their participation in youth programs made better grades.

Overall, 4-H membership was rated by respondents as having a high, positive image when compared to other youth organizations. Yet there were three limitations affecting its growth – perception of being unavailable in many areas, inability to retain membership in their late teens, and opportunities for leadership may be too restricted (Ladewig & Thomas, 1987).

Nevertheless, much value was derived from participation in 4-H and other youth programs as well. Large percentages of respondents claimed that some of this value was attained from their contact with people. Also particularly valued were the contributions of adult volunteer leaders, family members, club meetings, and competitions. Participants in all youth programs seemed to rate highly the opportunities available to develop their skills, to make contributions to their programs, and to develop communication and cooperation skills (Ladewig & Thomas, 1987).

Compared to others, 4-H alumni were more satisfied with the program’s contribution to their personal development (e.g., development of self-worth, responsibility development, and goal setting). However, significant percentages of alumni also felt that their experiences in other youth programs were more helpful in developing leadership skills and receiving the most responsibilities (Ladewig & Thomas, 1987).
However, in Ladewig and Thomas’ 1987 study, despite the positive experiences in youth programs, for most participants much of their experiences were not translated into corresponding levels of adult activity. Large majorities were not participators, yet 4-H alumni were involved more often than others. Further, they were more likely to involve their children in 4-H and other youth programs as well, and to be involved themselves as a 4-H leader or volunteer.

Employers of students involved in experiential education programs said they approve of the skills that students develop in vocational student organizations and are more likely to hire students who have been active in these organizations. Employers want to hire students who can work well with others, are dependable, have an interest in their field, can lead as well as follow, have tolerance and understanding, have initiative, and accept responsibility. It is noteworthy that employers often place more emphasis on these skills than on technical abilities. Former members say they developed these skills through participation in a vocational student organization (Vaughn, 1999).

Consequently, a finding that research has found to be consistently reported is the importance of personal qualities. Most workers lose their jobs due to a lack of personal qualities, rather than from a lack of technical competence. Several studies show that people tend to lose their jobs simply because they cannot get along with others. Vocational student organizations allow young people to learn how to work together in accomplishing a common goal. According to this research, vocational student organizations may be providing their members with the single most important skill needed for the future job market (Vaughn, 1999).
Leadership

Spicer (1982) defined leadership as characteristics which include citizen and character development; peer and group service; professional growth; development into an authority role; and growth in responsibility toward self, others and the community. Developing skills useful in working with and understanding others is another area that theorists suggest will enable youth to make a smooth transition from childhood to adulthood. Several investigators found positive relationships between 4-H participation and the development of leadership skills, organizational capabilities, and teamwork skills (Brown, 1982; Steele & Rossing, 1981).

There have been numerous studies conducted that link 4-H with leadership development, such as Mueller's (1989) study which found a positive relationship between participation in 4-H leadership activities and youth leadership life skills development. A Michigan study (Coop. Ext. Service, 1976) found that leadership skills were learned through participation in 4-H activities and projects that provide youth the opportunity to participate in trial leadership roles. Rockwell's (1981) survey of 318 Nebraska 4-H alumni revealed that over 90% of the respondents felt that the leadership experiences they had as members were helpful in some degree in preparing them for adult leadership roles. Benefits cited most frequently included learning a specific skill and having a chance to meet people. Other helpful experiences noted included public speaking experiences, competitive opportunities, project experiences, and preparation for occupations. Also, 4-H alumni were found to be more likely to become involved in community activities than non-alumni (Miller, 1987).
Cantrell, Doebler, and Heinsohn (1985) also studied 4-H member life skill development, including the development of leadership skills. They found that teens involved in local club leadership had higher interpersonal skill levels than did those who were not involved in club leadership. At the county level, life skills development dramatically increased if 4-H teens were involved in actual leadership roles.

Although leadership skills can be learned, sometimes personality plays a role in leadership development. Owings and Nelson (1977) found that personality traits are an important factor in understanding the dimensions of leadership. They concluded that identifying personality characteristics of leaders yields insight into the type of person who is successful in a leadership position. Knowing that certain traits imply certain behavioral tendencies leads to a better understanding of leadership behavior.

Benedetti’s (1977) study showed that leaders tend to exhibit characteristics related to extroverted, intuitive, and feeling types. Also extroversion was found to be significantly related to previous leadership experience for subjects 17-18 years old. Watts (1984) noted that leaders possess undesirable as well as desirable characteristics, but that the optimum amounts of each needed for success is undocumented. He distinguished effective leaders from ineffective leaders based on their success in achieving (a) attractive goals and workable programs, (b) order and structure, (c) persuasive communications, (d) emphasis on human interplay, (e) the expectation of appropriate award, and (f) fulfillment of a distinctive behavior and role. He recognized, though, that to achieve this success, effective leaders characteristically exhibit high energy levels, drive, perseverance,
education and scholarship, intelligence, good judgment, stature, personality, objectivity and balance, enthusiasm and optimism, and strong wills.

A variety of well-rounded experiences are necessary for adolescents to become leaders. Attention must be paid to the development of a strong foundation of support through family, and other nurturers and to the development of positive personal character. Also, attention should be paid to the development of intellect and cultural understanding and to the development of strong practical interpersonal and organizational abilities (Cox, 1988). Cox also found that leaders tend to be more highly educated than the general population and have strong family origins both in terms of spending their childhood in traditional families with both parents and in terms of their current marital status. They also have been active in organizations and in their communities as youth and have mentors and role models.

Peterson's (1984) study with recent officers of Michigan state vocational organizations to determine the usefulness of state officer leadership training for later life demonstrated that personal facilitation skills such as communication, social etiquette, time management, contact with business and industry, group discussions, and promotion of sex and racial equity were used most frequently by former officers in all organizations. Studies by Bass and Stogdill (1981) indicated that leadership exhibited in organizations at the high school level may persist in college and in later vocational, professional, and community life, especially when the leadership tasks are similar from group to group.
Emotional Intelligence

What is emotional intelligence? Daniel Goleman (1996) defines it as:

… a different way of being smart. It includes knowing what your feelings are and using your feelings to make good decisions in life. It’s being able to manage distressing moods well and control impulses. It’s being motivated and remaining hopeful and optimistic when you have setbacks in working toward goals. It’s empathy, knowing what the people around you are feeling. And it’s social skills – getting along well with other people, managing emotions in relationships, being able to persuade or lead others. (O’Neil, 1996, p. 6)

The concept of emotional intelligence is not new, however understanding the concept, according to Salovey and Sluyter (1997), requires the understanding of the two component terms, emotion and intelligence. Intelligence is typically measured by psychologists as how well the cognitive sphere functions. Emotions belong to the affective sphere of mental functioning. A good definition of emotional intelligence should, in some way, connect emotions with intelligence if the meanings of the two terms are to be preserved.

Research has been conducted to determine the characteristics and competencies most needed for success in agricultural careers, especially in developing youth. Many of these findings relate to the emotional competencies defined by Goleman as self-awareness, self-management, social awareness, and relationship management (Marlatt, 2003).

Measuring Emotional Intelligence

Two standardized testing instruments have been identified that measure emotional intelligence and seem to be the most scientific and reliable: the Mayer-Salovey-Caruso
Emotional Intelligence Test (MSCEIT) and the Bar-On Emotional Quotient Inventory (Bar-On EQ-i).

The Bar-On EQ-i, provides a total emotional quotient (EQ) score and five EQ composite scale scores comprising 15 subscale scores. The five scales are “Intrapersonal EQ,” “Interpersonal EQ,” “Stress Management EQ,” “Adaptability EQ,” and “General Mood EQ” — each with its own set of subscales (Bar-On, 2000). The test is comprised of 133 items and employs a five-point response set, ranging from “not true of me” to “true of me.” Approximately 30 to 40 minutes are needed to complete the exam; however, there are no imposed time limits. The assessment renders four validity scale scores, a total emotional quotient (EQ) score, five composite scale scores, and 15 EQ subscale scores. The scoring structure to this test is very similar to that of the intelligence quotient assessment (Bar-On, 2002). Since the development of the exam, the instrument has been translated into 22 languages and normative data has been collected in more than 15 countries. The EQ-i has previously been shown to demonstrate sufficient test-retest reliability with .85 after one month and .75 after 4 months (Bar-On, 1997). This test was developed by clinical psychologist Reuven Bar-On and was the first empirically constructed test of emotional intelligence that is commercially available (Bar-On, 2002).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is designed to measure the four branches of the emotional intelligence ability model of Mayer and Salovey. It is an ability-based scale that measures how well people perform tasks and solve emotional problems, as opposed to a scale that relies on an individual’s subjective assessment of their perceived emotional skills. Responses to MSCEIT represent actual
abilities at solving emotional problems, meaning that scores are relatively unaffected by self-concept, response set, and emotional state. This test is comprised of 141 items. Approximately 30-45 minutes are needed to complete the exam and it is appropriate for ages 17 and older. The MSCEIT provides 15 mains scores: Total EI score, two Area scores, four Branch scores, and eight Task scores. In addition to these 15 scores, there are three supplemental scores (Mayer, Salovey, Caruso, and Sitarenios, 2003).

**Emotional Intelligence and Leadership**

During the past two decades, no psychological concept has had a greater influence on leadership development than emotional intelligence (Lojoie, 2002), but as early as the 1940s research indicated a relationship between leadership and emotional intelligence. The Ohio State Leadership Studies suggested that “consideration” was an important aspect of effective leadership. More specifically, this research suggested that leaders who are able to establish “mutual trust, respect, and a certain warmth and rapport” with members of their group will be more effective (Fleishman & Harris, 1962). Bachman (1988) found that the most effective leaders in the US Navy were warmer, more outgoing, emotionally expressive, dramatic, and sociable.

Leaders are individuals who think for themselves, communicate their thoughts and feelings to others, and help others understand and act on their own beliefs. Leaders can influence others in an ethical and socially responsible way. Being a leader means trusting one’s instincts, when doing leadership tasks and when acting as a leader (van Linden & Fertman, 1998).
Marlett’s (2003) research on emotional intelligence recommended a need for further research be conducted on leadership and emotional intelligence.

**Character Education**

One of the most significant ethical developments during the last two decades has been a deepening concern for character. Scholarly discussion, media analysis, and everyday conversation have all focused attention on the character of our elected leaders, the character of our fellow citizens, and the character of our children. However, the emotional side of character has been vastly neglected in the discussion of moral education, but it is profoundly important. (Lickona, 2001, p. 239).

Character Education and social/emotional education share many overlapping goals. The Character Education Partnership in Alexandria, Virginia, defines Character Education as “the long-term process of helping young people develop good character, i.e., knowing, caring about, and acting upon core ethical values such as fairness, honesty, compassion, responsibility and respect for self and others (p. 3).

The word character is derived from a Greek word meaning to mark or to engrave and is associated with the writings of philosophers such as Plato and Aristotle. Throughout history thoughtful philosophers and educators have been concerned with the cultivation of such virtues as honesty, kindness, courage, perseverance, and loyalty.

According to Lickona (2001), good character consists of knowing the good, desiring the good, and doing the good – habits of the mind, habits of the heart, and habits of action. He goes on to define the moral qualities or character traits that make up moral knowing, moral feeling, and moral action. Under moral knowing, he lists these traits:
moral awareness, knowledge of moral values, perspective taking, moral reasoning, decision making and self-knowledge. Traits of Moral Feeling are: conscience, self-respect, empathy, loving the good, self-control, and humility. Moral Action is defined by: competence, will and habit.

The Josephson Institute of Ethics (2006) established the Character Counts! youth education initiative in 1993, one year after convening a conference on character education. The lesson from that conference was that schools, youth organizations and communities need to work together, using a common language of ethical values to maximize their ability to help young people grow up morally strong. The common language that was created was the “six pillars” of character: trustworthiness, respect, responsibility, fairness, caring and citizenship.

Much opportunity exists in forging leadership and character education. Such a linkage would offer opportunities for adolescents to consider the qualities they expect from the people in their lives who serve as leaders in formal and informal settings (Fertman & van Linden, 1999).

According to Fertman and van Linden (1999), the adolescent years are critical in developing future leaders whose decisions and actions will reflect universal human values. The future of our nation will depend on these values, wherein lie the character and leadership of our youth.
Texans Building Character

During the 1999 Texas Agricultural Extension Service Community Futures Forum process, 209 counties identified youth issues as high priority concerns. These issues ranged from character, ethics, morals, teen pregnancy, drugs, and education to job skills (Texas Agricultural Extension Service, 1999). The banner program, Texans Building Character, is the result of these findings.

Character education has been a major programming effort in Texas Cooperative Extension since the introduction of Texans Building Character (TBC) in 2000. Since that time, all 254 counties in Texas have addressed character education in at least one of the eight TBC program models: 4-H, community, livestock, schools, sports, workforce, youth at risk, and mega-community. The Character Counts! framework of the “six pillars” of character provided the basis for Texas’ character education initiative.

Research suggests a correlation between the teaching of character education of youth and its positive ethical results throughout the United States. According to Boleman (personal communication, June 26, 2006), in Texas, the outcomes from these programs have shown behavior change and positive impacts on the participants.

Character education and 4-H in Texas go hand-in-hand with the four “H’s” of 4-H being congruent with the four aspects of a psychologically mature person. Sprinthall’s (1997) study noted (as cited in McDaniel, 1998), that a psychologically mature person is a problem solver (head), is allocentric and empathetic (heart), acts on democratic values (hands), and is autonomous and self-directed (health).
Since 2004 the Texas 4-H Council, the premier leadership group for 4-H in Texas, has been charged with several assignments to help strengthen their impact and leadership with character education at the local level. According to Gayle Hall (2005), Texas 4-H Council advisor, each council member had to design a character education plan for his/her county and teach six character education programs, as well as conduct educational programs on the district and regional levels during his/her year on Council (personal communication, November 16, 2005). Harms and Fritz (2001) reported an increase in personal development as a result of teaching Character Counts!, thus strengthening the processes of internalization of Character Counts! principles.

Summary

4-H is known for leadership and life skills development in youth. Leadership skills are developed in 4-H members that they will use the rest of their lives. High moral character is an essential trait for those in leadership positions, and a trait that 4-H is working to develop in all 4-H members.

Emotional intelligence also effects leadership, as people with higher levels of emotional intelligence tend to have more successes in leadership positions, careers, relationships, and are healthier than those with lower levels.

Character education and emotional intelligence are very similar in nature, both dealing with attitudes and behaviors and the development of socially and emotionally capable people. Character education is a priority in the Texas 4-H program and has been addressed in all 254 counties in Texas. The Texas 4-H Council members have had
extensive training in the Texans Building Character curriculum and even taught the six
pillars of character across the state in their counties, districts and regions.

The review of literature provides evidence that leadership development, emotional
intelligence and character education share many similarities and common goals. Much
research has been conducted in each of these areas individually, but no major study has
been done to determine the relationship of these three traits to one another and whether
the level of 4-H leadership positively correlates with higher levels of emotional
intelligence and if 4-H enhances emotional intelligence through character education and
leadership development.
CHAPTER III
METHODOLOGY

The purpose of this study was to determine whether higher levels of 4-H leadership positively correlate with higher levels of emotional intelligence. Also, this study sought to determine whether the Texas 4-H program enhances emotional intelligence through its character education program. A final purpose was to determine if these traits were reflected in the leadership of the 2005-2006 Texas 4-H Council.

As a means of accomplishing these purposes, answers to the following questions were sought:

1. What is the relationship between leadership skills and emotional intelligence?
2. How does leadership development impact/affect emotional intelligence?
3. How does 4-H teach emotional intelligence?
4. Does the level of 4-H leadership positively or negatively correlate with higher levels of emotional intelligence?

Design for the Study

This study was exploratory in nature; therefore, a descriptive survey design was used to execute the study (Ary, Jacobs, & Razavieh, 1996). Information regarding emotional intelligence and character education competencies in Texas 4-H Council members was collected.

The study used an ex post facto approach and a correlational design. An ex post facto design is defined as a casual-comparative design in which the treatment has
occurred prior to the research, and the subjects self-selected the level of independent variable to which they were exposed (Gall, Borg, & Gall, 1996). Gall et al. (1996) continue by suggesting that the negative component to this type of study is that the independent variable cannot be controlled. The purpose of the correlational research was to evaluate the relationships between multiple variables by using correlational statistics (Gall et al., 1996).

Population and Sample

The population of this study was the 2005-2006 Texas 4-H Council members. This was a census study, encompassing all 32 members of the State 4-H Council. Texas 4-H Council members consist of two delegates from each of the 12 Extension districts in Texas. These two representatives are typically the President and Vice President of the District 4-H Council and must be 16 to 19 years of age. Each district also has the opportunity to elect a Delegate-at-Large who also represents his/her District 4-H Council as a member of the Texas 4-H Council. Districts select a minority to fill the position of Delegate-at-Large, if neither the District Council President nor Vice President is a minority. The Delegate-at-Large must be 1/16th of a minority nationality. However, the same standing rules for membership apply to all delegates. All Texas 4-H Council members are eligible to attain and hold membership on the Council for only one year (Texas 4-H Council Standing Rules, 2005).
Census

Schutt (2006) indicated that “in some circumstances it may be more feasible to skirt the issue of generalizability by conducting a census – studying the entire population of interest – rather than drawing a sample” (p. 138). He goes on to say social scientists don’t usually attempt to collect data from all members of some large populations because it would be too expensive and time-consuming, and they could do almost as well with a sample. Due to the small size of the Texas 4-H Council, a census study was determined to be feasible and was used in this study, reaching all 32 of the members.

Purposeful sampling was also used in this study because the goal was to develop a deeper understanding of the phenomena being studied and work with a group that was likely to be “information-rich” with respect to the purposes of the study. The intent of the study being to achieve an in-depth understanding of the selected individuals and not necessarily to select a sample that will represent accurately a defined population (Gall et al., 1996).

Instrumentation

The instrumentation for the study consisted of two separate instruments. The first was a researcher-designed questionnaire related to character education. The second instrument was the *Bar-On Emotional Quotient Inventory (EQ-i)* (Bar-On, 1996).

The character education instrument (Appendix A) consisted of a three-part booklet format questionnaire according to Dillman’s (1978) Total Design Method (TDM). The first section, Part One, consisted of Likert-type scale questions and was used to determine
the participants’ knowledge and actions related to character. The specific character-related questions are listed below:

1. Complete my obligations and follow through with my promises.
2. Show respect to others.
3. I treat others as I would like them to treat me.
4. Take responsibility for my own actions.
5. Play by the rules to be fair.
6. Set goals for myself to achieve.
7. Listen to everyone’s opinion.
8. Accept others for who they are.
9. Make ethical decisions.
10. Cooperate with others.
11. Get along with others.
12. Apply new ideas to be an effective leader.
13. Care for others.
14. Be a good neighbor and work for the common good.
15. Help others in need.

The scale, very commonly used and designed to measure change in populations, was 1 = *Never*, 2 = *Seldom*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*.

The questions asked in this part of the questionnaire were pilot tested and used with 4-H members in nine Texas counties (Austin, El Paso, Karnes, Wilson, Hood, Guadalupe, Childress, Williamson and Bosque) as well as with 4-H youth located in Extension
District 11 (personal communication with Chris Boleman, June 26, 2006). Reliability (internal consistency) of the character education scale was estimated from these data. SPSS 11.0 for Windows was used for analysis. A Cronbach’s coefficient alpha was computed to be a .74 for the 15 statements in Part One of the character questionnaire. As a result of these pilot tests, final corrections were made prior to the development of this questionnaire. Part Two of the instrument asked the participants to list the Six Pillars of Character and Part Three was used to accumulate demographic information from the subjects.

The second instrument, the BarOn EQ-i, provided a total emotional quotient (EQ) score and five EQ composite scale scores comprising 15 subscale scores (Bar-On, 2000). The five scales are “Intrapersonal EQ,” “Interpersonal EQ,” “Stress Management EQ,” “Adaptability EQ,” and “General Mood EQ” — each with its own set of subscales (Bar-On, 2000). The test was comprised of 133 items and employed a five-point response set, ranging from “not true of me” to “true of me.” Approximately 30 to 40 minutes were needed to complete the exam; however, there were no imposed time limits. The scoring structure to this test was very similar to that of the intelligence quotient assessment (Bar-On, 2002). This test was developed by clinical psychologist Reuven Bar-On and was the first empirically constructed test of emotional intelligence that is commercially available (Bar-On, 2002).
Data Collection

On November 22, 2005, a parental consent form (Appendix B) was sent in a packet from the State 4-H Council advisors to the Council members with a letter and other information related to the workshop. Only State 4-H Council members who brought their signed parental consent form to the workshop were able to participate that day. Data were collected on January 14, 2006, during the State 4-H Council Workshop at the Texas 4-H Center on Lake Brownwood.

Both the Character Questionnaire and the Bar-On EQ-i instrument were numbered so that each person received instruments with corresponding numbers allowing the instruments to be paired up later for analysis, but still insuring anonymity of the participants if they so desired. Six of the 32 Texas 4-H Council members were not able to attend the workshop; therefore, the two instruments were mailed to them along with another parental consent form and a personalized letter of explanation (Appendix C), on March 13, 2006. Before they were mailed, emails and telephone calls were made to each recipient to explain what they would be receiving in the mail (Dillman, 1978). All six of the instruments were returned by April 10, 2006.

Analysis of Data

SPSS 11.0 for Windows software was used for parts of the data analysis. The analysis of data was divided into three sections. The first section was the character education section, the second section was the emotional intelligence section, and the third section examined the relationship between character education and emotional intelligence.
Character Education Competencies

Descriptive statistics were used to summarize data. Frequencies, percentages, central tendency measures and variability were used to describe the data. Relationships were then compared between character education, emotional intelligence, and leadership. The character education variables of “complete my obligations and follow through with my promises,” “show respect to others,” “I treat others as I would like them to treat me,” “take responsibility for my own actions,” “play by the rules to be fair,” “set goals for myself to achieve,” “listen to everyone’s opinion,” “accept others for who they are,” “make ethical decisions,” “cooperate with others,” “get along with others,” “apply new ideas to be an effective leader,” “care for others,” “being a good neighbor and working for the common good,” and “help others in need” were measured using a scale where 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, and 5 = Always. A composite scale comprised of all 15 items was developed, and internal consistency of this scale was assessed by Cronbach’s coefficient alpha. The character responses were compared among gender, years of 4-H participation, offices held on Council, place of residence, and school type attended to determine the extent of the relationship between being a Texas 4-H Council member and character education. Inferential correlational and/or comparative techniques were used. These techniques included analysis of variance, independent and paired t-tests, and Pearson’s product moment correlations.
Emotional Intelligence

The BarOn EQ-i instrument used to measure emotional intelligence was scored and interpreted by Multi-Health Systems, Inc. Since the development of the exam, the instrument has been translated into 22 languages and normative data has been collected in more than 15 countries. The EQ-i has previously been shown to demonstrate sufficient test-retest reliability with .85 after one month and .75 after 4 months (Bar-On, 1996). The EQ-i variables in the five major domains of “Intrapersonal EQ,” “Interpersonal EQ,” “Stress Management EQ,” “Adaptability EQ,” and “General Mood EQ” were measured with 133 questions using a scale of 1 = Very seldom or Not true of me, 2 = Seldom true of me, 3 = Sometimes true of me, 4 = Often true of me, and 5 = Very often true of me or True of me. The 133 questions dealt with “self-regard,” “emotional self-awareness,” “assertiveness,” “independence,” “self-actualization,” “empathy,” “social responsibility,” “interpersonal relationships,” “stress tolerance,” “impulse control,” “reality testing,” “flexibility,” “problem solving,” “optimism,” and “happiness.”

The Total EQ-i response and the responses from each of the five domains were compared among gender, years of 4-H participation, offices held on Council, place of residence, and school type attended to determine the extent of the relationship between being a Texas 4-H Council member and emotional intelligence. Inferential correlational and/or comparative techniques were used. These techniques included analysis of variance, independent and paired t-tests, and Pearson’s product moment correlations.
Character Education and Emotional Intelligence Relationship

Relationships were explored between the level of character development and the $EQ-i$ scores of the Texas 4-H Council members. Comparisons were run between the mean character development score and the Total $EQ-i$ score as well as between the mean character development score and the five $EQ-i$ domain sub-scores of each Texas 4-H Council member.
CHAPTER IV

RESULTS AND DISCUSSION

The major purpose of this study was to determine whether higher levels of 4-H leadership positively correlate with higher levels of emotional intelligence. Also this study sought to determine whether the Texas 4-H program enhances emotional intelligence through their character education program. A final purpose was to determine if these traits are reflected in the leadership of the 2005-2006 Texas 4-H Council.

As a means to accomplishing these purposes, answers to the following questions were sought:

1. What is the relationship between leadership skills and emotional intelligence?
2. How does leadership development impact/affect emotional intelligence?
3. How does 4-H teach emotional intelligence?
4. Does the level of 4-H leadership positively or negatively correlate with higher levels of emotional intelligence?

Data were collected on January 14, 2006, during the State 4-H Council Workshop from the 26 Council members in attendance and by mail from the six members that could not attend. There was a 100 percent response rate.

Profile of Participants/Respondents

Participants in the study were the 32 members of the 2005-2006 Texas 4-H Council. Nine questions were asked pertaining to demographics. These nine questions include age, gender, ethnicity/race, residence, grade, type of school attended, years in
4-H, District officer position held, and State officer position held. All members of the Texas 4-H Council were between the ages of 16 and 19 with the mean age being 17.31. Their years of 4-H participation ranged from 4-12 years with the mean years in 4-H being 9.03 (Table 1).

Table 1.

<table>
<thead>
<tr>
<th>Mean Age and Years of 4-H Participation of 2005-2006 Texas 4-H Council Members.</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>17.31</td>
<td>.069</td>
</tr>
<tr>
<td>Years of 4-H Participation</td>
<td>9.03</td>
<td>1.90</td>
</tr>
</tbody>
</table>

Table 2 reveals that the majority of the Texas 4-H Council members were male (53.1%). Fifteen of the 32 members were female.

Table 2.

<table>
<thead>
<tr>
<th>Gender of 2005-2006 Texas 4-H Council Members.</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>17</td>
<td>53.1</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>46.9</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The Texas 4-H Council members represent Texas youth, providing a youth voice to statewide Extension programming (Texas 4-H Council Standing Rules, 2005). They
are also representative of Texas 4-H youth in their race and ethnicity. In the 2005 4-H year, 80.3% of the 959,595 Texas 4-H members were white, 14.5% were black, less than one percent were American Indian or Alaskan Native (0.4%) or Native Hawaiian or Pacific Islander (0.9%), and 1.9% were Asian (Texas 4-H, 2005). As indicated in Table 3, the majority (81.3%) of the Texas 4-H Council members were white, two (6.3%) were black, one (3.1%) was American Indian or Alaskan Native, one (3.1%) was Asian, and one (3.1%) was Native Hawaiian or Pacific Islander. Following the format of questions asked on the Texas 4-H Enrollment Form, participants were asked in a separate question if they were of Hispanic ethnicity. Two youth (6.3%) responded that they were of Hispanic ethnicity, and one of these marked that he was also white, the other did not choose a race. In comparison to the total enrollment in Texas 4-H, 33.78% of the total enrollment indicated that they were of Hispanic ethnicity (Texas 4-H, 2005).
Table 3.

*Race/Ethnicity* of 2005-2006 Texas 4-H Council Members.

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>26*</td>
<td>81.3</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>6.3</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>Missing</td>
<td>1*</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>

*Following the format of questions asked on the Texas 4-H Enrollment Form, participants were asked in a separate question if they were of Hispanic ethnicity. Two youth responded that they were of Hispanic ethnicity and one of these marked that he was White also. The other did not choose a race.

The next demographic question asked the participants where they lived. The majority (53.1%) lived on a farm or ranch. The next largest group (25.0%) lived in a town/city larger than 10,000. Three members (9.4%) indicated that they lived outside of town, but not on a farm or ranch, and four (12.5%) lived in a town with a population under 10,000 (Table 4).
Table 4.

<table>
<thead>
<tr>
<th>Residence</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm or Ranch</td>
<td>17</td>
<td>53.1</td>
</tr>
<tr>
<td>Outside of town, but not on a farm or ranch</td>
<td>3</td>
<td>9.4</td>
</tr>
<tr>
<td>Town under 10,000</td>
<td>4</td>
<td>12.5</td>
</tr>
<tr>
<td>Town/City Larger than 10,000</td>
<td>8</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5 provides a breakdown of the grade level of each Texas 4-H Council member. The majority (68.8%) were seniors in high school, 28.1% were juniors, and one was a first-year college student.

Table 5.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>11th Grade</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>12th Grade</td>
<td>22</td>
<td>68.8</td>
</tr>
<tr>
<td>College</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>
Participants were next asked what type of school they attended. Most (68.8%) attended a public school. Home schooled youth made up 18.8% of the Council members and only 9.4% attended private schools. One member was already in college (Table 6).

Table 6.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>22</td>
<td>68.8</td>
</tr>
<tr>
<td>Private School</td>
<td>3</td>
<td>9.4</td>
</tr>
<tr>
<td>Home School</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>College</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The final questions asked of the group pertained to the offices they held at both the District and State level. They were asked what district-level office they held. These two representatives from each district are typically the President and 1st Vice President of the District 4-H Council. If either of these officers have served on State Council before then the district can decide what other elected district officer will serve on State Council, meaning the Texas 4-H Council may not be entirely made up of only the President and 1st Vice President from each district. Also, each district has the opportunity to elect a Delegate-at-Large, who must be 1/16th of a minority nationality, creating the possibility for 12 additional representatives on Council. Once it was determined what District office the members held, they were then asked if they were elected to one of the seven State
Council officer positions. These questions were asked to identify the level of leadership each youth had achieved. The results of the district-level leadership question are revealed in Table 7.

Table 7.

District Offices Held by 2005-2006 Texas 4-H Council Members.

<table>
<thead>
<tr>
<th>Office</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>12</td>
<td>37.5</td>
</tr>
<tr>
<td>1st Vice President</td>
<td>12</td>
<td>37.5</td>
</tr>
<tr>
<td>Delegate-at-Large</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>

Character Education Competencies

Fifteen statements related to character development were analyzed individually to reveal mean values, standard deviations, frequencies and percentages (Table 8). Texas 4-H Council members were asked to rate their actions related to character. The rank order for the top six mean scores were: “help others in need” ($M = 4.53$, $SD = .51$), “make ethical decisions” ($M = 4.53$, $SD = .51$), followed by “being a good neighbor and working for the common good” ($M = 4.47$, $SD = .62$), “take responsibility for my own actions” ($M = 4.44$, $SD = .62$), “care for others” ($M = 4.44$, $SD = .62$), and “show respect for others” ($M = 4.44$, $SD = .50$), where $1 = Never$, $2 = Seldom$, $3 = Sometimes$, $4 = Often$, and $5 =$
Always. In addition, 59.4% of the respondents reported that they always “set goals to achieve.”

Table 8.


<table>
<thead>
<tr>
<th>Character Development</th>
<th>Mean Scores</th>
<th>Frequencies and Percentages for Scaled Items¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Help others in need.</td>
<td>32</td>
<td>4.53</td>
</tr>
<tr>
<td>Make ethical decisions.</td>
<td>32</td>
<td>4.53</td>
</tr>
<tr>
<td>Be a good neighbor and work for the common good.</td>
<td>32</td>
<td>4.47</td>
</tr>
<tr>
<td>Take responsibility for my own actions.</td>
<td>32</td>
<td>4.44</td>
</tr>
<tr>
<td>Care for others.</td>
<td>32</td>
<td>4.44</td>
</tr>
<tr>
<td>Show respect for others.</td>
<td>32</td>
<td>4.44</td>
</tr>
<tr>
<td>Set goals for myself to achieve.</td>
<td>32</td>
<td>4.38</td>
</tr>
<tr>
<td>Cooperate with others.</td>
<td>32</td>
<td>4.31</td>
</tr>
<tr>
<td>Accept others for who they are.</td>
<td>32</td>
<td>4.25</td>
</tr>
<tr>
<td>Complete my obligations and follow through with my promises.</td>
<td>32</td>
<td>4.25</td>
</tr>
<tr>
<td>Play by the rules to be fair.</td>
<td>32</td>
<td>4.22</td>
</tr>
<tr>
<td>I treat others as I would like them to treat me.</td>
<td>32</td>
<td>4.22</td>
</tr>
<tr>
<td>Apply new ideas to be an effective leader.</td>
<td>32</td>
<td>4.19</td>
</tr>
<tr>
<td>Get along with others.</td>
<td>32</td>
<td>4.19</td>
</tr>
<tr>
<td>Listen to everyone’s opinion.</td>
<td>32</td>
<td>3.84</td>
</tr>
<tr>
<td>Overall Character</td>
<td>32</td>
<td>4.31</td>
</tr>
</tbody>
</table>

¹Scale: 1 = *Never*, 2 = *Seldom*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always.*
A test was run to measure the relationship between the number of years in 4-H to the character development of the Texas 4-H Council members. A Pearson product moment correlation coefficient (r) was the statistical test used to compare these two continuous variables (Table 9).

Four null hypotheses were identified in the introduction of this manuscript. These hypotheses were:

H₀₁: There is no relationship between character development and years in the 4-H program.

H₀₂: There is no relationship between emotional intelligence and years in the 4-H program.

H₀₃: There is no difference in character development and emotional intelligence levels for Texas 4-H Council Officers versus Texas 4-H Council members.

H₀₄: There is no relationship between character development and emotional intelligence.

Hypothesis 1. Hypothesis one was created to determine if the character education programs in Texas 4-H had a different effect on the youth based on the number of years they have been in the 4-H program. Earlier, this chapter displayed the mean years these Texas 4-H Council members had been in the 4-H program. The years of 4-H participation ranged from 4-12 years, with the overall mean years in 4-H being 9.03 (SD = 1.90).
As a result, a Pearson product moment correlation coefficient (r) was conducted to ascertain the first hypothesis and determine the relationship between the years in the 4-H program and the character development of the Texas 4-H Council members (Table 9).

Table 9.

Pearson Product Moment Correlation Coefficients Between Years in 4-H and Character Development in 2005-2006 Texas 4-H Council Members.

<table>
<thead>
<tr>
<th>Character Development</th>
<th>Years in 4-H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete my obligations and follow through with my promises.</td>
<td>.13</td>
</tr>
<tr>
<td>Show respect to others.</td>
<td>.33</td>
</tr>
<tr>
<td>I treat others as I would like them to treat me.</td>
<td>.42</td>
</tr>
<tr>
<td>Take responsibility for my own actions.</td>
<td>.01</td>
</tr>
<tr>
<td>Play by the rules to be fair.</td>
<td>.20</td>
</tr>
<tr>
<td>Set goals for myself to achieve.</td>
<td>.03</td>
</tr>
<tr>
<td>Listen to everyone’s opinion.</td>
<td>.17</td>
</tr>
<tr>
<td>Accept others for who they are.</td>
<td>.16</td>
</tr>
<tr>
<td>Make ethical decisions.</td>
<td>.23</td>
</tr>
<tr>
<td>Cooperate with others.</td>
<td>.22</td>
</tr>
<tr>
<td>Get along with others.</td>
<td>.14</td>
</tr>
<tr>
<td>Apply new ideas to be an effective leader.</td>
<td>.37</td>
</tr>
<tr>
<td>Care for others.</td>
<td>.27</td>
</tr>
<tr>
<td>Be a good neighbor and work for the common good.</td>
<td>.10</td>
</tr>
<tr>
<td>Help others in need.</td>
<td>.02</td>
</tr>
<tr>
<td>Summed Character Traits</td>
<td>.12</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.
Of the fifteen character development variables, only three – “I treat others as I would like them to treat me” ($r = .42$), “apply new ideas to be an effective leader” ($r = .37$), and “show respect to others” ($r = .33$) revealed positive relationships. Two of these moderately positive relationships (Davis, 1971) were significant at the .05 level (“I treat others as I would like them to treat me” and “apply new ideas to be an effective leader”). However, these data cannot support rejecting the null hypothesis that states, “There is no relationship between character development and years in the 4-H program.”

Fifteen character development variables were measured against gender (Table 10). Of the fifteen, three variables were found to be significantly different ($p < .05$) using an independent T-test. The variable “complete my obligations and follow through with my promises” revealed a significantly higher mean value ($p < .05$) for females when compared to males (female = 4.47, male = 4.06, $t = 2.44$), as did the variables “accept others for who they are” (female = 4.69, male = 3.94, $t = 2.67$) and “care for others” (female = 4.73, male = 4.18, $t = 2.81$).
Table 10.


<table>
<thead>
<tr>
<th>Character Development</th>
<th>Mean Score by Gender</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>Complete my obligations and follow through with my promises.</td>
<td>4.06</td>
<td>4.47</td>
<td>2.44</td>
<td>.02*</td>
</tr>
<tr>
<td>Show respect to others.</td>
<td>4.29</td>
<td>4.60</td>
<td>1.77</td>
<td>.09</td>
</tr>
<tr>
<td>I treat others as I would like them to treat me.</td>
<td>4.06</td>
<td>4.40</td>
<td>1.38</td>
<td>.18</td>
</tr>
<tr>
<td>Take responsibility for my own actions.</td>
<td>4.47</td>
<td>4.40</td>
<td>0.32</td>
<td>.75</td>
</tr>
<tr>
<td>Play by the rules to be fair.</td>
<td>4.06</td>
<td>4.40</td>
<td>1.38</td>
<td>.18</td>
</tr>
<tr>
<td>Set goals for myself to achieve.</td>
<td>4.24</td>
<td>4.53</td>
<td>0.97</td>
<td>.34</td>
</tr>
<tr>
<td>Listen to everyone’s opinion.</td>
<td>3.76</td>
<td>3.93</td>
<td>0.056</td>
<td>.58</td>
</tr>
<tr>
<td>Accept others for who they are.</td>
<td>3.94</td>
<td>4.60</td>
<td>2.67</td>
<td>.01*</td>
</tr>
<tr>
<td>Make ethical decisions.</td>
<td>4.47</td>
<td>4.60</td>
<td>0.72</td>
<td>.48</td>
</tr>
<tr>
<td>Cooperate with others.</td>
<td>4.24</td>
<td>4.40</td>
<td>0.78</td>
<td>.44</td>
</tr>
<tr>
<td>Get along with others.</td>
<td>4.06</td>
<td>4.33</td>
<td>1.32</td>
<td>.20</td>
</tr>
<tr>
<td>Apply new ideas to be an effective leader.</td>
<td>4.29</td>
<td>4.07</td>
<td>0.78</td>
<td>.44</td>
</tr>
<tr>
<td>Care for others.</td>
<td>4.18</td>
<td>4.73</td>
<td>2.81</td>
<td>.01*</td>
</tr>
<tr>
<td>Be a good neighbor and work for the common good.</td>
<td>4.41</td>
<td>4.53</td>
<td>0.55</td>
<td>.59</td>
</tr>
<tr>
<td>Help others in need.</td>
<td>4.47</td>
<td>4.60</td>
<td>0.72</td>
<td>.48</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.

A second test was done to measure the fifteen character variables against the type of school the Council members attended. Two of the character development traits proved to be significantly different ($p < .05$) using an independent T-test (Table 11). The variable “listen to everyone’s opinion” revealed a significantly higher mean value ($p < .05$) for those Texas 4-H Council members who attended public schools versus those who
attended private schools or were home schooled (public = 4.05, home/private = 3.40, \( t = 2.11 \)). This was also true of the variable “care for others” (public = 4.59, home/private = 4.10, \( t = 2.21 \)).

Table 11.

*Independent T-test of Character Development by Public School versus Home School or Private School in 2005-2006 Texas 4-H Council Members.*

<table>
<thead>
<tr>
<th>Character Development</th>
<th>Public Mean</th>
<th>Home/Private Mean</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete my obligations and follow through with my promises.</td>
<td>4.27</td>
<td>4.20</td>
<td>0.37</td>
<td>.71</td>
</tr>
<tr>
<td>Show respect to others.</td>
<td>4.55</td>
<td>4.20</td>
<td>1.87</td>
<td>.07</td>
</tr>
<tr>
<td>I treat others as I would like them to treat me.</td>
<td>4.36</td>
<td>3.90</td>
<td>1.78</td>
<td>.09</td>
</tr>
<tr>
<td>Take responsibility for my own actions.</td>
<td>4.45</td>
<td>4.40</td>
<td>0.23</td>
<td>.82</td>
</tr>
<tr>
<td>Play by the rules to be fair.</td>
<td>4.23</td>
<td>4.20</td>
<td>0.10</td>
<td>.92</td>
</tr>
<tr>
<td>Set goals for myself to achieve.</td>
<td>4.45</td>
<td>4.20</td>
<td>0.76</td>
<td>.45</td>
</tr>
<tr>
<td>Listen to everyone’s opinion.</td>
<td>4.05</td>
<td>3.40</td>
<td>2.11</td>
<td>.04*</td>
</tr>
<tr>
<td>Accept others for who they are.</td>
<td>4.32</td>
<td>4.10</td>
<td>0.75</td>
<td>.46</td>
</tr>
<tr>
<td>Make ethical decisions.</td>
<td>4.55</td>
<td>4.50</td>
<td>0.23</td>
<td>.82</td>
</tr>
<tr>
<td>Cooperate with others.</td>
<td>4.32</td>
<td>4.30</td>
<td>.08</td>
<td>.94</td>
</tr>
<tr>
<td>Get along with others.</td>
<td>4.14</td>
<td>4.30</td>
<td>0.72</td>
<td>.48</td>
</tr>
<tr>
<td>Apply new ideas to be an effective leader.</td>
<td>4.23</td>
<td>4.10</td>
<td>0.40</td>
<td>.69</td>
</tr>
<tr>
<td>Care for others.</td>
<td>4.59</td>
<td>4.10</td>
<td>2.21</td>
<td>.04*</td>
</tr>
<tr>
<td>Be a good neighbor and work for the common good.</td>
<td>4.55</td>
<td>4.30</td>
<td>1.04</td>
<td>.31</td>
</tr>
<tr>
<td>Help others in need.</td>
<td>4.59</td>
<td>4.40</td>
<td>0.99</td>
<td>.33</td>
</tr>
</tbody>
</table>
Emotional Intelligence

Emotional Quotient Inventory (EQ-i) scores may be classified as high, moderate, or low. In general, high scores identify areas of strength. Scores in the average range on these scales indicate typical healthy functioning and are scores that are obtained by the majority of those in the population who have taken the EQ-i. Lower scores reflect areas for development (Bar-On, 2006).

The Total EQ score obtained by the Texas 4-H Council members was about average (97). Usually a score in this range is obtained by a group that functions very well in some or most areas of emotional intelligence. A score of 100 represents effective emotional functioning. Scores greater than 100 represent enhanced emotional functioning, and scores of less than 100 indicate areas that may need improvement. This information is based on the average scores obtained by the group members, therefore it is important to keep in mind that the group results presented may not, and usually will not, apply to every single individual within the group (Bar-On, 2006).

There are five composite scales used to determine EQ. The composite scales break Total EQ into the five domains of EQ for the Texas 4-H Council Members: Intrapersonal (101), Interpersonal (100), Stress Management (97), Adaptability (94), and General Mood (104). Figure 2 provides a graphical display of the group’s composite scores.
Within each of the five composite scales there are 15 subscales that provide scores and very focused information about specific skills within each of the domains of Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood (Bar-On, 2006).

Intrapersonal EQ. The Intrapersonal composite score includes Emotional Self-Awareness, Assertiveness, Self Regard, Self-Actualization, and Independence. The group’s Total Intrapersonal score (101) was about average overall, and scores on all of the subcomponents are also comparable to the norm (Bar-On, 2006).
• Self-Regard: The score on the self-regard scale (103) is slightly above average indicating a group with adequate self-respect and self-confidence. The Texas 4-H Council members probably have a reasonably good sense of who they are and have positive feelings about their life, lifestyle, and work most of the time (Bar-On, 2006).

• Emotional Self-Awareness: The score on this scale is about average (100). The emotional self understanding of the Texas 4-H Council members is moderate. Usually, emotional self-awareness assists interactions for this group, and attitudes are conveyed adequately. Nonetheless, improvement in this facet of emotional functioning may be of benefit (Bar-On, 2006).

• Assertiveness: Collectively, the Council members’ scores are above average (104) on the Assertiveness scale. This group should have an advanced ability to defend their beliefs, deal appropriately with others, and handle adversity. These Council members are probably forthright and confident and can openly share thoughts, beliefs, and feelings in a constructive manner. The group is likely perceived as non-threatening and provides freedom for exchanging ideas (Bar-On, 2006).

• Independence: The score on this scale is about average (97), indicating a balance between a desire to think and act independently and a willingness to make decisions in combination with other people (Bar-On, 2006).

• Self-Actualization: The score on this scale is reasonably high (103) and is indicative of a group of individuals who generally feel more content and self-fulfilled than the population norm. The score is indicative of a group whose
members enjoy life most of the time and who usually stay involved in pursuits that are interesting and meaningful to them. Texas 4-H Council members are likely motivated and successful in what they do (Bar-On, 2006).

**Interpersonal EQ.** This component of the Total EQ-I scale taps interpersonal capacity and functioning. The subcomponents of the Total Interpersonal Scale include Empathy, Interpersonal Relationship, and Social Responsibility. The Total Interpersonal group score (100) was about average overall, but at least one of the subcomponents of interpersonal functioning was below average. Some social interactions are experienced as difficult, while others can be handled with the utmost ease and confidence. The subcomponent scores listed below will be helpful in understanding why some interpersonal situations are handled more easily than others (Bar-On, 2006).

- **Empathy:** The score on this scale (95) was slightly below average. While some of the time members of this group may have little difficulty understanding others and showing them consideration, there may be occasions when empathizing and giving proper regard to others is more difficult. As a result, some interactions will become strained due to thoughts and feelings being misunderstood (Bar-On, 2006).

- **Social Responsibility:** The results (99) indicated individuals who perceive themselves as being considerate and responsible most of the time. Sometimes self-aspirations are put ahead of the needs of others, but overall these individuals will be satisfactory contributors to the “community at large” (society, organization, team, etc.) (Bar-On, 2006).
• Interpersonal Relationship: The score (103) on this scale indicated a group with above average interpersonal skills overall. This is the scale that ties most directly to the ability to interact with others. Group members are able to form agreeable relationships and alliances. This ability supports effective communication and the mutually beneficial exchange of ideas, feelings, and information (Bar-On, 2006).

Stress Management EQ. The Stress Management component consists of the Stress Tolerance and Impulse Control Scales. The Total Stress Management EQ score (97) was below average, indicating that the scores obtained on both of the two subcomponents of Stress Management were low. This can indicate nervousness, anxiety, and difficulties handling stressful situations (Bar-On, 2006).

• Stress Tolerance: The score (98) on the Stress Tolerance scale is a bit below average. The group probably has a reasonably normal ability to withstand adverse events and stressful situations. However, some circumstances may be difficult to handle for some individuals. Emotional outbursts and avoidance are probably common reactions to stress, but task-oriented coping efforts focused on problem resolution would be more adaptive (Bar-On, 2006).

• Impulse Control: The Impulse Control score (95) was below average indicating that group members have occasional or frequent difficulties resisting or delaying impulses, drives, and temptations to act. There may be problems avoiding overreacting, making impetuous decisions, and losing control. Some actions/decisions are likely made without adequate thought concerning all of the important implications (Bar-On, 2006).
Adaptability EQ. The Adaptability composite area is composed of the Problem Solving, Reality Testing, and Flexibility subscales and examines success in coping with environmental demands based on the ability to effectively size up and deal with problematic situations. The responses and score (94) of these individuals suggest some pretty important limitations in terms of adaptability. Sometimes the limitations can be due to an impractical approach to life that might be addressed by setting realistic goals. In other cases, the limitations are due to poor approaches to problem solving or the inability to adapt to changing demands (Bar-On, 2006).

- Reality Testing: The Reality Testing score (92) is quite low indicating a group with a pronounced tendency to be unrealistic and unfocussed. Group members may pursue unrealistic goals instead of sticking to practical and attainable goals. These Texas 4-H Council members may tend to lose focus on the task at hand and/or let their minds wander and become distracted (Bar-On, 2006).

- Flexibility: The group’s Flexibility score (97) was slightly below average. Overall, the Council members may be slow to change opinions about things and to respond to shifting demands/needs. Some or most of the group members may be most comfortable performing clearly defined, regular tasks or assignments (Bar-On, 2006).

- Problem Solving: The group score (96) on the Problem Solving scale is a bit below average. Scores in this range are indicative of a group of individuals who have some success with their approach to problem resolution, but overall feel that improvement is possible in this area. Often improvement will come from
approaching problems more methodically and systematically and by considering all of the possibilities before deciding what to do (Bar-On, 2006).

*General Mood EQ.* The subcomponents of this composite scale consist of Happiness and Optimism Scales. These components of the Total *EQ-i* scale measure contentment and overall outlook. Both components of General Mood were high for the Texas 4-H Council members (Bar-On, 2006).

- **Optimism:** The score (101) on this scale is about average, indicating a level of optimism that is close to the population norm. There are probably times when members of this group feel a little pessimistic, but this is not necessarily unusual. Overall, optimism usually will be appropriate for the circumstances. Prospects for the future are assessed by keeping expectations balanced (Bar-On, 2006).

- **Happiness:** The score (106) on the Happiness scale is quite a bit above average and indicates Council members who feel satisfied with their lives and who get along well with others. This disposition can be infectious and can help energize and create an upbeat feeling in those around, fostering optimal functioning (Bar-On, 2006).

The overall *EQ-i* score was in the average range and indicates emotional functioning which is about typical for emotionally healthy individuals in the population. There were fairly large differences in the scores for the 15 content scales indicating areas of relative strengths and areas for improvement. The highest subscales were Happiness (106), Assertiveness (104), Self-Actualization (103), Interpersonal Relationship (103), and Self-Regard (103). The lowest subscales were Reality Testing (92), Empathy (95), and
Impulse Control (95). A graphical display of the Texas 4-H Council’s averages for the 15 EQ-i subscales grouped by composite area is shown in Figure 3 (Bar-On, 2006).
Figure 3.

Emotional Quotient Scores on the 15 Subscales by Texas 4-H Council Members.
Hypothesis 2. Hypothesis 2 was developed to investigate the relationship between years in the 4-H program and the level of emotional intelligence of the Texas 4-H Council members. Again, the stated hypothesis was: There is no relationship between emotional intelligence and years in the 4-H program.

Similar to the methods used to test hypothesis one, a Pearson product moment correlation coefficient was conducted to determine this relationship (Table 12). There was nothing significant to report, but it is worth noting that Intrapersonal EQ ($r = .23$) and Stress Management ($r = .20$) both had low, positive relationships (Davis, 1971) with the years in the 4-H program. However, these data cannot support rejecting the null hypothesis.

Table 12.

*Pearson Product Moment Correlation Coefficients Between Years in 4-H and Emotional Intelligence in 2005-2006 Texas 4-H Council Members.*

<table>
<thead>
<tr>
<th>Emotional Quotient Inventory</th>
<th>$r$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total EQ</td>
<td>.04</td>
<td>.22</td>
</tr>
<tr>
<td>Intrapersonal EQ</td>
<td>.23</td>
<td>.22</td>
</tr>
<tr>
<td>Interpersonal EQ</td>
<td>.06</td>
<td>.77</td>
</tr>
<tr>
<td>Stress Management EQ</td>
<td>.20</td>
<td>.28</td>
</tr>
<tr>
<td>Adaptability EQ</td>
<td>.05</td>
<td>.80</td>
</tr>
<tr>
<td>General Mood EQ</td>
<td>.10</td>
<td>.58</td>
</tr>
</tbody>
</table>
An independent T-test was conducted to measure the Emotional Quotient variables against the gender of the Council members. Overall, females on Council had higher scores for the five Emotional Quotient domains and therefore for the total Emotional Quotient score. Four of the six Emotional Quotient scores were significant. These include: Total EQ – $M = 95.53$ (male) vs. $M = 102.40$ (female), $t = 2.30$, $p = .03$; Interpersonal EQ – $M = 94.24$ (male) vs. $M = 106.47$ (female), $t = 2.36$, $p = .03$; Stress Management EQ – $M = 92.12$ (male) vs. $M = 101.93$ (female), $t = 2.63$, $p = .01$; Adaptability EQ – $M = 87.53$ (male) vs. $M = 100.60$ (female), $t = 2.77$, $p = .01$ (Table 13).

Table 13.

*Independent T-test of Emotional Intelligence by Gender in 2005-2006 Texas 4-H Council Members.*

<table>
<thead>
<tr>
<th>Emotional Quotient</th>
<th>Mean Score by Gender</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>n=17</td>
<td>n=15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total EQ</td>
<td>95.53</td>
<td>102.40</td>
<td>2.30</td>
</tr>
<tr>
<td>Intrapersonal EQ</td>
<td>99.76</td>
<td>101.73</td>
<td>0.41</td>
</tr>
<tr>
<td>Interpersonal EQ</td>
<td>94.24</td>
<td>106.47</td>
<td>2.36</td>
</tr>
<tr>
<td>Stress Management EQ</td>
<td>92.12</td>
<td>101.93</td>
<td>2.63</td>
</tr>
<tr>
<td>Adaptability EQ</td>
<td>87.53</td>
<td>100.60</td>
<td>2.77</td>
</tr>
<tr>
<td>General Mood EQ</td>
<td>101.59</td>
<td>106.93</td>
<td>1.32</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.
The author also ascertained the differences in Emotional Quotient scores comparing public school students and non-public school students. There was nothing significant to report (Table 14).

Table 14.

**Independent T-test of Emotional Intelligence by Public School versus Home School or Private School in 2005-2006 Texas 4-H Council Members.**

<table>
<thead>
<tr>
<th>Emotional Quotient</th>
<th>Public</th>
<th>Home/Private</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=22</td>
<td>n=10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total EQ</td>
<td>97.05</td>
<td>97.40</td>
<td>.07</td>
<td>.94</td>
</tr>
<tr>
<td>Intrapersonal EQ</td>
<td>100.27</td>
<td>101.60</td>
<td>.26</td>
<td>.80</td>
</tr>
<tr>
<td>Interpersonal EQ</td>
<td>101.41</td>
<td>96.80</td>
<td>.77</td>
<td>.45</td>
</tr>
<tr>
<td>Stress Management EQ</td>
<td>96.14</td>
<td>98.00</td>
<td>.42</td>
<td>.68</td>
</tr>
<tr>
<td>Adaptability EQ</td>
<td>93.55</td>
<td>93.90</td>
<td>.06</td>
<td>.95</td>
</tr>
<tr>
<td>General Mood EQ</td>
<td>103.50</td>
<td>105.40</td>
<td>.43</td>
<td>.67</td>
</tr>
</tbody>
</table>

**Hypothesis 3.** Hypothesis three was developed to determine if there was a difference in the character development and emotional intelligence levels of the Texas 4-H Council members that held the seven offices on State Council. As a result, an independent T-test (Table 15) was conducted to make officer and non-officer comparisons. None of the character development or Emotional Quotient scores revealed significant differences when comparing the two groups. Therefore, these data do not support rejecting the null hypothesis that states, “There is no difference in character
development and emotional intelligence levels for Texas 4-H Council Officers versus Texas 4-H Council members.”

Table 15.

Independent T-test of Emotional Intelligence and Character Development for Officers versus Non-Officers of the 2005-2006 Texas 4-H Council.

<table>
<thead>
<tr>
<th>Character/Emotional Quotient</th>
<th>Officer</th>
<th>Non-Officer</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum Mean Values of Character</td>
<td>4.40</td>
<td>4.29</td>
<td>.85</td>
<td>.40</td>
</tr>
<tr>
<td>Total EQ</td>
<td>95.57</td>
<td>97.60</td>
<td>.36</td>
<td>.72</td>
</tr>
<tr>
<td>Intrapersonal EQ</td>
<td>96.14</td>
<td>101.96</td>
<td>1.02</td>
<td>.32</td>
</tr>
<tr>
<td>Interpersonal EQ</td>
<td>101.86</td>
<td>99.44</td>
<td>.36</td>
<td>.73</td>
</tr>
<tr>
<td>Stress Management EQ</td>
<td>94.57</td>
<td>97.32</td>
<td>.55</td>
<td>.58</td>
</tr>
<tr>
<td>Adaptability EQ</td>
<td>95.00</td>
<td>93.28</td>
<td>.27</td>
<td>.79</td>
</tr>
<tr>
<td>General Mood EQ</td>
<td>104.00</td>
<td>104.12</td>
<td>.02</td>
<td>.98</td>
</tr>
</tbody>
</table>

Character Education and Emotional Intelligence Relationship

Hypothesis 4. Hypothesis 4 was developed to investigate the relationship between character development and emotional intelligence in the Texas 4-H Council members. A Pearson product moment correlation coefficient (r) was the statistical test used to compare the variables (Table 16).

Low positive relationships are noted for all six Emotional Quotient categories compared to character development in the Texas 4-H Council members. However, “Interpersonal IQ” revealed a statistically significant ($p < .05$), substantial, positive
relationship (Davis, 1971), and “Total EQ” and “General Mood” showed statistically significant ($p < .05$), moderate, positive relationships (Davis, 1971). Therefore these data do support rejecting the null hypothesis that states, “There is no relationship between character development and emotional intelligence” indicating a relationship does exist.

**Table 16.**

*Pearson Product Moment Correlation Coefficients Between Character Development and Emotional Intelligence in 2005-2006 Texas 4-H Council Members.*

<table>
<thead>
<tr>
<th>Emotional Quotient</th>
<th>Character Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>r</strong></td>
</tr>
<tr>
<td>Total EQ</td>
<td>.43</td>
</tr>
<tr>
<td>Intrapersonal EQ</td>
<td>.21</td>
</tr>
<tr>
<td>Interpersonal EQ</td>
<td>.65</td>
</tr>
<tr>
<td>Stress Management EQ</td>
<td>.17</td>
</tr>
<tr>
<td>Adaptability EQ</td>
<td>.33</td>
</tr>
<tr>
<td>General Mood EQ</td>
<td>.39</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.*
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine whether higher levels of 4-H leadership positively correlate with higher levels of emotional intelligence. Also, this study sought to determine whether the Texas 4-H program enhances emotional intelligence through its character education program. A final purpose was to determine if these traits were reflected in the leadership of the 2005-2006 Texas 4-H Council.

As a means to accomplishing these purposes, answers to the following questions were sought:

1. What is the relationship between leadership skills and emotional intelligence?
2. How does leadership development impact/affect emotional intelligence?
3. How does 4-H teach emotional intelligence?
4. Does the level of 4-H leadership positively or negatively correlate with higher levels of emotional intelligence?

The following null hypotheses, generated from the literature review, were also tested.

$H_{01}$: There is no relationship between character development and years in the 4-H program.

$H_{02}$: There is no relationship between emotional intelligence and years in the 4-H program.

$H_{03}$: There is no difference in character development and emotional
intelligence for Texas 4-H Council Officers versus Texas 4-H Council members.

H₀₄: There is no relationship between character development and emotional intelligence.

This study was exploratory in nature, using a descriptive survey design in addition to an ex post facto approach and a correlational design. Information regarding emotional intelligence and character education competencies in Texas 4-H Council members was collected. This census study was used to analyze the population of the 2005-2006 Texas 4-H Council members.

Data were collected in a face-to-face meeting the author attended with the Texas 4-H Council. The instrumentation for the study consisted of two separate instruments. The first being a researcher-designed questionnaire related to character education. The second instrument, designed to measure emotional intelligence, was the *Bar-On Emotional Quotient Inventory (EQ-i)* (Bar-On, 1996).

Conclusions

Characteristics of Participants

Participants in the study were the 32 members of the 2005-2006 Texas 4-H Council. This included 17 males and 15 females, all between the ages of 16-19 with the mean age being 17.31 (SD = .07). Their years of participation in 4-H ranged from 4-12 years, with the mean years in 4-H being 9.03 (SD = 1.90). The racial majority (81.3%) of the Council members were white, two (6.3%) were black, one (3.1%) was American
Indian or Alaskan Native, one (3.1%) was Asian, and one (3.1%) was Native Hawaiian or Pacific Islander. Two indicated that they were also of Hispanic ethnicity.

The majority (53.1%) of the Council members lived on a farm or ranch. Eight (25%) lived in a town/city larger than 10,000, four (12.5%) lived in a town under 10,000, and three (9.4%) lived outside a town, but not on a farm or ranch. Most were seniors in high school (68.8%), 28.1% were juniors and one was a first-year college student. The majority (68.8%) of these youth attended public schools, 18% were home schooled and 9.4% attended private schools.

To serve on the Texas 4-H Council, each youth must hold a District Office. Twelve (37.5%) of the youth held the office of President in their District, 12 (37.5%) of them were the 1st Vice President in their District, six (18.8%) were the Delegate-at-Large, and two indicated they held an office other than the three previously mentioned. Of this group of 32, seven held an office on the State Council.

Character Education Competencies

Texas 4-H Council members were heavily involved in teaching character education programs in their counties, districts and regions during their year on Council. During their year of leadership on State Council, the Council members work around the concept of “Texas 4-H Knights.” According to Hall (2005),

“A ‘Knight’ is very visual and the word knight means ‘servant’. All State 4-H Council members were charged with several assignments to help strengthen their impact and leadership with character education at the local level during their year as a State 4-H Council member. The ‘Knight’ theme promotes the notion that true success flows from treating others with dignity (the way we want to be treated ourselves) and stress that all
4-H members can learn how to achieve great things in their world by developing personal virtue and helping/serving others.”

Expectations for each Council member during their year of leadership include:

- Exemplifying the “Six Pillars of Character” to the best of their ability.
- Learning to work cooperatively with their county, regional, and state 4-H faculty, district officers, county extension faculty, donors, and volunteer leaders.
- Designing a character education plan for their county and present six programs between July and January at the county level. Extra credit will be given for teams who are able to conduct a regional and state character education program.
- Designing character education promotional/marketing materials for the region (fliers, crest, t-shirt, and activity bag/box)

Harms and Fritz (2001) reported an increase in personal development as a result of teaching Character Counts!, thus strengthening the processes of internalization of Character Counts! principles. These ethical and moral principles are known as the “six pillars” of character:

- Trustworthiness: This pillar involves honesty, promise-keeping, and loyalty. Young people can learn that honesty is speaking the truth, that promise-keeping means saying you will do something and then doing it, and that loyalty means protecting and helping people who are special to you.
• Respect: This pillar refers to treating others with consideration and accepting individual differences. It is a lesson that applies as much on the playground as in the workplace.

• Responsibility: Youth should learn that good people are people of action. They can be depended on to do the right thing, even when the right thing is the hard thing to do.

• Fairness: Most youth have a keen sense of what is “fair” when it comes to a referee’s call at a soccer game, cutting a birthday cake into equal portions, or a class grade. They can learn to avoid arguments over fairness by following the rules, treating everyone the same, and using the same rules for everyone.

• Caring: Caring people are loving, helpful, giving and kind. Youth can learn to care for people, pets, plants, and possessions. They should begin to consider how their decisions, words, and actions will affect other people.

• Citizenship: A sense of community and obligations to larger groups is the bedrock of citizenship. Children can learn citizenship with simple displays of citizenship such as the Pledge of Allegiance, helping to pick up trash on a community clean-up day, or other types of civic or community service.

The objective of this section was to determine the impact that the character education programming efforts that the Texas 4-H program had on the Texas 4-H Council members. To help in determining this, they were asked to rank their actions
related to fifteen statements dealing with character development. The 15 character variables measured included:

1. Complete my obligations and follow through with my promises.
2. Show respect to others.
3. I treat others as I would like them to treat me.
4. Take responsibility for my own actions.
5. Play by the rules to be fair.
6. Set goals for myself to achieve.
7. Listen to everyone’s opinion.
8. Accept others for who they are.
9. Make ethical decisions.
10. Cooperate with others.
11. Get along with others.
12. Apply new ideas to be an effective leader.
13. Care for others.
14. Be a good neighbor and work for the common good.
15. Help others in need.

The rank order for the top six mean scores were: “help others in need” ($M = 4.53, SD = .51$), “make ethical decisions” ($M = 4.53, SD = .51$), followed by “being a good neighbor and working for the common good” ($M = 4.47, SD = .62$), “take responsibility for my own actions” ($M = 4.44, SD = .62$), “care for others” ($M = 4.44, SD = .62$), and “show respect for others” ($M = 4.44, SD = .50$) where $1 = Never$, $2 = Seldom$, $3$ = 
Sometimes, $4 = \text{Often}$, and $5 = \text{Always}$. In addition, 59.4% of the respondents reported that they always “set goals for myself to achieve.”

When these character development variables were measured against gender, only three variables were found to be significantly different ($p < .05$) using an independent T-test. The variable “complete my obligations and follow through with my promises” revealed a significantly higher mean value ($p < .05$) for females when compared to males (female = 4.47, male = 4.06, $t = 2.44$), as did the variables “accept others for who they are” (female = 4.69, male = 3.94, $t = 2.67$) and “care for others” (female = 4.73, male = 4.18, $t = 2.81$). There is research that indicates there are differences in males and females when discussing emotional intelligence, specifically citing more highly developed interpersonal skills in females versus males (Bar-On, 2002 & Goleman, 1998). This could help explain why these three character variables were higher and more significant for the females in this group.

When the character development variables were measured against the type of school (public, private, home) the Council members attended, only two of the character development traits proved to be significantly different using an independent T-test (Table 11). The variable “listen to everyone’s opinion” revealed a significantly higher mean value ($p < .05$) for those Texas 4-H Council members who attended public schools versus those who attended private schools or were home schooled (public = 4.05, home/private = 3.40, $t = 2.11$). This was also true of the variable “care for others” (public = 4.59, home/private = 4.10, $t = 2.21$). This could be a result of public school youth having a
greater exposure to a variety of youth with varying opinions, and as a result learning to be more tolerant and caring of their fellow classmates.

_Hypothesis 1._ Hypothesis one was created to determine if the character education programs in the Texas 4-H program had a different effect on the youth based on the number of years they have been in the 4-H program. Of the fifteen character development variables, only two – “I treat others as I would like them to treat me” ($r = .42$) and “apply new ideas to be an effective leader” ($r = .37$) revealed positive relationships. These moderately positive relationships (Davis, 1971) were significant at the .05 level. However, these data cannot support rejecting the null hypothesis that states, “There is no relationship between character development and years in the 4-H program.”

**Emotional Intelligence**

The objective of this section was to determine the emotional intelligence levels of the premier leadership team in Texas 4-H and to gain a better understanding of the relationship between leadership and emotional intelligence. Emotional Quotient Inventory ($EQ-i$) scores may be classified as high, moderate, or low. In general, high scores identify areas of strength. Scores in the average range on these scales indicate typical healthy functioning and are scores that were obtained by the majority of those in the population who have taken the $EQ-i$. Lower scores reflect areas for development (Bar-On, 2006).

The Total EQ score obtained by the Texas 4-H Council members was about average (97). Usually a score in this range is obtained by a group that functions very well in some or most areas of emotional intelligence. A score of 100 represents effective
emotional functioning. Scores greater than 100 represent enhanced emotional functioning, and scores of less than 100 indicate areas that may need improvement (Bar-On, 2006).

There are five composite scales used to determine EQ. The composite scales break Total EQ into the five domains of EQ scores for the 2005-2006 Texas 4-H Council Members: Intrapersonal EQ (101), Interpersonal EQ (100), Stress Management EQ (97), Adaptability EQ (94), and General Mood EQ (104). Within each of the five composite scales there are 15 subscales that provide scores and very focused information about specific skills within each of the domains.

There were fairly large differences in the scores for the 15 content scales indicating areas of relative strengths and areas for improvement. The highest subscales were Happiness (106), Assertiveness (104), Self-Actualization (103), Interpersonal Relationship (103), and Self-Regard (103). The lowest subscales were Reality Testing (92), Empathy (95), and Impulse Control (95).

Overall, females on Council had higher scores for all five of the Emotional Quotient domains and, therefore, for the total Emotional Quotient score. Four of the six Emotional Quotient scores were significant. These include: Total EQ – $M = 95.53$ (male) vs. $M = 102.40$ (female), $t = 2.30, p = .03$; Interpersonal EQ – $M = 94.24$ (male) vs. $M = 106.47$ (female), $t = 2.36, p = .03$; Stress Management EQ – $M = 92.12$ (male) vs. $M = 101.93$ (female), $t = 2.63, p = .01$; Adaptability EQ – $M = 87.53$ (male) vs. $M = 100.60$ (female), $t = 2.77, p = .01$. However, there were no differences in Emotional Quotient scores when comparing public school students and non-public school students.
Hypothesis 2. Hypothesis 2 was developed to investigate the relationship between years in the 4-H program and the level of emotional intelligence of the Texas 4-H Council members. Again, the stated hypothesis was: There is no relationship between emotional intelligence and years in the 4-H program. There was nothing significant to report, but it is worth noting that Intrapersonal EQ \((r = .23)\) and Stress Management \((r = .20)\) both had low, positive relationships (Davis, 1971) with the years in the 4-H program. However, these data cannot support rejecting the null hypothesis.

Hypothesis 3. Hypothesis three was developed to determine if there was a difference in the character development and emotional intelligence levels of the Texas 4-H Council members that held the seven offices on State Council. According to Lojoie (2002), no psychological concept has had a greater influence on leadership than emotional intelligence. Previous research has shown that people who show emotional intelligence traits tend to be more effective leaders (Fleishman & Harris, 1962; Bachman, 1988; van Linden & Fertman, 1998). However, none of the character development or Emotional Quotient scores revealed significant differences when comparing the two groups. Therefore, these data do not support rejecting the null hypothesis that states, “There is no difference in character development and emotional intelligence levels for Texas 4-H Council officers versus Texas 4-H Council members.”

Character Education and Emotional Intelligence Relationship

The objective of this section was to determine the relationship between character education/development and emotional intelligence. When evaluating the six pillars of character and the five Emotional Quotient (EQ) domains, it is easy to see the many
similarities between the two. Terminology used to describe the Emotional Quotient domains include: “Intrapersonal EQ” – self-respect (respect pillar), deal appropriately with others (fairness pillar), and forthright (trustworthiness pillar); “Interpersonal EQ” – empathy & consideration (caring and respect pillars), responsible (responsibility pillar), satisfactory contributors to the community at large (citizenship pillar), agreeable relationships and alliances (respect pillar), and beneficial exchange of ideas, feelings and information (respect and fairness pillars); and “Adaptability EQ” – flexibility and openness to new ideas/opinions (fairness pillar). “Stress Management EQ” and “General Mood EQ” do not blatantly show an overlap with the six pillars.

Hypothesis 4. Hypothesis 4 was developed to investigate the relationship between character development and emotional intelligence in the Texas 4-H Council members. Miller (2001) stated that character education and social and emotional intelligence share many overlapping goals. Both character education and social and emotional intelligence aspire to teach youth to be good citizens with positive values, interact effectively, and behave constructively (Akers, 1998). Low positive relationships (Davis, 1971) are noted for all six Emotional Quotient categories compared to character development in the Texas 4-H Council members. However, “Interpersonal IQ” revealed a statistically significant ($p < .05$), substantial, positive relationship (Davis, 1971), and “Total EQ” and “General Mood” showed statistically significant ($p < .05$), moderate, positive relationships (Davis, 1971). Therefore, these data do support rejecting the null hypothesis that states, “There is no relationship between character development and emotional intelligence” indicating a relationship does exist.
Recommendations

Practice

The two Emotional Quotient domains on which the Texas 4-H Council members scored lowest were Adaptability EQ (94) and Stress Management EQ (97). The content subscales for Adaptability include “Reality Testing (92),” “Flexibility (97),” and “Problem Solving (96).” The content subscales within Stress Management EQ include “Stress Tolerance (98)” and “Impulse Control (95).” Of the 15, “Reality Testing” was the subscale that the Council members scored the lowest; “Impulse Control” and “Empathy” were the other two identified in the Bar-On EQ-i Group Report (2006) as the lowest scores. In order to address this, Texas 4-H teaching efforts and curriculum development should focus on “Reality Testing,” “Impulse Control,” “Empathy,” “Problem Solving,” “Stress Management,” and “Stress Tolerance” — specifically for the youth, but they should also be addressed and included in professional development efforts of Extension faculty who work closely with the 4-H members.

Specific recommendations (Bar-On, 2006) for addressing “Reality Testing” are to make sure goals are concrete and attainable and to ensure that observations/opinions are verified with alternate sources of information. The 4-H program is known for teaching goal setting (Karr, 2000), but in light of the findings, should perhaps help youth to increase their focus on practical actions; where ideals are desirable, they are sometimes not feasible. Also noted was the fact that inability to stay focused on the situation at hand is sometimes related to attention deficits or concentration lapses (Bar-On, 2006).
could be directly related to research that indicates attention-deficit/hyperactivity disorder (AD/HD), a neurological disorder characterized by developmentally inappropriate levels of inattention, impulsivity, and hyperactivity, affects 3 to 7 percent of school-age children (American Psychiatric Association, 2000; Mayo Clinic, 2002; Surgeon General of the United States, 1999; American Academy of Pediatrics, 2000, and National Resource Center on AD/HD, 2004). Increased novelty in activities/assignments to improve attention and removal of distractions from the immediate environment would assist in this area (Bar-On, 2006).

“Impulse Control” was another area Bar-On (2006) specifically addressed in relation to this group. Strategies for improvement in this area include establishing or enforcing protocols that require specific procedures/steps to help avoid rash actions. For important decisions, require the submission of formal listings of alternative actions, including an examination of the pros and cons of each action – allotting time and resources for verification of solutions. The importance of thinking before acting should be reinforced to 4-H members, as should listening/understanding before speaking. Other suggestions include setting priorities and avoiding diversions based on “whims” as well as using teams to balance/pair impulsive individuals with others who are more methodical (Bar-On, 2006).

When addressing “Empathy,” another low scoring subscale for the Texas 4-H Council members, Bar-On (2006) suggests using job exchanges or job shadowing and make clear the duties/responsibilities of others with whom the youth are working, helping to promote an empathetic understanding between individuals. Also, opportunities for
group members to interact and get to know each other on a personal level aids in facilitating empathy. Individually, 4-H members should learn to refine observational skills to notice facial expressions and body language as these cues are often just as important as what is being said. They should also learn to be “inquiring” in interactions, making sure that a message has been correctly interpreted and to understand the thoughts and feelings being conveyed. Finally, they should be able to “put oneself in the other person’s shoes,” ask questions of others, and find out about their activities, problems, and needs. The character education pillars of “caring” and “respect” should be used to help address “empathy” and compassion. Although research shows that youth involved in experiential education programs like 4-H report that they developed more empathy for others when compared to youth with no experiential education contact (Conrad & Hedin, 1981), more emphasis should be focused on empathy and compassion when training/teaching Extension faculty and 4-H members the Texans Building Character curriculum.

Noting that the EQ scores of the Texas 4-H Council members were in relation to the general population, it is important to remember that the population for this study was youth and that a person’s emotional intelligence quotient, as well as behavior and impulse control, will continue to increase with age (Stein & Book, 2001; Bar-On, 2002). Research on the ages and stages youth development show that while even in early childhood youth begin to experience empathy for others, they are still selfish (Tomek & Williams, 1999). Such social and emotional characteristics continue to develop through all stages of youth development and into adulthood. While social and emotional maturity continues to
increase, in teenagers such as those on the Texas 4-H Council, the hormones and mood swings of puberty, the desire for peer acceptance and approval, and the need for independence play a role in emotional intelligence. The social/emotional maturation process is explained by Selman (1980) who developed social role taking stages that are viewed as a link between Piaget’s logical reasoning stages and Kohlberg’s moral reasoning stages. Selman places emphasis on the role of experience and learning, where advances in social perspective taking depend on the individual’s experiences with others. Selman’s five stages are:

- **Stage 0 (ages 3-6):** Children cannot distinguish clearly between their own interpretation of a situation and another person’s point of view.
- **Stage 1 (ages 5-9):** Although children realize others may have different views than their own, they are unable to understand such views.
- **Stage 2 (ages 7-12):** Older children and preadolescents can reflect on their thoughts and feelings from another person’s viewpoint, but they cannot hold both perspectives simultaneously.
- **Stage 3 (ages 10-15):** Adolescents can step outside their own viewpoints and those of others and assume the perspective of a neutral third person.
- **Stage 4 (adolescence – adulthood):** Individuals can now understand their thoughts and behaviors from a more abstract level that is capable of a generalized, societal perspective.
Credit should be given at some level to the Texas 4-H Program that has created and assembled a group of teenage youth who are emotionally competent and function well in some or most areas of emotional intelligence (Bar-On, 2006), especially since their scores are relative to the general population and not youth. Most notably, there were five subscale areas these youth scored particularly high (Happiness, Assertiveness, Self-Actualization, Interpersonal Relationships, and Self-Regard).

When discussing these subscales, descriptions that apply include: “Happiness” – this is a group who feels satisfied with their lives and who get along well with others. This disposition can be infectious and can help energize and create an upbeat feeling in those around fostering optimal functioning (Bar-On, 2006); “Assertiveness” – this group has an advanced ability to defend their beliefs, deal appropriately with others and handle adversity. This group is forthright and confident, and can openly share thoughts, beliefs, and feelings in a constructive manner. The group milieu is likely perceived as non-threatening and provides freedom for exchanging ideas (Bar-On, 2006); “Self-Actualization” – these individuals feel more content and self-fulfilled than the population norm, indicative of a group whose members enjoy life most of the time and who usually stay involved in pursuits that are interesting and meaningful to them. These are people who are motivated and successful at what they do (Bar-On, 2006); “Interpersonal Relationships” – this area ties most directly to the ability to interact with others. This group is able to form agreeable relationships and alliances, support effective communication, and the mutually beneficial exchange of ideas, feelings and information (Bar-On, 2006).
When sharing 4-H accomplishments with donors, emotional intelligence results and programming efforts should be shared as research suggests that people with high levels of emotional intelligence “experience more career success, build stronger personal relationships, lead more effectively, and enjoy better health than those with low [emotional intelligence] EQ” (Cooper, 1997, p.32). The fact that the 4-H program is producing these emotionally competent youth that will be assets and contributing, responsible adult members (Schlutt, 1987) to any university, workplace or community should be of interest to anyone helping to fund the 4-H program.

This study found there to be a relationship between character education and emotional intelligence, indicating that 4-H is enhancing emotional intelligence through their strongly emphasized character education curriculum. However, there are some areas of emotional intelligence that are not addressed through character education, indicating areas on which the 4-H program could specifically concentrate to improve emotional intelligence in 4-H members. These areas include Stress Management (stress tolerance and impulse control) and Adaptability (reality testing, flexibility, and problem solving).

If the cost of the Bar-On $EQ-i$ was not an issue, or funding could be allocated, it would be beneficial for the membership of each Texas 4-H Council to take the Bar-On $EQ-i$ at the beginning and end of their year of leadership. This would help in their understanding of each other and the group dynamics which would also be beneficial to the advisors working closely with this group. Consistently collecting this information on a yearly basis would also provide valuable research data to the 4-H program and provide
valuable insight into their programming efforts and their effect on emotional intelligence development.

Research

While this study was specific in nature, looking at the highest level of leadership in the Texas 4-H Program and examining the relationships between this level of leadership, emotional intelligence, and character development, further research should be conducted with 4-H members at various levels (state and national) and with various levels of participation and leadership in the 4-H program.

Overall, females on the Texas 4-H Council had higher scores for all five of the Emotional Quotient domains and therefore for the total Emotional Quotient score. Most research indicates that there is no difference in emotional intelligence between genders. Although research conducted by Bar-On (2002) revealed no significant difference between males and females in overall emotional intelligence, he admits there were several differences of small magnitude. Goleman (1998) noted that women generally have had more practice at some interpersonal skills than men because in cultures like the United States, girls are raised to be more attuned to feelings and their nuances than are boys. Goleman (1998) goes on to state that, on average, women are more empathetic. Future studies need to be conducted to further investigate gender relationships with emotional intelligence in the 4-H program.

The standardized testing instruments that have been identified that measure emotional intelligence, and seem to be the most scientific and reliable (Bar-On EQ-i or
MSCEIT), are very expensive and therefore a limiting factor in further emotional intelligence testing in youth programs. A solution to this cost should be addressed either through the creation of a reliable instrument to measure emotional intelligence or through a cooperative, beneficial partnership between 4-H and the standardized test creators (Bar-On EQ-i or MSCEIT) to help them gather more normative emotional intelligence data on youth.

Programmatic

To further, and more completely develop the emotional intelligence and character attributes of the Texas 4-H Council members and 4-H members in general, modeling should be used. According to Elias et al. (1997), modeling is the most powerful technique that teachers employee, intentionally or otherwise. Mize and Ladd (1990) state that students who observe discrepancies between what is practiced and what is preached are most likely to imitate what they see modeled. This indicates that Extension employees, especially those working closely with youth, must model the behavior they want the youth to learn and imitate. Also, involving the youth in the programmatic planning and implementation of emotional intelligence and character education development would be one of the best ways to insure its success (Matthews & Riley, 1995; Leming 1993). Youth must be engaged in the planning of their activities or they will not have “buy-in.” Research has shown that expectations developed by adults without youth involvement set youth up for failure (Natriello & Dornbusch, 1984).
Other ways to assist the Council members, as well as other 4-H members, in the development of their character and emotional intelligence include using cooperative learning strategies, role-playing, and service learning experiences. Cooperative learning has been shown to increase pro-social behavior and enhance children’s ability to understand others’ points of view. In contrast, children who are competitive and whose parents emphasize competition are less empathetic than their peers (Kohn, 1990). This approach improves acceptance of students of other races and ethnic origins, mutual concern among students, and positive social attitudes and behavior (Leming, 1993). Role-playing and discussion provide a basis for critical thinking about values, attitudes, character and moral issues as well as a way to relate experiences to students’ lives (McDaniel, 1998). Service learning experiences, and reflection on those experiences, enhance self-esteem, a sense of personal competence and efficacy, and social responsibility for others (McDaniel, 1998).

Education on emotional intelligence and providing the youth with their scores on the Bar-On EQ-i would probably be the most beneficial thing for the Texas 4-H Council members in helping develop their emotional intelligence. Awareness of their emotional strengths and weaknesses and instruction and education on improving those weaknesses would be the best short-term solution for the current Council members. If the Bar-On EQ-i could be administered at the beginning of their term on Council, then the members would know the areas where they needed to improve. Re-administration of the test at the end of their leadership year would determine if there was improvement once they were made aware.
To assist Extension personnel working with youth to teach and/or incorporate emotional intelligence into their teaching, specific research and time should be devoted to determining the best way to develop and design curriculum to meet this need. The 4-H program needs to specifically work toward connecting this curriculum to the desired outcomes rather than leaving this up to the agents, faculty, and teachers.

Further research should be conducted on a larger population specific to their years in 4-H relative to character development and emotional intelligence. The population of this study may have been too small to determine conclusive results. Other interesting studies would be to compare the emotional intelligence and character development among leaders of different youth organizations such as 4-H, FFA and FCCLA, and compare emotional intelligence and character between youth in leadership positions within those organizations as opposed to those who are not. A long-term study that would follow selected 4-H members from the time they join 4-H at age nine then throughout their 4-H career, measuring emotional intelligence along the way to see growth or change would be an ideal research project to conduct in the area of emotional intelligence development. Currently there is not much research in the area of emotional intelligence and youth and this type of study would be very beneficial to those working in youth development.
References


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National Resource Center on AD/HD (2004). The disorder named AD/HD. *What We Know, 1.*


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APPENDIX A

CHARACTER EDUCATION INSTRUMENT
### Part II: Pillars of Character

1. Help others in need.
2. For the common good.
3. Being a good neighbor and working.
4. Care for others.
5. Cooperation with others.
6. Listen to everyone's opinion.
7. Respect for others.
8. Play by the rules to be fair.
9. Take responsibility for my own actions.
10. I would like them to be an effective leader.
11. Often always

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### Part I: Character Education (continued)

- Always
- Sometimes
- Seldom
- Never

Think about yourself and circle the ONE number that best describes you:

**Directions:** For each of the questions listed below, circle the ONE number in the right column that best describes you.
APPENDIX B

PARENTAL CONSENT FORM
Parent Consent Form

4-H Study of Emotional Intelligence

for Texas 4-H Council Members

Your child has been asked to participate in a research study due to their involvement in the Texas 4-H Council and the level of leadership they have attained. Texas 4-H Council members are asked to take part in this study because they have achieved the highest level of leadership in the Texas 4-H program and have had extensive training in Character Education.

The purpose of this study is to determine the relationship between emotional intelligence, leadership and character.

During the Texas 4-H Council workshop on January 14, 2006, your child will be filling out two survey forms which may take as long as one hour. State Council members will be asked questions which involve demographic information such as age, gender and race as well as questions that will ask them to rate their actions related to character. The emotional intelligence survey will ask questions dealing with intrapersonal and interpersonal emotions, stress management, adaptability, and general mood.

By participating in this survey, your child's answers will help researchers who work with youth to know more about ways we can help youth develop into more emotionally intelligent leaders and adults. No payments will be made for completing the survey.

This study is confidential and the records will be kept private. There will be nothing on the survey which will link your child to the study or to any of the reports which will be made. Research records will be stored securely and only Kalico Karr Leech will have access to the records.

Your child is not required to fill out any part of the survey that makes them feel uncomfortable. They may quit filling out the survey at any time. Their participation in the Texas 4-H Council will not be affected by their choice to participate. Please feel free to contact Kalico Karr Leech, District 3 4-H Specialist at 940-552-2941 ext. 223 (kleeche@ag.tamu.edu) with any questions you, or your child, may have.

This research project has been reviewed by the Institutional Review Board for the Protection of Human Subjects - Texas Tech University. For research-related problems or questions regarding subjects' rights, you may contact the Institutional Review Board through the Office of Research Services, Texas Tech University, Lubbock, Texas 79409 or you can call (806) 742-3884. For questions related to the validity of research projects conducted in the name of the Texas 4-H and Youth Development Program please contact Dr. Jeff W. Howard, Associate State Program Leader for 4-H and Youth at 979-845-6533 (jhoward@tamu.edu)

I have read the above information, have asked questions and have received answers to my satisfaction. I have been given a copy of this consent document for my records. By signing this document I agree to participate in the study.

As the parent or guardian of ____________________________, I give my permission for them to participate in the study. (Printed name of 4-H Member)

______________________________________________________________
Signature of Parent

______________________________________________________________
Date
APPENDIX C

LETTER OF EXPLANATION THAT ACCOMPANIED

MAILED INSTRUMENTS
Dear Jennifer,

My name is Kalico Karr Leech and I am the 4-H Specialist in District 3. I recently emailed you and/or spoke to you on the phone regarding the research on Emotional Intelligence and Character Education that I am doing for my doctoral studies. In January, at the 4-H Council meeting at the Texas A&M Center, I met with your fellow 4-H Council members and they filled out questionnaires I provided to help me collect the data needed for my research. Since you were unable to attend that meeting, I am mailing you the questionnaires and ask that you please fill them out and mail them back to me in the self-addressed stamped envelope I have provided.

The Character questionnaire I am asking you to complete is intended to help me get a better understanding of how you honestly feel about your daily actions related to character and your knowledge of the character education training you have received. There are 15 questions that you will need to answer regarding your daily actions. Your responses will range from "Never" to "Always." You will also be asked to list the six pillars of character. Please do this from memory and without any help from others. Please do not forget to fill out the back page of the questionnaire which asks demographic information that is also very important.

The RonOn Emotional Quotient Inventory is designed to help me obtain a better understanding of your emotional intelligence. There is an item booklet that contains 133 brief questions that I would like for you to answer about yourself. There are five possible responses for each question, ranging from "Not True of Me" to "True of Me." You should mark your response to each question on the answer sheet that I have attached to the booklet. You should not have any problem completing the Emotional Quotient Inventory as it is very similar to the standardized tests you are familiar with in school. Please complete this independently and without input from others.

The information that is collected in this study will help us better understand the relationship between character, leadership and emotional intelligence and help us determine the need to incorporate emotional intelligence into our 4-H curriculum. If you choose, your name will not be associated with this information in any way and your answers will be kept strictly confidential. If you would like to know your individual information, you can include your name. Only I will have access to this information. I plan to interpret the results of this study to the Texas 4-H Council members in July at Texas 4-H Congress. If you who want to know your specific results I will discuss this privately to you.

Please have your parents sign the enclosed parent assent form and send both with your completed questionnaires and booklet to me at any time while you are completing these questionnaires, and you or your parent have a question, please feel free to call me on my cell phone at (816) 735-2866. I so appreciate your helping me to complete my doctoral studies.

Thanks again,

Kalico Karr Leech
Extension Program Specialist 4-H

Enclosures: Character Questionnaire, Parent Assent Form, RonOn EQ-T Inventory, Self Addressed Stamped Envelope

Agriculture and Natural Resources · Family and Consumer Sciences · 4-H and Youth Development · Community Development

Extension programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating. A member of The Texas A&M University System and its statewide Agriculture Program.