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The University of Southern Mississippi

EMOTIONAL MATURITY OF ADOLESCENTS AND ADULTS  
IN GED PROGRAMS

by

Billy Joe Riffle

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

December 2010

ABSTRACT

EMOTIONAL MATURITY OF ADOLESCENTS AND ADULTS

IN GED PROGRAMS

by Billy Joe Riffle

December 2010

When discussing issues relating to students in General Educational Development (GED) Option and pre-GED programs with educators, the contention exists that it is possible to make reasonably accurate predictions on the success or failure of a student by observing a number of items. Looking at their cumulative records shows their academic and attendance history. Insight is gained by looking at their family dynamics and how they relate to adults. Much can be learned about them from their discipline reports and the nature of any infractions. One of the most intriguing aspects gained through experience and observation is the perception of a relationship between Reading level and maturity; that whatever battery score a student achieves on the TABE (Test of Adult Basic Education), his or her maturity level is generally consistent with that score. If the student's score is in the sixth grade range, his or her maturity mirrors that score. Although a generalization and not applicable to all students in these programs, those with familiarity in this area attest that a relationship between score and behavior exists. Observation of an adult GED class, conversely, reveals that although scores may be in the same range, the approach to education and social interactions lacks little similarity to those of the adolescent

group.

This study looked at three groups of students: adults enrolled in an Adult Basic Education (ABE)/GED program, adolescents enrolled in a pre-GED or GED Option program and normative high school students enrolled in an eleventh grade English class. Instruments utilized for data collections were the TABE and the Bar-On Emotional Quotient Inventory (EQ-i). This data was analyzed to determine if correlations exist between these instruments within groups, and if significant differences exist between groups. Analysis included variables of gender and ethnicity. Any of the constructs or sublevels of socially intelligent behavior found to have significant differences could then be utilized as a factor for identifying at-risk students and applying the appropriate remediation.

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A Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

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## CHAPTER I

### PROBLEM

#### Introduction

Students' dropping out continues to be a problem for school systems throughout the nation. Every school day in America, 3000 students drop out (Fleishman, 2004). According to data from Joftus (2002) and the Alliance for Excellent Education (AEE), only 75% of the nation's ninth graders graduate from high school. To offer adolescents an alternative to quitting, states and school districts have become more creative in providing methods in which those disillusioned by the process can still achieve an educational certificate.

One method employed by the state of Mississippi is to offer a GED Option program for qualified students. This process allows a student to enroll in a course with the specific objective of achieving a GED. They receive instruction in academic areas in which they are deficient and are considered high school completers when they pass the GED test. This certification allows an individual access to further educational and employment opportunities not available to dropouts. According to Cameron and Heckman (1993), the value of the GED is its ability to provide school and training options for completers.

To qualify for this program a student has to be within the state established criteria of being at least age sixteen, and either two years or more academically behind their peers, or having earned no more than four Carnegie units toward their graduation. These standards have been set to see that those who elect to go this route are not doing so just because they have become disillusioned or

“tired” of high school. This was the point of contention argued by Chaplin (1999) in which he suggests that a GED program may actually encourage young people to drop out of school. Policies enacted by states and local school boards are mixed. Agodini and Dynarski (1998) point out that some locations have lowered age restrictions on taking the GED while increasing the requirements for graduation. Other locations have regulations in place to restrict access to GED programs to those still of school age (Summers, 2002). The minimum requirement for graduation in Mississippi is 24 units with at least four of those units being in English, four in History, three in Science, and three in Mathematics. Additionally the state has stipulated that students must pass Subject Area Test Program (SATP) examinations in Algebra I, Biology, English II, and American History as part of their graduation criteria. These minimum standard exams, used by a number of states, have “been seen as a method for holding schools accountable for graduating literate students with at least basic skills.” (Beard, 1986, p.1). Programs such as No Child Left Behind (NCLB) and the call for higher standards have been the impetus behind exit and area exams. Studies, however, by Catterall (1989) and Reardon (1996) found that a connection may exist between failure on a graduation requirement test and dropping out.

The last measure that students must achieve for GED Option placement is to attain a battery score of a grade equivalency of at least 8.0 on the D or A level of the Test of Adult Basic Education (TABE). Students failing to reach this level generally have three options. They can (a) return to the classroom environment and retest at a later date, (b) drop out of school provided that they are at least 17

years old, or (c) be placed in a pre-GED program, if one is offered by their district. In these programs, students receive specific problem area instruction until the required score is reached.

There can be any number of reasons that a student will look for an alternate approach to completing their education. For some, it is a matter of trying to overcome a language barrier. Other students are out of school due to the necessity of working to help support their families. For a number of female students it is the academic time lost due to a pregnancy and the associated absences. For many of these students, it is the result of lost classroom time from absences due to suspensions, incarcerations, placement in alternative schools for behavioral reasons, and not attending because they do not enjoy the school environment. The two areas of behavior and grade retention are the most important factors for predicting a student dropping out (Goldschmidt & Wang, 1999). Many of these students failed grades in either elementary or middle school and moved into the ninth grade after a transition class or their age became detrimental to a middle school environment.

#### Statement of the Problem

Those educators who work with these in a pre- or GED program find that these adolescents present a myriad of challenges. They are often disrespectful to authority, lacking in motivation, and require constant supervision. They exhibit poor basic skills, take no personal responsibility for their actions, and attend sporadically unless court ordered and monitored. One can look at their records and glean much from their grades, but even more from their attendance. Insight

can be gained by looking at their family dynamics and how they relate to adults. Much is learned about them, from not only their discipline reports, but also the nature of the infractions. One of the most intriguing aspects gained through experience and observation is that whatever battery score a student achieves on the TABE, their maturity, or lack thereof, is generally consistent with that score. Although this is a generalization and certainly does not apply to all students in these programs, those with familiarity in this area attest that a relationship between score and behavior exists. This is in sharp contrast to what one observes when examining an adult GED class.

An observation made of a night GED class consisting of adults will show that they are disciplined in their study, task oriented, considerate of others, respectful to the staff and motivated to succeed (Knowles et al., 1984). There is a drive to achieve their goal of a GED and generally in the shortest time possible. Adults in an Adult Basic Education (ABE) course or a GED program also convey a sense of humility and appreciation. This contrasts sharply with a characteristic shared by many of the adolescents. For unknown reasons, perhaps as a defense mechanism, their level of self-esteem is inordinately high. This is consistent with findings of studies on poverty and those living in a generational lower socioeconomic status (Payne, 1998), but is in contrast to the extremely low self-esteem levels noted by Guthrie and Wigfield (2000). Their expectations in how they will score on the GED test are unrealistic when TABE results, scores of official GED practice tests, and effort are considered. Why does such a difference exist between the two groups? It is not a matter of intelligence. The

TABE scores for participants in both groups are similar. The only obvious difference is age. This fact alone, however, is not sufficient as a cause and effect means of explanation. Regular high school students are of the same age as the GED Option students, yet their approach to education is not unlike those of the adult GED community. There are other factors then, to investigate and consider in analyzing this situation.

Accordingly, this study looked at the impact of Emotional Intelligence (EI) from the perspective of Dr. Reuven Bar-On, who defines emotional-social intelligence as interrelated emotional and social competencies. He views it as how one is able to function with others and the skills developed to express themselves and handle the daily demands that are placed upon them (Bar-On, 2006). The instrument that he has developed is a self-report that measures an array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures (Bar-On, 1997). A study by Lopes, Grewal, Kadis, Gall, and Salovey (2006) indicates that emotional intelligence may contribute to performance by building social capital, nurturing positive relationships, and working effectively with others. The ability to manage and express their emotions in social encounters is indicative of a high emotional intelligence (Hatfield, Cacioppo, & Rapson, 1994)

A goal of this study is to learn if there is a relationship between the level of an individual's score on the TABE and their emotional intelligence as measured by the Bar-On Emotional Quotient Inventory (EQ-i). This instrument measures five different constructs, which are related to Emotional Intelligence. These



consist of Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood. There are 15 different sublevels related to the different scales. This instrument is designed to measure socially intelligent behavior and is available in over two dozen languages (Fernández-Berrocal & Extremera, 2006). The test is designed for individuals 16 and above, consists of 133 different items, and takes approximately 30 minutes to complete. A statistical analysis will be conducted on the gathered data to evaluate if any aspects of emotional intelligence are significant in determining how a student will perform on the TABE, or if relationships exist with regard to age and TABE score. If any correlations exist, being able to identify them would be beneficial to educators who would then be able to address the areas in which the student is deficient.

#### Research Questions

Working with adults in a GED program is not difficult. The subject matter is basic, does not require higher level thinking skills, and material is presented in a straight- forward manner at the students pace. The students are motivated, eager to learn, and appreciative of instructor assistance. Working with adolescents is an entirely different matter. Although they may be at the same level or higher academically, their approach to a classroom environment is generally completely different. There is difficulty in getting them to attend, a sense of entitlement, and unhealthy attitudes toward authority. As noted by Rachel and Bingham (2004), there is a qualitative difference between the adult and adolescent learner, “that effective education requires a different methodology, even a different philosophy” (p. 35). The conclusion has been reached over years of observation that there

may be a correlation or relationship between adolescent TABE scores and behavior. Simply put, a 16 or 17 year old with a TABE score of 6.2 will exhibit the social behavior of a student in the sixth grade. This behavior is the basis for the following questions:

1. Is there a relationship between any levels of Emotional Intelligence and grade equivalency scores in Reading on the Test of Adult Basic Education for adolescents?
2. Is there a relationship between any levels of Emotional Intelligence and grade equivalency scores on the Test of Adult Basic Education for adults?
3. Do any statistically significant differences exist between adolescents in a GED Option program and normative high school students in levels of Emotional Intelligence?
4. Do any statistically significant differences exist between adults in GED and adolescents in GED Option programs in levels of their Emotional Intelligence?
5. Do any statistically significant differences exist between adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence based on gender?
6. Do any statistically significant differences exist between adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence based on ethnicity?

Historically, the GED was not intended for adolescents. It was established to help the many veterans of World War II who had enlisted into the military instead of finishing high school. Throughout the years since its

inception in 1942, it has served its purpose of providing a high school equivalent diploma to working adults who had dropped out of school. In addition to providing a service to adults, the GED program is now being utilized by states as a last chance of obtaining a diploma for students who would otherwise not graduate.

This change in the approach to dealing with these students is illustrated by the fact that in 2006 the number of those between the ages of 16-18 taking the test was 30% and around 40% with the inclusion of 19 year olds (GED Testing Service, 2007). The advent of state testing to pass specific subject areas or to meet state requirements for graduation has increased the number of students in need of an alternative means of completing their education. The prospect of a student failing different subject areas and having an adverse effect on a district's rating can be an incentive for steering at-risk students to a GED program. Students in a school district's GED Option program are still considered enrolled for purposes of attendance and contribute to the Average Daily Attendance (ADA) rate for which the district receives funding, and those that pass the GED test are counted as completers for the districts academic records.

#### Definition of Terms

Various terms relevant to this study are defined as follows:

Adolescent – Individuals age 16 – 19 enrolled in a school district sponsored GED or pre-GED program.

Adult – Individuals age 20 and above enrolled in an ABE/GED program.

Adult Basic Education (ABE) – A program designed to provide instruction in the basic skills of reading, writing, and mathematics to adult learners in order to prepare them for transitioning into the labor market or higher academic or vocational training.

Average Daily Attendance (ADA) – The ADA count is the average daily attendance of a school district over a nine-month period.

Emotional Intelligence (EI) - Often measured as an Emotional Intelligence Quotient (EQ), describes an ability, capacity, skill or (in the case of the trait EI model) a self-perceived ability, to identify, assess, and manage the emotions of one's self, of others, and of groups.

English Second Language (ESL) – Students not native to the United States whose primary language is something other than English. This can also include students where a language other than English is spoken in their residence.

General Educational Development (GED) - A group of five subject tests in Mathematics, Language Arts, Writing, Language Arts, Reading, Science, and Social Studies, which (when passed) certifies that the taker has high school level academic skills.

High School Student – An individual age 16 – 19 enrolled and attending a public school system in Mississippi and working toward a high school diploma.

Intelligence Quotient (IQ) – A score based on one of different models of test used that attempt to measure intelligence. The score gives an idea of where an individual stands intellectually compared to the rest of their age group. It has been used as a predictor of how a person will perform in school.

Likert scale – A scale used in research on surveys or questionnaires. It is used to gauge the range of a response. Choices can be from Strongly Agree to Strongly Disagree or some point in between. Each of the options is assigned a numerical value of statistical purposes.

No Child Left Behind (NCLB) – Federal legislation proposed by President Bush and passed into law in 2002 with the purpose of improving schools by increasing standards for accountability for states and school districts, and giving family's choices where their children would attend.

pre-GED - Classes for students that have not achieved the required level of Eighth grade on the TABE to enter the GED Option Program.

Subject Area Test Program (SATP) – State tests given in Mississippi in the areas of Algebra I, Biology, English II, and American History. Passing these tests is a requirement for graduation.

Test of Adult Basic Education (TABE) - A test of basic education gained through school. The test consists of reading, math, and language subtests. Scores can range from 0.0 to 12.9 and are reflective of grade equivalency.

#### Delimitations

One group consists of students at least 16 years of age enrolled in a pre-GED or GED Option program.

One group of adults (20 years of age and above) enrolled in either an ABE or GED program.

One group of regular high school students above the age of 16 enrolled in an English 11 class.

#### Assumptions

1. The answering of the survey instrument was accomplished in a conscientious honest manner.
2. Scores on the TABE were the results of an individual's best effort.
3. Testing was conducted following the instrument guidelines for time.

#### Justification

This study was the result of observing a phenomenon for a number of years and questioning the validity of the accompanying assumption. A curiosity developed concerning a possible relationship between TABE scores and maturity levels of adolescents. This questioning also led to determining where the differences, if any, existed in Emotional Intelligence, between the adolescents in a pre-GED or GED program, normative high school students, and adults in an ABE or GED program, even though both groups functioned at the same basic skills levels. This in turn led to questioning the difference in both academic and emotional intelligence of same age adolescents from the high school and alternative (GED) environment.

The first step in the process was to determine if any statistically significant differences exist. If there were none, then the null hypothesis was true and there was no justification for the initial suppositions. Findings of

significance in any particular group of emotional intelligence constructs could be beneficial in identifying students that are at risk of dropping out. The construct could be identified as a precursor for possible problems.

Students exhibiting issues with substandard academics and emotional or social behavior in contrast to the norm, or identified by criteria as being at-risk of dropping out could be monitored and mentored. They would complete the Emotional Intelligence instrument to determine if any levels would benefit from professional intervention. Early detection of individuals and the application of appropriate corrective measures could be beneficial in reducing dropout rates.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

A couple of different factors were the primary consideration when literature related to various aspects of this study was studied. The first of these was to determine if the questions being posed had already been asked and answered. To this date, while there are certainly studies that centered on EI and adolescents, nothing was found that involved a comparative study of different levels of EI between adults and adolescents in GED programs, or high school students and adolescents in a GED program to ascertain if differences exist and if these differences are significant. An article by Rachal and Bingham (2004) was similar in its observation of adolescent behavior in a GED program, and served as an impetus for the direction of this study, but did not examine group differences or attempt to explore cause and affect data. Similarly, a study by Lipschitz-Elhawi and Itzhaky (2008) evaluated maturity differences between at-risk and normative youth, but did not include adults of like academic levels.

A review of the literature on adolescent maturity suggests that the two areas of internal and external resources are contributing factors to the emotional adjustment of adolescents (Mizell 1999; Smith & Carlson 1997). The external resources are made up of peer and parental support. The divergent composition of the participant groups excluded any inclusion of these factors. The internal resources consist of a person's perception of their being able to be in control of their environment (Ben-Zur, 2003), and of being developed fully socially, intellectually, emotionally, and physically. Many adolescents, however, will attest



that they do not “feel” in control of anything, and their physical development masks their immaturity in other areas (Rice, 1987). The data gathered will evaluate the emotional intelligence scores of the groups to determine if differences exist. The work of David Elkind (2001) discusses in length the biological, physiological, social, and emotional development issues faced by the youth of today.

Once the determination had been made that a study of the selected subject matter would not mimic an existing one, the lion’s share of literature examination was devoted to materials, dissertations, books, presentations, talking papers, articles, and any other media related to the subject of emotional intelligence and adolescents. Subject areas included maturity, adult education, and methodology for identification of at-risk students. The review looked at the testing instruments used for GED placement for both adolescents and adults, and the type of instrument that would be most appropriate to answer the questions put forth in the study. A review of literature related to Psychology and Counseling was also incorporated to evaluate if procedures exist to remediate or moderate deficiencies in maturity, if in fact, any did exist. Seligman and Csikszentmihalyi (2000) state that EI could be used to provide positive interventions in schools, business, and in the community.

The study of ones emotion and its impact on their ability to succeed is a relatively new field. Thorndike (1920) was the first to introduce the concept of social intelligence. The idea of nonintelligent aspects of general intelligence proposed by David Wechsler (1940) was the basis for future work. The book,

*Emotional Intelligence*, by Daniel Goleman (1995), was the first to bring prominence to this model of behavioral study. He and others such as Gardner (1983), Salovey and Mayer (1990), Mayer and Salovey (1993), and Salovey, Hsee, and Mayer (1993) developed their principles in part because the use of Intelligence Quotient (IQ) was not an accurate indicator of how successful one might be and that it ignored the elements of behavior and character. The work of Malcolm Knowles (1984) in developing humanist learning theory and Reuven Bar-On with the development of an instrument to measure different levels and sublevels of EI have contributed to interest and study of the subject.

One important aspect that had to be addressed was to have a good working definition of EI. The relative youth of the field of study has led emotional intelligence to become a catch-all phrase for anything that involved maturity, emotion, or character (Mayer & Cobb, 2000). The definitions are so wide ranging, and the field is changing at such a rapid pace, that researchers are constantly revising even their own definitions of the construct (Sun, 2007). Mayer and Ciarrochi (2001) point out that to have understanding and better communication within a discipline, there needs to be clear terminology. The first published definition was by Salovey and Mayer (1990) who defined EI as “the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions.” Loo, (2006) discusses that Mayer and Salovey broke down the traits of emotional intelligence into four different parts. These are self-awareness, need management, self-motivation, empathy, and managing relationships. These, with the addition of

adaptability and some variations, are the levels used by the EQ-i. They measure the ability that an individual has to know, understand, and acknowledge their emotions. It is being able to handle situations in a mature manner. This includes working with others and resolving conflicts by being able to understand situations from more than one point of view. It is also the ability to motivate oneself and stay focused on a goal. According to Mayer and Salovey (1997):

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)

The term, emotional intelligence, was first put forth by Leuner in 1966 and defined by Thorndike. In the view of Bar-On, Handley, and Fund (2006), most descriptions of this construct have included one or more of the following key components:

- (a) the ability to understand and express oneself;
- (b) the ability to understand others and relate to them;
- (c) the ability to manage and control emotions;
- (d) the ability to manage change, adapt, and solve problems of a personal interpersonal nature; and
- (e) the ability to generate positive mood and to be self-motivated. (p. 4)

According to Cote and Miners (2006), there are differences between general and emotional intelligence. In their view, "general intelligence is the general ability to

reason correctly with abstractions (concepts) and solve problems. Emotional intelligence can be conceptualized as the ability to grasp and reason correctly with emotional abstractions (emotional concepts) and solve emotional problems” (p. 3). Although there have been difference and growing pains in the field, Ciarrochi, Chan, and Caputi (2000) observed that “while the definitions of EI are often varied for different researchers, they nevertheless tend to be complementary rather than contradictory” (p. 540).

The importance of EI to the degree of success one might experience was illustrated in a study conducted at the University of Pennsylvania on incoming freshman in which scores from a test on optimism were a better predictor of grades than their SAT scores (Schulman, 1995). Daniel Goleman (1995) poses the significance of EI to individuals when he states that EI is the most important variable contributing to success. He bases this on his belief that IQ explains just 20% of the success in life, while the remaining 80% could be attributed to EI. In Goleman’s book, *The Emotionally Intelligent Workplace* (2000), he contends that while IQ may be a better predictor of what particular field of study a person embarks on for a career, EI is a better predictor within a given field as to the degree of success that one will achieve. Goleman (2008), however, makes it a point that the importance of EI versus IQ should not be construed as many have. He is adamant that both are significant. His contention is that IQ is what determines if a person has the competency to perform to a specific level of technical expertise. His opinion is that EI is the determining factor in the degree of success in their chosen field.

A study of graduate students at Berkeley, which measured IQ and personality, found forty years later that professional success and prestige were determined on social and emotional abilities at a rate of four to one over IQ (Feist & Barron, 1996). A study by Spencer and Spencer (1993) concluded that of the competencies in their model for distinguishing superior performers from average ones, over 85% were EI based. One study found that among low-IQ pupils, those with higher trait EI scores performed better at school and presented less behavior issues (unauthorized absences, suspension for behaviors) than their lower trait EI peers (Petrides, Frederickson, & Furnham, 2004). From a prolonged study of a large number of young males growing up in Massachusetts, Hunter and Hunter (1984) estimated that, at best, an IQ score could account for about 25% of the variance in how well someone does in school or career. In a study by Lam and Kirby (2002), it was found that general intelligence was insufficient to explain cognitive-based levels attained; emotional intelligence was responsible for higher performances.

One area of literature reviewed was that of adolescent or youth behavior compared to adult maturity. Numerous studies (Modecki, 2008; Scott, Reppucci, & Woolard, 1995; Steinberg & Cauffman, 1996) look at the differences found when examining antisocial behavior and the domains of rational and maturity of judgment expressed when the groups are contrasted. The emphasis of their work was a comparative look at the factors involved with adolescents, youth, and adults and their participation in delinquent behavior. From the viewpoint of science and medicine, studies have found that differences exist between the

brain of a teen and someone in their twenties. Medicine, however, is not able to differentiate the neural maturity between an individual that is 17, 18, or 19 (Schaffer, 2004). Most agree that the transition from one stage to another is a gradual process.

According to Fountain (1961), there are a number of qualities that distinguish adolescents from adults. This can be their inability to see themselves as others see them, or the manner in which they are unable to render an honest self-critique. They are unaware or caring of the consequences of their actions, and have difficulty dealing with frustration and anxiety. Adolescents also have issues in interpreting the behavior or feelings of others. Another difference discussed by Adams, Labouvie-Vief, Hakim-Larson, DeVoe, and Hayden (1989) was that adults were able to envision multiple solutions when presented with a problem, whereas adolescents tend to see only a single possible interpretation.

A logical area to investigate is in the differences that exist between the two groups of adolescents for explanations of why most are able to complete the requirements for obtaining a high school diploma, while a portion are not. Some characteristics pointed out by McCall (2003) are that these students do not engage in school or with prosocial peers. They tend to be from a minority and have low scores on achievement tests. The works of Sizer (1984), Lesko (2001), and Lee and Burkam (2003) focused on a number of the reasons and roles that family, environment, structure, and society play in the drop out problem.

The work of Galambos, MacDonald, Naphtali, Cohen, and de Frias (2005) studied proved insightful by recognizing and differentiating different levels of

maturity among adolescents. Their work supported the findings of Galambos and Tilton-Weaver (2000) in identifying differences in adolescents in their level of psychosocial maturity. This involves the degree to which they accept responsibility, communicate, and interact with others, and how well they are able to function independently. The levels described in these studies are consistent with what one finds when working with GED and pre-GED students. There will be those who approach the program in a mature manner and work toward achieving their goal. Others will be immature for their age, but are aware of their situation. The last group, the majority, is those that swear that they are mature, that they are adults, but have frequent problem behaviors and low scores.

The situation then, is to try to determine the differences between the adult GED student, the normative high school student, and the high school age student in a GED Option program. In general terms, it is maturity. It begs the question however, of just what constitutes maturity. It can be defined as “the emergence of certain behaviors and competencies that enable the individual to live a responsible, independent life” (Gall & Stixrud, 2008, p. 55). Bar-On (2006) discusses each of these different facets or levels, and uses them to derive an individual emotional intelligence quotient. This is the driving force behind all of the study in EI. It is designed to educate people about the relevance of emotional intelligence in school, at work, and in life. It is used to help assess strengths and weakness, and to enhance an individuals ability to interact with others (Boyatzis, 2001). A study by Druskat, Sala, and Mount (2006) found that those who are able

to control their emotions and understand the emotions of others have an advantage in work and life.

The prime motive of the study was to determine if differences exist between the different groups. To do so, an instrument that met the prescribed criteria would be needed. This required searching to find what was available, what addressed the issues of concern, and the ease of use for the participants. It would need to be something that was economically feasible, applicable to different groups, and provide scores that could be translated in a meaningful way statistically. The literature review included a search to find what instruments were available, which met specifications required and the pros and cons of each. In reviewing the instruments, the criteria set forth by Matthews, Emo, Roberts, and Zeidner (2006) was followed. The tests needed to be fair and unbiased toward any group, and be valid so that the results can have meaningful consequences for society.

The instruments found and researched consisted of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), the Bar-On Emotional Quotient Inventory - EQ-i, the Trait Emotional Intelligence Questionnaire (TEIQue), the Emotional & Social Competency Inventory, the Genos Emotional Intelligence Assessment, the Schutte Self Report Emotional Intelligence Test (SSEIT), and Wong's Emotional Intelligence Scale (WEIS). Although one can readily find other instruments for their particular purpose, the decision was made to choose one from this group. This was based on their previous extensive use and their development by leading researchers in the field of EI.



Different reviews and articles assessing each of the different instruments were evaluated to determine which would best meet the needs of the study. The first of these was the Bar-On Emotional Quotient Inventory (EQ-i). Of those examined, it is the most used, having been given to over 100,000 people worldwide (Bar-On et al., 2006). In the opinion of Cox (2001), this instrument would serve a useful role in a research activity. It is his contention that it possesses adequate validity, and that scoring and interpretation information is well presented. Guion (2001) shares his view that the instrument would work well for accessing groups. In their reviews of the EQ-i, both agree that the data supports the claim of validity. Their findings are supported by a study by Rovnak (2007) on middle school students. She concludes that this instrument is a reliable method of measuring emotional intelligence and finding variances between genders. At the time of their reviews, one of their concerns was about the inability to hand score. Scoring is performed by the company that markets the instrument, and is available for individuals or groups.

Using this instrument, Dawda and Hart, (2000) found a strong negative correlation between Emotional Intelligence and Alexithymia, or the inability to express emotions. This indicates that the EQ-i would work in differentiating between scales. A study by Austin, Saklofske, and Egen (2005) using the EQ-i and the SSEIT for comparative purposes found that the Bar-On model had subscale reliability of at least 0.78 for all areas except Positive Impression. There are also a strong correlation found between high life satisfaction and a high EI score, and between alcoholism and a low EI score. Barling, Slater, and Kelloway (2000)

in a study on leadership, found that the EQ-i had correlation in transformational leadership and motivation. In a study of leaders in construction, Butler and Chinowsky (2006) discussed the instrument use of highly correlated questions with similar content that are used to gauge the consistency in the responses that are given. A study by Rodeck, Plake, and Davis (2006) of different college graduate schools using the EQ-i indicated that results were being used to develop student's general EQ competence.

The next instrument evaluated was the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Like the EQ-i, its purpose is to measure the capacity for reasoning with emotional information. It is designed for older adolescents and adults and can be used to measure individuals or groups. Scores for the test, like most intelligence test, are converted to standard scores. The MSCEIT initially consisted of a large number of items that with refinement has been reduced to 141. This reduction has helped to strengthen the reliability (Leung, 2005). The MSCEIT was designed for the same age group as the EQ-i, but is written at an eighth grade level. Reliability of the instrument was good at .93, but some results were mixed due to an inadequate sample size. Validity was evident with content, structure, and predictability, and correlations suggest a relationship between ones EQ score and their occupational interest, relationships, and interpersonal violence (Cook-Cottone & Meier, 2005). One issue found with this test was that an omission of a percentage of items would place the validity in question. This finding should hold true not just for this test, but all tests.

In another study by Dunn, Brackett, Ashton-James, Schneiderman, and Salovey (2007), MSCEIT scores were shown to have a positive association with quality interpersonal relationships and being competent socially, and a negative association with depression and anxiety. This is consistent with the construct of an EI instrument. One should be able to gain an accurate understanding of how an individual would comport themselves in a particular situation based on how they scored in different facets of emotion.

Other aspects of the MSCEIT were a concern about how the different items were developed, and the methodology with which weighting took place on the normative sample. Additionally, according to Cook-Cottone and Meier (2005), while the demographic characteristics for the normative sample are adequate for the United States concerning ethnicity, there is an overrepresentation of those with some college experience. The primary concern about using the MSCEIT for this study was the reading level. The eighth grade level of the items was deemed too high to be useful. A number of the pre-GED and ABE/GED students are unable to read and comprehend at this level. This would have had an adverse impact upon their ability to answer the questions and led to data, which would not accurately reflect the sample population.

The Trait Emotional Intelligence Questionnaire (TEIQue) was the third instrument for evaluating emotional intelligence researched for possible use. Like others, it is a self-report inventory. There are two forms available; a long form which consists of 151 questions, which measure four factors and 15 different facets, or a short form, which is comprised, of two items for each of the different

subscales (Petrides & Furnham, 2006). It utilizes a seven-point Likert scale for the items and was developed from other models such as Goleman (1995), Bar-On (1997), and Salovey and Mayer (1990). A concern raised by Hofstee (2001) about the use of scales for scoring is that when taking this type of test, participants will often try to guess what they perceive the experts view as the correct answer, instead of answering the way they really think. According to the findings of a study by Freudenthaler, Neubauer, Gabler, Scherl, and Rindermann (2008), existing research does not provide evidence that TEIQue is superior in predicting relevant criteria in comparison to other EI models.

A study of this instrument by Mikolajczak, Luminet, Leroy, and Roy (2007) found that scores were susceptible to socially desirable responding; that is, answering questions with what the participant thinks is the “right” answer instead of what they actually believe. They also found some of the subscales had Alpha’s that were below .70. Their overall assessment of the TEIQue was that it was consistent with the EQ-i and others for measuring EI. They also pointed out, “ultimately, it is the construct’s ability to predict outcomes of interest that will determine its utility” (p. 350). This concept parallels the goals of being able to provide a correlation between emotional constructs and early identification and remediation of potential dropouts.

The Emotional & Social Competency Inventory, developed by Richard E. Boyatzis (2007) is another of the instruments assessed for possible use. This test is a modification of the Emotional Competence Inventory 2.0 (ECI) and is based on emotional competencies conceptualized by Daniel Goleman (1998). It

assesses an individual's strengths and weaknesses and gives precise information on areas to improve. A study conducted by Byrne, Dominick, Smither, and Reilly (2007), using ECI found that self-ratings were not related to academic ability and performance. Although a number of studies had use the ECI, there was very little literature on the ECSI.

The Genos Emotional Intelligence Assessment (GEIA) was another reviewed instrument. The GEIA is identical to the Swinburne University Emotional Intelligence Test, or SUEIT, as it is sometimes referred. This model measures the frequency that emotional intelligence workplace behavior takes place using seven difference emotional intelligence skills (Gignac, 2008). It was developed by Palmer and Stough (2000) and can be taken online. It is designed to access five core dimensions of EI, consists of 70 items, and can be completed in approximately fifteen minutes. The use of self-report is a prime component of this study, and while a 360-degree assessment of the GEIA is an option, the intricacies involved with multiple raters (Sala & Dwight, 2002) were important considerations in the instrument selection process. A study by Gardner and Stough (2002) found strong correlations, both positive and negative, in relations to the style of leadership practiced.

Another instrument considered for the study was the Schutte Self Report Emotional Intelligence Test (SSEIT). This is a self-report measure that was developed by Schutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim (1998). The test consists of 33 different items and evaluates three aspects of EI regarding appraisal, regulation, and how emotion is utilized. It was modeled after

the work of Salovey and Mayer (1990). In a study on emotions and task performance, Schutte, Schuettpelez, and Malouff (2001) used this instrument to find if people having high emotional intelligence would perform better than others on cognitive tests of varying degrees of difficulty.

The last instrument evaluated was Wong's Emotional Intelligence Scale (WEIS). This self-report measure has two parts. The first part consists of scenarios and the participant chooses the option that expresses what they would do in a given situation. The second part has the individual picking their preference of compared ability pairs. The instrument was developed by Wong (2007) and measures expression of emotion in ones self and others. It provides scoring for how emotion is used to help performance and how emotion is regulated using the four dimensional definition that was developed by (Davies, Stankov, & Roberts, 1998).

The WEIS was developed to demonstrate that EI is distinctly different from the dimensions of personality, a point of contention among some psychologists (Davies et al., 1998). That a difference exists was the findings of Law, Wong, and Song (2004) in a study in China of supervisors in a factory environment. Although satisfied with the results of the instrument, there was some question if the results would translate across cultural boundaries.

After reviewing the different models that were available, the decision was made to use the Bar-On Emotional Quotient Inventory. This was based on this instrument meeting several criteria that had been set. The first of these is that the participants needed to be able to understand the questions being asked. The

reading level of many of the adult ABE/GED and adolescent pre-GED/GED students is too low for use of the MSCEIT, which has an eighth grade reading level. An inability to comprehend the questions would render any results invalid. The self-report style of the instrument is also desired. The primary interest is in finding out how the participants view themselves.

Other considerations for electing to use this particular model were the qualification requirements needed to administer some of the other instruments, and having scores for the sub-levels as well as the primary levels. This will allow for pinpointing specific deficiencies through more in-depth analysis. The items that are measured: self-awareness and self-expression, social awareness and interpersonal relationship, emotional management and regulation, change management, and self-motivation, are all aspects in which significant differences may be found between the different groups. The period over which it has been in use and the extensive validation of this test were factors in choosing it over the other models.

The other instrument used in the study is the TABE. This device serves the purposes of identifying areas of academic strength and weakness, and allows instructors to pinpoint deficiencies, and give participants an idea of their probable performance on the GED test through the conversion of scores to a GED equivalent (Norms Book, 2004). It also serves as a placement tool with a minimum qualifying score requirement for placement in some GED programs, such as the high school GED Option. Although testing covers four areas, the subject of interest is the grade equivalency score for the Reading section. For

this study, the mean score of this section was used for comparative purposes between the groups. The use of multiple choice questions on the TABE result in consistency of answers and have a stronger reliability than essay-type subjective questions (Zenisky, Keller, & Sireci, 2004)

A review of recent dissertations with subject areas of emotional intelligence, adolescent GED programs, ABE/GED programs, and comparative studies between different groups was undertaken. The vast majority were deemed as non-applicable upon examination of their abstract. One reviewed that addressed relevant aspects was a study by Miller-Grotas (2003) that discussed the role of accuracy in self-assessment and the implications of the amount of variance it presented. This along with personality was found to have higher degrees of variance than cognitive intelligence. A review of the available research on dropouts was simplified the work of Jablonsky (1974). This consisted of a compilation of all doctoral research on the aspects of “dropouts” for an eight-year period. Although dated, the data was reflective and applicable to the current dropout issues.

The most important factor of this study, which must be discussed, is that of the participants. The normative high school students are included to allow for a comparison with the pre-GED/GED students. This is to see if there is a difference in any EI levels between two groups of the same age. It will also find if there is a difference in grade equivalency. The comparison between the adult GED students and the pre-GED/GED students is of interest from the aspect of comparing two groups that are similar academically, but notably different in age.



From the beginning, the goal has been to find what levels of emotional intelligence could account for the differences in their behavior. The benefit of using the ABE/GED is the way in which they are alike. As opposed to the high school students, both of the other groups were unsuccessful in obtaining a regular diploma. It would not be unreasonable to state that both groups shared similar educational experiences and that both were alike with issues of behavior and attendance. The difference is that now they are vastly different in their approach to education.

A review of literature related to at-risk students proved to be useful and instructive. One method used by school systems to combat students dropping out of school is to identify as early as possible those that met the criteria. The line of thinking is that these at-risk students could be monitored and given appropriate interventions to correct deficient areas and thus remain in school. In theory, this practice makes sense. In reality, it can be difficult to use effectively. It is not possible to control a child's environment. The changing demographics of the United States mean that school districts will have significantly more English Second Language (ESL) students than in years past. The problem of literacy is evidenced by the fact that over two-thirds of the eighth graders in the nation are below the proficient level in reading (Grigg, Daane, Jin & Campbell, 2003). The magnitude of the problem was shown by an Urban Institute study which found that half of the Native American, Hispanic, and African American students that entered the ninth grade in 2000, did not graduate in 2004 (Swanson, 2004). Single parent families are the norm in some areas, but a study by Alexander,

Entwhistle, and Kabbani (2001) found that highly stressed White first grade students from lower socioeconomic backgrounds had a drop out rate of 80 percent. This supports the findings of other researchers examining the role of income as it pertains to dropouts (Heckman & Krueger, 2003; Orfield, 2004).

A necessary step is to identify the distinction between what constitutes an at-risk adolescent and an at-risk student. According to Lahav (1999) an at-risk adolescent is a teen that has left or been removed from the standard education environment and is now in alternative programs and exhibiting deviant behavior. The at-risk student is in the educational system, but meets at least one of the established identifiers associated with students dropping out. The factors used to identify an at-risk student can vary. It can be different from one state to another and one district to another. To illustrate, the state legislature in Texas enumerated thirteen different criteria for identifying at-risk students (Ronda & Valencia, 1994). These can be anything from being pregnant or a parent, having a limited proficiency in English, not meeting specific levels on state administered tests, or been expelled for the present or past school year. For Mississippi, the definition of an at-risk student is determined by each individual school district (MDE, 2009).

The establishing of criteria for identifying students that are at risk can be an effective tool for a dropout prevention program. A problem that arises, however, is when all, or the vast majority of all students in a district meet the criteria. Several school districts in the state of Mississippi have at risk percentages in excess of their ADA (MDE, 2007). The issue in this case is the

provision of services to the students with the need. If a criteria for being considered “at risk” is being of a racial minority, and every student in the district is of that minority group, other criteria need to be included to better identify those students truly at risk. Everything revolves around money and funding to support one program is often accomplished at the expense of another. Another aspect is that districts receive funding with their percentage of at risk students as part of the funding formula (MDE, 2007). The higher the percentage, the higher the funding. This can serve as an incentive for a district to have a more inclusive criterion.

One does generally not associate elementary school with dropouts. However, in elementary and middle school, notes Landsberg (2006), “year after year, students were allowed to fail upward, promoted despite a trail of Ds and Fs” (p. 2). It is also possible for a child in pre-kindergarten, kindergarten, or grades 1 – 3 that did not perform to a satisfactory level on a readiness test to be classified as at-risk. This makes it possible for a four-year-old child to be labeled as a risk of dropping out of school. Alexander, Entwisle, and Horsey (1997) found that attendance as early as kindergarten is also an indicator. Their study showed that a six-day differential in attendance at this early stage increased the probability of dropping out by 30%. In addition, Montes and Lehmann (2004) report that first grade behaviors, school performance, and grade retention were significant predictors of school dropout, even when controlling for later variables. A study by Ensminger and Slusarcick (1992) found that first grade students who exhibited aggressive behavior had elevated dropout rates. According to Hickman,

Bartholomew, Mathwig, and Heinrich (2008), most students do not deviate in their development path that is set in kindergarten.

In identifying students at risk of dropping out, it is easier for school systems to track those that have been retained in a grade than to follow those that have been promoted despite low grades. However, several studies in the literature (Grissom & Shepard, 1989; Jimerson, 1999; Rumberger & Larson, 1998; Temple, Reynolds & Miedel, 1998) have established that grade retention is a major predictor as a factor for those dropping out. The risk of dropping out is increased seven times when associated with repeating a grade (Alexander et al., 2001). Another issue addressed by Hickman et al. (2008) is that students that have been retained or struggled academically are often given core basic classes upon entry into the ninth grade. Their assertion is that this attempt to catch up, or strengthen the child's performance placed more pressure upon them and may actually exacerbate the academic failure.

One of the stated goals of the study will be to determine if significant differences exist between the groups, and if so, employ measures that address and resolve any deficiencies in the different levels. Doing so will involve more than just pointing out areas that could be improved and supplying materials. As Boyatzis (2005) articulated in a study of alcoholism, the key characteristic to effective coaching is to possess a sensitivity or empathy to the client.

This review has examined literature related to studies in the fields of adolescent maturity, to emotional intelligence ranging from a working definition to a comparative evaluation of the different instruments available for use. It has

looked at the programs for obtaining a GED for both adults and adolescents. Available literatures on these programs and policies and criteria for identifying students that are at risk of not completing high school have been evaluated. Books, articles, working papers, presentations, dissertations, and other media have been searched looking at differences in the approaches to education between the selected groups.

An aim of this study is to explore the differences between three groups in the education process: normative high school students, high school GED Option students, and adult ABE/GED students. The analysis will be if there is a possibility of having another tool that could be used by those in leadership positions in education to better identify and help students that are potential dropouts. It may provide a means by which students that have been labeled in the past as immature or underachieving can receive remediation directed at correcting deficiencies.

## CHAPTER III METHODOLOGY

### Overview

The research methodology utilized in this study was a comparative analysis between three groups of participants. It utilized the Reading portion of the TABE and the Emotional Quotient Inventory (EQ-i) instrument developed by Reuven Bar-On. This instrument measured five different constructs related to Emotional Intelligence. These consisted of Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood. There are 15 different sublevels related and grouped to the different scales (Appendix A). This study utilized the total EQ score, the five basic constructs, or all sublevels for evaluating the different groups depending on the research question. This instrument was designed to measure socially intelligent behavior and is available in over two dozen languages (Fernández-Berrocal & Extremera, 2006). The test is designed for individuals 16 and above, consists of 133 different items, and takes approximately 30 minutes to complete.

Two very important aspects of any test are its ability to measure what it was designed for, and how consistently it measures what it is supposed to measure. These are the validity and reliability of the test. For the EQ-i, two different studies of reliability, internal consistency and retest reliability had been conducted. The average Cronbach alpha coefficient for the subscales was .76, was a low of .69 for Social Responsibility and a high of .84 for Self-Regard (Bar-On, 1997). This indicates that the questionnaire is internally consistent.

The other reliability study conducted was a retest to evaluate the stability of the instrument over time. Considerations for this study are that they are not conducted over too short a time span (Downie & Heath, 1970), or too long an interval (Anastasi, 1982). The result of the retest reliability coefficient was .85 for one month and .75 after four months (Bar-On, 1997).

To evaluate how successful the instrument is in assessing emotional intelligence, nine different types of validity studies were conducted on the EQ-i. These were construct, factor, face, content, criterion-group, convergent, divergence, discriminant, and predictive validity. The content and face validity were examined by an item analysis and direct feedback of participants to remove those items that were not understood by those responding or that were found to be poorly related to definitions. According to Anastasi (1982) the requirements of content and face validity have been satisfied by the final form of the inventory.

A factorial analysis was used to evaluate 117 of the 133 items of the instrument to determine which, based on being highly correlated, should be placed in a particular sublevel and the grouping of sublevels to one of the five constructs (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Multiple analyses for strengthening purposes resulted in some items being moved from their selected sublevels to ones that are more appropriate. Goodness-of-fit indicators were employed to determine if the model fit the data (.854), and for joining or separation of subscales.

The construct validity of the instrument was examined by comparing the subscale scores with those of ten other test instruments over a 12-year period in

six different countries from over 500 individuals. Bar-On's (1997) findings were that the instrument had moderate correlations, ranging from .30 to an upper range of .70. The instrument was found to have positive correlation with other indicators of emotional intelligence. Additionally, there was a strong negative correlation with scales that are strong indicators of pathology (Bar-On). This relationship of correlation between positive items and high negative correlation with negative ones held for all sublevels.

A number of studies were examined to evaluate the convergent validity of the instrument. The findings of these also showed a high degree of correlation. Whether the methodology was self-assessment or observer ratings, the correlation average was .52. A study of job performance and work satisfaction by Wagner and Morse (1975) found a high correlation to exist ( $r=.51$ ,  $p<.01$ ), and that the EQ-i measured emotional intelligence. The findings when measuring for divergent validity were consistent for those of construct and convergent validity.

Owing to the nature of this study, there was significant interest in criterion group validity. Studies of different groups showed that the level of emotional intelligence for that group was consistent with the nature of the group. For this reason, the pre-GED/GED group had low scores in subscales that reflect their weaknesses (Bar-On, 1997).

In studying the discriminant validity of EQ-i, the emphasis was in being able to discern between different levels of emotional intelligence. The practical application of this being that if a specific score of a construct or sublevel could be identified as a make or break point, this could be where remediation is initiated.



Studies, particularly one involving military recruiters, indicated that the EQ-i could identify individual levels of emotional intelligence. The findings from this study were incorporated into the selection process for this position and resulted in a significant increase in the retention rate (Handley, 1997). The enormous amount of available research indicates that the EQ-i is a valid and reliable instrument.

The data from the Emotional Intelligence Quotient Inventory was analyzed to determine if significant differences existed between groups among any of the constructs and TABE grade equivalency levels. Logic suggested that the TABE scores from the group of high school students would be the highest based on their higher achieved educational level. Anecdotal data would suggest that no difference would exist between the group of pre-GED/GED Option students and the group of adults in the ABE/GED programs, despite the differences in age.

#### Participants

The participants of the study were current students age 16 - 19 attending high school, GED Option programs with the same age limit, and adult ABE/GED programs using individuals age 20 and above. A review of the five-year history of a GED Option program found that the average age of students was 16.8, with 79% of those enrolled being either 16 or 17. For having similar groups among the adolescents, the normative high school students were from the eleventh grade. The planned size for each group was 100 individuals. The study was limited to the six southernmost counties in the state of Mississippi. The group size was based on having a significant number to insure the power of the study, and Levene's test was also conducted to assure homogeneity of variances existed

within each group to allow for within as well as between group analysis of gender and ethnicity. The size of each group was calculated by using the statistical analysis program, GPower 3, developed by Faul, Erdfelder, Lang, and Buchner (2007). Based on the mean of 100 and a standard deviation of 15, the result of this operation indicated that a minimum number of 171 would provide for sufficient power and effect size. The actual study number used was for additional strengthening, and to allow for different numbers of participants based on sex and ethnic background. The administrator used names only to match TABE and EQ-i scores for data analysis purposes. Ethnicity was taken from class rosters or supplied by the participants' instructor. Numbers ranging from 1 – 300 were assigned to participants.

#### Instrumentation

The study made use of two instruments: the TABE and Emotional Quotient Inventory (EQ-i). The TABE is an academic assessment that measures a person's grade level in Reading, Mathematics, Applied Mathematics, and Language. It is a diagnostic objective assessment of a test taker's requisite foundation of knowledge and skills. The Reading portion of the TABE was used and the mean for each group was addressed and represented the grade equivalency for that group.

Because it is an assessment tool designed to measure an individual grade equivalency, the TABE reading level varies according to the booklet being used. Levels E (Easy), M (Medium), D (Difficult), and A (Advanced), with increasing degrees of difficulty, are available and their use is based on scores achieved on

a preliminary locator test. Scores can range from 0.0 to 12.9. Based on the grade level of the normative high school students, the decision was made to test those participants using the D, and A levels. For the other two groups, the TABE Reading score used was the score they initially achieved upon entry into their respective program.

The Emotional Quotient Inventory is an assessment inventory tool developed by Dr. Reuven Bar-On. The EQ-i is a self-report measure designed to measure a number of constructs related to EI. This method of data gathering was preferred on the premise that while performance-based measures capture maximal performance, self-report measures capture typical performance (Cronbach, 1949). The EQ-i consists of 133 items and takes approximately 30 minutes to complete. It gives an overall EQ score as well as scores for the following 5 composite scales and 15 subscales (Bar-On, 2006). It employs a 5-point Likert type scale with a textual response format ranging from "very seldom true or not true of me", to "very often true of me or true of me". The inventory is based on the Flesch (1948) formula of readability and has been assessed at the North American sixth grade level. Scores for the EQ-i are converted standard scores with a mean of 100 and a standard deviation of 15.

### Procedures

No testing took place until Institutional Review Board approval had been granted (Appendix B). Permission was obtained from all school district superintendents for their respective schools (Appendix C). The Reading level data from the TABE for the ABE/GED and pre-GED/GED students was the score

from the first time they accomplished that section upon entry into their respective programs. The high school students were randomly given the Reading portion of either the A or D level of Form 9 or 10 of the TABE. All participants completed informed consent forms (Appendix D) and signatures from parents or guardians were obtained for those under the age of eighteen.

All participants were given the Emotional Quotient Inventory. Again, permission to administer this instrument was obtained and informed consent and assent from adolescents was collected. There was no expense incurred by any of the participants. The time involved was approximately 30 minutes for completion of the EQ-i for all participants, and an additional 50 minutes for the Reading section of the TABE for the high school English students.

#### Data Analysis Methods

The different independent variables measured consisted of the different groups, age, gender and ethnicity between groups, and the gender and ethnicity of individuals within the groups. The dependent variables were the score of the different intelligence constructs, and the score on the Reading section of the TABE.

Each of the research questions required an analysis of different data to provide an answer. This section discusses the specific data used and the corresponding statistical methodology. The first two questions asked if there was a relationship between any levels of Emotional Intelligence and grade equivalency scores on the Test of Adult Basic Education. To examine this, the mean scores on the TABE and the EQ-i were compared for the different groups.

Higher scores on the TABE and a corresponding higher level on the EQ-I would suggest that a relationship exist. This was measured using a Pearson correlation.

The next two questions sought to find out if any statistically significant differences exist between the different groups of adolescents, and adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence. This was determined by analyzing the means of the various EI levels of the two different groups. It was possible that significance would be found on some levels but not on others. The statistical analysis planned was a MANOVA.

The last two research questions considered the possibility of statistical differences in different measured levels of EI because of gender or ethnicity. These questions were be evaluated for any between group differences. An ANOVA was conducted on these questions. The ethnic makeup of the geographic area of the study limited the groups to Caucasian and African American. Based on studies by Gignac (2008), Singh (2003), and Lyons and Schneider (2005) females may demonstrate a higher level of emotional intelligence than males. Studies of data based on ethnicity were mixed with some indicating that differences exist (Koh, 1999; Van Rooy, Alonso, & Viswesvaran 2005), while others (Matthews, Zeidner, & Roberts, 2002) found no significant differences.

#### Limitations

The study was conducted using participants from the state of Mississippi and it is possible that any findings are unique to that area, and as such, caution should be taken in generalizing them to other regions of the nation. The

demographics of the study area limited ethnic groups to those of African American and Caucasian.

## CHAPTER IV

### RESULTS

#### Introduction

Data collection commenced as soon as the Institutional Review Board granted permission. Approximately three months were needed to collect the desired number of surveys. The time required was the result of identifying different school districts to survey eligible participants, the return of signed consent forms, computer availability for answering the questionnaire, and securing permission to use and funding for scoring of the questionnaire (Appendix E).

To obtain the desired number of 300 participants, 349 EQ-i surveys were completed. This was necessitated by a number of surveys that were determined invalid because too many questions unanswered or there was an excessive score on the inconsistency index. This was the result of the participant providing contrasting answers to a number of paired items. It was indicative of an individual that simply pressed answers in an attempt to expeditiously complete the survey. This occurred on four surveys accomplished by the adult group, eleven times in the GED Option group, and thirty-four times by the high school group. One survey was invalid due to question omission, and a high school instructor completed one survey. A total of 301 surveys were included in the study.

Scores for the Reading portion of the TABE were obtained from the respective instructors of the different programs involved in the study. TABE testing for the high school students was completed as part of a classroom assignment. Testing took place at the end of the first semester (December) and

the beginning of the second semester (January). The second session was limited to one English instructor and those students that had returned the consent form.

### Descriptive

Before an analysis of each research question, an overview of the descriptive statistics involved was examined. The following table shows the breakdown of age for each of the groups.

Table 1

#### *Group Age Descriptive Statistics*

Group	Mean	n	Std. Dev.	Min.	Max.
Adult	31.88	101	10.53	20	63
High School	16.91	100	.84	16	19
GED Option	17.57	100	.94	16	19

Concerning gender, of the 301 participants, 151 were Female. With respect to ethnicity, 151 of the study subjects were White; the remainder was Black. Within each group, with the exception of an additional adult White Female, there was an equal distribution of four categories: White Male, Black Male, White Female, and Black Female

Each participant in the survey, in addition to the EQ-i, also had a Reading grade equivalency score on the TABE. This instrument was for determining if any differences in emotional intelligence levels might be attributable to differing academic levels. The following table gives the mean for each group.



Table 2

*TABE Reading Scores*

Group	Mean	n	Std. Deviation
Adult	7.68	101	2.45
High School	7.62	100	3.02
GED Option	7.68	100	3.01
Total	7.66	301	2.83

This indicates that Reading for all groups was at seventh year, sixth month level.

This was contrasted by the differences in the EQ score for each group as shown in the following table and graph.

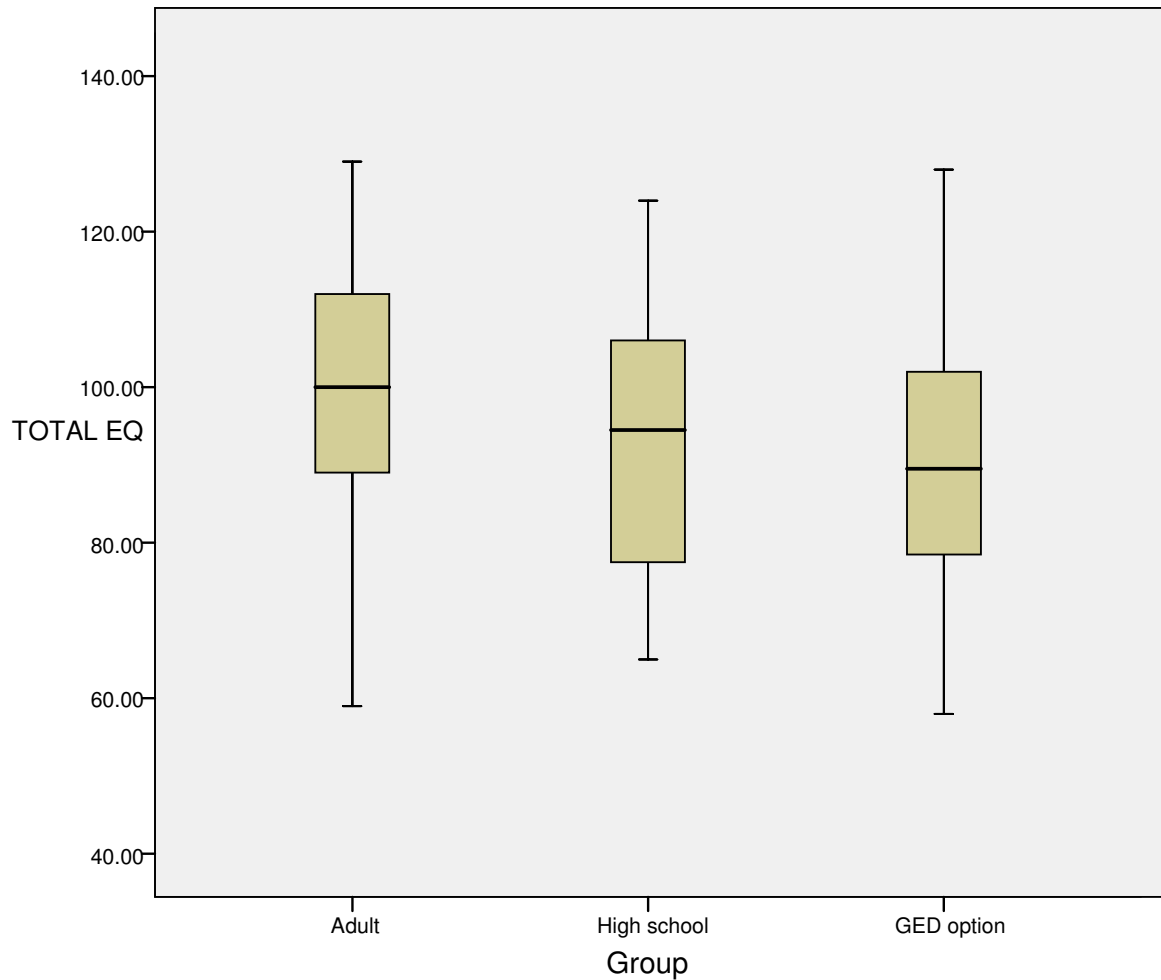
Table 3

*Total Emotional Intelligence Quotient*

Group	Mean	n	Std. Dev.	Min.	Max.	Range
Adult	99.45	101	16.33	59	129	70
High School	93.51	100	15.76	65	124	59
GED Option	90.11	100	14.99	58	128	71

This table shows that all three groups are within one standard deviation (15) of the EQ-i mean of 100. It shows that according to the test instrument, the adult group scored the highest, followed by the high school group, and the GED

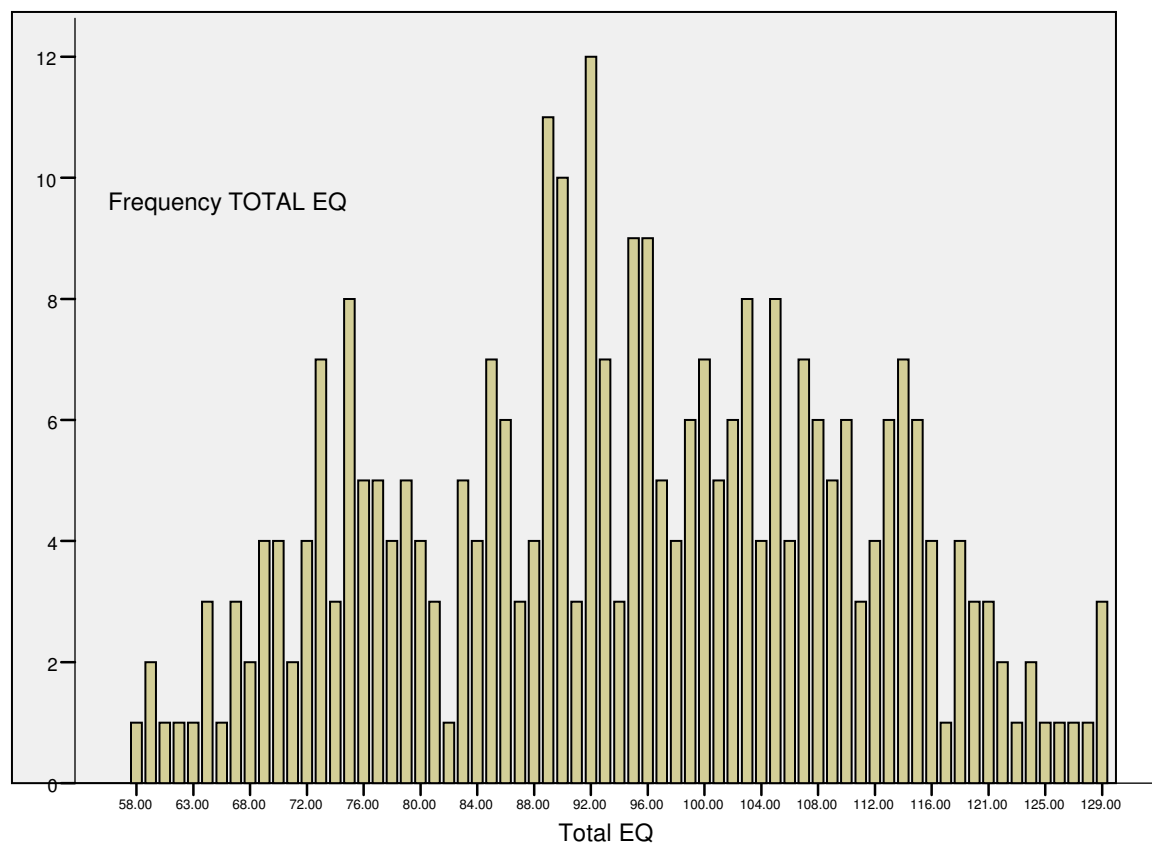
option group. The difference between the adults and the high school was 5.94 and 9.34 for the GED option group. The difference between the two adolescent groups was 3.4.



*Figure 1.* Estimated Marginal Means of Total EQ.

The data of Table 3 is visually depicted by the figure and shows that the adults were near the norm as a group in their level of their total Emotional Intelligence

Quotient. Their mean score was followed by the regular high school students and then the mean of the GED Option students.



*Figure 2.* Total Emotional Intelligence Quotient Frequency Distribution.

The bar graph gives an illustration of the range and frequency of the total participant Emotional Intelligence Quotient scores. The shape is indicative of a normal distribution given the sample size.

#### Statistical

The following research questions established the parameters of this study and guided the investigation:

1. Is there a relationship between any levels of Emotional Intelligence and grade equivalency scores in Reading on the Test of Adult Basic Education for adolescents?
2. Is there a relationship between any levels of Emotional Intelligence and grade equivalency scores on the Test of Adult Basic Education for adults?
3. Do any statistically significant differences exist between adolescents in a GED Option program and normative high school students in levels of Emotional Intelligence?
4. Do any statistically significant differences exist between adults in GED and adolescents in GED Option programs in levels of their Emotional Intelligence?
5. Do any statistically significant differences exist between adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence based on gender?
6. Do any statistically significant differences exist between adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence based on ethnicity?

The research questions were evaluated using quasi-experimental methodology. The following hypotheses that respectively correspond to the research questions were investigated in this study with an alpha of .05 for all statistical tests:

Hypothesis I: There is a relationship between the grade equivalency score an adolescent achieves on the TABE Reading test and their Emotional

Intelligence score on the EQ-i. Expressed as a null hypothesis:

There is no significant relationship between the grade equivalency score an adolescent achieves on the TABE Reading test and their Emotional Intelligence score on the EQ-i.

A Pearson Correlation was used to evaluate the first hypothesis. The following tables show the results of the analysis.

Table 4

*High School TABE/Emotional Intelligence (N=100)*

	TABE	
	Pearson Correlation	Sig.(2 tailed)
Total Emotional Intelligence	.109	.280
Intrapersonal	-.011	.912
Self-Regard	-.035	.733
Emotional Self-Awareness	.016	.872
Assertiveness	-.010	.918
Independence	-.093	.358
Self-Actualization	.099	.329
Interpersonal	.260**	.009
Empathy	.332**	.001
Social Responsibility	.301**	.002
Interpersonal Relationship	.107	.287
Stress Management	.081	.424
Stress Tolerance	.103	.309
Impulse Control	.021	.837
Adaptability	.076	.452
Reality-Testing	-.035	.733
Flexibility	-.018	.856
Problem-Solving	.254*	.011
General Mood	.142	.160
Optimism	.166	.098
Happiness	.086	.393

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

This indicates that among normative high school students that the TABE is correlated with the Interpersonal component of emotional intelligence

( $r = .260$ ,  $p < .01$ ). For the sublevels of Empathy and Social Responsibility

there is a positive correlation ( $r = .332$ ,  $p < .01$ ), and ( $r = .301$ ,  $p < .01$ ). For the

sublevel of Problem Solving a positive correlation also exists ( $r = .254, p < .05$ ).

The Pearson Correlation of TABE and the different components and sublevels of Emotional Intelligence for GED option students are shown in the following table. There are no significant correlations between the TABE score and scores of the EQ-i for GED Option students.

Table 5

*GED Option TABE/Emotional Intelligence (N=100)*

	TABE	
	Pearson Correlation	Sig.(2 tailed)
Total Emotional Intelligence	.001	.991
Intrapersonal	-.04	.692
Self-Regard	-.117	.248
Emotional Self-Awareness	-.081	.421
Assertiveness	.125	.214
Independence	-.03	.764
Self-Actualization	.008	.936
Interpersonal	.004	.972
Empathy	-.009	.931
Social Responsibility	-.068	.502
Interpersonal Relationship	.086	.397
Stress Management	.037	.712
Stress Tolerance	.094	.351
Impulse Control	-.021	.837
Adaptability	.016	.876
Reality-Testing	-.009	.926
Flexibility	.088	.384
Problem-Solving	-.031	.760
General Mood	.083	.414
Optimism	.068	.499
Happiness	.057	.576

A Pearson Correlation was utilized to evaluate the second hypothesis.

Hypothesis II: There a relationship between levels of Emotional Intelligence and grade equivalency scores on the Test of Adult Basic Education for adults.

Expressed as a null hypothesis:

There is no significant relationship between the grade equivalency score an adult achieves on the TABE Reading test and their Emotional Intelligence score on the EQ-i.

The following table is the result of that analysis.



Table 6

*Adult TABE/Emotional Intelligence (N=101)*

	TABE	
	Pearson Correlation	Sig.(2 tailed)
Total Emotional Intelligence	.236*	.017
Intrapersonal	.141	.161
Self-Regard	-.019	.847
Emotional Self-Awareness	.126	.208
Assertiveness	.047	.641
Independence	.134	.181
Self-Actualization	.248*	.013
Interpersonal	.378**	.000
Empathy	.426**	.000
Social Responsibility	.451**	.000
Interpersonal Relationship	.211*	.034
Stress Management	.103	.306
Stress Tolerance	.132	.188
Impulse Control	.054	.593
Adaptability	.202*	.043
Reality-Testing	.224	.025
Flexibility	-.051	.610
Problem-Solving	.339**	.001
General Mood	.173	.083
Optimism	.235*	.018
Happiness	.066	.511

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

This indicates that among adults the TABE is correlated with several components of emotional intelligence; principle among these is the Total EQ ( $r = .236, p < .05$ ). For the component of Interpersonal there is positive correlation ( $r = .378, p < .01$ ). This is also reflected by positive correlations for the corresponding sublevels of Empathy ( $r = .426, p < .01$ ) Social

Responsibility ( $r = .451, p < .01$ ), and Interpersonal Relationship ( $r = .211, p < .05$ ). The sublevel of Self-Actualization ( $r = .248, p < .05$ ) reflects a positive correlation. The component of Adaptability ( $r = .202, p < .05$ ), and the sublevel of Problem Solving ( $r = .254, p < .05$ ) positively correlate for adults. The component of General Mood is also represented by the positive correlation of the sublevel of Optimism ( $r = .235, p < .05$ ).

The third research question addressed whether significant differences exist in levels of Emotional Intelligence between adolescents in GED/pre-GED Option programs and adolescents in a regular high school environment. Hypothesis III: Statistically significant differences exist between adolescents in a GED Option program and normative high school students in levels of Emotional Intelligence. Expressed as a null hypothesis:

There are no statistically significant differences between adolescents in a GED Option program and normative high school students in levels of Emotional Intelligence.

A MANOVA was the statistical methodology used. The variables included each of the adolescent groups and the five primary components of the EQ-i: Intrapersonal, Interpersonal, Adaptability, Stress Management, and General Mood. The descriptive statistics for this analysis are shown in the following table.

Table 7

*High School/GED Option Component Analysis*

Component	Group	Mean	Std. Deviation	n
Intrapersonal	High School	100.08	15.70	100
	GED Option	94.85	14.52	100
	Total	97.47	15.31	200
Interpersonal	High School	93.07	17.77	100
	GED Option	91.85	17.92	100
	Total	92.46	17.81	200
Adaptability	High School	90.53	16.06	100
	GED Option	89.26	14.74	100
	Total	89.90	15.39	200
Stress Management	High School	93.53	16.35	100
	GED Option	92.97	14.89	100
	Total	93.25	15.60	200
General Mood	High School	97.86	15.72	100
	GED Option	93.52	13.64	100
	Total	95.69	14.85	200

These descriptive statistics show that the normative high school students scored higher in their level of emotional intelligence, particularly in Intrapersonal and General Mood. Included in these are the sublevels of Self-Regard, Emotional Self-Awareness, Assertiveness, Independence, Self-Actualization, Optimism, and Happiness. To determine if the differences in these areas were statistically significant, a review of the table of Multivariate Tests was done.

Table 8

*High School/GED Option Multivariate Tests<sup>b</sup>*

Effect	Value	F	Hypothesis		Sig.	
			df	Error df		
Intercept	Pillai's Trace	0.98	2325.55 <sup>a</sup>	5.00	194.00	.000
	Wilks Lambda	0.02	2325.55 <sup>a</sup>	5.00	194.00	.000
	Hotelling's Trace	59.94	2325.55 <sup>a</sup>	5.00	194.00	.000
	Roy's Largest Root	59.94	2325.55 <sup>a</sup>	5.00	194.00	.000
Group	Pillai's Trace	.05	2.06 <sup>a</sup>	5.00	194.00	.072
	Wilks Lambda	.95	2.06 <sup>a</sup>	5.00	194.00	.072
	Hotelling's Trace	.05	2.06 <sup>a</sup>	5.00	194.00	.072
	Roy's Largest Root	.05	2.06 <sup>a</sup>	5.00	194.00	.072

a. Exact statistic

b. Design: Intercept + Group

The results show that for the overall MANOVA for the primary components of Emotional Intelligence that a significant difference does not exist between normative high school students and students in a pre-GED/GED Option program.  $F(5, 194) = 2.06, p = .072$ .

Research question four is similar the question three. The analysis in this case was the difference, if any, between adults in a GED program and adolescents in a GED Option program in their levels of emotional intelligence on the primary components of the EQ-i.

Hypothesis IV: Statistically significant differences exist between adults in GED and adolescents in GED Option programs in levels of their Emotional Intelligence. Expressed as a null hypothesis:

There are no statistically significant differences between adults in GED and adolescents in GED Option programs in levels of their Emotional Intelligence.

As with question three, the first order of business was to examine the descriptive statistics resulting from using a MANOVA. The following table shows those statistics. For all components, the mean score for adults in an ABE/GED program is higher than adolescents, especially for the areas of Adaptability and Stress Management.

Table 9

*Adult/GED Option Component Analysis*

Component	Group	Mean	Std. Deviation	n
Intrapersonal	Adults	101.80	15.16	101
	GED Option	94.85	14.52	100
	Total	98.34	15.21	201
Interpersonal	Adults	98.75	17.17	101
	GED Option	91.85	17.92	100
	Total	95.32	17.85	201
Adaptability	Adults	99.89	17.07	101
	GED Option	89.26	14.74	100
	Total	94.60	16.78	201
Stress Management	Adults	101.22	14.57	101
	GED Option	92.97	14.89	100
	Total	97.11	15.26	201
General Mood	Adults	95.11	16.27	101
	GED Option	93.52	13.64	100
	Total	94.32	15.02	201

An examination of the means of the different components found that with the exception of General Mood, all other areas have a sizeable difference. A test of Between-Subjects Effects (Table 10) was used to determine if the differences in means are statistically significant.

Table 10

*Adult/GED Option Multivariate Tests<sup>b</sup>*

Effect	Value	F	Hypothesis		Sig.	
			df	Error df		
Intercept	Pillai's Trace	.98	2410.60 <sup>a</sup>	5.00	195.00	.000
	Wilks Lambda	.02	2410.60 <sup>a</sup>	5.00	195.00	.000
	Hotelling's Trace	61.81	2410.60 <sup>a</sup>	5.00	195.00	.000
	Roy's Largest Root	61.81	2410.60 <sup>a</sup>	5.00	195.00	.000
Group	Pillai's Trace	.14	6.21 <sup>a</sup>	5.00	195.00	.000
	Wilks Lambda	.86	6.21 <sup>a</sup>	5.00	195.00	.000
	Hotelling's Trace	.16	6.21 <sup>a</sup>	5.00	195.00	.000
	Roy's Largest Root	.16	6.21 <sup>a</sup>	5.00	195.00	.000

a. Exact statistic

b. Design: Intercept + Group

The results show that for the overall MANOVA for the primary components of Emotional Intelligence that a significant difference does exist between adults in a GED program and students in a pre-GED/GED Option program.  $F(5, 195) = 6.21, p < .001$ . The table indicated that for the five main components of Emotional Intelligence, all except General Mood were statistically significant when comparing adults in a GED program to adolescents in a GED Option program. For the component of Intrapersonal, the difference is expressed as

follows:  $F(1, 199) = 11.03, p = .001$ ). The component of Interpersonal, which measures levels of Empathy, Social Responsibility, and the ability to function in a mutually satisfying relationship or Interpersonal Relationship, had the following statistical finding.  $F(1, 199) = 7.77, p = .006$ ). The analysis also showed that the adults had a statistically significantly higher score in the sublevels that comprise the component of Adaptability: Reality Testing, Flexibility, and Problem Solving. The findings were  $F(1, 199) = 22.32, p < .001$ ). The last area of significance was in Stress management, made up of the sublevels Stress Tolerance and Impulse Control. These findings were  $F(1, 199) = 15.76, p < .001$ ). The component of General Mood, consisting of Optimism and Happiness was not significant,  $F(1, 199) = .56, p = .46$ ).

Research question five was an analysis of variance (ANOVA) with the aim of finding if any significant differences in the level of total Emotional Intelligence between adults in GED programs and students in a GED Option program existed based on gender.

Hypothesis V: Statistically significant differences exist between adults in GED and adolescents in GED Option programs in levels of their Emotional Intelligence based on gender. Express as a null hypothesis:

There are no statistically significant differences between adults in GED and adolescents in GED Option programs in levels of their Emotional Intelligence based on gender.

The following table shows the descriptive statistics for this analysis.

Table 11

*Adult/GED Option Gender Total EQ*

Group	Gender	Mean	Std. Deviation	n
Adults	Female	100.10	16.16	51
	Male	98.78	16.64	50
	Total	99.45	16.33	101
GED Option	Female	90.34	13.69	50
	Male	89.88	16.33	50
	Total	90.11	14.99	100
Total	Female	95.27	15.70	101
	Male	94.33	17.00	100
	Total	94.80	16.32	201

A review of this table shows that females in both groups scored higher than males. The differences, however, are not large. The analysis produced a tests of between-subjects effects table that is shown below.



Table 12

*Adult/GED Option between Subjects Gender Analysis*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4428.45 <sup>a</sup>	3	1476.15	5.95	.001
Intercept	1805291.01	1	1805291.01	7277.67	.000
Group	4372.97	1	4372.97	17.63	.000
GENDER	39.71	1	39.71	.16	.690
Group*GENDER	9.25	1	9.258	.04	.847
Error	48867.59	197	248.06		
Total	1859729.00	201			
Corrected Total	53296.04	200			

a. R Squared = .083 (Adjusted R Squared = .069)

The table indicates the following for the F-test for Group, Gender, and the interaction of Group\*Gender. For Group,  $F(1, 201) = 17.63$ ,  $p < .001$ . This was the only finding that was statistically significant. For Gender the findings were  $F(1, 201) = .16$ ,  $p = .690$ . For the interaction of Group and Gender the findings were  $F(1, 201) = .04$ ,  $p = .847$ .

Research question six was similar to question five and likewise utilized an ANOVA to analyze the data. The difference in this case was a desire to determine if any significant difference in the level of total Emotional Intelligence was attributable to the variable of ethnicity.

Hypothesis VI: Statistically significant differences exist between adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence based on ethnicity. Expressed as a null hypothesis:

There are no statistically significant differences between adults and adolescents in GED and GED Option programs in levels of their Emotional Intelligence based on ethnicity.

Table 13 gives the descriptive data for the groups of adults in GED programs and adolescents in pre-GED/GED Option programs.

Table 13

*Adult/GED Option Ethnicity Total EQ*

Group	Ethnicity	Mean	Std. Deviation	n
Adults	White	97.76	15.16	51
	Black	101.16	17.43	50
	Total	99.45	16.33	101
GED Option	White	88.68	14.44	50
	Black	91.54	15.54	50
	Total	90.11	14.99	100
Total	White	93.27	15.42	101
	Black	96.35	17.13	100
	Total	94.80	16.32	201

The data in this table shows that for both groups, the Black students achieved a higher score for their level of emotional intelligence. For the adults the difference was an average of 3.4 points, and for the younger students the difference was 2.86. The subgroup of Black adults scored just over the normed average of 100 for the EQ-i. All subgroup scores were within one standard

deviation. The results of the ANOVA were evaluated to determine if these differences in scores of the groups were statistically significant. The results are shown in Table 14.

Table 14

*Adult/GED Option between Subjects Ethnicity Analysis*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4874.84 <sup>a</sup>	3	1624.95	6.61	.000
Intercept	1805735.50	1	1805735.50	7346.57	.000
Group	4394.87	1	4394.87	17.88	.000
Ethnicity	491.52	1	491.52	2.00	.159
Group*Ethnicity	3.60	1	3.60	.02	.904
Error	48421.20	197	245.79		
Total	1859729.00	201			
Corrected Total	53296.04	200			

a. R Squared = .091 (Adjusted R Squared = .078)

Table 14 shows that while the group is statistically significant,  $F(1, 197) = 17.88$ ,  $p < .001$ , neither Ethnicity,  $F(1, 197) = 2.00$ ,  $p = .159$ , nor the interaction of the variables, Group and Ethnicity were statistically significant:  $F(1, 197) = .02$ ,  $p = .904$ .

### Ancillary Findings

The inclusion of the group of normative high school students the same chronological age as the GED Option students was for the purpose of evaluating if any significant differences between the adults in a GED program and adolescents in a pre-GED/GED Option program were unique to these particular students, or were relevant to all adolescents. The line of thinking was that while the two GED groups would be similar academically, based on anecdotal data, the high school students would score better on the TABE based on having achieved a grade level beyond that of most dropouts. The fact that the high school students actually had the lowest average score on the TABE was unexpected. In viewing the EQ-i however, the high school students did score higher than the Option students did in all but two of the sublevels (Empathy and Social Responsibility).

The mean score for each of the three groups was below the mean for different age groups as set by all the previous years of study of the EQ-i. For the 16-19 year old groups, their scores of 93.51 (high school), and 90.11 (GED Option) were below the established level of 95.3. Likewise, the adult score of 99.45 was less than the score of 101.8 for the age group of 30-39 (Bar-On, 1997).

## CHAPTER V

### DISCUSSION

#### Summary

This study evaluated and analyzed the TABE and EQ-i scores of three different groups. The goal was to determine whether differences of statistical significance exist between adults in an ABE/GED program, adolescents in a pre-GED/GED Option program, and adolescents in a normative high school environment in their respective levels of emotional intelligence. Additionally, statistical tests were performed to evaluate the groups based on gender and ethnicity. Participants were enrolled in community college GED programs, community education ABE/GED programs, WIN job center GED programs, high school GED Option programs in south Mississippi, and six classes of normative high school students.

The analysis of data found that all three groups had very comparable scores on the Reading section of the TABE. This added substance to the thinking that different of scores on the EQ-i was attributable to factors other than differences in academic ability. A comparison of the means for the three groups was consistent in their finding. The adults scored higher in most constructs and sublevels, followed by the normative high school students, and the GED Option students. The component of General Mood, which measures optimism and happiness, was an exception to this with the high school students scoring highest. Mean scores for the sublevels were mixed with either the adults or high school students having the highest score.

A strong reason for the direction of this research was the result of the frustration of dealing with adolescent behavior and the hope of perhaps finding the causes and cures for it. Academically they are the same as adults in their situation, but do not act like it. Chronologically they are the same as the high school students, but do not act like it. Yes, it is a matter of maturity, but possibly, it could be narrowed down to an area that could be changed.

The frustrations continued with the use of the TABE and the EQ-i instruments. The behavior that contributed to the study also contributed to a sizable number of surveys being invalid. If a participant's response to a number of paired questions was too varied, it produced a high inconsistency score. According to Bar-On (1997), this was indicative of someone who was noncompliant or unmotivated and if the paired questions were not valid, the probability would be that the same effort went into the rest of the survey. The net result of this was significantly more surveys than initially planned had to be completed, and while the findings were valid, a number of participants that exhibited the very behavior that was the impetus to the study had their data excluded from the study. In a Catch 22 scenario, it seemed that the ones whose bad behavior led to the research, behaved too badly to be included in the study. Any future research along these lines should take this into consideration and work to resolve this issue.

### Conclusions and Discussion

The results of the TABE test were both expected and somewhat disconcerting from an educator prospective. The expectation was that both

groups of GED students would, by nature of their similar educational experiences of having dropped out of school, have TABE scores that did not differ greatly. This, in fact, was the case. The high school students were thought to have a TABE score, which if consistent with their grade level in school (Eleventh), would be at least a couple of grade levels above the other groups. The high school students however, had the lowest average of the three groups. The regression analysis accomplished for both research questions one and two provided interesting results. The adult and high school students had a correlation between the TABE and numerous sublevels of the EQ-i, while the GED Option students had no correlation with any Emotional Intelligence components or sublevels.

The questions relating to gender were consistent with that of previous studies. Females in all three groups scored higher, although not significantly, in total Emotional Intelligence score than males. This is in line with the findings of Rovnak (2007), Gignac (2008), Singh (2003), and Lyons and Schneider (2005).

One aspect of this study was an examination of the variable of ethnicity. In terms of total Emotional Intelligence, there were no statistically significant differences between the two represented groups. Previous studies were mixed. Matthews, Zeidner, & Roberts (2004) found no significant differences while others indicated that differences exist that were in favor of the minority group (Koh, 1999; Van Rooy, Alonso, & Viswesvaran, 2005).

Two overall outcomes were desired by doing this research. The first of these was to determine that if differences do exist between the adult and adolescents in GED programs, could they be identified. Could these be areas

that once located, be remediated to aid these students in a more beneficial attitude and approach to education? The analysis of data from the participants showed that the differences do exist, are significant, and widespread. They cover facets of maturity such as self-awareness, how well they handle change, how well they handle their emotions and control their impulses, and how they relate to others. The only component that was not significant was in how optimistic and happy they are.

Secondly, of more importance from a school administrator perspective, would be if the instrument was a viable tool in the identification of students that are deficient in some aspect of the maturity process. It could be administered for students that meet established criteria for being at risk of later dropping out, or it could be used by districts as one of their methods for identifying those “at risk”. By taking this approach, school administrators may be able to direct students to counselors or school psychologists early enough in the process to effect corrective action and prevent students from developing issues that reduce or inhibit their opportunity to finish their high school education in the traditional sense. As pointed out by Wenner (2006), Enminger and Slusarcick (1992), and Hickman, Bartholomew, Mathwig, and Heinrich (2008), the earlier in the education process that identification is made, the better the chances for successful remediation.

As one with a personal interest in the outcome of the findings, the hope was that a specific sublevel would be found that would prove to be the culprit in the behavioral differences between adults and adolescents in GED programs.



That by remediating just one thing, flexibility for example, adolescent students would approach the educational process in a responsible, positive manner. As pointed out however, by Research Question IV, there are significant differences in several of the primary components of Emotional Intelligence between adults and adolescents involved in an alternative education program. The findings would indicate that the process of changing a youth into a more mature individual is considerable more complicated than altering a single variable.

#### Limitations

The study was conducted using participants from the southernmost counties of the state of Mississippi and it is possible that any findings are unique to that area and cannot be generalized to other regions of the nation. The participating high school students were from one school. The area demographics restricted the ethnicity to African-American and Caucasian.

#### Recommendations for Policy or Practice

As with any study, the purpose of this endeavor was to gain information. It has done so. It has pointed out some of the differences in the constructs of emotional intelligence between adults and adolescents involved in GED programs. It has found among this group of participants, that although both groups are at the same point academically, the more mature approach to studying exhibited by the adults makes for a more successful learning environment. The analysis of the study data found that while GED Option students are the same chronological age as the study group of high school students, the Pearson Correlation of the high school students showed that a

linear relationship exist between the TABE and the EQ-i in Problem Solving, Empathy, and Social Responsibility. The GED Option students had no correlation. As the overall MANOVA found however, there was no statistical differences between these two groups.

Although this study was directed to discerning differences in the levels of Emotional Intelligence of different groups, the more practical application can be made to the individual. Based on a normal distribution, it is a rare occurrence that a score would be found at the extreme ranges. For this reason, a student that is more than three standard deviations below the norm in a specific sublevel would be deemed “Markedly Low” and possessing atypically impaired emotional capacity and should probably receive counseling to rectify the deficiency (Bar-On, 1977).

#### Recommendations for Future Research

One of the limitations of this study was the ethnicity of the participants. The demographics of the south Mississippi region consist primarily of Caucasians and African-Americans. While there is representation by both Asian and Hispanic groups within the schools, the adult GED, and GED Option programs, the numbers were not significant enough to constitute a study group or subgroups. Because they constitute the group with the highest dropout rate according to Swaim, Beauvais, Chavez, and Oetting (1997), an area with a sizable Hispanic population may want to evaluate those students in similar programs. As discussed, the Black participant groups had higher mean EQ scores for all three groups. While there was no significance in the between

groups test, a study of the differences of within groups may find that a significance exists. This possibility was not analyzed in this study

A variable which was not used, but available, was the time required for a participant to complete the EQ-i survey. The surveys were taken online and once an individual had finished, the researcher was notified by email of the participants name and the time need for completion. This information can then be grouped and used as an interval scale in the data analysis. It can then be evaluated to determine if there is a correlation between mean completion time and group Emotional Intelligence. This could further be broken down into the different construct and sublevels.

With the exception of Research Question I and II, the remaining statistical analysis focused on the five primary constructs of emotional intelligence, while there were significant differences found, the study would have been better served by analyzing all of the various sublevels. Future studies that utilize the EQ-I, should endeavor to do so. Finding statistical significance in the primary components is relevant, but the breakdown of each of these into the sublevels that comprise it may better serve to identify specific facets of maturity to target for study or remediation. For a component such as Intrapersonal, low scores in the sublevels of Assertiveness and Independence could produce an overall significant component score, when the accompanying sublevels of Self-Regard, Emotional Self-Awareness, and Self-Actualization were acceptable.

Another concern that the data revealed was with the reading level of the EQ-i instrument. A consideration in choosing to use Bar-On's device was that it

was written at a sixth grade level. After seeing that all three groups read at a level not far in advance of this, the decision to go with the EQ-i instead of a tool such as the MSCEIT was correct. Although the average of each group was above the established level for the instrument, the fact that it was an average meant that a sizable number of participants had difficulty understanding some of the items. Words such as “optimistic”, “impulsiveness,” and “assertiveness” periodically needed to be defined to a participant. It stands to reason then, that for as many times as a question was asked, it was also unasked.

There are a number of different recommendations for future research on this topic. There would include (a) looking for significant differences within groups as well as between. The mean score for Black males was higher than Black adolescents, but this was not analyzed, (b) The inclusion of variables which could be contributing factors: family dynamic, socio-economic status, past grades failed and year in school this occurred, number of siblings who have dropped out, (c) Analyzing all sublevels of Emotional Intelligence in addition to total EQ and components, and (d) inclusion of all relevant ethnic groups for the geographic area of interest.

## APPENDIX A

## CONSTRUCTS AND SUBLEVELS OF EMOTIONAL INTELLIGENCE

## Intrapersonal (inner self)

- Self-Regard: Respect and acceptance of oneself.
- Emotional Self-Awareness: To be aware of and understand ones feelings and what caused those feelings.
- Assertiveness: Expressing feelings, beliefs, and ability to stand up for their rights.
- Independence: Self-reliant in decision making and able to function autonomously.
- Self-Actualization: Realizing their potential and trying to do their best.

## Interpersonal (social interaction and interpersonal relationship)

- Empathy: To be aware of and understand how others feel
- Social Responsibility: Abiding by social rules and doing things with and for others.
- Interpersonal Relationship: Establishing relationships and functioning comfortably with others.

## Stress Management (emotional and task management and regulation)

- Stress Tolerance: Using different methods to deal with difficult situations.
- Impulse Control: Being composed in resisting the impulse to act.

## Adaptability (coping with change)

- Reality-Testing: Maintaining the proper perspective, coping with situations, and not withdrawing.
- Flexibility: Ability to adapt to new situations and open to new ways of working.
- Problem-Solving: Identifying and coming up with different solutions to problems.

## General Mood (self-contentment)

- Optimism: To be positive and think that things will be alright.
- Happiness: To feel content with oneself and able to enjoy life

## APPENDIX B

## INSTITUTIONAL REVIEW BOARD APPROVAL




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 THE UNIVERSITY OF SOUTHERN MISSISSIPPI
 

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Institutional Review Board

118 College Drive #5147  
 Hattiesburg, MS 39406-0001  
 Tel: 601.266.6820  
 Fax: 601.266.5509  
 www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE  
 NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **29101903**

PROJECT TITLE: **Emotional Maturity of Adolescents and Adults in GED Programs**

PROPOSED PROJECT DATES: **11/13/09 to 03/19/10**

PROJECT TYPE: **Dissertation or Thesis**

PRINCIPAL INVESTIGATORS: **Billy J. Riffle**

COLLEGE/DIVISION: **College of Education & Psychology**

DEPARTMENT: **Educational Leadership & Research**

FUNDING AGENCY: **N/A**

HSPRC COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **10/27/09 to 10/26/10**

*Lawrence A. Hosman*  
 \_\_\_\_\_  
 Lawrence A. Hosman, Ph.D.  
 HSPRC Chair

*10-28-09*

\_\_\_\_\_  
 Date

APPENDIX C  
PERMISSION LETTERS

October 19, 2009

Mr. Glen East, Superintendent  
Gulfport School District  
2001 Pass Road  
Gulfport, MS 39501

Dear Mr. East;

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs. The premise of this study is that although both groups are similar in their academic levels, their approach to education and achieving their goals is considerably different.

To conduct this study I would like to utilize three groups from within the Gulfport School District. These would consist of students in the pre-GED/GED program, adults from the Community Education ABE/GED program, and eleventh grade English students from Gulfport High School. I have planned to have 100 participants in each group. The high school students would serve as a control group for the study to evaluate if any differences pertain to just the pre-GED/GED group or are relevant to all adolescents.

Testing would include an online survey 30 minutes in duration, which may be accomplished at the participants' convenience, and the Reading portion of the TABE test. This section has a time limit of 50 minutes. This would be dependent upon the approval of you, Mr. Lindsey and coordinated with the English Department.

No data would be collected until approval is granted from the University of Southern Mississippi Institutional Review Board. Data required would consist of instrument scores, age, and ethnicity. Although names would be on test forms, no individual names or scores would be included.

I have included a copy of the consent to participate in research forms for those under 18 years of age.

Please contact me with any questions or comments you may have, and thank you for your consideration.

Sincerely,

Bill Riffle, GED Instructor

October 19, 2009

Mr. Glen East, Superintendent  
Gulfport School District  
2001 Pass Road  
Gulfport, MS 39501

Dear Mr. East,

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs. The premise of this study is that although both groups are similar in their academic levels, their approach to education and achieving their goals is considerably different.

To conduct this study I would like to utilize three groups from within the Gulfport School District. These would consist of students in the pre-GED/GED program, adults from the Community Education ABE/GED program, and eleventh grade English students from Gulfport High School. I have planned to have 100 participants in each group. The high school students would serve as a control group for the study to evaluate if any differences pertain to just the pre-GED/GED group or are relevant to all adolescents.

Testing would include an online survey 30 minutes in duration, which may be accomplished at the participants' convenience, and the Reading portion of the TABE test. This section has a time limit of 50 minutes. This would be dependent upon the approval of yourself and Mr. Lindsey, and coordinated with the English Department.

No data would be collected until approval is granted from the University of Southern Mississippi Institutional Review Board. Data required would consist of instrument scores, age, and ethnicity. Although names would be on test forms, no individual names or scores would be included in the study.

I have included a copy of the Emotional Intelligence Inventory, a parent information letter, and a consent to participate in research forms for those under 18 years of age.

Please contact me with any questions or comments you may have, and thank you for your consideration.

Sincerely,

  
Bill Riffle  
GED Instructor

APPROVED  
Glen East  
10/20/09



Oct 13, 2009

Mr. Bill Riffle, GED Instructor  
Gulfport School District  
2507 21<sup>st</sup>. Avenue  
Gulfport, MS 39501

Dear Parent/Guardian:

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs. The premise of this study is that although both groups are similar in their academic levels, their approach to education and achieving their goals is considerably different.

To conduct this study am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School. I have planned to have 100 participants in each group. The high school students would serve as a control group for the study to evaluate if any differences pertain to just the pre-GED/GED group or are relevant to all adolescents.

Testing would include an online survey 30 minutes in duration, which may be accomplished at the participants' convenience, and the Reading portion of the TABE test. This section has a time limit of 50 minutes. Data required would consist of instrument scores, age, and ethnicity. Although names would be on test forms, no individual names or scores would be included in the study.

I have included a copy of the consent to participate in research form. Those participants under 18 years of age require a parent/guardian signature.

Please contact me with any questions or comments you may have, and thank you for your consideration in allowing your child participate in this study.

Sincerely,

Bill Riffle  
GED Instructor  
bill.riffle@gulfportschools.org  
(228) 896-2236

From "Arledge, Henry" <HArledge@harrison.k12.ms.us>  
Subject RE: Dissertation Study  
Date Thu, November 12, 2009 1:54 pm  
To bill.riffle@gulfportschools.org

---

That will be fine with me.

-----Original Message-----

From: bill.riffle@gulfportschools.org  
[mailto:bill.riffle@gulfportschools.org]  
Sent: Thursday, November 12, 2009 12:40 PM  
To: Arledge, Henry  
Subject: Dissertation Study

Mr. Arledge;

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs.

To conduct this study am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School. I have planned to have 100 participants in each group. In order to reach The desired number of GED Option students, I would like to include students from the Harrison Central High GED Option program.

Testing would consist of an online survey, 30 minutes in duration, which would be accomplished at the participants' convenience. Data collected would consist of scores, age, and ethnicity. Although names would be on test forms, no individual names would be included in the study.

I have spoken with Dr. Holloway and Mr. Hammel regarding this study and both are agreeable pending your approval.

Thank you for your consideration in this matter and please contact me With any questions or comments you may have.

Sincerely,

Bill Riffle  
GED Instructor  
Gulfport School District  
bill.riffle@gulfportschools.org  
228-896-2236

---

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From "Carrolyn Hamilton" <hamiltonc@lbsdk12.com>  
Subject Re: Dissertation study  
Date Mon, November 30, 2009 9:54 am  
To bill.riffle@gulfportschools.org

---

Mr. Riffle - I have no problems with your study. Good luck with your dissertation. Let me know if I can do anything to help. Carrolyn Hamilton

>>> <bill.riffle@gulfportschools.org> 11/18/09 11:06 AM >>>  
Ms. Hamilton;

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs.

To conduct this study I am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School.

I have planned to have 100 participants in each group. In order to reach the desired number of GED Option students, I would like to include students from the Long Beach High GED Option program.

Testing would consist of an online survey, 30 minutes in duration, which would be accomplished at the participants' convenience. Data collected would consist of scores, age, and ethnicity. Although names would be on the survey, no individual names would be included in the study.

I have spoken with Ms. Whiten and Ms. Ware regarding this study and both are agreeable pending your approval.

Thank you for your consideration in this matter and please contact me with any questions or comments you may have.

Sincerely,

Bill Riffle  
GED Instructor  
Gulfport School District  
bill.riffle@gulfportschools.org  
228-896-2236

---

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[Download this as a file](#)

From "CO - Hirsch, Robert" <rhirsch@osdms.org>  
Subject RE: Dissertation study - Gulfport GED  
Date Fri, January 8, 2010 9:40 am  
To bill.riffle@gulfportschools.org

---

Bill, you are welcome to proceed with your research in our school district. Best of luck to you!

Robert E. Hirsch, Ed.D.  
Superintendent of Schools  
Ocean Springs School District  
2300 Government Street  
Ocean Springs, MS 39564  
228-875-7706

-----Original Message-----

From: [bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)  
[mailto:[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)]  
Sent: Friday, January 08, 2010 8:42 AM  
To: CO - Hirsch, Robert  
Subject: Dissertation study - Gulfport GED

Dr. Hirsch;

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs.

To conduct this study I am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School.

I have planned to have 100 participants in each group. In order to reach the desired number of GED Option students, I would like to include students from the Ocean Springs GED Option program.

Testing would consist of an online survey, 30 minutes in duration, which would be accomplished at the participants' convenience. Data collected would consist of scores, age, and ethnicity. Although names would be on the survey, no individual names would be included in the study.

I have communicated with Ms. Arnold describing my study and she has agreed to provide assistance pending your approval. I have also e-mailed Ms.

Townsend regarding this request.

Thank you for your consideration in this matter and please contact me with any questions or comments you may have.

Sincerely,

Bill Riffle  
GED Instructor  
Gulfport School District  
[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)  
228-896-2236

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From "Barry Amacker" <bAmacker@jaco.k12.ms.us>  
 Subject Re: Dissertation study  
 Date Fri, January 8, 2010 11:28 am  
 To bill.riffle@gulfportschools.org,"Dina Holland"  
 <dholland@jaco.k12.ms.us>,"Dino Vecchio"  
 <dvecchio@jaco.k12.ms.us>,"Hal Holmes"  
 <hholmes@jaco.k12.ms.us>,"James Hughey"  
 <jhughey@jaco.k12.ms.us>,"Margaret Bush"  
 <mbush@jaco.k12.ms.us>,"Michael Van Winkle"  
 <mvanwinkle@jaco.k12.ms.us>,"Todd Knight"  
 <tknight@jaco.k12.ms.us>

---

Ok. As long as it is voluntary and parental permission is obtained.  
 ba

Barry Amacker, Ed.D.  
 Superintendent  
 Jackson County School District  
 "Raising the Standard"

>>> <[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)> 1/8/2010 10:17 AM >>>  
 Dr. Amacker:

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs.

To conduct this study I am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School.

I have planned to have 100 participants in each group. In order to reach the desired number of GED Option students, I would like to include students from the St. Martin, East Central, and Vancleave GED Option programs.

Testing would consist of an online survey, 30 minutes in duration, which would be accomplished at the participants' convenience. Data collected would consist of scores, age, and ethnicity. Although names would be on the survey, no individual names would be included in the study.

I have previously communicated with each schools GED instructor Describing my study and each has agreed to provide assistance upon approval. I shall also request permission from Mr. Hughey, Ms. Holland, and Mr. Knight



pending your approval.

Thank you for your consideration in this matter and please contact me with any questions or comments you may have.

Sincerely,

Bill Riffle  
GED Instructor  
Gulfport School District  
[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)  
228-896-2236

-----  
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From "Dina Holland" <dholland@jaco.k12.ms.us>  
Subject Re: Dissertation study  
Date Fri, January 8, 2010 2:53 pm  
To bill.riffle@gulfportschools.org

---

Absolutely!

>>> 01/08/10 10:49 AM >>>

Ms.Holland:

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs.

To conduct this study I am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School.

I have planned to have 100 participants in each group. In order to reach the desired number of GED Option students, I would like to include students from all Jackson County GED Option programs.

Testing would consist of an online survey, 30 minutes in duration, which would be accomplished at the participants' convenience. Data collected would consist of scores, age, and ethnicity. Although names would be on the survey, no individual names would be included in the study.

I have communicated with Ms. McAnally describing my study and she has agreed to provide assistance pending your approval. I have also e-mailed Dr. Amacker regarding this request and he has given his approval.

Thank you for your consideration in this matter and please contact me With any questions or comments you may have.

Sincerely,

Bill Riffle  
GED Instructor  
Gulfport School District  
[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)  
228-896-2236

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From "Wayne Rodolfich" <wrodolfich@psd.ms>  
Subject Re: Dissertation study  
Date Sat, January 9, 2010 7:56 am  
To bill.riffle@gulfportschools.org  
CC "Larry Leake" <LRleake@psd.ms>

---

Great topic. We will be glad to assist you with your research.

>>> <[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)> 1/8/2010 3:09 PM >>>

Mr. Rodolfich:

I am currently working on a study based on a comparative analysis of levels of Emotional Intelligence of adolescent students in pre-GED/GED, and adults in ABE/GED programs.

To conduct this study I am utilizing three different groups. These consist of students in pre-GED/GED Option Programs, adults from area ABE/GED programs, and eleventh grade English students from Gulfport High School. I have planned to have 100 participants in each group. In order to reach the desired number of GED Option students, I would like to include students from the Pascagoula School District Opportunity Center GED Option program.

Testing would consist of an online survey, 30 minutes in duration, Which would be accomplished at the participants' convenience. Data collected would consist of scores, age, and ethnicity. Although names would be On the survey, no individual names would be included in the study. All participation is voluntary and consent forms are required.

I have spoken with Mr. Leake and Ms. Cooper regarding this study and They have both graciously offered their assistance pending your approval.

Thank you for your consideration in this matter and please contact me With any questions or comments you may have.

Sincerely,

Bill Riffle  
GED Instructor  
Gulfport School District  
[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)  
228-896-2236

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## APPENDIX D

## CONSENT FORMS

## THE UNIVERSITY OF SOUTHERN MISSISSIPPI

## CONSENT FORM

## AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

**Consent is hereby given to participate in the study titled:**

EMOTIONAL MATURITY OF ADOLESCENTS AND ADULTS IN GED PROGRAMS

1. **Purpose:** This study is being conducted to determine if differences exist in the levels of emotional intelligence between adolescents and adults in GED programs. The results will be evaluated for use as a tool in identification and remediation of at-risk students.
2. **Description of study:** The study will be an evaluation of data gathered from three groups of volunteer participants. The groups consist of high school pre-GED/GED Option Program students, adult ABE/GED students, and normative high school students at least 16 years of age. Each group will consist of 100 participants. Instruments used will be the Reading portion of the Test of Adult Basic Education (TABE) and the Bar-On Emotional Quotient Inventory (EQ-i). Time involved for the participants will be 50 minutes for the TABE, and 30 minutes for the EQ-i.
3. **Benefits:** There are no monetary benefits to the participants as a result of participation in the study.
4. **Risks:** There are no risks associated with participation in the study.
5. **Confidentiality:** No names of participants will be used during the study. Each participant will be assigned a number.
6. **Alternative Procedures:** There will be no prescribed order for taking either survey. The testing may vary based on availability of test book and computers.
7. **Participant's Assurance:** Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty,

prejudice, or loss of benefits. Questions concerning the research should be directed to Mr. Bill Riffle at 228-896-4633. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820. A copy of this form will be given to the participant.

- 8. Signatures:** In conformance with the federal guidelines, the signature of the participant or parent or guardian must appear on all written consent documents. The University also requires that the date and the signature of the person explaining the study to the subject appear on the consent form.

Research Participant \_\_\_\_\_ Date \_\_\_\_\_

Individual Explaining the Study \_\_\_\_\_  
Date \_\_\_\_\_

Under 18 Research Participant \_\_\_\_\_ Date \_\_\_\_\_

Parent/Guardian \_\_\_\_\_ Date \_\_\_\_\_

Participants Initials \_\_\_\_\_

**THE UNIVERSITY OF SOUTHERN MISSISSIPPI**  
**AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT**  
**(Short Form - to be used with oral presentation)**

Participant's Name \_\_\_\_\_

Consent is hereby given to participate in the research project entitled  
**EMOTIONAL MATURITY OF ADOLESCENTS AND ADULTS IN GED  
PROGRAMS**

All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained by \_\_\_\_\_. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to Bill Riffle at 228-896-4633. This project and this consent form have been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

A copy of this form will be given to the participant.

Research Participant \_\_\_\_\_ Date \_\_\_\_\_

Individual Explaining the  
Study \_\_\_\_\_ Date \_\_\_\_\_

Under 18 Research  
Participant \_\_\_\_\_ Date \_\_\_\_\_

Parent/Guardian \_\_\_\_\_ Date \_\_\_\_\_



Participants Initials \_\_\_\_\_

APPENDIX E  
INSTRUMENT PERMISSION LETTERS

May 21, 2009

Dr. David Lee  
Assistant Professor of Educational Leadership and Research  
University of Southern Mississippi  
118 College Drive #5027  
Hattiesburg, MS 39406-0001

Multi-Health Systems, Inc.  
P.O. Box 950  
North Tonawanda, NY 14120-0950

To Whom It May Concern:

This is to confirm that Billy J. Riffle is enrolled in the University of Southern Mississippi, and is actively pursuing a doctoral degree in Educational Leadership and Research. One of instruments he has planned to utilize is the Emotional Quotient Inventory (EQ-i) for group analysis.

Please feel free to direct any questions you may have for me at:  
david.e.lee@usm.edu or call 601-266-6062.

Sincerely,

David E. Lee

From "Catherine Wong" <catherine.wong@MHS.com>  
Subject EQI Copyright Clearance  
Date Tue, April 7, 2009 3:03 pm  
To bill.riffle@gulfportschools.org

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Hi Bill,

It was good speaking with you. I have attached here the copyright clearance letter you need to sign and send back to me so I can release the EQI Sample for you to include for your IRB approval.

Please let me know if you have any questions.

Thank you

Catherine Wong  
Inside Sales Support

MULTI HEALTH SYSTEMS INC

Tel: 1-800-268-6011 ext 227

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**SENT VIA ELECTRONIC MAIL**

April 7, 2009

Direct dial: 1-800-456-3003 ext. 227

E-mail: catherine.wong@mhs.com

**Attention:** Bill Riffle

**Re: Copyright Clearance Letter**

Thank you for your interest in Multi-Health Systems Inc. ("MHS") and request for the EQI (test). This letter provides Bill Riffle (the "Party") with permission to reproduce one copy of the EQI (test) at no cost.

The Party will not be permitted to make additional reproductions of the EQI (test) without first obtaining express written permission from MHS, which may be subject to additional costs. The Party agrees to return and/or destroy the EQI (test) within thirty (30) days of receipt.

The Party shall not, directly or indirectly, disclose, divulge, reveal, report, publish, transfer or otherwise communicate, or use for its or his own benefit or the benefit of any other person, partnership, firm, corporation or other entity, or misuse in any way, any of the EQI (test) components.

Please sign and return a copy of this letter acknowledging your understanding of our relations. If you have any questions or concerns regarding the foregoing, please feel free to contact me.

We accept the arrangements outline above.

LICENSEE:

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Authorized Signing Representative

---

Date

Sincerely,

MULTI-HEALTH SYSTEMS INC.

Per: Catherine Wong

From "Tyrone Williams" <tyrone.williams@MHS.com>  
Subject Welcome to MHS Scoring Organizer  
Date Wed, August 19, 2009 4:44 pm  
To griff2003@yahoo.com,bill.riffle@gulfportschools.org

---

Hello Bill,

This is Tyrone with MHS. I've reviewed your Research Discount Application and you're approved. This means you will get 30% off of all related orders over \$50 as well as a flat rate of \$5 per participant for online administration and scoring. You can call client services at 1.800.456.3003 to place your order at any time. You'll find instructions for administration and scoring attached and below.

I want to confirm that the address/email information on your file is accurate, please indicate which of the following you would like me to use

Please confirm the following:

Your address and email address:

16040 N. April Dr.

Gulfport, MS

39503

[griff2003@yahoo.com](mailto:griff2003@yahoo.com)

OR should I update it to match your qualification form:

Gulfport School District

2507 21 Ave

Gulfport, MS

39501

[bill.riffle@gulfportschools.org](mailto:bill.riffle@gulfportschools.org)

## REFERENCES

- Adams, C., Labouvie-Vief, G., Hakim-Larson J., DeVoe, M., & Hayden, M. (1989). *Modes of thinking and problem solving: Developmental transitions*. Manuscript submitted for publication.
- Agodini, R., & Dynarski, M. (1998, October). *Understanding the trend toward alternative certification for high school graduates*. Presented at the Twentieth Annual APPAM Research Conference, New York
- Alexander, K. L., Entwisle, D. R., & Horsey, C. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education, 70*, 87-107.
- Alexander, K. L., Entwistle, D. R., & Kabaani, N. (2001). The dropout process in life course perspective: Early risk factors at home and school. *Teachers College Record 103*, 760-822.
- Anastasi, A. (1982). *Psychological testing* (6th ed.). New York: MacMillan.
- Austin, E. J., Saklofske, D. H., & Egan, V. (2005). Personality, well-being and health correlates of trait emotional intelligence. *Personality and Individual Differences, 38*, 547-558.
- Barling, J., Slater, F., & Kelloway, E. (2000). Transformational leadership and emotional intelligence: An exploratory study. *Leadership and Organization Development, 21*(3), 157-161.
- Bar-On, R. (1997). *The Emotional Quotient Inventory (EQ-i): Technical manual*. Toronto, Canada: Multi-Health Systems.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence. *Psicothema, 18*, 13-25.

- Bar-On, R., Handley, R., & Fund, S. (2006). The impact of emotional intelligence on performance. In V. Druskat, F. Sala, & G. Mount (Eds.) *Linking emotional intelligence and performance at work: Current research evidence* (pp. 3-19). Mahwah, NJ: Lawrence Erlbaum.
- Beard, J. G. (1986). *Minimum competency testing update*. Princeton, NJ: ERIC Clearinghouse on Tests Measurement and Evaluation, Educational Testing Service (ERIC Document 284910)
- Ben-Zur, H. (2003). Happy adolescents: The link between subjective well-being, internal resources, and parental factors. *Journal of Youth and Adolescence*, 32(2), 67-79.
- Boyatzis, R. E. (2001). Developing emotional intelligence. In C. Cherniss & D. Goleman (Eds.), *The emotionally intelligence workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. San Francisco: Jossey-Bass.
- Boyatzis, R. E. (2005). Core competencies in coaching others to overcome dysfunctional behavior. In V. Druskat, G. Mount & F. Sala, (Eds.). *Emotional intelligence and work performance* (pp. 81-95). Mahwah, NJ: Erlbaum.
- Boyatzis, R. E. (2007). *The creation of the emotional and social competency inventory (ESCI)*. Boston: Hay Group.
- Butler, C. J., & Chinowsky, P. S. (2006). Emotional intelligence and leadership behavior in construction executives. *Journal of Management in Engineering*, 22(3), 119-125.

- Byrne, J. C., Dominick, P. G., Smither, J. W., & Reilly, R. R. (2007). Examination of the discriminant, convergent, and criterion-related validity of self-ratings on the emotional competence inventory. *International Journal of Selection and Assessment, 15*(3), 341-353.
- Cameron, S. V., & Heckman, J. (1993). The nonequivalence of high school equivalents. *Journal of Labor Economics, 11*(2) 1-47.
- Catterall, J. (1989). Standards and school drop outs: A national study of tests required for high school graduation. *American Journal of Education, 98*, 1-34.
- Chaplin, D. (1999, November). *GEDs for teenagers: Are there unintended consequences?* Paper presented at the Annual Meeting of the Association for Public Policy Analysis and Management, Washington, DC.
- Ciarrochi, J. V., Chan, A. Y. C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences, 28*(3), 539–561.
- Cook-Cottone, C., & Meier, S. (2005). Test review of the Mayer-Salovey-Caruso Emotional Intelligence Test. In R. A. Spies & B. S. Plake (Eds.), *The sixteenth mental measurements yearbook* [Electronic version]. Retrieved from <http://www.unl.edu/buros>
- Cote, S., & Miners, C.T.H. (2006). Emotional intelligence, cognitive intelligence, and job performance. *Administrative Science Quarterly, 51*(1), 1-28.
- Cox, A. (2001). Test review of the BarOn Emotional Quotient Inventory. In B. S. Plake & J. C. Impara (Eds.), *The fourteenth mental measurements yearbook* [Electronic version]. Retrieved from <http://www.unl.edu/buros>



- Cronbach, L. (1949). *Essentials of psychology testing*. New York: Harper & Row.
- Davies, M., Stankov, L., & Roberts, R. D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*, 989–1015.
- Dawda, D., & Hart, S.D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (1997; 2000) in university students. *Personality and Individual Differences, 28*, 797-812.
- Downie, N. M., & Heath, R. W. (1970). *Basic statistical methods* (3rd ed.). New York: Harper and Row.
- Druskat, V. U., Sala, F., & Mount, G. (2006). Introduction: Emotional intelligence and work performance. In V. U. Druskat, F. Sala, & G. Mount (Eds.) *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups* (pp. 17-46). Mahwah, NJ: Lawrence Erlbaum
- Dunn, E. W., Brackett, M. A., Ashton-James, C., Schneiderman, E., & Salovey, P. (2007). On emotionally intelligent time travel: Individual differences in affective forecasting ability. *Personality and Social Psychology Bulletin, 33*, 85-93.
- Elkind, D. (2001). *The hurried child: Growing up too fast too soon* (3rd ed.). Cambridge, MA: Perseus.
- Ensminger, M., & Slusarcick, A. (1992). Paths to high school graduation or dropout: A longitudinal study of a first-grade cohort. *Sociology of Education 65*(2), 925-1115.

- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191.
- Feist, G. J., & Barron, F. (1996, June). *Emotional intelligence and academic intelligence in career and life success*. Paper presented at the Annual Convention of the American Psychological Society, San Francisco
- Fernández-Berrocal, P., & Extremera, N. (2006). Emotional intelligence: A theoretical and empirical review of its first 15 years of history. *Psicothema*, *18*, 7-12.
- Fleishman, E. B. (2004). *Adolescent literacy: A national reading crisis*. New York: Scholastic Incorporated.
- Flesch, R. (1948). A new readability yardstick, *Journal of Applied Psychology*, *32*, 221-233.
- Fountain, G. (1961). Adolescent into adult: An inquiry. *Journal of the American Psychoanalytic Association*, *9*, 417-433.
- Freudenthaler, H., Neubauer, A., Gabler, P., Scherl, W. & Rindermann, H. (2008). Testing the trait emotional intelligence questionnaire (TEIQue) in a German-speaking sample. *Personality and Individual Differences*, *45*, 673-678.
- Galambos, N. L., MacDonald, S., Naphtali, C., Cohen, A., & de Frias, C. (2005). Cognitive performance differentiates selected aspects of psychosocial maturity in adolescence. *Developmental Neuropsychology*, *28*(1), 473-492.

- Galambos, N. L., & Tilton-Weaver, L. C. (2000). Adolescents' psychosocial maturity, problem behavior, and subjective age: In search of the adultoid. *Applied Developmental Science, 4*, 178–192.
- Gall, M., & Stixrud, W. (2008). The 4 S's of adolescent success. *Independent School Magazine, 67*(4), 54-65.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, L., & Stough, C. (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership and Organizational Development, 23*(1/2), 68-79.
- GED Testing Service. (2007). *GED 2006 testing program statistical report*. Washington, DC: American Council on Education.
- Gignac, G. (2008). *Genos emotional intelligence inventory: Technical manual*. Genos Press: Sydney, NSW.
- Goldschmidt, P., & Wang, J. (1999). When can schools affect dropout behavior? A longitudinal multilevel analysis. *American Educational Research Journal, 36*, 715-738.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Goleman, D. (2000). Emotional intelligence: Issues in paradigm building. In D. Goleman, & C. Cherniss (Eds.), *The emotionally intelligent workplace:*

*How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations.* (pp. 13-26), San Francisco, Jossey-Bass.

Goleman, D. (2008). When emotional intelligence does not matter more than IQ.

Retrieved from [www.danielgoleman.info/blog/2008/03/24/when-emotional-intelligence-does-not-matter-more-than-iq](http://www.danielgoleman.info/blog/2008/03/24/when-emotional-intelligence-does-not-matter-more-than-iq).

Grigg, W. S., Daane, M. C., Jin, Y., & Campbell, J. R. (2003). *The nation's report card: Reading 2002.* (National Assessment of Educational Progress Report). Retrieved from

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubin=2003521>

Grissom, J., & Shepard, L. (1989). Repeating and dropping out of school. In L. A. Shepard & M. L. Smith (Eds.), *Flunking grades: Research and policies on retention.* pp. 34-63. London: Falmer Press

Guion, R. (2001). Test review of the BarOn Emotional Quotient Inventory. From B. S. Plake & J. C. Impara (Eds.), *The fourteenth mental measurements yearbook* [Electronic version]. Retrieved from <http://www.unl.edu/buros>

Guthrie, J., & Wigfield, A. (2000). Engagement and motivation in reading. In M. Kamil, P. Mosenthal, P. Pearson & R. Barr (Eds.), *Handbook of reading research* (Vol.3, pp. 403-22). Mahwah, NJ: Lawrence Earlbaum

Handley, R. (1997, April). AFRS rates emotional intelligence. *Air Force Recruiter News.*

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion.* New York: Cambridge University Press.

- Heckman, J. J., & Krueger, A. B. (2003). *Inequality in America: What role for human capital policies?* Cambridge, MA: MIT Press.
- Hickman, G. P., Bartholomew, M., Mathwig, J., & Heinrich, R. (2008). Differential developmental pathways of high school dropouts and graduates. *Journal of Educational Research, 102*(1) 3-14.
- Hofstee, W. K. B. (2001). Intelligence and personality: Do they mix? In J. M. Collins & S. Messick (Eds.), *Intelligence and personality: Bridging the gap in theory and measurement* (pp. 43-60). Mahwah, NJ: Lawrence Erlbaum.
- Hunter, J. & Hunter, R. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin, 96*, 72-98.
- Jablonsky, A. (1974). *Dropouts: An annotated bibliography of doctoral dissertations*. ERIC-IRCD Doctoral Research Series, (ERIC Document Reproduction Service No. ED364540). Retrieved from [eric.ed.gov/ERICWebPortal/recordDetail?accno=ED096362](http://eric.ed.gov/ERICWebPortal/recordDetail?accno=ED096362)
- Jimerson, S. (1999). On the failure of failure: Examining the association between early grade retention and education and employment outcomes during late adolescence. *Journal of School Psychology, 37*(3), 243-272.
- Joftus, S. (2002). *Every child a graduate: A framework for an excellent education for all middle and high school students*. Washington, DC: Alliance for Excellent Education. (ERIC Document Reproduction Service No. ED470267)
- Knowles, M. et al. (1984). *Andragogy in Action. Applying modern principles of adult education*, San Francisco: Jossey Bass.

- Koh, B. H. (1999). *A study of relationships between emotional intelligence, academic achievement and vocational choice*. Masters thesis, Universiti Utara Malaysia.
- Lahav, H. (1999). At-risk youth: The phenomenon in perspective (in reflection). *Separation to Integration, 10*, 8-16.
- Lam, L. T., & Kirby, S. L. (2002). Is emotional intelligence an advantage? An exploration of the impact of emotional and general intelligence on individual performance. *Journal of Social Psychology, 142*(1), 133-143.
- Landsberg, M. (2006, January 29). The vanishing class: Back to basics: Why does high school fail so many? *The Los Angeles Times, Metro News*, p. A1.
- Law, K. S., Wong, C. S., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology, 89*(3), 483-496.
- Lee, V., & Burkam, D. (2003). Dropping out of high school: The role of school organization and structure. *American Educational Research Journal, 40*(2), 353-393.
- Lesko, N. (2001). *Act your age! A cultural construction of adolescence*. New York: Routledge/Falmer.
- Leung, S. (2005). Test review of the Mayer-Salovey-Caruso Emotional Intelligence Test. From R. A. Spies & B. S. Plake (Eds.), *The sixteenth mental measurements yearbook* [Electronic version]. Retrieved from <http://www.unl.edu/buros>

- Lipschitz-Elhawi, R., & Itzhaky, H. (2008). The contribution of internal and external resources to emotional adjustment: A comparison of at-risk and normative adolescents. *Child & Adolescent Social Work Journal, 25*(5), 385-396.
- Loo, T. (2006, July 22). *What Is emotional intelligence?*. Retrieved from <http://ezinearticles.com/?What-Is-Emotional-Intelligence?&id=249807>
- Lopes, P. N., Grewal, D., Kadis, J., Gall, M., & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. *Psicothema, 18*, 132-138.
- Lyons, J. B., & Schneider, T. R. (2005). The influence of emotional intelligence on performance. *Personality and Individual Differences, 39*(4), 693-703.
- Matthews, G., Emo, A., Roberts, R. D., & Zeidner, M. (2006). What is this thing called emotional intelligence? In R. Murphy (Ed.), *A critique of emotional intelligence: What are the problems and how can they be fixed?* (pp. 3-36). Mahwah, NJ: Erlbaum.
- Matthews, G., Zeidner, M., & Roberts, R. (2002). *Emotional intelligence: Science & myth*. Cambridge, MA: The MIT Press.
- Mayer, J. D., & Ciarrochi, J. (2001). Clarifying concepts related to emotional intelligence: A proposed glossary. In J. Ciarrochi, J. Forgas & J. Mayer (Eds.): *Emotional intelligence in everyday life* (p. 261). New York: Psychology Press.
- Mayer, J. D., & Cobb, C. D. (2000). Educational policy on emotional intelligence: Does it make sense? *Educational Psychology Review, 12*(2), 163–183.

- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence, 17*, 433-442.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational applications* (pp. 3-31). New York: Basic Books.
- McCall, H. (2003). When successful alternative students "disengage" from regular school. *Reclaiming Children and Youth: The Journal of Strength-based Interventions, 12*(2), 113-117.
- Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the trait emotional intelligence questionnaire: Factor structure, reliability, construct, and incremental validity in a French-speaking population. *Journal of Personality Assessment, 88*, 338-353.
- Miller-Grotas, J. (2003). To know thyself: The roles of accuracy of self-assessment, personality, and cognitive intelligence in assessment center performance. *Dissertation Abstracts International, 65*(6), 3207.
- Mississippi Department of Education. (2007). *Report of the at-risk students subcommittee of the house education committee*. Retrieved from <http://www.mde.k12.ms.us/Extrel/leg/2007/AtRiskReport.pdf>
- Mississippi Department of Education. (2009). *Effective at-risk programs*. Retrieved from [http://www.mde.k12.ms.us/SBE\\_policymanual/4905.htm](http://www.mde.k12.ms.us/SBE_policymanual/4905.htm)
- Mizell, C. A. (1999). African American men's personal sense of mastery: The consequences of the adolescent environment, self-concept, and adult achievement. *Journal of Black Psychology, 25*(5), 210-230.



- Modecki, K. (2008). Underlying processes of antisocial decisions: Adolescents versus adults. *Dissertation Abstracts International: Section B: The Sciences and Engineering Vol. 68(8-B)*, 5635.
- Montes, G., & Lehmann, C. (2004). *Who will drop out from school? Key predictors from the literature*. (T04-001). Children's Institute Technical Report.
- Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. (1975). *SPSS: Statistical package for the social sciences*. New York: McGraw-Hill.
- Norms book: Complete battery and survey*. (2004). Monterey, CA: CTB/McGraw Hill.
- Orfield, G. (Ed.). (2004). *Dropouts in America: Confronting the graduation rate crisis*. Cambridge, MA: Harvard Education Press.
- Palmer, B., & Stough, C. (2000). The Swinburne University Emotional Intelligence Test: Technical manual. Melbourne, Australia.
- Payne, R. (1998). *A framework for understanding poverty*. Highlands, TX: aha! Process.
- Petrides, K., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36, 277–293.
- Petrides, K., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology*, 36, 552-569.

- Rachal, J. R., & Bingham, M. J. (2004). The adolescentizing of the GED. *Adult Basic Education, 14*, 32-44.
- Reardon, S. (1996, April). *Eighth grade minimum competency testing and early high school dropout patterns*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Rice, F. P. (1987). *The adolescent: Development, relationships, and culture* (4th ed.). Boston: Allyn and Bacon.
- Rodeck, E., Plake, B., & Davis, S. (2006, July). *Cultural generalization of non-cognitive concepts: Implications for measurement*. Paper presented at the 2006 International Testing Commission Conference, Brussels, Belgium.
- Ronda, M. A., & Valencia, R. (1994). "At-Risk" Chicano students: The institutional and communicative life of a category. *Hispanic Journal of Behavioral Sciences, 16*(4), 363-395
- Rovnak, A. M. (2007). A psychometric investigation of the Emotional Quotient Inventory in adolescents: A construct validation and estimate of stability *Dissertation Abstracts International Section A: Humanities and Social Sciences Vol. 68*(9-A) 3747.
- Rumberger, R., & Larson, K. (1998). Student mobility and the increased risk of high school dropout. *American Journal of Education, 107*, 1-35.
- Sala, F., & Dwight, S. A. (2002). Predicting executive performance with multi-rater surveys: Whom you ask makes a difference. *Consulting Psychology Journal: Practice and Research, 54*, 166-172.

- Salovey, P., Hsee, C., & Mayer, J. D. (1993). Emotional intelligence and the regulation of affect. In D. M. Wegner & J. W. Pennebaker (Eds.), *Handbook of mental control* (pp. 258-277). Englewood Cliffs, NJ: Prentice Hall.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*, 185-211.
- Schaffer, A. (2004, March). Roper v. Simmons asks how adolescent and adult brains differ. *Medical examiner: Health and medicine explained*. Retrieved from <http://www.slate.com/id/2108284>
- Schulman, P. (1995). Explanatory style and achievement in school and work. In G. Buchanan & M. E. P. Seligman (Eds.), *Explanatory style* (pp. 159-171). Hillsdale, NJ: Lawrence Erlbaum.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., . . . . Golden, C. J. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*, 167-177.
- Schutte, N. S., Schuettpelez, E., & Malouff, J. M. (2001). Emotional intelligence and task performance. *Imagination, Cognition, and Personality, 20*, 347-354.
- Scott, E. S., Reppucci, N. D., & Woolard, J. L (1995). Evaluation adolescent decision making in legal contexts. *Law and Human Behavior, 19*, 221-244.
- Seligman, M., & Csikzentmihalyi, M.(2000). Positive psychology: An introduction. *American Psychologist, 55*, 5-14.

- Singh, D. (2003). *Emotional intelligence at work: A professional guide*. New Delhi: Response Books.
- Sizer, T. R. (1984). *Horace's compromise: The dilemma of the American high school*. Boston: Houghton Mifflin.
- Smith, C., & Carlson, B. E. (1997). Stress, coping, and resilience in children and youth. *Social Service Review*, 71(2), 231-256.
- Spencer, L., & Spencer, S. (1993). *Competence at work*. New York: John Wiley.
- Steinberg, L., & Cauffman, E. (1996). Maturity of judgment in adolescence: Psychosocial factors in adolescent decision making. *Law and Human Behavior*, 20, 249-272.
- Summers, J. (2002, October). *More harm than good? Restricting teenagers' access to the GED* (Working Paper No. 19). Urban Appalachian Council.
- Sun, Y. (2007, December 22). *The challenges faced by present day youth*. Presented at the YMM National Convention, Pusat Kokurikulum, JPN, PP.
- Swaim, R. C., Beauvais, F., Chavez, E. L., & Oetting, E. R. (1997). The effect of dropout rates on estimates of adolescent substance use among three racial/ethnic groups. *American Journal of Public Health*, 87(1), 51-55.
- Swanson, C. D. (2004). *Projections of 2003-04 high school graduates: Supplemental analysis based on findings from Who Graduates? Who Doesn't?* The Urban Institute, Washington, D C, Retrieved from <http://www.urban.org/url.cfm?ID=411019>
- Temple, J. A., Reynolds, A. J., & Miedel, W. T. (1998). *Can early intervention prevent high school dropout? Evident from the Chicago Child-Parent*

*Centers* [Discussion Pager No. 1180-98]. Institute for Research on Poverty. Madison: University of Wisconsin.

Thorndike, E. (1920). *Intelligence and its uses*. Harper's Magazine, 140, 227-235.

Van Rooy, D. L., Alonso, A., & Viswesvaran, C. (2005). Group differences in emotional intelligence scores: Theoretical and practical implications. *Personality & Individual Differences*, 38(3), p. 689-700.

Wagner, F. R., & Morse, J. J. (1975). A measure of individual sense of competence. *Psychological Reports*, 36, 451-459.

Wechsler, D. (1940). Nonintellective factors in general intelligence. *Psychological Bulletin*, 37, 444-445.

Wenner, G. (2006). Kindergarten screens as tools for the early identification of children at risk for remediation or grade retention. *Psychology in the Schools*, 32(4), 249-254.

Wong, C. S., Wong, P. M., & Law, K. S. (2007). Evidence on the practical utility of Wong's emotional intelligence scale in Hong Kong and Mainland China. *Asia Pacific Journal of Management*, 24, 43-60.

Zenisky, A., Keller, L., & Sireci, S. G. (2004). A basic primer for understanding standardized tests and using test scores [Electronic version]. *Adventures in Assessment*, 16, 29-34.