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Investigating Emotional Intelligence and Social Skills in Home Schooled Students

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INVESTIGATING EMOTIONAL INTELLIGENCE AND SOCIAL SKILLS IN
HOME SCHOOLED STUDENTS

A Specialist Project
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Specialist in Education

By
Jennifer Howard Adkins

May 2004

INVESTIGATING EMOTIONAL INTELLIGENCE AND SOCIAL SKILLS IN
HOME SCHOOLED STUDENTS

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INVESTIGATING EMOTIONAL INTELLIGENCE AND SOCIAL SKILLS IN HOME SCHOOLED STUDENTS

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In the United States today there are approximately 1.5 million students being home schooled. With this ever growing number, it is important to examine this unique population in order to determine the effects this alternative form of education will have on these students, not just academically, but in other areas as well. The purpose of this study is to examine the concepts of emotional intelligence and social skills in home schooled students. One hundred home schooled students and their parents participated in this study by completing emotional intelligence and social skills questionnaires.

Results of the study support the hypotheses that the home schooled students would have higher levels of social skills and lower scores on the problem behaviors scale than the standardization population. In regards to emotional intelligence, differences were found among the elementary and secondary grade levels of the home schooled children. Home schooled elementary students achieved higher scores than the standardization population on two of the seven areas measured. No significant differences were found in the other areas. Home schooled secondary students achieved higher scores than did the standardization population on four of the seven areas measured. No significant differences were found in the other areas.

CHAPTER ONE

Introduction

Consider the following names: The Wright brothers, Winston Churchill, Monet, da Vinci, Presidents Washington, Adams, Lincoln, Roosevelt, and Wilson, Benjamin Franklin, Charles Chaplin, and Andrew Carnegie, John Burroughs, Noel Coward, and George Rogers Clark (Williamson, 1989). What did these people all have in common? They were all very successful and they were all taught at home.

In Ray's (1999) publication, *Home Schooling on the Threshold*, it was estimated that 1,500,000 child in the United States are being home schooled (p. 2). Ray reported that in 1980, almost 100 percent of the total population of United States children between the ages of 6 and 18 were enrolled in traditional schools, with approximately 88 percent of these students in public schools. Twenty years later, there were between 1.2 and 1.6 million children being home schooled. He further reported that in the fall of 1996 it was estimated that there were more home schooled children across the country than there were public school students in the nine states of Wyoming, Vermont, Delaware, North and South Dakota, Rhode Island, Montana, Alaska, and Hawaii combined. The total population of public school children in these states equaled 1,198,957. This meant that the home schooling population was equal to about 24% of the private school population. Ray estimated that 3 million students would be home schooled by the year 2010 if these numbers continued to increase at their then current rate (Ray, 1999). With this large and

ever-growing percentage of the population being home schooled, it is necessary to examine the impact this alternative form of schooling will have on the students.

Although research supports that children who are taught at home do well academically, one of the major concerns of those opposed to home education, as well as parents thinking about home schooling, was that of socialization. Catholic Home Schoolers of Western New York (2000) stated that when home schooling parents reveal their decision to home school their children, one of the first questions they are asked, (besides, “How will you teach them?”) is “What about socialization?”

It has been assumed by many that the daily contact achieved by students in traditional schools was necessary for their social adjustment (Shyers, 1992). Since home schooled students did not get regular social contact with students of their same age, other (than their siblings), parents, educators, courts, and legislators questioned whether home schooled students were as socially well adjusted as traditionally schooled students. The home schooled child was often stereotyped as being shy, passive, and lethargic because of the lack of socialization from not being enrolled in a public school.

Researchers have reported the five major reasons parents had for home schooling their children. First, parents often felt that home education helped the students accomplish more academically. Second, they sought to individualize the curriculum they used in educating their students. Third was that of enhancing the relationships among family members. Fourth was that many parents wanted to exercise more control over with whom their children were socializing. Fifth, an increasing number of parents were concerned about the safety of American schools (Ray, 1999). Although it may be

surprising to many, socialization was one of the main reasons parents chose to home school their children (Williamson, 1989).

For many years it has been argued that there are many kinds of intelligence. This can be seen with Howard Gardner's work involving multiple intelligences. Gardner suggested that there are nine different intelligences. In examining these different intelligences, Chen and Gardner (1997) did not ask how smart a person is, but instead, asked the question, "How are you smart?" (p. 105).

Goleman (1995) believed that in the past, far too much emphasis had been placed on cognitive IQ, but that general intelligence became a small factor when emotions were involved. When faced with making decisions and choosing courses of action, a person's feelings often had as much of an impact, if not more, than the person's thoughts. In fact, Goleman believed the two factors were negatively correlated. The more intense the feelings and emotions, the more ineffectual the rational mind became.

What is emotional intelligence? Take two people of seemingly high academic intelligence, say, for example, two Harvard graduates. Why does one graduate go on to succeed in his or her chosen career, while the other flounders? The concept of emotional intelligence may help answer this question. Goleman (1995) stated that, "at best, IQ contributes about 20 percent to the factors that determine life success, which leaves 80 percent to other forces" (p. 34). This study will examine some of these other forces. Emotional intelligence, as a general concept, has gained increasingly more professional acceptance and has led many researchers to study the effects of the presence or absence of this concept. The work of Salovey and Mayer in the early 1990's led Goleman (1995) to write his book, *Emotional Intelligence: Why It Can Matter More Than IQ*. It is with

the publishing of this book that the concept of emotional intelligence gained nationwide attention and popularity. Goleman quoted the early philosophers, Socrates and Aristotle, when he spoke of controlling our emotions. Socrates' statement, "Know thyself" is what Goleman called the "keystone of emotional intelligence: awareness of one's own feelings as they occur" (p. 46). Goleman quoted Aristotle who said, "be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way" (p. xiii). Goleman referred to this as the ability to control emotional impulses and handle relationships. Emotional intelligence included persistence, self-control, zeal, and the ability to motivate oneself. Goleman believed emotional intelligence encompassed five concepts: "the ability to know one's own emotions...manage one's own emotions...motivate oneself...recognize emotions in others...and handle relationships" (p. 43).

Mayer and Salovey (1997) defined the concept of emotional intelligence as that which:

involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional intellectual growth. (p. 10)

Mayer and some of his colleagues suggested a model of emotional intelligence containing four psychological processes. First was the verbal and nonverbal appraisal and expression of emotion in the self and others. Second was the utilization of emotion to facilitate thought and action. Third was understanding and reasoning about emotions.

Fourth was the regulation of emotion in the self and others (Roberts, Zeidner, & Matthews, 2001).

With the ever-growing interest in emotional intelligence, tests were constructed to measure this construct. The first measure of emotional intelligence was developed by Reuven BarOn. In 1997, BarOn developed the BarOn Emotional Quotient Inventory designed for adult populations. Three years later, the BarOn Emotional Quotient Inventory: Youth Version (2000) was published for children and adolescents.

As Hunt (1928) stated,

Experience in studying the basis for success of college students, and the bases for success in various vocations, has emphasized the importance of this last variety [social variety of intelligence], and has led to the study of means of measuring social intelligence. (p. 317)

The construct of social skills is difficult to define. This researcher used the definition by Gresham (1986) stating that social skills include:

(1) interpersonal behaviors, (e.g., accepting authority, conversation skills, cooperative behaviors, play behaviors), (2) self-related behaviors (e.g., expressing feelings, ethical behavior, positive attitude toward self), and (3) task-related behaviors (e.g., attending behavior, completing tasks, following directions, independent work). Interpersonal behaviors relates to accepting authority, conversation skills. (p. 147)

There has been limited research with the BarOn Emotional Quotient Inventory: Youth Version with students of specific populations. As far as this researcher was able to

determine, home schooled children have never been evaluated with this instrument, nor have they been evaluated with the Social Skills Rating System.

With the ever-growing number of parents choosing to home school their children, it is important to examine this unique population to determine the impact this alternative form of schooling can have on these children, socially and emotionally.

CHAPTER TWO

Literature Review

A Look at Past Research on Home Schooled Students

Ray (1999) analyzed numerous studies investigating home school and public school academic achievement for grades K-12. While public school academic achievement scores averaged in the 50th percentile, statewide and nationwide scores for home schoolers ranged from the 58th to 85th percentile. However, academics were not all that was important to a child's growth, development, and ability to function in our society. It was necessary to examine social and emotional factors as well.

There were several reasons why home schooling parents felt their child would have better socialization if taught at home. Parents often believed that home schooling helped them to be more effective in disciplining and training the children in conflict resolution, which in turn, strengthened relationships with family and peers alike. Often times in regular school situations, there was no time to really resolve conflicts or deal with negative behaviors causing the problems (Hahn & Hasson, 1996).

Mattox (1999) believed that there were certain things that distinguished home schoolers from traditionally schooled students. First, home schooled students tended to associate more with students of different ages (much like adults do in the real world). Second, home schooled children would usually get their social identity from their family as opposed to a peer group. This wider age range in their friends encouraged home

schoolers to be more mature in exhibiting leadership qualities (Ensign, 1997). Because home schooled students interacted more with other students of different ages, they were more likely to include younger students in their play, rather than exclude them (Hahn & Hasson, 1996).

Home schooled students were usually involved in extracurricular activities outside the home. Some home schooled students participated in sports with city leagues or other private or public schools. Many home schooled students were involved in volunteer work in hospitals, nature parks, museums, libraries, and businesses (Ensign, 1997). In 1997, Ray collected information on the activities and community involvement of home schooled students. Ray found that approximately 8% participated in scouts; 10% were in ballet; 14% belonged to 4-H clubs; 33% did volunteer work; 34% were involved in some type of ministry; 35% were in Bible clubs; 42% participated in classes outside the home; 47% went to music classes; 48% were in sports; 77% went to Sunday School; and 84% participated in field trips. Most of the students, 98%, were involved in two or more of the activities above (Ray, 1999). However, aside from this information from home schooling parents and proponents, it was necessary to examine scientifically how home schooled students compared to other students, in areas apart from academics.

In his University of Florida research, Shyers (1992) conducted one of the most widely known studies involving home schoolers. In his study of home schooled and traditionally schooled students, Shyers gave 178 home schooled students and a matched population of 178 traditionally schooled students the Piers-Harris Children's Self-Concept Scale and the Children's Assertive Behavior Scale. Then, the first 140 participants (70 home schooled and 70 traditionally schooled) were also videotaped for 40 minutes while

engaged in games and other activities. The tape was reviewed by a trained observer who then completed a Direct Observation Form on each child. The observers were not told which students were home schooled and which were not. On the Piers-Harris Children's Self-Concept Scale and the Children's Assertive Behavior, he observed no difference in the home schooled and traditionally schooled students. However, on the Child Behavior Checklist Direct Observation Form, he found that there were significant differences between the two groups of students. Regardless of their age and/or gender, home schooled students scored significantly lower in problem behaviors on the Direct Observation Form. During the videotaped observation sessions, home schooled students showed less anxiety being separated from their parents or not knowing other students in the group. Home schooled students introduced themselves to each other and sought common interests in conversation topics. They tended to play well together and cooperate in group activities. At the conclusion of the observation activities, several students exchanged addresses and phone numbers. This was not observed in the traditionally schooled students. Some of the traditionally schooled students were anxious about where their parents would be during the activities. They were slower to warm up to other students and five of the students decided not to interact with the other students at all during the activities. When the students did start conversing, they were much louder than the home schooled students. In each age group of traditionally schooled students, there was always at least one child who became upset when he or she was not included in a game or activity (Shyers, 1992).

Although the traditionally schooled students tended to play alone during the taped observation, their behavior was similar to the behavior of those around them. As noise

and body motion increased, each child increased his or her noise and body motion. There was much more of a tendency for the traditionally schooled students to imitate their peers. In the case of the home schooled students, much of their time was spent with their parents so much of their behavior was learned from the behavior of adults. The home schooled students were observed to be quieter, less aggressive and less competitive. They seemed to decide on their own how to behave instead of following the behavior of others (Shyers, 1992).

Before examining the emotional intelligence and social skills of home schooled students, it is necessary to first examine each concept and how it has evolved.

A Brief History of Intelligences

R. M. Thorndike (1997) saw the testing of intelligence as very complex, saying that separate abilities could not be measured by any one construct. He stated, the primary fact is that intelligence is not one thing but many. The abilities measured by a speed test with language and mathematics are not identical with, or even very similar to those measured by a test with pictures and less exacting speed. (p. 11)

Thorndike then concluded that intelligence consisted of at least two other major factors besides abstract intelligence: mechanical (understanding concrete things and spatial concepts) and social (working effectively with people).

When psychologists first began studying intelligence, they focused only upon the cognitive aspects, or general intelligence. Cherniss (2000) quoted Wechsler when he defined intelligence as "The aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment" (p. 1). As

far back as 1943, after saying that there were “intellective” and “non-intellective elements,” Wechsler suggested that the non-intellective (affective, personal, and social factors) were essential for achieving success in life (Cherniss, 2000).

Kaufman and Kaufman (2001) examined the concept of emotional intelligence in relation to the work of Wechsler. Wechsler believed that there were other factors of intelligence, besides those measured by his tests that facilitated or inhibited a person's behavior. Those factors could include persistence, motivation, curiosity, impulsivity and anxiety, etc. He was disturbed that factor analysis of his tests usually accounted for no more than 60% of the total variance. Wechsler considered different aspects of intelligence as can be seen in aspects of the Comprehension and Picture Arrangement subtests. As an example, some believed the item on the Comprehension subtest, "What is the thing to do if a boy (girl) much smaller than yourself starts to fight with you" should have been removed from the test, because in a ghetto no one can survive by simply walking away. Wechsler left the item in, believing that the ability to show restraint was an important part of intelligence. Although Wechsler did not specifically refer to emotional intelligence in terms laid out by Salovey, Mayer, and others, he did consider it an aspect of intelligence as can be seen by his definition of what intelligence tests measured. Kaufman and Kaufman (2001) quoted Wechsler on his ideas regarding those factors not measured by his tests. Wechsler said,

What we measure with tests is not what tests measure—not information, not spatial perception, not reasoning ability. These are only means to an end. What intelligence tests measure, what we hope they measure, is something much more

important: the capacity of an individual to understand the world about him and his resourcefulness to cope with his challenges. (p. 259)

Different forms of intelligence apart from abstract or general intelligence were largely forgotten or overlooked during the next several decades until Howard Gardner began to write about multiple intelligences in 1983. He suggested that interpersonal and intrapersonal intelligences were just as important as general intelligence.

Chen and Gardner (1997) discussed the importance of acknowledging different intelligences. Gardner defined intelligence as “the ability to solve problems or to create products that are valued within one or more cultural settings” (p. 106). He proposed nine different types of intelligences and believed that the different intelligences were totally separate entities. “The fact that nearly every cultural role requires a combination of intelligences suggested the importance of considering that individuals possess various aptitudes rather than a singular problem-solving faculty” (p. 107).

Social Intelligence

Social intelligence as a construct held a plethora of meanings that could be applied. Research literature tended to revolve around three criteria in defining this domain (Ford & Tisak, 1983). The first criterion referred to one’s ability to decode social information; that is, the ability to understand nonverbal cues and make correct inferences in social situations. The second criterion, effectiveness and adaptiveness of social performances, referred to behavioral outcomes stemming from the previous social-cognitive skills mentioned in the first definition. The third criterion used in defining social skills dealt with any form of social measure containing a skill component.

As far back as 1920, the concept of social intelligence as a separate intelligence was generally accepted. Walker and Foley (1973) traced the early definitions of social intelligence as far back as 1920 beginning with E. L. Thorndike's definition in which he defined social intelligence as “the ability to understand and manage men and women, boys and girls—to act wisely in human relations” (p. 840). After the presentation of this definition of social intelligence, most researchers did not attempt to change it, but generally accepted a test designed that best fit this definition, the George Washington Social Intelligence Test. Walker and Foley also included Vernon's 1933 definition which expanded on Thorndike's definition of social intelligence. Vernon stated,

social intelligence apparently includes ability to get along with people in general, social technique or ease in society, knowledge of social matters, susceptibility to stimuli from other members of a group, as well as insight into the temporary moods or underlying personality traits of friends and of strangers. (p. 842)

In the 1930's, social intelligence research centered around the methods and accuracy in which people make judgments about others. By the 1950's, social intelligence studies had broadened to focus on two elements. First, intelligence regarding “person perception,” and second, social-psychological aspects regarding “social determinants of person perception” (Roberts, Zeidner, & Matthews, 2001, p. 198).

Social intelligence was quickly accepted and popularized in the field of psychology and gained even greater attention with the development of instruments to measure this concept. Researchers working within the area of social intelligence believed themselves to be working with a concept that was distinctly separate from abstract intelligence. It was believed by researchers that social intelligence was not measured by

those intelligence tests generally used and accepted. Whether or not social and abstract intelligences were distinct concepts would only be determined through further research. Efforts in constructing social intelligence tests that did not depend upon some level of abstract independence were faced with many difficulties (Walker & Foley, 1973).

Ford and Tisak (1983) studied 620 high school students based on four different academic intelligence measures and six different social intelligence measures. They sought to find whether or not social intelligence could in fact be termed an intelligence. To evaluate each student's social behavior effectiveness, the students were each interviewed, then judged by the interviewer on a five-point scale to be "very competent, smooth, posed" and "ineffective, unresponsive, inappropriate emotions or behavior" (p. 200). Interviewers were to judge the students based on their ability to speak effectively, be responsive, and exhibit appropriate nonverbal behaviors such as eye contact, body posture, etc. In examining their results, Ford and Tisak found evidence that there did exist a separate domain of social intelligence (Ford & Tisak, 1983).

To measure social intelligence, most researchers have combined the definitions above to develop social skills assessments. In looking specifically at children's social skills, there were many definitions formed to attempt to provide a basis for the idea of just what exactly social skills were. According to Gresham (1986), there were at least three definitions that could be derived from combining social skills literature regarding children. The first definition, peer-acceptance, refers to the peer acceptance or popularity of a given individual to define social skills. Under this definition, those children and adolescents who were popular or generally accepted by their peers in school or community settings were deemed socially skilled. The second was that of a behavioral

definition. This definition dealt with “situation-specific responses that maximize the probability of maintaining reinforcement responses that maximize the probability of punishment contingent on one’s social behavior” (p. 150). Measures used in evaluating social skills included naturalistic observations and role-play situations. The third definition termed the social validity definition referred to a set of behaviors that, in a certain situation, will “predict important social outcomes for children. These so-called social outcomes could be (1) peer acceptance or popularity, (2) significant others’ judgment of social skills (e.g., parents, teachers), and/or (3) other social behaviors known to consistently correlate with 1 and 2 above” (p. 150).

To assess social skills, the social validity definition used procedures such as naturalistic observations, sociometric measures, and ratings by parents, teachers, etc. This definition has been empirically supported (Gresham, 1986).

Dowrick (1986) indicated that social interactions were a necessary, inevitable, and often sought after aspect of children’s daily lives. Children who were skilled in the social realm had more fun and got more enjoyment out of activities presented over the course of their lives, while those children who were socially inept may have been ridiculed, neglected, or abused, by their peers and adults as well.

Social skill problems were grouped into four types: skill deficits, performance deficits, self-control deficits, and self-control performance deficits (Gresham, 1986). Children who had social skills deficits simply did not have the skills needed to interact well with peers. These children may not have known the steps that were necessary for performing a certain social skill. The two most obvious early consequences of social skill deficits in children were withdrawal and aggression (Dowrick, 1986). A child with a

social performance deficit knew about social skills but, in this case, did not perform them in ways that contributed to acceptable peer interactions. Self-control skill referred to a child who, because of some kind of response of emotional arousal, (such as anxiety or impulsivity), had not acquired a necessary social skill. Children who had a self-control performance deficit were those children who knew how to perform skills; however, they performed these skills infrequently or inconsistently (Gresham, 1986).

Social Skills Assessments

There were many social skills assessment methods available for use with children and adolescents. These included sociometrics, rankings, role-play, naturalistic observations, self-report, ratings by others, and self-monitoring (Gresham, 1986). One of the most widely used and frequently researched tests was the George Washington Social Intelligence Test. This test was created in 1926 by F. A. Moss and his colleagues at George Washington University (Thorndike & Stein, 1937). The George Washington Social Intelligence Test was often referred to as one of the best known instruments in measuring social intelligence. Although the reliability of this test was rarely questioned, it was considered to be invalid by numerous studies. It was found to correlate quite highly with measures of abstract intelligence (Walker & Foley, 1973). Factor analyses showed that the test essentially measured the “ability to understand and work with words” (p. 849). The test was designed to measure social intelligence by determining the examinee’s ability to deal with people. The faculty used the George Washington University Social Intelligence Test to study whether or not there was a correlation with the scores on this test and abstract intelligence. Among the college students tested, those who scored in the highest quartile on social intelligence were not necessarily higher in

abstract or general intelligence. It was determined that high levels of general intelligence do not necessarily guarantee a higher level of social intelligence (Walker & Foley, 1973).

Other early measures of social intelligence and social skills included Chapin's Social Participation Scale, which basically measured the “action” or “functional” aspects of social intelligence (Walker & Foley, 1973, p. 849).

This study will use the Social Skills Rating System to measure the construct of social skills. This assessment tool was published in 1992 and constructed by Gresham and Elliott. The Social Skills Rating System was originally designed to broadly assess social skills but was also useful in sampling academic competence and problem behavior areas (Benes, 1995).

Emotional Intelligence

Salovey and Mayer were credited with inventing the term emotional intelligence in 1990 (Cherniss, 2000). In order to fully understand emotional intelligence, one must examine its two key components: intelligence and emotion. As far back as the 1700s, psychologists have acknowledged the three separate parts of the mind: thought or cognition (including memory, abstract thought, and reasoning), affect (emotion), and motivation. Intelligence was a term used to describe how well the mind functions in the cognitive domain. Emotions fell into the category of affect and included features such as moods, emotions themselves, feelings, and evaluations. Therefore, definitions of emotional intelligence should connect the two terms. Mayer and Salovey (1997) suggested the following definition:

Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate

feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. (p. 10)

Mayer (2001) traced the history of emotional intelligence from its beginning to the present time. From 1900 - 1969, psychology treated intelligence and emotion as unrelated concepts. During the period of 1970 - 1989, with the interest in the field of cognition and affect, emotion and intelligence began to be examined together. During this time, emotional facets, such as faces and posture were examined in the field of non-verbal communication. Later, Gardner introduced his work in multiple intelligences, which dealt with concepts of interpersonal and intrapersonal intelligence. These intelligences involved the ability to understand emotions. Neuroscientists were separating and examining the relationships of emotion to intelligence during this period as well. By 1990, Mayer and Salovey had written and published articles involving their work in emotional intelligence. During the period of 1990 – 1993, emotional intelligence began to be accepted as its own form of intelligence. Between 1994 - 1997, Goleman (1995) published his book, *Emotional Intelligence: Why It Can Matter More Than IQ*, somewhat parallel to the work of Mayer and Salovey. After the publishing of his book and the acceptance of the now popular term, EQ, many assessments were developed attempting to examine this construct. From 1998 to the present time, the concept of emotional intelligence was refined, peers of the authors reviewed journal articles, and new methods of assessment were introduced (Mayer, 2001).

According to Mayer and Salovey, (1997) emotional intelligence begins in the home; however, individuals begin life with different emotional starting points. Parents

helped children understand their emotions and those of others, yet, in some homes, there may not have been much of an opportunity or environment for growth in emotional intelligence. Parents may have suffered from psychological limitations or avoided feelings so that they were unable to provide the child with an opportunity to grow in emotional-cognitive processes. When this was the case, the child would often suffer from disorders or misunderstand feelings and emotions.

Goleman (1995) indicated that although we were born with certain emotional set points that made up our temperament, the circuitry of the brain was extremely malleable. He elaborated on this point by discussing that the lessons children learned in the home or in the school can either help or harm them in teaching them the skills of emotional intelligence. The lessons and behaviors children learned early in life were very influential in their functioning later on, hence positive childhood experiences in emotional intelligence were essential for the well being of the future adult. Goleman (1995) referred to a survey revealing that children were more depressed, lonely, emotionally troubled, angry, nervous, unruly, aggressive, impulsive, and worrisome in this generation than in the last. This trend was found worldwide.

Research by Roberts, Zeidner, and Matthews (2001) supported the fact that emotional intelligence, as a distinct intelligence deserved much attention; however, several experts suggested that there were many questions that needed to be answered before emotional intelligence and the measures used to assess it could gain full scientific approval.

Assessing Emotional Intelligence

Seligman has conducted several studies concerning learned optimism (Cherniss, 2000). Learned optimism referred to the causal attributions people make in relationship to their failures, setbacks, and accomplishments. In his research for Met Life, Seligman found that salespersons considered optimists sold approximately 37 percent more insurance than did the more pessimistic salespersons. Later, when Met Life hired people who scored high in optimism, even though these people had failed the normal screening procedures, this group of people sold 21 percent more insurance in their first year, and 57 percent more insurance in their second year than did people who had passed the normal screening.

In another study, Seligman tested 500 freshmen at the University of Pennsylvania and determined that their scores on a test of optimism were better predictors of their final grades that year than were their SAT scores or high school grades (Cherniss, 2000).

The BarOn Emotional Quotient:Inventory was the initial instrument for measuring emotional intelligence. This self-report measure was designed to assess the personal qualities or emotional well being of adults. This instrument had been studied on thousands of subjects and much was determined about the reliability, convergent, and discriminate validity of the test. There is less information about the predictive validity, although one study did show that it was successful in predicting which people would be successful Air Force recruiters. In using this test to select individuals to be recruiters, the United States Air Force has saved almost 3 million dollars each year (Cherniss, 2000).

The BarOn EQ-i: Youth Version, developed by BarOn and Parker (2000), was used to assess the emotional intelligence of the children between the ages of 7 and 18.

The inventory consisted of 60 items covering seven scales. The scales were: Interpersonal, Intrapersonal, Adaptability, Stress Management, General Mood, Positive Impression, and Total EQ.

Another popular emotional intelligence test was the Multifactor Emotional Intelligence Scale. This ability scale required the individual to perform a series of tasks aimed at measuring his or her ability to perceive, identify, understand, and work with emotion (Cherniss, 2000). The Emotional Competence Inventory, another measure of emotional intelligence, required people who knew the individual to rate him or her on 20 skills or competencies suggested by Goleman's work. Forty percent of the items on this assessment were taken from the Self-Assessment Questionnaire (Cherniss, 2000).

Because the concept of emotional intelligence, and measures to assess it are fairly new, very little research has been conducted with specific populations.

Purpose

The purpose of this study was to examine the emotional intelligence and social skills of students who were home schooled to determine what, if any, differences existed among the sample of home schooled students and the standardization population. A sample of 100 home schooled students were given the BarOn Emotional Quotient Inventory: Youth Version and the Social Skills Rating System Self-Report Form. The parents of these students completed a Social Skills Rating System form on their child also. Included in the Social Skills Rating System form completed by the parents was a Problem Behaviors Scale. Parents were asked to complete this form as well. There were four hypotheses for this study.

Hypothesis One: Home schooled students would score statistically significantly higher on the Total EQ composite of the BarOn EQ-i: Youth Version than their same aged peers of the standardization sample.

Hypothesis Two: Home schooled students would have statistically significantly higher social skills scores on the Social Skills Rating System Student Self-Rating Form than their same aged peers in the standardization population.

Hypothesis Three: Home schooled students would have statistically significantly higher social skills scores on the Social Skills Rating System-Parent Rating Form than their same aged peers in the standardization population.

Hypothesis Four: The scores of the Social Skills Rating System-Parent Rating would indicate statistically significantly fewer problem behaviors in home schooled students than in students from the standardization population.

CHAPTER THREE

Method

Participants

Home schooled families with children in the third through twelfth grades were invited to voluntarily participate in this study. These ages were selected based on the age requirements of the assessment instruments used in the study.

There were 100 students (60 girls, 40 boys) involved in this study. The population for this study consisted of students residing in the state of Florida, with the majority of these students living in Pinellas, Hillsborough, Pasco, and Polk County. Approximately 89% of the children were Caucasian, 5% were Hispanic, 2% were African-American and 3% of the children were in the “other” category. Most of the families had average annual incomes of \$50,000 to \$60,000.

Materials

The BarOn EQ-i: Youth Version, developed by BarOn and Parker (2000), was used to assess the emotional intelligence of the home schoolers participating in this study.

Participants of the study were required to rate themselves on a Likert-type scale of four points ranging from (1) “Very Seldom True of Me” to (4) “Very Often True of Me.” The inventory consisted of 60 items covering seven scales. The scales were: Total Emotional Intelligence, which consisted of four of the scales (Interpersonal, Intrapersonal, Adaptability, and Stress Management), General Mood, Positive

Impression, and Inconsistency Index. The test also provided five subscale scores (Intrapersonal, Interpersonal, Adaptability, Stress Management, General Mood) and a Total EQ score was derived from the five composite scores. The Intrapersonal Scale measured the individual's Emotional Self Awareness, Assertiveness, Self-Regard, Self-Actualization, and Independence. The Interpersonal scale measured on Interpersonal Relationships, Social Responsibility, and Empathy. The Adaptability Scales measured Problem Solving, Reality Testing, and Flexibility. Stress Management Scales measured Stress Tolerance and Impulse Control. The General Mood Scale measured the level of Happiness and Optimism (BarOn & Parker, 2000).

According to BarOn and Parker (2000),

Empirical research supports the theoretical scale structure of the...BarOn EQ-i:YV...and shows that the scales correlate well with measures believed to tap similar or related constructs. Findings are consistent with the authors' conceptualization of emotional intelligence and definitions of the EQ-i subscales. Based on these findings, it can be concluded that these inventories are psychometrically sound. (p. 5)

The internal reliability coefficients for the BarOn EQ-i: Youth Version scales ranged from .65 - .90 for all ages and genders. Test-retest reliability coefficients ranged from .77 - .88 depending on the subscale. The test-retest reliability coefficient for the Total EQ was .89. The BarOn EQ-i: Youth Version was chosen for this study, as this inventory appears to be an adequately reliable measure of the construct of emotional intelligence.

The Social Skills Rating System was used to assess the social skills of the students (Gresham & Elliot, 1990). The Social Skills Rating System consisted of three scales: Social Skills, Problem Behaviors, and Academic Competence, the latter of which is only found on the teacher forms. This rating system is available in three forms: teacher, parent, and self-ratings. The parent and self-rating scales were used in this study. The parent rating form includes: Social Skills and Problem Behaviors. The Social Skills scale measures five areas of positive social behavior: Cooperation, Assertion, Empathy, Responsibility, and Self-Control. The Problem Behaviors Scale measures behaviors that may interfere with positive behaviors. There are three subscales of Problem Behaviors for elementary students: Externalizing Problems (aggressive acts, poor control of temper), Internalizing Problems (sadness and anxiety), and Hyperactivity. There are only two subscales (Internalizing Problems and Externalizing Problems) for secondary students. The items on the scale are rated according to the frequency of occurrence on a three-point scale (0- Never; 1-Sometimes, 2-Very Often).

The Social Skills Rating System (SSRS) is used to screen and classify the social behavior of students in their educational and family environments. One feature of the Social Skills Rating System is that it is the first social skills scale to provide separate norms for boys and girls, as well as for those with or without disabilities. This rating scale is supported by research and was standardized on a sample of over 4000 children, with 27% being minorities (Benes, 1995).

Coefficient alpha internal consistency reliability estimates of the SSRS range from .83 - .94 for all forms on the Social Skill Scale and .73 - .88 for the Problem Behavior Scale. Correlations in test-retest reliabilities are .87 for the Social Skill Scale

and .65 for the Problem Behavior Scale. Criterion and construct validity were previously tested and numerous studies were conducted which yielded findings showing that the SSRS correlated highly with similar assessment measures, such as the Piers Harris Children's Self-Concept Scale and the Child Behavior Checklist (Benes, 1995). The SSRS was chosen for this study, as this rating system appears to be an adequately reliable and valid measure of the construct of social skills.

Procedures

In order to make access to the study easier for home schooling families and to allow for group administration of the instruments, parents and students completed the forms and questionnaires prior to or following any home school event in which many home school families were present (e.g., support groups, 4-H club meetings). Some of the families were allowed to complete the forms at home.

To maintain confidentiality, each child was assigned a code number. This number was placed on the BarOn EQ-i: Youth Version questionnaire, Social Skills Rating Systems, and demographics page in place of the child's name.

The parents of each student participating in this study were asked to sign a consent form (see Appendix A) and complete a demographics page (see Appendix C). Parents were asked to complete the Social Skills Rating System Parent Form for each of their students participating in the study. Because some of the parents did not complete certain questions on the Social Skills Rating System, results for this scale only include 97 participants for the social skills component of the scale and 95 participants for the problem behavior component of the scale.

Each child participating in the study was asked to complete an Assent Form (see Appendix B), the BarOn EQ-i: Youth Version questionnaire, and the SSRS Student Self-Rating scale. Because some of the students omitted questions on the Social Skills Rating System, results for this scale only included 98 participants. Ninety-nine participants were included in the results for the BarOn EQ-i: Youth Version.

CHAPTER FOUR

Results and Discussion

Results

Multiple one-sample t-tests comparing the sample values of home schooled students and students of the standardization populations were used to evaluate the four hypotheses of this study. Results are given separately for elementary students (grades 3-6) and secondary students (grades 7-12) to determine whether or not differences existed among the older and younger students.

Hypothesis 1

First, it was hypothesized that, as determined by the Bar-On Emotional Quotient Inventory: Youth Version, home schooled children would show higher levels of emotional intelligence than children from the standardization population. Since the Emotional Quotient Inventory: Youth Version is comprised of six subtests (Interpersonal, Intrapersonal, Stress Management, Adaptability, General Mood, and Positive Impressions), all of which yield individual standard scores, comparison data were examined for the individual subtests, as well as the total EQ.

Forty-two home schooled elementary children completed the Bar-On Emotional Quotient Inventory: Youth Version. The home schooled children achieved significantly higher scores on the General Mood subtest when compared to the standardization population, $t(41) = 3.32$, $p < .01$. When compared to the standardization population the

home schooled children also achieved significantly higher scores on the Positive Impressions subtest, $t(41) = 3.28$, $p < .01$. Table 1 shows the means, standard deviations, and t values for the elementary students on the six EQ subtests and the Total EQ composite of the Bar-On Emotional Quotient Inventory: Youth Version.

Table 1

Means, standard deviations (SD), and t values on EQ:i-YV Grades 3-6

	Mean	SD	t value	Cohen d
Total EQ	103.00	13.51	1.44**	.20
Interpersonal	103.45	12.53	1.79	.23
Intrapersonal	101.67	14.73	.73	.07
Stress Management	99.07	13.84	-.44	-.06
Adaptability	100.57	15.00	.25	.04
General Mood	106.12	11.96	3.32*	.41
Positive Impressions	105.38	10.63	3.28*	.36

Note. * $p < .01$, two tail; Mean = 100, SD = 15

Fifty-seven home schooled secondary students completed the Bar-On Emotional Quotient Inventory: Youth Version. The secondary grades home schooled students achieved significantly higher scores on the Interpersonal subtest when compared to the standardization population, $t(56) = 2.53$, $p < .01$. They also received significantly higher scores than those of the standardization population on the Adaptability subtest, $t(56) = 2.59$, $p < .01$. Like the elementary students, the home schooled secondary students also received significantly higher scores than those of the standardization population on the Positive Impressions subtest, $t(56) = 2.74$, $p < .01$. The Total EQ scores of the secondary home schooled students were also higher than those of the standardization

population, $t(56) = 2.46, p < .01$. Table 2 shows the means, standard deviations, and t values for the secondary students on the six EQ subtests and the Total EQ composite of the Bar-On Emotional Quotient Inventory: Youth Version.

Table 2

Means, standard deviations (SD), and t values for EQ:i-YV Grades 7-12

	Mean	SD	t value	Cohen d
Total EQ	105.19	15.96	2.46**	.35
Interpersonal	104.56	13.57	2.54*	.30
Intrapersonal	99.46	16.13	-.26	-.04
Stress Management	101.47	15.38	.72	.10
Adaptability	105.28	15.37	2.59*	.35
General Mood	103.68	16.30	1.71	.25
Positive Impressions	105.19	14.33	2.74*	.35

Note. * $p < .01$, two tail; Mean = 100, SD = 15

Note. ** $p < .01$, one tail

The first hypothesis stated that home schooled students would score significantly higher than the standardization sample on the Total EQ composite of the BarOn EQ-i: Youth Version. This hypothesis was supported in secondary grades but not supported in the elementary grades. There was no difference between the overall scores of the elementary home schooled students and those of the standardization population.

Regarding the EQ subtests, home schooled students in both groups scored equal to or higher than the students in the standardization population on every subtest.

Hypothesis 2

The second hypothesis stated that when compared to the standardization population, home schooled students would show higher social skills scores as determined by the Social Skills Rating System: Student Self-Report Form. This hypothesis was supported in both the elementary and secondary grades. Forty-two elementary home schooled students participated in this part of the study. The elementary home schooled students achieved significantly higher scores when compared to the standardization population, $t(41) = 4.16, p < .01$. Fifty-five secondary home schooled students completed the SSRS Self-Report Form. The secondary home schooled students also achieved significantly higher scores when compared to the standardization population, $t(54) = 4.07, p < .01$. Table 3 shows the means, standard deviations, and t values for the home schooled students' results of the Social Skills Rating System: Student Self-Report Form.

Table 3

Means, standard deviations (SD), and t values for the SSRS Self-Report Form Total Scores

	Mean	SD	t value	Cohen d
Grades 3-6	109.86	15.36	4.16*	.66
Grades 7-12	108.55	15.57	4.07*	.57

Note. * $p < .01$, two tail; Mean = 100, SD = 15

Note. ** $p < .01$, one tail

Hypothesis 3

The third hypothesis stated that home schooled students would show higher social skills scores than the standardization population as determined by the Social Skills Rating System: Parent Form. Results indicate social skills scores were higher for home

schooled students in both groups. The parents of forty-two elementary home schooled students participated in this part of the study. The elementary home schooled students achieved significantly higher scores when compared to the standardization population, $t(41) = 7.10, p < .01$. The parents of fifty-four secondary home schooled students completed the SSRS Parent Form. On this measure, the secondary home schooled students achieved significantly higher scores when compared to the standardization population, $t(53) = 6.31, p < .01$. The third hypothesis was supported. Table 4 shows the means, standard deviations, and t values for the home schooled students' results of the Social Skills Rating System: Parent Form

Table 4

Means, standard deviations (SD), and t values for the SSRS Parent Form Total Scores				
	Mean	SD	t value	Cohen d
Grades 3-6	115.12	13.81	7.10*	1.01
Grades 7-12	112.09	14.09	6.31*	.81

Note. * $p < .01$, two tail; Mean = 100, SD = 15

Hypothesis 4

Lastly, it was hypothesized that home schooled students would show fewer problem behaviors than students from the standardization population and therefore would receive lower scores on this scale. Home schooled students in both groups received significantly lower scores when compared to the standardization population. The parents of forty elementary home schooled students complete the Problem Behaviors Scale. The elementary home schooled students achieved significantly lower scores when compared to the standardization population, $t(39) = -3.48, p < .01$. The Problem Behaviors Scale was also completed by the parents of 55 secondary home schooled students. The

secondary home schooled students also achieved significantly lower scores when compared to the standardization population, $t(53) = -3.75, p < .01$. The fourth hypothesis was supported for both groups. Table 5 shows the means, standard deviations, and t values for the home schooled students' results of the Problem Behaviors Scale of the Social Skills Rating System: Parent Form.

Table 5

Means, standard deviations (SD), and t values for the SSRS Problem Behaviors Parent form

	Mean	SD	t value	Cohen d
Grades 3-6	93.90	11.08	-3.48*	-.41
Grades 7-12	92.24	15.20	-3.75*	-.52

Note. * $p < .01$, two tail; Mean = 100, SD = 15

Discussion

Although much research has been conducted to determine whether or not homeschooling is a wise choice academically for the child, very little research has been conducted to determine the effect homeschooling has on other areas of the child's development. The purpose of the study was to answer questions of whether or not home schooled students possess the same social skills and emotional intelligence of the normal population.

Results of the study indicated that in the areas of emotional intelligence, home schooled students are no different from than their same aged peers in most of the areas measured. Home schooled students in grades 3-6 did show higher scores than the standardization population on the General Mood and Positive Impressions subtests. Home schooled students in grades 7-12 showed higher scores than did the standardization

population on the Interpersonal, Adaptability, Positive Impressions, and Total EQ scores, as measured by the Bar-On Emotional Quotient Inventory: Youth Version.

In regards to social skills, as indicated by the Parent and Student Self-Report Forms of the Social Skills Rating System, results of the study indicate the home schooled students have significantly higher social skills than do students of the standardization population. It should be noted that the parents tended to rate their students higher than the students rated themselves; however, on both forms the home schooled students received higher scores than did the standardization population.

Problem behaviors were also measured on the Social Skills Rating System Parent Form. Results of the study indicate that home schooled students show significantly fewer problem behaviors than the standardization population.

Results of the study indicate that students who are taught at home are socially and emotionally well adjusted, and in most cases, even more so than their same age peers. Due to the limited research in this area, the study was chiefly exploratory but it does hold some significance for those interested in examining the home schooled child's total development.

Some limitations of the study should be acknowledged when considering these results. First, demographic data gathered about these homeschooling families indicates that the home schooling families who participated in this study are very different from the normal population. For example, of the 100 students who participated in this study, 98 were from two-parent homes. The majority of the families earned an annual income of \$50,000-\$60,000. Second, all of the participants in the study were from the state of Florida and it is impossible to know what effect this culture may have on the participants

and what differences may exist when compared to the national norm. Third, results are based on data gathered from the parent and the child. It is possible that answers were given in regards to what the parent or child wanted for the child and not based on what the actual case may be. Finally, results of the social skills of home schooled students may actually be higher than was shown in this study. The Social Skills Rating System for students grades 7-12 asks a number of questions about whether or not the child feels confident when out on a date, or whether the child will ask others out on a date. Many home schooled students in this age bracket are not allowed to date so when given a choice of “never,” “sometimes,” and “always,” they simple circled the number 0 (“never”). Because they are not allowed to date, they did not score any points on those items.

All hypotheses were supported with the exception of hypothesis one stated that the Total EQ scores of home schooled students would be significantly higher than those of the standardization population. Although this hypothesis was true of the secondary home schooled students, there was no difference between the home schooled elementary students and elementary students in the standardization population.

CHAPTER FIVE

Summary

With the recent interest in emotional intelligence and the development of tests to measure this construct, it has become possible to study emotional intelligence in different groups of subjects. For the home schooled population especially, research in emotional intelligence and social skills are for the most part, uncharted territories. However, one of the top concerns in the minds of those opposed to home schooling is how the child will develop good social skills without the daily influence from other students. With the use of the BarOn Emotional Quotient Inventory: Youth Version and the Social Skills Rating System: Parent and Student Forms, this study was able to measure the emotional intelligence and social skills of home schoolers.

One hundred students and their parents participated in the study. Their scores were compared to those of the standardization population for each measure. All hypotheses of the study were supported, with the exception of the hypothesis regarding Total EQ scores. Home schooled students in grades 7-12 showed higher levels of emotional intelligence than the standardization population; however, there was no difference between the home schooled students in grades 3-6 and students in the standardization population. Individual subtests of the BarOn Emotional Quotient Inventory: Youth Version revealed that in every area, regardless of grade levels, the home schooled students' scores were equal to or higher than those of the normal population.

Home schooled students also revealed higher social skills as measured by the Social Skills Rating System: Student Self Report Form and the Parent Form. Results of the Parent Form showed even higher social skill scores than did those of the Student Forms. Parent ratings of the child's problem behaviors indicated that the home schooled children's problem behaviors were lower than that of the standardization population.

Future Research

The current study examined the emotional intelligence and social skills in home schooled students. Due to the number of participants in the study, it was not possible to thoroughly examine the differences for age, gender, and number of years the student was home schooled and the effect this might have on different subtests measuring emotional intelligence and social skills. Future research may want to gather larger numbers or select groups to examine more closely whether or not any differences or correlations may appear when home schooling samples are broken down by age, gender, etc.

Due to the age limitations of the BarOn Emotional Quotient Inventory: Youth Version, only students from third grade through high school were included in the study. Future research should attempt to measure this construct in younger children or adults who have been home schooled.

The majority of children involved in this study were participants living in cities with many active home schooling groups and many social opportunities available to them. These students were involved a number of activities outside the home, including P.E. groups, 4-H clubs, church youth groups, athletic teams, sewing and chess clubs, and volunteer work. Future research may want to examine emotional intelligence and social

skills in students from more rural areas who may not have access to those events or who do not, for one reason or another, participate in many activities outside of the home.

This study used only children in the state of Florida, with the majority of these from the counties of Pinellas, Polk, Hillsborough, and Pasco. Future research should attempt to gather information on home schoolers from a broader geographic area.

REFERENCES

- Aiex, N. K. *Home schooling and socialization of children*. Retrieved July 21, 2002, from http://www.ed.gov/database/ERIC_Digests/ed372460.html.
- American Guidance Service (AGS). *SSRS-Social skills scale*. Retrieved July 2002, from: <http://www.agsnet.com/text/ssrs1.asp>.
- Arbor, A. University's 4-year study shows children educated at home don't become social misfits. Retrieved July 3, 2002, from, http://www.athomeinameric.com/Article_4YearStudy.mv.
- Bar-On, R. (2000). Emotional and social intelligence: Insights from the Emotional Quotient Inventory. In R. Bar-On & J. D. Parker (Eds.), *The Handbook of Emotional Intelligence* (pp. 361-369). San Francisco: Jossey Bass.
- Bar-On, R & Parker, J. D. (2000). *BarOn Emotional Quotient Inventory: Youth Version technical manual*. North Tonawanda, NY: Multi-Health Systems Inc.
- Benes, K. (1995). Review of the Social Skills Rating System. In J. Conoley, & J. C. Impara (Eds.), *The Twelfth Mental Measurement Yearbook* (pp. 964-969). Lincoln, Nebraska: University of Nebraska Press.
- Burns, P. Socialization. In Arizona families for home education. Retrieved June 26, 2002, from: <http://wwwlafhe.org/socialization.htm>.
- Catholic Homeschoolers of Western New York. *Socialization concerns*. Retrieved July

11, 2002, from: <http://www.netacc.net/~mafg/chs/socialize.htm>.

- Chen, J & Gardner, H. (1997). Alternative assessment from a multiple intelligences theoretical perspective. In D. Flanagan, J. Genshaft, & P. Harrison (Eds.), *Contemporary Intellectual Assessment: Theories, Tests, and Issues* (pp.105-119). New York: The Guilford Press.
- Cherniss, C. (2000, April). *Intelligence: What it is and why it matters*. Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA.
- Dowrick, P. W. (1986). *Social survival for children: A trainee's resource book*. NY: Brunner/Mazel Publishers.
- Ford, M. E. & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology*, 75, 196-206.
- Gershman, F. M. (1986). Conceptual issues in the assessment of social competence in children. In P. Strain, M. Guralnick, & H. Walker (Eds.), *Children's Social Behavior: Development, Assessment, and Modification* (pp.143-175). Orlando, FL: Academic Press, Inc.
- Gresham, F. M., & Elliot, S. N. (1990). *Social Skills Rating System*. Circle Pines, MN: American Guidance Service
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Hahn, K. & Hasson, M. (1996). *Catholic education: Homeward bound*. San Francisco, CA: Ignatius Press.

- Home School Legal Defence Association. (1996). How many home schoolers are there? Retrieved July 27, 2002, from: <http://www.hslda.org/docs/study/1997/03.asp>
- Hunt, T. (1928). The measurement of social intelligence. *Journal of Applied Psychology*, 12, 317-334.
- Kaufman, A. S., & Kaufman, J. C. (2001). Emotional intelligence as an aspect of general intelligence: What would David Wechsler say? *Emotion*, 1, 258-264.
- Keating, D. P. (1978). A search for social intelligence. *Journal of Educational Psychology*, 70, 218-233.
- Mayberry, M., Knowles, G. J., Ray, B., & Marlow, S. (1995). *Parents as educators*. Thousand Oaks, CA: Corwin Press Inc.
- Mayer, J. D. (2001). A field guide to emotional intelligence. In J. Ciarrochi, J. Forgas, & J. Mayer (Eds.), *Emotional Intelligence in Everyday Life: A Scientific Inquiry* (pp. 3-24). NY: Psychology Press.
- Mayer, J. D., & Salovey, P. (1997) What is emotional intelligence? In P. Salovey & D. Slueter (Eds.), *Emotional Development and Emotional Intelligence*. (pp. 3-34) NY: Basic Books.
- Multi-Health Systems (MHS). BarOn Emotional Quotient-Inventory Youth Version & trade; (BarOn EQ-I: YV & trade). Retrieved June 2002, from <http://www.mhs.com/onlineCat/product.asp?productID=BARONEQIYV>
- Ontario Home School Organization. *Social behaviors: Public vs. home educated Children*. Retrieved July 3, 2002, from <http://www.ontario.homeschool.org/oacas3.html>

- Ray, B. D. (1999). *Home schooling on the threshold*. Salem, OR: NHERI Publications.
- Roberts, R. D., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards for an Intelligence? Some new data and conclusions. *Emotion, 1*, 196-231.
- Schaie, K. W. (2001). Emotional intelligence: psychometric status and developmental characteristics—comment on Roberts, Zeidner, and Matthews. *Emotion, 1*, 243-248.
- Shyers, L. E. (1992). *Comparison of social adjustment between home and traditionally schooled students*. Gainesville, Fl: University of Florida.
- Sternberg, R. J. (1999). Looking back and looking forward on intelligence: Toward a theory of successful intelligence. In M. Bennet (Ed.), *Developmental Psychology: Achievements and Prospects* (pp. 289-307). Philadelphia: Psychology Press/Taylor & Francis.
- Thorndike, R. L. & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *The Psychological Bulletin, 34*, 275-285.
- Thorndike, R. M. (1997). The early history of intelligence testing. In D. Flanagan, J. Genshaft, & P. Harrison (Eds.), *Contemporary Intellectual Assessment: Theories, Tests and Issues* (pp. 3-15). New York: The Guilford Press.
- Walker, R. E., & Foley J. M. (1973). Social intelligence: Its history and measurement. *Psychological Reports, 33*, 839-864.

Williamson, K. (1989). *Homeschooling: Answering questions*. Springfield, Il:
Charles C. Thomas Publisher.

Appendix

Appendix A
Parental Consent Form

PARENTAL CONSENT FORM

Dear Homeschooling Parent/Guardian,

Your child has been invited to participate in this study conducted through the Psychology Department at Western Kentucky University. This study is part of a graduate student's thesis work and will be supervised by faculty members of the university.

It has been a well-researched and established fact that homeschoolers usually score above average in all subject areas. However there has not very much research done to examine other areas of performance and behavior of homeschooled children. The first purpose of this study is to look at how homeschooled children deal with their emotions. The second purpose is to look at the social skills of homeschooled children. Your child will be asked to complete two paper and pencil inventories in which he or she will answer questions about their awareness of their emotions, as well as those of others, how they handle certain situations, and how he or she interacts with others. You, the parent or guardian, will also be asked to complete an inventory about your child's social skills. There are no right or wrong answers. Your child will also be asked to sign an assent form stating their understanding of the project and willingness to participate.

To protect your child and maintain confidentiality, your child's name will not be given on any of the inventories. Your child will be given a number to be given in place of the name. **This study will not identify individual children. Only group results will be used.**

If you or your child refuse to take part in this study it will have no effect on the provision of services available to you by Western Kentucky University. Participants of this study are free to drop out at any time at no penalty.

If you have any questions about this study at any time, please feel free to call Jennifer Howard (Graduate Student) at 270-779-4619 or Dr. William Pfohl (University Supervisor) at 270-745-4419.

We hope that you and your child will participate in this study. To indicate your consent, simply fill in your child's name and give your name and signature on the attached page. Thank you for your participation and support.

If you have any questions about your or your child's rights as a participant, feel free to contact:

Dr. Phillip E. Myers
Human Protections Administrator
(270) 745-4652

Sincerely,

Jennifer C. Howard, Researcher
Department of Psychology, 270-779-4619

Dr. William Pfohl, University Supervisor
Department of Psychology, 270-745-4419
William.Pfohl@wku.edu

I have read the information provided and give my consent for my child to participate in this study.

Name of Child (Print)

Signature of Parent or Legal Guardian

Name of Parent or Legal Guardian (Print)

Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT THIS PROJECT HAS BEEN REVIEWED BY THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD.

Appendix B
Child Assent Form

CHILD/YOUTH ASSENT FORM

I, _____ understand that my parents have given
(Print your name on this line)

permission for me to take part in this project under the direction of Jennifer Howard from Western Kentucky University. This project is about homeschooled children and how we act and think about ourselves and how we work and play with others.

I have volunteered for this project and I may stop at any time I want to and nothing will happen.

Signature _____ Date _____
(sign your name in cursive)

Appendix C
Demographic Questionnaire

Demographics Page

The following information will be useful in determining the similarities and differences between homeschoolers and the general population the questionnaires were based upon.

1. Please indicate the number of years your child has been educated in the following types of schools.
Home _____ Private _____ Public _____
2. Please indicate the grade in which your child would normally be enrolled (i.e. not the grade your child is currently in due to acceleration or grades repeated). _____
3. Please circle your child's race/ethnicity
Caucasian African American Pacific Islander
Hispanic Native American Asian Other
3. Please circle father's highest level of education completed
 - a. 12th grade or less
 - b. High school diploma or GED
 - c. Some college
 - d. Associate's degree or trade school
 - e. Bachelor's degree
 - f. Master's
 - g. Doctorate
4. Please circle mother's highest level of education completed
 - a. 12th grade or less
 - b. High school diploma or GED
 - c. Some college
 - d. Associate's degree or trade school
 - e. Bachelor's degree
 - f. Master's
 - g. Doctorate
5. Does the child live in a two-parent home? Yes _____ No _____
6. What is the child's native language? _____
7. What is the language typically spoken in the home? _____
8. Please circle approximate annual household income level

Under 10,000	50,000 to 60,000
10,001 to 20,000	60,001 to 70,000
20,001 to 30,000	70,001 to 80,000
30,001 to 40,000	80,001 to 90,000
40,001 to 50,000	90,001 to 100,000

Thank you for your participation.