The Emotional Intelligence of Award-Winning Fitness Industry Professionals

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THE EMOTIONAL INTELLIGENCE OF AWARD-WINNING
FITNESS INDUSTRY PROFESSIONALS

by

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A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements

for the degree of
Doctor of Philosophy

Grand Forks, ND
May
2004
This dissertation, submitted by Terry Eckmann in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Katrina A. Meyer  
Chairperson

[Signatures of other committee members]

This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

Dean of the Graduate School

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ABSTRACT

The purpose of this study was to investigate if award-winning fitness professionals with careers as fitness instructors, personal trainers, and program directors demonstrate higher emotional intelligence than non-award winning fitness professionals as measured by the Emotional Competency Inventory (ECI). The study also compared self and others' assessment scores as well as differences among women and men and individuals of various ages.

Thirty award winners (23 women and 7 men) and 77 non-award winners (60 women and 17 men) participated in this study. The sample ranged from 23 to 70 years of age. MANOVA was used to analyze the data and significant multivariate results were found (Wilk's Lambda = .643, F(19,88)=2.72, p=.001) when award winners and non-award winners were compared on the 18 ECI competencies. Award winners scored higher on 10 out of 18 competencies. Significant multivariate analysis results were also found (Wilks' Lambda = .793, F(4,102)=6.67, p<.001) when award winners and non-award winners were compared on the four cluster scores and on the ECI composite score. Significant differences were also found between award winners self-assessment and their clients' assessment on the ECI composite score, four cluster scores (Wilks' Lambda = .704, F(4,47)=4.95, p=.002), and competency scores (Wilks' Lambda = .288, F(18,33)=4.53, p<.001). Clients rated the award winners higher on the ECI composite score, three out of four cluster scores, and eight out of 18 competency scores. No
significant differences were found between male and female award winners. No relationship existed between age and the score of award winners (n=30). There was a small positive relationship (p=.033) between age and the ECI composite score for all participants (n=107). Additional analysis indicates that there is a relationship between the criteria used to select award winners and the competencies measured by the ECI.
CHAPTER I

THE RESEARCH PROBLEM

Introduction

The concept of emotional intelligence (EI) is increasing in popularity and has become a rapidly growing area of research (Goleman, 1995 & 1998; Lam, 2002; Langley, 2000; Megerian & Sosik, 1996). Salovey and Mayer (1990) first proposed a theory of emotional intelligence and Goleman (1995) popularized the concept with his book, *Emotional Intelligence*. Howard Gardner (1995) contended that *Emotional Intelligence* (Goleman, 1995) is the most widely read social science book in the world. Amazon.com now lists more than 70 titles on emotional intelligence.

Consistent with the interest in EI, this study proposes to research the EI of professionals who have won IDEA Fitness Instructor of the Year, IDEA Personal Trainer of the Year, and IDEA Program Director of the Year. IDEA Health and Fitness Association, formerly International Dance Exercise Association (IDEA), awards fitness professionals for superior instructional abilities, capability to influence people, creativity, strong leadership skills in the community and the fitness industry, and high degree of motivation. The current literature would support that these characteristics are directly related to EI (Goleman, 1998). This connection has yet to be studied and is the purpose of this research.
One of the instruments used for assessing EI in this study is the Emotional Competence Inventory (ECI). The ECI surveys emotional competencies including self-awareness and self-control, ability to influence and develop others, catalyst of change, developing others, service orientation, initiative, and achievement drive (Sala, 2002). While there is a growing body of research related to EI, no research has been found regarding EI and professionals in the fitness industry.

Purpose of the Study

This study will investigate if IDEA Group Fitness Instructor of the Year, IDEA Personal Trainer of the Year, and IDEA Program Director of the Year Award Winners demonstrate higher emotional intelligence than non-award-winning IDEA Health and Fitness Association members, as measured by the Emotional Competence Inventory (ECI). This study will attempt to identify if there are significant differences on the ECI composite score, the four cluster scores and 18 emotional competencies of IDEA Award Winners versus non-award winners. And for IDEA Award Winners, the study will compare self-assessment and others’ assessment scores as well as differences among women and men and individuals of various ages.

Definitions

The following definitions are provided to clarify the terms of this study:

1. Emotional competence is a learned capability, based on emotional intelligence, that results in outstanding performance at work (Goleman, 1998). Emotional competence describes the personal and social skills that lead to superior performance in the world of work (Cherniss & Goleman, 2001).

3. Emotional intelligence is 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 (Salovey & Mayer, 1990). EI is the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in self and others (Mayer, Caruso, & Salovey, 1999). Goleman (1998) further defines emotional intelligence as the demonstration of the competencies that constitute self-awareness, self-management, social awareness, and social skills at appropriate times and ways in sufficient frequency to be effective in the situation.

4. IDEA Health and Fitness Association is a membership organization for fitness professionals. Originally, IDEA was an acronym for International Dance Exercise Association, but today it is used on its own with the tag line Health and Fitness Association. The organization's mission is to support the world's leading health and fitness professionals with credible information, education, career development and leadership to help them enhance the quality of life worldwide through participation in safe, effective fitness and healthy lifestyle programs. IDEA Membership is open to anyone and offers a spectrum of informational services for professionals in the fitness industry. http://www.ideafit.com/mission.htm.

5. IDEA Fitness Instructor of the Year is an award that recognizes an IDEA member who demonstrates strong leadership skills through community and industry
involvement and whose superior instructional abilities and influence as an instructor motivate active and underactive people to commit to healthy lifestyles (Durrett, 2000).

6. IDEA Program Director of the Year is an award that recognizes an IDEA member who is a healthy role model, who demonstrates keen professional commitment through community and industry involvement and whose outstanding leadership inspires staff and influences both active and underactive people to commit to a healthy lifestyle through successful, creative and diverse programming (Durrett, 2000).

7. IDEA Personal Trainer of the Year is an award that recognizes an IDEA member who is a practicing industry professional spending at least 15 hours per week actually training clients one-to-one and has demonstrated exceptional leadership, business management, motivational and instructional skills, and who has inspired his or her clients to greater personal growth and a higher level of fitness (Durrett, 2000).

Significance of the Study

This research seeks to study whether significant differences exist between IDEA Award Winners and non-award winners on the overall ECI score, four cluster scores (self-awareness, self-regulation, social awareness, and relationship management), and the 18 ECI competencies. If differences exist and IDEA Award Winners demonstrate higher scores on these measures, the evidence could indicate that professionals in these careers should strive to develop specific emotional competencies that will enhance EI. Professionals developing curriculum for professionals and students in the fitness industry could use this information to develop educational programs that include emotional competency training in the curriculum.
Such a difference might also support a possible correlation between the criteria for selecting award winners and EI as measured by the emotional competencies of the ECI. The research might also suggest differences between males and females, among individuals of various ages, and self and other assessments for IDEA Award winners on the overall ECI score, four cluster scores and 18 competencies contributing to the current literature.

Conceptual Framework

Goleman (1998) believes that most effective positive leaders are alike in one crucial way: they all have a high degree of emotional intelligence. He explains the difference between emotional intelligence and emotional competence as a learned capability (emotional competence) versus a potential for learning (emotional intelligence) the practical skills of emotional competence. It appears that emotional intelligence is the ability or capacity to develop the emotional competencies that are collectively the skills of emotional intelligence. Mayer and Salovey (1993) chose the words emotional intelligence over emotional competence in order to link their framework to the historical literature on intelligence. The conceptual framework of this study is based on emotional competence as defined by Goleman (Cherniss & Goleman, 2001). The ECI used in this study measures 18 competencies organized in four clusters: self-awareness, self-management, social awareness, and relationship management (Cherniss & Goleman; Goleman, 1998; Sala, 2002). This framework and the ECI assessment tools have evolved and appear to continually be improved and refined with ongoing research (Goleman, 1995; Goleman, 1998; Cherniss & Goleman, 2001; Sala, 2002). Three of the
more popular frameworks of EI and their corresponding assessment tools will be
described in Chapter II.

Emotional intelligence as measured by tests of emotional competency is being
examined in various professional arenas as a contributing factor to success. Spencer and
Spencer (1993) report that in 300 studies of companies having a wide array of jobs,
emotional competencies are more important and carry more weight than cognitive
abilities when looking at successful job performance. Goleman’s (1998) doctoral
advisor, McClelland, sparked Goleman’s interest in EI with his discovery that the
emotional competency measures of empathy, initiative, and self-discipline better
distinguish success on the job than traditional academic aptitude, school grades and
advanced credentials (McClelland, 1973). Goleman (1998) conducted an analysis of
competence models for 181 different positions drawn from 121 companies and
organizations worldwide and found that 67 percent of the abilities deemed essential for
effective performance were emotional intelligence competencies.

Goleman (1998) reported that successful customer service representatives from
Blue Cross health insurance divisions exhibit high self-control, conscientiousness, and
empathy. Key competencies he identified for successful retail store managers were self-
control, conscientiousness, empathy, and service orientation. These competencies are all
measured by the ECI. The literature supports that performance of jobs with a high level
of interpersonal contact such as customer service, sales, and management positions are
highly affected by emotional competence (Bass & Avolio, 1994; Salovey, Mayer &
Caruso, 2002; Sojka & Deeter-Schmelz, 2002; Tucker, Sojka, Barone & McCarthy,
2000).
Fitness instructors, personal trainers, and program directors are fitness professionals whose jobs require a wide range of emotional competencies. It appears that the criteria for IDEA Award Winners align with the competencies measured by the ECI. According to IDEA Vice President, Pat Ryan (personal communication, October 14, 2003), peer committees and the IDEA staff determined the criteria for award winners without conscious knowledge of emotional intelligence or the competencies measured by the ECI. The IDEA Award Winner criteria of community involvement and influence on the general public may require the emotional competencies of self-management (adaptability, achievement orientation, and initiative), social awareness (empathy, and service orientation), and relationship management (influence, developing others, leadership, change catalyst, and teamwork and collaboration). The IDEA Award Criteria of development of professional credibility of self and the fitness industry may require the emotional competencies of self-awareness (accurate self-assessment and self-confidence), self-management (emotional self-control, optimism, adaptability, achievement drive, and initiative), social awareness (empathy, service orientation, and organizational awareness), and relationship management (developing others, influence, leadership, change catalyst, teamwork and collaboration). Because these fitness professionals require strong skills in the competencies measured by the ECI and the IDEA Award Winner criteria, a comparison of IDEA Award Winners and non-award winners may identify whether EI is a characteristic of award-winning fitness professionals.

Based on the entire ECI North American Database (N=3,628), self-ratings on the ECI tend to be, on average, .21 higher than ratings by others on all 20 competencies of the ECI. This suggests that people view themselves more favorably than others view
them; however, the correlations between self and others ratings suggest that ratings tend to be aligned, those rating themselves higher tend to be rated higher by others (Sala, 2002). It is argued by some researchers that self-reported EI measures lack reliability (Davies & Stanow, 1998); this study will examine whether ECI self-reported measures are reliable.

According to the research (Davis, 1995; Mayer, Caruso & Salovey, 1999; Sutarso, Baggett, Sutarso, & Tapia, 1996; Tapia, 1999), there are differences in EI between males and females. A variety of EI assessment tools have been used to measure these differences, so although it is suggested that women sometimes score higher than men on some EI measures there are not consistent measures that can be easily compared (Davis, 1995; Mayer, Caruso & Salovey, 1999; Sutarso et al., 1996; Tapia, 1999). In an analysis of 1,015 males and 496 females from the HayGroup EI database, Sala (2002) reports that gender differences were found on both self and others ratings on the ECI. Females rated themselves and were rated by others higher on the ECI than males rated themselves or were rated by others. The literature is mixed on this point and this study will further explore gender and EI. The majority of IDEA Award Winners in the categories of program director and fitness instructor are female; the majority of personal trainers are men. As males and females are recognized using the same criteria in the IDEA Award selection process, a comparison of gender on ECI scores will also be made in this study.

Studies indicate that there may be differences in emotional intelligence based on age (Bar-On, 2000a; Goleman, 1998; Mayer & Salovey, 1997). Bar-On (2000a) reports that EI scores improve with age and experience and the highest EI scores are among those in their forties and fifties. According to Sala (2002), ratings on ECI clusters by
both participants and others show positive correlation by age; older participants rated
themselves and were rated by others higher in ECI competencies than younger
participants; however, age ranges were not reported.

In this study the emotional competencies of IDEA Award Winners and non-award
winners and IDEA Award Winners and a corresponding others assessment were
measured and compared using the ECI. The variables of gender and age were also
investigated. The following research questions provide focus for the study.

Research Questions

1. Are there significant differences between IDEA Award Winners and non-
award winners on the overall ECI scores, four cluster scores (self-awareness, self-
management, social awareness, and relationship management) and the 18 ECI
competencies?

2. Are there significant differences between the self-ratings of award winners and
the ratings of their clients on the overall ECI score, four cluster scores, and 18 ECI
competencies?

3. Are there significant differences between male and female award winners on
the overall ECI score, four cluster scores, and 18 ECI competencies?

4. Is there a relationship between age and the scores of award winners on the
overall ECI score, four cluster scores, and 18 ECI competencies?

Limitations

The following limitations applied to the study:
1. IDEA Health and Fitness Association is only one of many membership associations for professionals in the fitness industry. Their awards recognize only IDEA members. Therefore, the results may not be generalizable to all of the fitness industry.

2. The Emotional Competence Inventory is one of the tools used to evaluate emotional intelligence. Therefore, other tools to assess emotional intelligence may show different results.

3. Emotional intelligence and the emotional competencies measured may be only one contribution to the success of professionals in the fitness industry. Therefore, the investigator may wish to consider further research based on the results of this study.

4. The sample size is 107; 30 IDEA Award winners and 77 IDEA non-award winners. Ninety women and 17 men participated in the study. The age range was 33 to 63 years.

Assumptions

The study is based on the following assumptions:

1. The responses to the ECI are accurate and truthful.

2. The procedures that have been used to validate the Emotional Competence Inventory (ECI) are reliable.

3. The standards for the IDEA Health and Fitness Awards and the process for selecting award winners are of sufficient rigor to identify the leaders in group fitness instruction, personal training, and program management.

Organization of the Dissertation

The dissertation is organized in five chapters. Chapter I introduced the problem statement, definitions, limitations, assumptions, purpose and significance of the study,
review of the literature, research questions, hypotheses, and methodology. Chapter II contains a review of the literature and research related to emotional intelligence. Chapter III contains a description of the research methodology. Chapter IV reports the data analyses and research findings. Chapter V contains a summary, conclusions and recommendations.
CHAPTER II
REVIEW OF THE LITERATURE

Chapter II begins with an overview of the history of emotional intelligence (EI). This chapter also provides support for EI as an intelligence and discusses EI frameworks that are prevalent in the literature. Assessment tools currently used to measure EI are reviewed, along with the literature on the influence of EI on job performance and leadership. Research on EI and gender and EI and age are also discussed as well as consistency of self and other assessments. The chapter concludes with a summary of training methods and strategies that are being used to improve EI.

The History and Evolution of Emotional Intelligence

The history of EI can be traced to many. Thomas Edison, for example believed that human intelligence consisted of combined intelligences of many "entities" within. Darwin (1965) proposed in *The Expression of Emotions in Man and Animals*, that the ability to send and read feelings plays a major role in the evolution of humans, both in the creation and maintenance of the social order. According to a history compiled by Kristine Paranica, Director of the University of North Dakota Conflict Resolution Center, Augustine (354-430 AD) believed that knowledge was obtained from self-awareness and that the mind works as a unit with independent facilities (K. P., personal communication, September 2, 2003). Aristotle in *Nicomachean Ethics* (c.322B.C.E/1962) stated that
“anyone can become angry, that is easy, to be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way is not easy”.

Thorndike’s (1920) research on social intelligence is tied to the concept of EI. Thorndike believed that no man was equally intelligent for all sorts of problems and that intelligence varied according to life situations. He divided the intelligences into abstract, mechanical, and social intelligences. He defined social intelligence as “the ability to understand and manage men and women, boys and girls, and to act wisely in human relations” (1920, p. 228). While Thorndike sees EI as a subset of social intelligence, Bernet (1996) suggests that it is social intelligence that is a subset of EI. Bernet believes that the awareness associated with EI is what creates social intelligence. Thorndike and Stein (1937) reviewed the attempts to measure social intelligence. They explored the three areas from Thorndike’s (1920) study of social intelligence: an individual’s attitude toward society and its various components, social knowledge, and social adjustment. With their survey of the experimentation on social intelligence, Thorndike and Stein (1937) concluded that “the ability to deal with people” had not been satisfactorily measured. They also seemed doubtful as to whether any test that was predominantly verbal could measure social ability. These authors suggested that further experimentation with situation tests, movies, and other experiences of social interaction would shed light on the ability to manage and understand people.

Walker and Foley (1973) reviewed the history and measurement of social intelligence and suggested that social intelligence is a cyclical concept that gained more attention after 1965. They saw the construction of valid measurements of social intelligence as a focal problem. They concluded that although the study of social
intelligence has been frustrating to psychologists, many now perceive social intelligence as a very important human ability. Although the value of social intelligence is unknown, it is tacitly recognized as important in social interaction.

Weschler (1958) defined intelligence as the “aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment” (p. 7). He began to see the value of affective, personal, and social factors as the interpersonal and intrapersonal elements defining intelligence (Weschler, 1940). He believed that these factors of intelligence were essential for predicting one’s ability to succeed in life. There seems to be a fundamental and ongoing debate about the nature of intelligence, whether it is a global attribute or a composite of discrete skills. Weschler’s (1958) definition and Gardner’s (1983) view of intelligence appear to be supportive of the theory of intelligence as a composite of discrete skills.

Gardner (1983) played a major role in the evolution of EI. In his theory of multiple intelligences, Gardner proposed two varieties of personal intelligence: interpersonal and intrapersonal intelligence. He proposed that intrapersonal and interpersonal intelligence are as important as general intelligence and the specific intelligence of knowledge and abilities such as verbal reasoning or spatial problem-solving evident in specific task as typically measured by IQ tests (Bukatko & Daehler, 1992). According to Gardner (1983), intrapersonal intelligence at its most advanced level allows one to detect and to symbolize complex and highly differentiated sets of feelings. Gardner also speaks of interpersonal intelligence, which permits a skilled adult to read the intentions and desires of other individuals and to act on this knowledge.
Bar-On (1997) developed the first instrument to assess emotional intelligence, using the term emotional quotient (EQ). He suggested that the concept of emotional intelligence brings new depth to the understanding of human intelligence. He also believed that like cognitive intelligence, EI is difficult to define. He stated that EI addressed the emotional, personal, social, and survival dimensions of intelligence, which are often more important for daily functioning than the more traditional cognitive aspects of intelligence. According to Bar-On, EI is concerned with understanding oneself and others, relating to people, and adapting to and coping with the immediate surroundings to be more successful in dealing with environmental demands.

Literature from the past decade credits Mayer and Salovey for coining the term emotional intelligence (Bar-On, 1997; Cherniss & Goleman, 2001; Goleman, 1995; Goleman, 1998; McDowelle & Bell, 1997). Salovey and Mayer (1990) define emotional intelligence as “the subset of social intelligence that involves 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 own thinking and actions (p. 189).” Because emotional intelligence refers in part to an ability to recognize the meanings of emotional patterns and to reason and solve problems based on them, Salovey and Mayer (1990) measure emotional intelligence with an ability construct model. According to Mayer, Salovey, and Caruso (2000) the ability construct model meets three criteria. First, mental problems have right or wrong answers. Second, the measured skills correlate with other measures of mental ability as well as with self-reported empathy. Third, the absolute ability levels rise with age. The mental ability model focuses on emotions themselves and their interactions with thought. According to Cobb and Mayer (2000), the ability
model defines emotional intelligence as a set of abilities and makes claims about the importance of emotional information and the potential uses of reasoning well with that information. The mixed models (Bar-On, 1997; Cooper & Sawaf, 1996; Goleman, 1998) assess emotional intelligence as an ability with social competencies, traits, and behaviors. Mixed models include personality characteristics such as achievement drive, initiative, and service orientation that may accompany EI (Mayer, Salovey, & Caruso, 2000b).

Goleman (1998), Bar-On (1997), and Cooper and Sawaf (1996) have measured EI through the exploration of emotional competencies. McClelland (1973) first focused on competencies and recommended study of competencies and associated habits of star performers, as they clearly add economic value to organizations. Gowing (Chernis & Goleman, 2001) describes emotional competence as the personal and social skills that lead to superior performance in the world of work. Goleman (1998) defines an emotional competence (EC) as “a learned capability based on emotional intelligence that results in outstanding performance at work” (p. 24). An emotional competency is any individual characteristic (or combination of characteristics) that can be measured reliably and that can distinguish superior from average performers, or effective from ineffective performance, at levels of statistical significance (Cherniss & Goleman, 2001).

The Consortium for Research on Emotional Intelligence in Organizations, a group of thirty members representing four universities, two large corporations, two federal agencies, and two large consulting firms, provided the research for the book *The Emotionally Intelligent Workplace* (Cherniss & Goleman, 2001). This book takes emotional intelligence into the workplace, showing how to measure and promote EI to enhance workplace performance. After popularizing the concept of EI in *Emotional*
Intelligence (1995), Goleman discovered that many business managers and consultants wanted to improve EI in the workplace, but needed guidance and training to proceed. As a result he formed the consortium in 1996. According to Goleman (1998), the rules for work are changing. He believes we are now being judged by a new yardstick: not just by our training and expertise or how smart we are, but also how we handle ourselves and others. EI is referred to as “a different way of being smart” (Goleman, 1998, p. 5).

Goleman (1998) identifies communication skills, interpersonal skills, and initiative as the three most desired capabilities corporations seek in the MBAs they hire (Dowd & Liedtka, 1994). Gowing (Chemiss & Goleman, 2001) stated that emotional intelligence refers to a person’s basic underlying capability to recognize and use emotion. Integrating the work of Goleman (1995, 1998) and Boyatzis (1982), Boyatzis, Goleman, and Rhee (1999) offer the following descriptive definition: emotional intelligence is observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness, and social skills at appropriate times and ways in sufficient frequency to be effective in the situation. The results of Goleman’s work (Goleman, 1995; Goleman, 1998) were the conceptual framework selected for this study. The five skill domains that comprise EI (Goleman, 1998) include self-awareness, self-regulation, motivation, empathy, and social skill. The four clusters measured by the ECI (Sala, 2002) include self-awareness, self-management, social awareness, and relationship management.

Emotional Intelligence as an Intelligence

According to Bar-On (1997), the word “intelligence” did not appear in books prior to the twentieth century, nor did it appear in Baldwin’s Dictionary of Philosophy
and Psychology, which was published in 1902. He defines cognitive intelligence as the capacity to understand, learn, recall, think rationally, solve problems, and apply what one has learned. Two of the most popular intelligence tests are the Stanford-Binet Intelligence Scale and the Wechsler Adult Intelligence Scale. Weschler’s definition of “general intelligence” is probably one of the most useful and one that lends itself to considering other forms of intelligence in addition to cognitive intelligence. He viewed this concept as “the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his (or her) environment” (Weschler, 1958, p. 7).

Mayer, Caruso, and Salovey (1999) identified three criteria for an intelligence: conceptual, correlational, and developmental. First it should be capable of being operationalized as a set of abilities. The conceptual criteria of intelligence must reflect mental performance rather than simply preferred ways of behaving or a person’s self-esteem. Mental performance should plainly measure the concept in question, for example, emotional-related abilities. Correlational criteria include a set of closely related abilities that have similar characteristics, but are different from mental abilities described by other tests of intelligence. The developmental criterion states that intelligence develops with age and experience.

Gardner (Cherniss & Goleman, 2001) added new items to the standard list of criteria for an intelligence and increased the argument for considering EI as a distinct variety of intelligence. Included in his criteria for intelligence is potential for isolation by brain damage, making it separable from other abilities in the functioning of the brain. For example, it is possible to show a loss of or deficit in a specific ability through damage
to particular areas of the brain. A lesion to the left cortex of the brain specifically dedicated to language may produce a loss of linguistic intelligence while other intelligences, like musical and bodily-kinesthetic intelligence, remain intact. Studies have indicated that trauma to the brain's emotional circuitry connections to the prefrontal cortex can have significant consequences for the performance of competencies associated with EI, such as empathy and collaboration, yet can leave abilities associated with intellect entirely intact (Damasio, 1994). Another criteria of intelligence is distinct developmental history with a definable set of measurable skills (Cherniss & Goleman, 1998). Emotional skills appear to be, at least somewhat, developmental. There are recognizable stages of skills of emotion, for example, there is a point at which young children become able to label emotions and talk about their feelings, and this ability precedes the ability to recognize feelings in others (Saarni, 1997).

Two models that meet the conceptual criteria of an intelligence are Mayer and Salovey's (1997) and Goleman's (1998). Mayer and Salovey (1997) developed the Multifactor Intelligence Scale (MEIS), a four-branch model of the mental skills of EI: reflectively regulating emotions, understanding emotions, assimilating emotion in thought, and perceiving and expressing emotion. Goleman's ECI measures competencies in four categories: self-awareness, self-management, social awareness, and relationship management (Sala, 2002). There are similarities between the two models. The ECI self-awareness cluster identifies the ability to know one's internal states, preferences, and intuitions, which aligns with the MEIS measurement of ability to perceive, appraise, and express emotion. The ECI self-management cluster measures ability to manage one's internal states, impulses, and resources, while the MEIS assesses the ability to
reflectively regulate emotion. The social awareness cluster of the ECI measures empathy, service orientation and organizational awareness, which also aligns with the MEIS branch of effectively regulating emotion. The relationship management cluster of the ECI assesses the ability of an individual to induce desirable responses in others which would require the ability to use all four branches measured by the MEIS: reflectively regulating emotions, understanding emotions, assimilating emotion in thought, and perceiving and expressing emotions. EI at the most general level refers to the abilities to recognize and regulate emotions in ourselves and in others; these abilities are inherent in the four clusters of self-awareness, self-management, social awareness, and relationship management. The ECI is a mixed model and the MEIS an ability model.

Both of the above models have identified a cluster of interrelated abilities for each category or branch of the model. This qualifies as a correlational standard for measures of intelligence. Correlational criteria for intelligence should form a related set (be intercorrelated), and be related to pre-existing intelligences, while showing some unique variance (Mayer, Caruso, & Salovey, 1997). The authors also determined that ability levels of emotional intelligence increase with age and experience, with adults performing at higher abilities than adolescents, which is the third criterion for an intelligence as identified by Mayer, Caruso, & Salovey (1999).

Frameworks of Emotional Intelligence

There are a variety of frameworks of emotional intelligence. As EI research grows, these frameworks and the assessments associated with them are continually being refined and improved. The most common in the literature will be discussed. These include Goleman’s EI four-cluster model (Cherniss & Goleman, 2001), Mayer and

Goleman (Cherniss & Goleman, 2001) refined his 1998 EI model, collapsing 25 competencies into 18, and five domains or clusters into four: self-awareness, self-management, social awareness, and relationship management (social skills). Clusters are defined by Boyatzis and Goleman (Boyatzis, Goleman & Rhee, 1999) as behavioral groups of desired competencies. The most current published framework is outlined in Figure 1.

<table>
<thead>
<tr>
<th>Self (Personal Competence)</th>
<th>Other (Social Competence)</th>
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<tbody>
<tr>
<td>Self-Awareness</td>
<td>Social Awareness</td>
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<tr>
<td>• Emotional self-awareness</td>
<td>• Empathy</td>
</tr>
<tr>
<td>• Accurate self-assessment</td>
<td>• Service orientation</td>
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<tr>
<td>• Self-confidence</td>
<td>• Organizational awareness</td>
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<tr>
<td>Social Awareness</td>
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<td>• Recognition</td>
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<td>• Emotional self-control</td>
<td>• Developing others</td>
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<td>• Trustworthiness</td>
<td>• Influence</td>
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<td>• Conscientiousness</td>
<td>• Communication</td>
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<tr>
<td>• Adaptability</td>
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<td>• Achievement drive</td>
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<td></td>
<td>• Building Bonds</td>
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<td></td>
<td>• Teamwork and Collaboration</td>
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Source: Cherniss and Goleman, 2001, p. 28.

Figure 1. Goleman's Framework of Emotional Competencies.
The ECI framework outlined in Table 1 has undergone minor changes to increase validity and maintain high reliability. Members of the EI Consortium and researchers from HayGroup modified the ECI that was used for the research with award-winning fitness professionals. The revised ECI has 18 competencies and 72 items. The self-awareness and social awareness clusters are the same. In the self-management cluster, trustworthiness became transparency and conscientiousness was dropped. Optimism was added to this cluster. In the relationship management cluster, building bonds was integrated into teamwork and collaboration, visionary leadership became inspirational leadership, and communication was dropped. The changes were made because a number of psychometric properties of the 2001 ECI framework were not what was desired (Sala, 2002). It was reliable, but competency scales showed intercorrelations that were too high. There was also a desire to reduce the number of items, as 110 items was too long (Cherniss & Goleman, 2001). No specific information was found regarding the data analysis leading to the changes in the most recent ECI.

A multi-task ability scale to measure EI, as opposed to measuring emotional competence, was developed by Mayer, Caruso, and Salovey (2000). The first scale was the Multifactor Emotional Intelligence Scale (MEIS). Their framework is presented in Figure 2. Mayer and Salovey (1997) have been explicitly focused on an internal concept of emotional intelligence: the perception, use, understanding, and management of emotion. They predict that these internal abilities have external consequences. The four branches outlined in Figure 2 are arranged from the more basic psychological processes at the bottom to the higher, more psychologically integrated processes at the top. Perception, appraisal and expression of emotion are at first and lowest level. Emotional
D. Reflectively Regulating Emotion

D1. Ability to stay open to feelings both those that are pleasant and those that are unpleasant.

D2. Ability to reflectively engage or detach from an emotion depending on its judged utility.

D3. Ability to reflectively monitor emotions in relation to oneself and others such as recognizing how influential, clear or reasonable they are.

D4. Ability to manage emotion in oneself and others by moderating negative emotions and without repressing or exaggerating information they may convey.

C. Understanding and Analyzing Emotions; Employing Emotional Knowledge

C1. Ability to label emotions and recognize relations among the words and the emotions themselves, such as the relation between linking and loving.

C2. Ability to interpret the meanings that emotions convey regarding relationships, such as that sadness often accompanies a loss.

C3. Ability to understand complex feelings such as simultaneous feelings of love and hate or blends such as awe as a combination of fear and surprise.

C4. Ability to recognize likely transitions among emotions, such as the transition from anger to satisfaction or from anger to shame.

B. Emotional Facilitation of Thinking

B1. Emotions prioritize thinking by directing attention to important information.

B2. Emotions are sufficiently vivid and available that they can generate as aids to judgements and memory concerning feelings.

B3. Emotional mood swings change the individual's perspective from optimistic to pessimistic encouraging consideration of multiple points of view.

B4. Emotional states differentially encourage specific problem approaches; for instance happiness can facilitate inductive reasoning and creativity.

A. Perception, Appraisal, and Expression of Emotion

A1. Ability to identify emotion in one's physical states, feelings, and thoughts, language, sound, appearance, and behavior.

A2. Ability to identify emotions in other people, designs, artwork, and so forth, through

A3. Ability to express accurately and to express needs related to those feelings.

A4. Ability to discriminate between accurate and inaccurate or honest and dishonest expression of feelings.

Source: Salovey and Sluyter, 1997, p. 11.

Figure 2. Mayer and Salovey's Emotional Intelligence Framework.
facilitation is at the second level. Understanding and analyzing emotion is level three and level four is reflectively regulating emotions. There is also a developmental process across each level from the most basic level of one up to the more complex level of four.

Bar-On (1997) defines EI as an array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures. Bar-On refers to EI as emotional quotient (EQ) and believes EQ to represent a set of social and emotional abilities that help individuals cope with the demands of daily life. There are 15 conceptual components of EI measured on the Bar-On EQ-i subscales. They include:

1. Emotional Self-Awareness (ES) is the ability to recognize one's feelings.
2. Assertiveness (AS) is the ability to express feelings, beliefs, and thoughts and defend one's rights in a nondestructive manner.
3. Self-regard (SR) is the ability to respect and accept oneself as basically good.
4. Self-actualization (SA) pertains to the ability to realize one's potential capacities.
5. Independence (IN) is the ability to be self-directed and self-controlled in one's thinking and actions and to be free of emotional dependency.
6. Empathy (EM) is the ability to be aware of, to understand, and to appreciate the feelings of others.
7. Interpersonal Relationship (IR) involves the ability to establish and maintain mutually satisfying relationships that are characterized by intimacy and by giving and receiving affection.
8. Social Responsibility (RE) is the ability to demonstrate oneself as a cooperative, contributing, and constructive member of one's social group.
9. Problem Solving (PS) is the ability to identify and define problems as well as to generate and implement potentially effective solutions.
10. Reality Testing (RT) is the ability to assess the correspondence between what is experienced and what objectively exists.

11. Flexibility (FL) is the ability to adjust one’s emotions, thoughts, and behavior to changing situations and conditions.

12. Stress Tolerance (ST) is the ability to withstand adverse events and stressful situations without “falling apart” by actively and positively coping with stress.

13. Impulse Control (IC) is the ability to resist or delay an impulse, drive, or temptation to act.

14. Happiness (HA) is the ability to feel satisfied with one’s life, to enjoy oneself and others, and to have fun.

15. Optimism (OP) is the ability to look at the brighter side of life and to maintain a positive attitude, even in the face of adversity.

(Bar-On, 1997)

Although there are many researchers supporting EI constructs (Goleman, 1995, 1998; Bar-On, 1997; Mayer and Salovey, 1997), there are also opponents. Pfeiffer (2001) questioned the EI constructs, calling them popular but elusive. His two major issues with EI are the lack of precision in how EI is conceptualized and a lack of scientifically sound objective measures of the EI construct. It appears that the EI constructs and the measurements associated with each EI construct are continually being revised and refined to increase reliability and validity. Proponents of EI will continually challenge the opponents with new data to further support EI as an intelligence that is measurable.

The Influence of Emotional Intelligence on Performance

According to Goleman (1998), the rules of work are changing and employees are being judged by a new yardstick, one that places more importance on how well employees handle themselves and each other as well as than on how smart employees are or their training or expertise. He reported a national survey that indicated employers look
for seven desired traits in entry-level workers and only the final trait would be considered academic (Goleman, 1998, p. 12):

- Listening and oral communication.
- Adaptability and creative responses to setbacks and obstacles.
- Personal management, confidence, motivation to work toward goals, a sense of wanting to develop one's career and take pride in accomplishments.
- Group and interpersonal effectiveness, cooperativeness and teamwork, skills at conflict resolution.
- Effectiveness in organization, wanting to make a contribution, leadership potential.
- Competence in reading, writing, and math.

Dowd and Liedtka (1994) summarized a study that identified communication skills, interpersonal skills, and self-motivation or initiative as the three most important skills companies seek when hiring employees with a Master's Degree in Business Administration (MBA). The faculty of the Darden Graduate School of Business Administration at the University of Virginia commissioned this study to determine skills they need to look for in applicants to the MBA program as well as skills that need to be part of the program's curriculum. First candidate-evaluation forms used by a representative sample of corporate recruiters nationwide in conducting final-round, on-site interviews were obtained. Industry sectors represented by thirty-nine firms included manufacturing (33%), financial services (31%), consumer goods (21%), and consulting (10%). The remaining five percent was made up of two firms that did not fit into any other specific category. A faculty member of the Darden Graduate School of Business conducted a content analysis. Once the key traits used by companies in candidate evaluations were identified, common definitions of the terms were developed. The seven qualities mentioned most by hiring organizations were communication, interpersonal skills, self-motivation/initiative, professional presence/initial impact, demonstrated
leadership, problem-solving skills, and academic achievements. The three most important skills identified were communication skills, interpersonal skills, and self-motivation/initiative. Communication (verbal and nonverbal) was the most common skill sought with 85 percent of respondents including this characteristic on the candidate evaluation form. Interpersonal skills was the second most common skill set sought by MBA recruiters. This factor was sought by 69 percent of the study respondents. The third skill identified in the study as being important for future leaders was self-motivation/initiative, with 67 percent of respondents including this trait on candidate-selection forms (Dowd & Liedtka, 1994).

Cooper (1997) worked extensively with business leaders and organizations and found three driving forces of competitive advantage: building trusting relationships, increasing energy and effectiveness under pressure, and creating the future. He believed emotional intelligence plays a role in all three.

Finegan (1998) reported implications of the impact emotional intelligence has on achievement, emotional well-being, and culture from a review of literature on EI. The author indicated that possessing the abilities, or even some of the abilities, of emotional intelligence can lead to achievement throughout the years of formal education during childhood and adolescence and contribute to the adult’s effectiveness in the workplace and society.

A study was conducted on 358 managers across the Johnson and Johnson Consumer and Personal Care Group globally to assess if there are specific leadership competencies that distinguish high performers from average performers (Cavallo & Brienza, 2003). Participants were randomly selected. More than 1400 employees
completed a 183 question multi-rater survey that measured a variety of competencies of emotional intelligence. The survey was a blend of the Johnson and Johnson Standards of Leadership competency model and the Emotional Competency Inventory. Of the 358 managers randomly selected 55% were male and 45% were female. They were regionally distributed as follows; North America 40%, Europe 25%, Asia, Africa-Middle East 20%, and Latin America, 15%. Participants were required to have a minimum of two years in a management position with Johnson and Johnson with fluency of the English language. Participants rated themselves and were rated by one supervisor and four subordinates. The competencies of self-confidence, achievement orientation, initiative, leadership, influence and change catalyst differentiated superior performers. Ratings of 4.1 on a 5-point scale was considered high performing.

Goldsworthy (2000) stated that in the corporate world, interpersonal skills or the "soft skills" of corporate training are being recognized as at least as important, and often even more so, than technical and cognitive skills. The ability to sustain self-confidence and work with others in pressure-intensive work environments where teamwork is essential while maintaining motivation in the face of adversity were soft skills he believed could be enhanced through training of emotional intelligence with instructional technology.

According to Sojka and Deeter-Schmelz (2002), salespeople who understand EI and how to use it will be at an advantage during the sales process and are likely to perform better than salespeople lacking EI. Their research provides a review of the literature supporting testable hypotheses for which future research with managerial implications can be generated.
According to McDowelle and Bell (1997), educational leaders would benefit from training for the skills of EI. His recommendations were based on an overview of EI research related to the study of organizational leadership and development. A meta-analysis of cognitive test research concluded that differences in cognitive test performance accounts for between 4% and 25% of variance in job performance. The author suggested that 75% to 96% of the ability to perform a job is related to other variables, many which are skills associated with emotional intelligence.

An overview of EI and the above noted studies suggests that the characteristics of EI are directly related to performance success. The research identifies these characteristics by a variety of names including abilities, competencies, traits, or skills that are identified through the evaluation of job descriptions or interview processes (Dowd & Liedtka, 1994; Finnegan, 1998; Goldsworthy, 2000; Goleman, 1998; McDowelle & Bell, 1997). The sought-after characteristics include communication skills, adaptability, interpersonal and intrapersonal abilities, motivation, and self-confidence; all are traits that align with the four clusters of the ECI (self-awareness, self-management, social awareness, and relationship management). Goleman (Cherniss & Goleman, 2001) suggested that EI influences organizational effectiveness in areas of employee recruitment, productivity, sales, innovation, teamwork, revenues, efficiency, quality of service and customer loyalty. He suggested that work-related job requirements fall into one of three domains: emotional intelligence, technical skills, and cognitive abilities. He found that for jobs of all kinds, emotional competencies are twice as prevalent in workplace performance as cognitive or technical competencies.
Emotional Intelligence in Leadership

Salovey, Mayer, and Caruso (2002) reported that in a study of an insurance company, higher levels of EI helped team leaders and their teams better satisfy customers, but not necessarily increase the efficiency with which they do so. They suggested that the efficiency factor was a result of the time it takes to deal with customer's feelings in adaptive ways.

It is believed that a leader's mood and behaviors drive the mood and behaviors of everyone in an organization. Goleman, Boyatzis, and McKee (2001) compiled two years of research that supported the assertion that a leader's high level of emotional intelligence can create climates in which information sharing, trust, healthy risk-taking, and learning flourish. Low levels of emotional intelligence seem to create climates of fear and anxiety where employees are less productive.

Palmer, Walls, Burgess, and Stough (2000) examined the relationship between EI and effective leadership using the transactional/transformational leadership model (Bass, 1985; Bass & Avolio, 1994) and the ability model (Mayer & Salovey, 1997) as a basis to examine EI and effective leadership. Study results suggested that EI as measured by the ability to monitor and manage emotions within oneself and others might be an underlying competency of transformational leadership. They found significant correlations between components of transformational leadership and EI subscales suggesting that EI may be a concept useful for predicting outstanding leadership as defined in the transformational leadership model. According to Bass and Avolio (1994), transformational leaders who develop followers to higher levels of personal and professional development display four behaviors: (1) idealized influence (charisma), demonstrating high standards of conduct,
self-sacrifice, determination, and vision, (2) inspirational motivation, (3) intellectual stimulation, and (4) individualized consideration and developing followers through mentoring. Megerian and Sosik (1996) studied the importance of EI in motivation of followers and presented a theoretical bridge between Goleman’s (1995) EI framework and Bass and Avolio’s (1994) components of transformational leadership. Their research linked the four components that characterize the behavior of transformational leaders -- individual consideration, intellectual stimulation, inspirational motivation and idealized influence (Bass & Avolio, 1994) with Goleman’s emotional competency framework. Sosik and Megerian (1999) suggested that leaders who possess high EI are likely to exhibit transformational behaviors because they are self-aware, willing to self-regulate, and able to understand the emotions of others in a way that they can use to enhance their growth. The authors encouraged further research to increase understanding of effective leadership and its relationship to EI in an effort to develop powerful tools for the selection, training and development of leaders.

Sternberg (1997) suggested that the successfully intelligent person in the world of management goes beyond any one static profile of intellectual skills. Successfully intelligent people are those who have the dynamic abilities to (1) figure out their strengths, (2) figure out their weaknesses, (3) capitalize on their strengths, and (4) compensate for or repair their weaknesses. Goleman’s (1997) self-awareness cluster of EI focuses on ability to understand self-abilities.

Cooper (1997) has worked extensively with business leaders and organizations and has found three driving forces of competitive advantage: building trusting relationships, increasing energy and effectiveness under pressure, and creating the future.
He believed emotional intelligence plays a role in all three. Tucker, Sojka, Barone, and McCarthy (2000) completed a review of literature on studies of managers that have failed and found that lack of intrapersonal and interpersonal skills were often the cause of failure. The authors suggested that a successful manager must possess theoretical knowledge, technological competence, and emotional intelligence.

IDEA Award Winners are considered by their peers to be leaders in the fitness industry. They are selected by peer committees based on demonstration of their work and community performance evaluated through IDEA Award criteria. This alignment may indicate that EI plays a major role in selecting these fitness industry leaders to be IDEA Award Winners.

Emotional Intelligence and Gender

It is suggested that there are differences in EI between men and women (Bar-On, 1997; Goleman, 1998; Sala, 2002; Sutarso et al., 1996). Goleman (1998) proposed that women are not “smarter” than men when it comes to EI, nor are men superior to women, rather each individual has a profile of strengths and weaknesses among the ECI competencies. He indicated that an analysis of EI in thousands of men and women found that women tend to be more aware of their emotions and are more adept interpersonally while men are more self-confident and optimistic and tend to handle stress better.

Using ECI data, Sala (2002) reported a study of 1,773 males and 845 females that found males high in empathy and achievement orientation and low in accurate self-assessment and females high in empathy, service orientation, and achievement orientation and low in self-control, accurate self-assessment, trustworthiness and conscientiousness. Neither type of job nor age was identified in the data. Mayer, Caruso, and Salovey
(1999) indicate that emotional intelligence may be an area where women are better than men. Women performed about 0.5 standard deviation higher than men on the MEIS. Women are slightly superior to men in perceiving emotion as measured by the Profile of Nonverbal Sensitivity (PONS) (Rosenthal, Hall, Dimatteo, Rogers, & Archer, 1979).

In a study to investigate the possible reasons for the effect of gender in masking negative emotions, the researcher (Davis, 1995) found that boys displayed greater negative affect than girls when they receive a disappointing gift. In this study, 64 children: 32 first graders (16 girls and 16 boys; $M=6$ years $11$ months) and 32 third graders (16 girls and 16 boys; $M=9$ years $3$ months). The children were predominately from middle-class families and were recruited through the public school system. First and third graders were selected to be consistent with age groups in two previous studies. Boys and girls showed no difference in emotional expression when receiving a positive gift. The author suggested several possible explanations for the gender differences found in the study. For example, there may be differences in brain structure that may affect emotional expressiveness. Other explanations focus more on socialization since girls are expected to “act nice” and parents socialize their children’s emotional expressiveness differently depending on the child’s gender.

Tapia (1999) examined the relationship between EI as measured by another tool, the Emotional Intelligence Inventory (EQI), and intelligence as measured by the Otis-Lennon School Ability Test administered to 319 high school students from the American School Foundation in Mexico City. Three factors of EQ including compassion, self-awareness, and attunement were analyzed. Female students had higher scores on the compassion and self-awareness factors than males. There was no significant gender
difference on the attunement factor. A definition for attunement has not been found in
the literature. There was no difference when EQI scores were grouped by ethnic
background, level of education of mother or level of education of father. Although the
EQI is yet another tool to assess EI, it also shows females score higher in EI. The effect
of gender and grade point average (GPA) on emotional intelligence was studied using yet
another tool, the Emotional Intelligence Inventory (EQ). GPA did not affect the three
factors of EQ (Sutarso, Baggett, Sutsarso, & Tapia, 1999).

Further research may help to explore the relationship of gender to EI. The review
of literature identifies a variety of EI assessment tools examining various aspects of EI
and gender (Goleman, 1998; Sala, 2002; Tapia, 1999; Davis, 1995). Consistent data that
identifies strengths and weaknesses of males and females among the EI competencies
may provide justification for training to improve individual and organizational EI that can
in turn enhance work performance.

Emotional Intelligence and Age

A model of EI developed by Mayer and Salovey (1997) provided a hierarchy of
developmental stages that operates within and across the biological and cultural stages of
growth. The first stage is perception, appraisal, and expression of emotion and
individuals first learn to identify emotions in other people and through external stimuli
such as artistic work. The second level involves emotional facilitation of thinking. At
the third level, individuals are able to understand and analyze emotions, and as a result,
employ emotional knowledge. The final stage in the hierarchy includes an ability to stay
open to both negative and positive emotions and use these emotions appropriately and
effectively. Mayer, Salovey, and Caruso (2000b) suggested that absolute ability of EI
rises with age, a supporting criteria of an intelligence. Emotional intelligence may improve as the brain develops and matures and with the social experiences of life. Goleman (1998) suggested that EI increases with age through maturity. Bar-On (2000) conducted normative studies on nearly four thousand people in the United States and Canada and found significant differences on the EQ-i based on age, with older groups scoring higher and with the highest scores for those in their forties and fifties. This study also reported small and steady increases as people age (Cherniss & Goleman, 2001).

The literature suggesting that EI improves with age is sparse and does not provide detail to explain areas of strengths and weaknesses at different age levels nor are age categories clearly defined. This is an area of interest to the researcher as an educator preparing prospective physical education teachers and professionals in the fitness industry.

The Assessment of Emotional Intelligence

There are a number of instruments for the assessment of EI. The three that will be discussed in this section include The Emotional Competency Inventory (ECI) (2000), The Multifactor Emotional Intelligence Scale (MEIS) (1997) which has recently changed to the Mayer, Salovey, Caruso Emotional Intelligence Scale (MSCEIT), and the EQ-i Emotional Quotient Inventory (Bar-On, 1980).

ECI

The ECI is a 360-degree assessment that gathers self, subordinate, peer, and supervisory ratings of an individual on 18 emotional competencies in four clusters. Each survey respondent uses a six-point scale to describe himself or herself or another person on each competence. The scale used is progressively labeled: never, rarely, sometimes,
often, consistently, don't know. The most recent ECI contains 72 items and takes approximately 15-20 minutes to complete.

The Emotional Competency Inventory (ECI), which is based on Goleman's framework of emotional competencies, measures 18 competencies organized in four clusters: self-awareness, self-management, social awareness, and relationship management (Chernis & Goleman, 2001; Goleman, 1998; Sala, 2002).

For scoring purposes, there are tipping points identified on the ECI. A tipping point, determined by prior studies, is the score at which the individual is expected to be tipped over into superior performance on that competency of the job (Cherniss & Goleman, 2001).

The ECI is published by Hay/McBer Emotional Intelligence Services (see www.eisglobal.com for more information). The ECI can be used for research purposes free of charge following acceptance by Hay/McBer based on a written proposal by the researcher.

**MSCEIT and MEIS**

Mayer, Caruso, and Salovey (2000b) have developed multiple-task ability scales to measure emotional intelligence, as opposed to emotional competence. The Multifactor Emotional Intelligence Scale (MEIS) (Mayer & Salovey, 1997) contains 16 subscales to correspond with 16 hypothesized abilities shown in Figure 2. The four branches include perceiving and expressing emotion, assimilating emotion in thought, understanding emotions, and reflectively regulating emotions.

Closely related to the MEIS is a newer test, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Like the MEIS, the MSCEIT is an ability measure of EI
designed to give an EI score as well as subscale scores for perception, facilitation, understanding, and management of emotions. Each of the four branches has several subtests. The constructs of the MSCEIT parallel those of the MEIS. The MSCEIT consists of 141 items that yield a total EI score, two area scores and four branch scores. The MSCEIT test takers are asked to identify emotions expressed by a face or design, generate a mood and solve problems, define the causes of different emotions, and determine how to include emotion in thinking. There is an online version that takes approximately 30 to 45 minutes (http://www.emotionaliq.org/researchpolicy.htm).

The MEIS is published by Multi-Health Systems, Inc. The MSCEIT is also published by Multi-Health Systems, Inc. Researchers may use the MSCEIT for a fee of 25% of the $25 fee per each test. Researchers can inquire regarding use of these tools via e-mail at oeg@mhs.com.

**BarOn EQ-i**

Bar-On is one of the pioneers in the measurement of EI. He coined the term emotional quotient (EQ) for his measure, to parallel the term intelligence quotient (IQ) used with cognitive measures. The BarOn EQ-i evolved out of Bar-On’s work as a clinical psychologist (Bar-On, 1997). Over the next 20 years, Bar-On developed a theoretical framework for emotional and social intelligence consisting of five meta-factors and 15 factors. These factors are represented in Figure 3.
Figure 3. The Five Meta-Factors and Fifteen Factors Measured by the BarOn EQ-i.

Bar-On (2002a) describes the Emotional Quotient Inventory as a self-report measure of emotionally and socially competent behavior that provides an estimate of one’s emotional and social intelligence. The EQ-i contains 133 items and takes approximately 40 minutes to complete. Item responses range from “very seldom or not true of me” to “very often and true of me” (Cherniss & Goleman, 2001, p. 112). The respondent receives a total EQ score, scores on the five composite scales, and scores on 15 subscales. The EQ-i was the first test of EI available from a psychological test publisher.

Administration of the test requires little special training, however, Bar-On (1997) recommends that the EQ-i be evaluated by a qualified psychologist or other professional familiar with psychometrics, normal human behavior, and psychopathology in to keep with the standards of educational and psychological testing. This recommendation would
apply to use of the EQ-I in mental health clinical setting or for evaluations for the purpose of workplace performance.

Selection of a measure of emotional intelligence should be based on research hypotheses or clinical application. Salovey, Mayer, and Caruso (2002) recommend that multiple measures be used, when possible, for coaching, clinical, or research applications. Figure 4 gives an overview and comparison of the three tests.

The ECI is the EI assessment tool that has been selected for this research. The time factor involved for subjects completing the survey was one of the reasons for using the ECI assessment. The ECI takes approximately 15 to 20 minutes to complete, the MSCEIT takes 30 to 45 minutes to complete, and the BarOn EQ-i takes approximately 40 minutes. The IDEA Award Winners are professionals who travel a significant amount of time and the IDEA non-award winners are volunteers in the profession that have been recruited to participate in the study and donate their time. There is no cost to use the ECI for research and there is evidence of reliability and validity (Sala, 2002).

The investigator first became interested in EI after reading *Emotional Intelligence* (Goleman, 1995). Goleman’s (1998) framework of EI appears to align with the criteria for IDEA Award Selection, which adds an interesting component to this research. There is a growing body of research using the ECI and the investigator is interested in contributing to the literature.

There are researchers who are skeptical about the self-report EI measures (Mayer, Salovey & Caruso, 2000). Ciarrochi, Chan, and Caputi (1999) suggest that self-report measures are unreliable and that EI measures like the MEIS, based on actual performance rather than self-reported performance, are more valuable. Self-report
<table>
<thead>
<tr>
<th>Test</th>
<th>ECI Emotional Competence Inventory</th>
<th>MSCEIT Mayer, Salovey, Caruso Emotional Intelligence Test</th>
<th>BarOn EQ-i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition on which the Test is Based</td>
<td>&quot;Emotional intelligence is observed when a person demonstrate the competencies that constitute self-awareness, self-management, social awareness, and social skills at appropriate times and ways in sufficient frequency to be effective in a situation&quot; (Boyatzis, Goleman, &amp; Rhee, 1999, p. 3)</td>
<td>&quot;Emotional intelligence is the set of abilities that account for how people's emotional perception and understanding vary in their accuracy. EI is the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotions in self and others&quot; (Mayer &amp; Salovey, 1997)</td>
<td>&quot;Emotional intelligence is an array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed coping with environmental demands and pressures&quot; (Bar-On, 1997, p.14)</td>
</tr>
<tr>
<td>Author</td>
<td>Boyatzis, Goleman, and Rhee</td>
<td>Mayer, Salovey, Caruso</td>
<td>Reuven Bar-On</td>
</tr>
<tr>
<td>Publisher</td>
<td>Hay-McBer</td>
<td>Multi-Health Systems</td>
<td>Multi-Health Systems</td>
</tr>
<tr>
<td>Testing Method</td>
<td>Observer/Self Mixed Model</td>
<td>Ability Model</td>
<td>Mixed Model</td>
</tr>
<tr>
<td>Measures</td>
<td>Emotional Intelligence Competencies</td>
<td>Emotional Intelligence</td>
<td>Emotionally-intelligent behavior</td>
</tr>
<tr>
<td>Test Item Examples</td>
<td>Acknowledges mistakes.</td>
<td>Look at the face (in the picture).</td>
<td>I have good relations with Others.</td>
</tr>
</tbody>
</table>
Indicate how the person is feeling:

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Angry</td>
<td>Never, Rarely, Sometimes, Often, Consistently, Don’t Know.</td>
</tr>
<tr>
<td>Sad</td>
<td>12345</td>
</tr>
<tr>
<td>Happy</td>
<td>A B C D E F G</td>
</tr>
</tbody>
</table>

I like helping people.

Seeks information in usual ways.

Rating Scale: Not True – Very True

Test Scales

<table>
<thead>
<tr>
<th>Self-Awareness</th>
<th>Emotional</th>
<th>Intrapersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Management</td>
<td>Perception</td>
<td>Interpersonal</td>
</tr>
<tr>
<td>Social Awareness</td>
<td>Emotional</td>
<td>Stress Management</td>
</tr>
<tr>
<td>Relationship Management</td>
<td>Facilitation</td>
<td>Adaptability</td>
</tr>
<tr>
<td>Management</td>
<td>Emotional</td>
<td>General Mood</td>
</tr>
</tbody>
</table>

Understanding Emotional Management

Source: http://www/eiconsortium.org/EI_Table.htm

Figure 4. Emotional Intelligence Tests Overview: ECI, MSCEIT, BarOn EQ-i.

inventories are much more reliable than casual observations; however, they are only as accurate as the information that respondents provide. According to Weiten (2004) and Elmes, Kantowitz, and Roediger III (1992), there are three common sources of error related to self-reporting, (1) Deliberate deception occurs when inventories include questions whose purpose is easy to figure out making it possible for respondents to intentionally fake particular personality traits, (2) Social desirability bias occurs when people consistently respond to questions in ways that make them look good, not as a matter of deception but more so wishful thinking, (3) Response sets is a systematic tendency to respond to test items in a particular way that is unrelated to the content of the items, for example agreeing or disagreeing with virtually every statement on a test or inventory. Test developers usually take these sources of error into consideration in their
test development to reduce the impact of deliberate deception, social desirability bias and response sets (Weiten, 2004). Self-report questionnaires are feasible and easy to administer and used quite often in research. A number of research studies have shown evidence of self-report validity (Aadah, & Jorgenson, 2003; Spector, 1987; Tamir, 1999). It should be noted that the ECI is a 360-degree assessment allowing for assessment by self and others (clients, peers, subordinates, and superiors).

Mayer, Salovey, and Caruso (2000) indicate that a mental ability test of emotional intelligence is the optimal tool for identification of people who understand emotion. According to Cobb and Mayer (2000), the ability model defines EI as a set of abilities and makes claims about the importance of emotional information and the potential uses of reasoning well with that information. The MEIS and MSCEIT are ability models. The mixed model includes social competencies, traits, and behaviors. The EQ-I (Bar-On, 1997) and the ECI (Goleman, 1998) are mixed models.

Training Emotional Intelligence

Education and training are used to improve skills for life and work. If EI does contribute significantly to success, it would appear that training to improve EI would benefit individuals and the organizations for which they work. According to Goleman (Goleman & Cherniss, 2001), emotional competencies are job skills than can be learned. Cherniss and Goleman (1998) developed a four-phase process for developing EI in individuals and organizations: preparation, training, transfer and maintenance and evaluation phase. They provided 22 guidelines for implementation of this EI training process. The authors suggested it is possible for people of all ages to become more socially and emotionally competent if cognitive learning takes place with social and
emotional learning. Longitudinal studies of 25 to 35-year olds and 45 to 55-year olds show that adults can develop emotional intelligence abilities and behavioral habits (Boyatzis, 2002).

One of the first steps in the preparation phase (Cherniss & Goleman, 1998) is assessment. Langley’s (2000) assessment with Goleman’s EI framework indicated that senior managers scored statistically higher in the personal competencies of emotional awareness, innovation and commitment and the social competencies of political awareness, leadership, change catalyst and team capabilities. Langley believed that identification of the differences in EI competencies could be a useful tool for revealing management development opportunities to prepare middle managers for the next level of management. Rozelle, Pettijohn, and Parker (2001) also believed that EI should be included within the core skills taught in management training and development programs. The results of their study suggested that dealing with interpersonal interaction and intrapersonal emotions may have a fundamental place in overall success of that individual in the workplace.

Goldsworthy (2000) proposed using a selected EI framework along with technology to enhance educational training curricula and programs to improve EI competencies. He proposed yet another EI framework that aligns with that of Salovey and Mayer (1990) and Goleman (1995) and designed interactive role-playing through software called Bubble Dialogue (Goldsworthy, 2000). Individuals role-play to enhance a variety of skills in both personal and professional situations and receive direct and immediate feedback as they participate. Results of the training were not reported; however, it appears that it may provide opportunity for practice of new skills with
immediate feedback, an integral component of the training phase outlined by Goleman and Cherniss (2001).

An increasing number of organizations incorporate EI training. Dowd and Liedtka (1994) reported that the three most important skills of MBAs include communication skills, interpersonal skills, and self-motivation/initiative. The faculty at Darden Graduate School of Business Administration used this information to redesign the curriculum, train admissions interviewers, and educate students about the interviewing process. Tucker, Sojka, Barone, and McCarthy (2000) provided an overview of current literature in EI along with a model for incorporating EI into the curriculum of business graduates through the use of assessment tools and experiential exercises.

McDowelle and Bell (1997) examined the concept of EI and educational leadership. They suggested that internships and clinical experiences should include EI training opportunities through teaming, networking, conflict management and negotiations. Educational leaders understanding that emotions are an open-loop system know that emotions are contagious; educational leaders create the emotional climate for the school and teachers setting the emotional tone of the classroom. Salovey, Mayer, and Caruso (2002) reported that over 300 curriculum-based programs in the public schools purport to teach EI. They also reported an increase in EI training in the workplace. Ayers and Stone (1999) indicated that Extension Services core competencies were comparable to emotional intelligence competencies and EI competency-based development activities are being implemented to build a better Extension Services workforce. Extension Services did a qualitative analysis of their Extension Competency Model and Goleman’s emotional competencies. Extension Services identified the
outstanding characteristics of Extension educators as self-development, achievement motivation, and initiative.

The recent and widespread interest in the importance of emotional intelligence at work has initiated a number of training programs designed to improve competencies of EI. A sample of accountants (N=20) from the United States participated in a Mastering Emotional Intelligence workshop (detailed workshop description was not outlined). The ECI was used for pre- and post-assessment. ECI scores were higher on 19 of 20 ECI competencies following the EI training. Post-assessment scores ranged from .28 SD to 1.06 SD higher than pre-assessment scores. On average, post-assessment scores were .70 SD higher than pre-assessment scores, which is approximately a 24% improvement over the pre-assessment score (Sala, 2001). Scores were based on participants others’ assessment scores of the accountants in the training. Others’ assessments were done on each participant by a supervisor and a subordinate (Sala, 2001). It is important to note that these are preliminary findings. Without a control group it is difficult to isolate the impact of intervention versus that of other variables that may have contributed to higher scores.

According to Goleman (1998), to enhance emotional intelligence, training must include focus on the limbic system. The training must help people break old behavioral habits and establish new ones. He suggests that EI can be learned; however, it is a process that takes time and commitment.

IDEA Awards and Emotional Intelligence

Personal and social competence skills as outlined by Goleman (1998) and tested by the ECI (Sala, 2002) appear to correspond with the criteria identified by IDEA for
award recognition as a fitness instructor, personal trainer, and program director. Fitness Instructor of the Year, Program Director of the Year, and Personal Trainer of the Year Awards recognize the ability of fitness professionals to motivate and influence both active and underactive individuals. A comparison of the ECI and Award Winner criteria made by the investigator is found in Figures 5, 6, and 7.

The selection process of the IDEA Health and Fitness Award Winners begins with completion of an application that is made available in the *IDEA Health and Fitness Source* journal and on the IDEA website (www.IDEAfit.com). An individual may apply for an award or nominate another candidate. Co-workers, clients, peers, or IDEA staff nominate approximately 60% of candidates and 40% are self-nominated (P.R., personal communication, May 14, 2003). Each applicant may be considered for only one award per year. IDEA staff select peer review judges. Peer committees defined objective criteria for each award and designed the application forms. The committees assign a number of points to each criterion, with 100 total points possible, so judges can rate the applicant’s qualifications numerically. The committee of peer judges review and numerically rate each application. The judges do not discuss the award applicants with each other. The candidate’s ratings are sent to IDEA where mean averages of the committee members’ ratings determine the IDEA Award Winners (Durrett, 2000).

The IDEA Fitness Instructor of the Year Award recognizes an IDEA member who demonstrates strong leadership skills through community and industry involvement. Figure 5 shows a comparison of the ECI and the IDEA Fitness Instructor of the Year Award criteria.
<table>
<thead>
<tr>
<th>IDEA Fitness Instructor of the Year Criteria</th>
<th>Emotional Competency Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Community involvement and/or influence on the general public.</td>
<td>1. <strong>Self-Management</strong>: adaptability, achievement orientation, and initiative. <strong>Social Awareness</strong>: empathy, service orientation. <strong>Relationship Management</strong>: influence, developing others, leadership, and change catalyst, teamwork and collaboration.</td>
</tr>
<tr>
<td>2. Impact of instructional skills on community.</td>
<td>2. <strong>Social Awareness</strong>: empathy service orientation. <strong>Relationship Management</strong>: influence, leadership, change catalyst, developing others, teamwork and collaboration.</td>
</tr>
<tr>
<td>3. Development and instruction of classes or workouts that they are responsible for initiating.</td>
<td>3. <strong>Self-Management</strong>: adaptability, achievement orientation, and initiative. <strong>Social Awareness</strong>: Organizational awareness. <strong>Relationship Management</strong>: Developing others, influence, leadership, change catalyst, teamwork and collaboration.</td>
</tr>
<tr>
<td>4. Development of their own professional credibility as well as the credibility and the public awareness of the industry.</td>
<td>4. <strong>Self-Awareness</strong>: accurate self-assessment, self-confidence. <strong>Self-Management</strong>: emotional self-control, optimism, adaptability, achievement drive, initiative. <strong>Social Awareness</strong>: empathy, service orientation, organizational awareness. <strong>Relationship Management</strong>: developing others, influence, leadership, change catalyst, teamwork and collaboration.</td>
</tr>
</tbody>
</table>

Figure 5. Comparison of IDEA Fitness Instructor of the Year Criteria and the Emotional Competence Inventory

47
Twenty possible points are awarded for criterion one which is community involvement and influence on the general public. According to IDEA Vice President, the candidate must demonstrate participation or a developmental role in community events and outreach programs, such as lectures, public awareness campaigns, newspaper or magazine articles or other media recognition (P.R., personal communication, May 14, 2000). This criterion aligns with the competencies within the self-management, social awareness, and relationship management clusters as measured by the ECI (Cherniss & Goleman, 2001). Thirty-five points are possible for impact of instructional skills on community. This criterion requires demonstration of how instructional skills have influenced individuals, peers, and the facilities where they instruct. This criterion is related to the competencies of the ECI's social awareness and relationship management clusters. There are 30 possible points for development and instruction of successful classes or workouts that fitness professionals are responsible for initiating. Candidates must demonstrate specific techniques that impact client exercise adherence, growth, and goal attainment. This requires emotional competencies found in the self-management, social awareness, and relationship management clusters. The development of professional credibility, as well as the credibility and public awareness of the industry, are the final criteria and have a possible 15 points. Emotional competencies of all four clusters of the ECI would be required for fitness professionals to meet this criterion.

According to the IDEA Vice President (P. R., personal communication, May 2003), six criteria items are scored to select the IDEA Personal Trainer of the Year. This award recognizes an IDEA member who is a practicing industry professional who has demonstrated exceptional leadership, business management, motivational and
instructional skills, and who has inspired his or her clients to greater personal growth and a higher level of fitness. A comparison of the IDEA Personal Trainer Award criteria and the ECI is reported in Figure 6.

<table>
<thead>
<tr>
<th>IDEA Personal Trainer of the Year</th>
<th>Emotional Competency Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Self-management</strong>: emotional self-control, optimism, adaptability, achievement drive, initiative.</td>
</tr>
<tr>
<td>2. Implementation of programs to help clients achieve their goals and the success of clients achieving their goals through these programs.</td>
<td>2. <strong>Social Awareness</strong>: empathy, organizational awareness.</td>
</tr>
<tr>
<td></td>
<td><strong>Relationship Management</strong>: influence, developing others, teamwork and collaboration, leadership, change catalyst.</td>
</tr>
<tr>
<td>3. Demonstration of enhanced growth and credibility of their organization with their contributions as a personal fitness trainer.</td>
<td>3. <strong>Self-Awareness</strong>: emotional self-awareness, accurate self-assessment, self-confidence.</td>
</tr>
<tr>
<td></td>
<td><strong>Self-Management</strong>: emotional self-control, optimism, adaptability, achievement drive, initiative.</td>
</tr>
<tr>
<td></td>
<td><strong>Social Awareness</strong>: organizational awareness, service orientation.</td>
</tr>
<tr>
<td></td>
<td><strong>Relationship Management</strong>: developing others, influence, leadership, catalyzing change, teamwork and collaboration.</td>
</tr>
<tr>
<td>4. Community involvement and/or influence on the general public.</td>
<td>4. <strong>Self-management</strong>: optimism, adaptability, achievement drive, initiative.</td>
</tr>
<tr>
<td></td>
<td><strong>Social Awareness</strong>: service orientation, organizational awareness, empathy.</td>
</tr>
<tr>
<td></td>
<td><strong>Relationship Management</strong>: influence, developing others, leadership, change catalyst, teamwork and collaboration.</td>
</tr>
</tbody>
</table>
5. Development of their own professional credibility as well as the credibility and the public awareness of the personal training industry.

6. Qualifications as a personal trainer and as a role model to their clients, colleagues and their community.

5. **Self-Awareness**: accurate self-assessment, self-confidence.  
**Self-Management**: emotional self-control, optimism, adaptability, achievement drive, initiative.  
**Social Awareness**: empathy, service orientation, organizational awareness.  
**Relationship Management**: developing others, influence, leadership, change catalyst, teamwork and collaboration.

**Self-Management**: emotional self-control, optimism, achievement drive, initiative.  
**Social Awareness**: empathy, service orientation, organizational awareness.  
**Relationship Management**: developing others, influence, leadership, teamwork and collaboration.

Figure 6. Comparison of IDEA Personal Trainer of the Year Award Criteria and the Emotional Competency Inventory.

The first criterion, worth 20 points, is demonstration of a philosophical approach to running a business and training clients. Candidates are required to show the ability to build successful relationships with clients while demonstrating that they motivate and inspire them. There must be proof that the personal trainer adheres to professional and ethical standards, as well as personal mission and vision for personal fitness training. The emotional competencies of all four clusters of the ECI would be needed to achieve this criterion. The second criterion, implementation of programs to help clients achieve their goals and the success of clients in achieving their goals through these programs is worth 30 points. The ECI social awareness and relationship management cluster competencies align with criteria two.
Personal trainer candidates can earn 10 points for criterion three: demonstration of enhanced growth and credibility of their organization because of their contributions as a personal fitness trainer. For the trainer to meet this criterion, the emotional competencies of the self-awareness, self-management, social awareness, and relationship management clusters must be evident. There are 10 possible points for community involvement and influence on the general public for the fourth criterion. This criterion aligns with the ECI self-management, social awareness, and relationship management emotional competencies (Cherniss & Goleman, 2001).

The emotional competencies of all four clusters measured on the ECI are needed to achieve criteria five and six of the IDEA Personal Trainer Award. Fifteen possible points can be earned for criterion five: development of professional credibility and increase of public awareness of the personal training industry. The final criterion, worth 15 possible points, requires qualifications as a personal fitness trainer and as a role model to clients, colleagues, and community.

The IDEA Program Director of the Year recognizes an IDEA member whose outstanding leadership inspires staff and influences active and underactive people to commit to a healthy lifestyle through successful, creative, and diverse programming. There are four criteria to judge candidates in this award category. A comparison of the IDEA Program Director of the Year criteria and The Emotional Competency Inventory is reported in Figure 7.
<table>
<thead>
<tr>
<th>IDEA Program Director of the Year</th>
<th>The Emotional Competency Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Community involvement and/or influence on the general public.</td>
<td>1. <strong>Self-management</strong>: optimism, adaptability, achievement drive, initiative. <strong>Social Awareness</strong>: service orientation, organizational awareness, empathy. <strong>Relationship Management</strong>: influence, developing others, leadership, change catalyst, teamwork and collaboration.</td>
</tr>
<tr>
<td>3. Implementation of programming.</td>
<td>3. <strong>Social Awareness</strong>: empathy, organizational awareness. <strong>Relationship Management</strong>: influence, developing others, teamwork and collaboration, leadership, change catalyst.</td>
</tr>
<tr>
<td>4. Development of their own professional credibility as well as the credibility and the public awareness of the industry.</td>
<td>4. <strong>Self-Awareness</strong>: accurate self-assessment, self-confidence. <strong>Self-Management</strong>: emotional self-control, optimism, adaptability, achievement drive, initiative. <strong>Social Awareness</strong>: empathy, service orientation, organizational awareness. <strong>Relationship Management</strong>: developing others, influence, leadership, change catalyst, teamwork and collaboration.</td>
</tr>
</tbody>
</table>

Figure 7. Comparison of The IDEA Program Director of the Year Award and the Emotional Competency Inventory.
Twenty points may be earned for criterion one: community involvement and influence on the general public. Related ECI competencies are optimism, adaptability, achievement drive, and initiative of the self-management cluster; service orientation, organizational awareness, and empathy of the social awareness cluster; influence, developing others, leadership, change catalyst, teamwork and collaboration of the relationship management cluster (Chemiss & Goleman, 2001). The second criterion awards up to 25 points for the candidate's contribution to the success of their organization. Related ECI competencies of all four clusters would help in achieving this criterion. Criterion three allows 35 possible points for implementation of programming that is creative, reaches a diverse market, and includes methods to measure participant and organizational goals. Adaptability, achievement orientation, initiative, developing others, service orientation, organizational awareness, influence, leadership, change catalyst, and teamwork and collaboration are emotional competencies in the social awareness and relationship management cluster that coincide with criteria three. The fourth criterion, worth 20 points, is development of professional credibility and the credibility and public awareness of the industry. The ECI competencies of the self-awareness, self-management, social awareness, and relationship management clusters could affect development of professional credibility.

The criteria for the IDEA Fitness Instructor, IDEA Personal Trainer, and IDEA Program Director yearly awards are closely aligned. All three awards seek individuals in the fitness profession who exhibit similar skills and attributes outlined in Figures 5, 6, and 7 which seem to require a great deal of emotional competence. The IDEA Award
Winners are grouped in one category for the purpose of this study due to a small sample size. A comparison of the criteria for the three awards is outlined in Figure 8.

<table>
<thead>
<tr>
<th>IDEA Fitness Instructor</th>
<th>IDEA Personal Trainer</th>
<th>IDEA Program Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Community involvement and/or influence on the general public.</td>
<td>4. Community involvement and/or influence on the general public.</td>
<td>1. Community involvement and/or influence on the general public.</td>
</tr>
<tr>
<td>4. Development of their own professional credibility as well as the credibility and public awareness of the industry.</td>
<td>5. Development of their own professional credibility as well as the credibility and public awareness of the industry.</td>
<td>4. Development of their own professional credibility as well as the credibility and public awareness of the industry.</td>
</tr>
<tr>
<td>3. Demonstration of enhanced growth and credibility of their organization with their contributions as a personal fitness trainer.</td>
<td>2. Implementation of programs to help clients achieve their goals and the success of clients achieving their goals through these programs.</td>
<td>2. Contribution to organization’s success.</td>
</tr>
<tr>
<td>2. Impact of instructional skills on the community.</td>
<td>6. Qualifications as a personal trainer and as a role model to their clients, colleagues and their community.</td>
<td>3. Implementation of programming.</td>
</tr>
</tbody>
</table>

Figure 8. Comparison of the IDEA Award Criteria for Fitness Instructor, Personal Trainer, and Program Director.
Organization of the Dissertation

There has been no research on the emotional intelligence of professionals in the fitness industry. The research reviewed in this chapter suggests that EI may be a factor in successful work-related performance (Dowd & Liedtka, 1994; Finegan, 1998; Goldsworthy, 2000; Goleman, 1995, 1998). Research Question One of this dissertation explores the emotional competencies of fitness professionals (personal trainer, program director and group fitness instructors) who have been selected as IDEA Award Winners and IDEA members who have not yet received IDEA awards, to see if there is a difference in EI clusters and competencies as measured by the ECI. Research Question Two adds to the research on self and other assessment ratings by comparing the responses of IDEA Award Winners on their ECI’s to the responses of their clients. There is some research comparing the EI of males and females (Davis, 1995; Hedges & Nowell, 1995; Mayer, Caruso & Salovey, 1999; Rosenthal, et al.; 1979; Sutarso et al., 1996; Tapia, 1999). Research Question Two investigates if differences exist between males and females and Research Question Three investigates whether or not differences exist at different ages among the IDEA Award Winners (Mayer & Salovey, 1997; Goleman, 1998; Bar-On, 1997; Cherniss & Goleman, 2001).

Chapter III provides an overview of the research design, a thorough explanation of the population sample and the data collection procedures. Chapter III also describes the survey instrument and the data analysis that will be used for this research. Chapter IV is a report of the data analysis and research findings for each of the four questions and Chapter V provides a summary, conclusions, and recommendations.
CHAPTER III
RESEARCH METHODS AND PROCEDURES

Introduction

This chapter addresses the selection of the research population, data collection procedures, the selection of the survey instrument, the process for survey instrument approval, and the method used to analyze the research data. The independent variables are identified. The investigator also addresses the protection of the rights of the participants, the process of informed consent, and how respondents will remain anonymous.

Research Design

Mertler and Vannatta (2002) indicate that multivariate analysis of variance (MANOVA) is used to test the significance of group differences. Research Question One seeks to investigate if there are differences on the ECI composite score, four cluster scores, and 18 ECI competencies between IDEA Award Winners and non-award winners. Research Question Two seeks to determine if differences exist between self-ratings of IDEA Award Winners and the ratings of their clients (others ratings). Research Question Three seeks to determine if significant differences exist male and female IDEA Award Winners. According to Kumar (1996), correlational research is done to discover or establish the existence of a relationship or association between two or more aspects of a situation, question four seeks to determine if there is a relationship between age and EI.
The purpose of this study was to determine if there are differences on the overall, four cluster, and 18 competency scores between the IDEA Health and Fitness Award Winners and IDEA non-award winners as measured by the ECI. This study also sought to determine if differences exist between gender, age, and self and others’ assessment on the overall, four cluster, and 18 competency scores of the IDEA Award Winners as measured by the ECI. A nonexperimental research design using MANOVA and linear regression was used (Mertler & Vannatta, 2002). The major independent variable in this analysis is the IDEA Award Winner versus non-award winner status. Gender and age are also independent variables. The various ECI competency scores, cluster scores and overall ECI score are the dependent variables.

Sample
The IDEA Health and Fitness Association is the world’s leading membership organization for health and fitness professionals, with over 23,000 members in 80 countries. The investigator has developed relationships with IDEA staff and IDEA Health and Fitness Award Winners through active participation as an IDEA convention presenter, IDEA committee member, contributor to IDEA publications, and IDEA Make Fitness Happen Award Winner. Winners of the IDEA Make Fitness Happen Award are not included in the research sample. On October 14, 2002, the IDEA public relations specialist released to the investigator the names and contact information including the work and home phone numbers, mailing addresses and e-mail addresses, and fax numbers of the IDEA Health and Fitness Award Winners in the categories of Fitness Instructor, Personal Trainer of the Year, and Program Director of the Year. An individual must be an IDEA member to be considered for an IDEA Health and Fitness Award. Forty-three
IDEA Health and Fitness Awards have been given to 40 individuals. Three people have received both the IDEA Program Director of the Year Award and the Fitness Instructor of the Year Award. Two fitness instructors received the Fitness Instructor of the Year Award in 1997. The ECI self and others' assessments were sent to 40 IDEA Award Winners, 11 men and 29 women.

In 1985, the first IDEA Business Person of the Year Award was presented, and that award became known as the Program Director of the Year Award in 1995 to fit the changing face of the fitness industry. There are 19 IDEA Health and Fitness Award Winners in the Program Director of the Year category. Of these, 17 are women and 2 are men.

The Fitness Instructor of the Year Award was conceived in 1987 and 18 Fitness Instructors have received the award. In 1997, two fitness instructors received the Fitness Instructor of the Year Award. Three of the award winners have received two awards: the Program Director of the Year Award in one year and the Fitness Instructor of the Year Award in another year. In the Fitness Instructor of the Year category, 14 award winners are female and four are male.

The Personal Trainer of the Year Award is the newest award. This award originated in 1998 and six personal trainers have been recognized. Of these, five award winners are male and one is female.

Non-award winners were solicited in the August 2003 Fit Tips, an electronic newsletter sent by IDEA to 10,000 members. One-hundred forty IDEA members responded to the inquiry and were sent more specific information regarding the study; 82
indicated an interest to participate in the study. Each interested respondent was sent an informed consent and an ECI.

IDEA is one of the professional organizations for fitness professionals. There are group fitness instructors, personal trainers, and program directors that are not IDEA members. The Aerobics and Fitness Association of America and the American College of Sports Medicine are two other professional organizations that fitness instructors, program directors, and personal trainers may join. There may be group fitness instructors, program directors, and personal trainers that are not affiliated with any professional membership organization. IDEA Fitness Instructor of the Year, IDEA Personal Trainer of the Year, and the IDEA Program Director of the Year Award Winners were requested from IDEA Health and Fitness Association for all the years the Award has been granted. IDEA Award Winners were contacted via electronic mail or phone with a brief description of the study.

Data Collection Procedures

Upon approval of the dissertation proposal, the investigator submitted an application to the University of North Dakota Institutional Review Board and authorization by HayGroup to use the ECI was finalized. The ECI self and other assessments were sent to all IDEA Award winners with the informed consent form requesting that the research participants read, sign, and return the ECI self-report and informed consent form and ask a client to fill out the ECI other assessment. All responders were given one week's notice of the date the ECI would be sent and two weeks to complete the ECI.
IDEA non-award winners were solicited in the August IDEA FitTips, an
electronic newsletter (see appendix). A total of 140 non-award winners responded
including 42 personal trainers, 38 program directors, and 60 group fitness instructors.
Each non-award winner who responded received an e-mail message (see appendix) with
details of the study and a request for an address of those willing to participate. A total of
82 interested fitness professionals responded with their mailing address indicating an
interest in participating. The participants received notice one week prior to mailing of the
ECI and informed consent form and had two weeks to complete the ECI and return it.

Survey Instrument

The ECI is owned by HayGroup and may be used for research upon approval.
The investigator submitted a research proposal to Fabio Sala, the senior investigator for
the Hay Group, with a signed agreement stating that the ECI would be used for research
purposes only. The ECI is appropriately cited in the dissertation and a final copy of the
dissertation will be submitted to HayGroup (K.C., personal communication, HayGroup,
May 2002).

The Emotional Competence Inventory (ECI) is a 360-degree tool designed to
assess the emotional competence of individuals and organizations. The tool is considered
a 360-degree tool because it can be used to gather self, subordinate, peer, and
supervisory ratings on 18 competencies organized into four clusters: self-awareness, self-
management, social awareness and social skill (Cherniss & Goleman, 2001). The
competencies include: emotional self-awareness, accurate self-assessment, self-confidence, self-control, trustworthiness, conscientiousness, adaptability, achievement orientation, initiative, empathy, organizational awareness, developing others, service
orientation, leadership, influence, communication, change catalyst, conflict management, building bonds, and teamwork and collaboration. The ECI is based on the emotional competencies identified by Goleman in *Working with Emotional Intelligence* (1998), competencies from the Hay/McBer *Generic Competency Dictionary* (1996) and Dr. Richard Boyatzis's *Self-Assessment Questionnaire* (SAQ) (Boyatzis, 1994; Boyatzis, Cowen & Kolb, 1995).

The self-awareness cluster includes accurate self-assessment, emotional self-awareness, and self-confidence. The self-management cluster includes achievement orientation, adaptability, emotional self-control, initiative, optimism, and transparency. The social awareness cluster includes empathy, organizational awareness, and service orientation. The relationship management cluster includes change catalyst, conflict management, developing others, influence, inspirational leadership, and teamwork and collaboration.

In the *Emotionally Intelligent Workplace*, Gowing (Cherniss & Goleman, 2001) outlines the emotional competence framework developed by Goleman (1998) after his research of hundreds of competency models from private and public sector organizations employing over two million members of our nation's workforce. The ECI was originally designed to measure all the competencies in this framework. After analyzing data on the first version of ECI during early pilot tests of the instrument, some changes were made on the first version of the ECI. Goleman (1998) originally hypothesized five competency clusters and the ECI assesses only four. Figure 9 is a comparison of the Emotional Competency Inventory and Goleman's Emotional Competence Framework.
The Emotional Competence Framework  
(Goleman 1998)  

The Emotional Competence Inventory  
(Boyatzis, Goleman, and Rhee, 2000)

<table>
<thead>
<tr>
<th>Personal Competence. How We Manage Ourselves.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Self-Awareness.</strong> Knowing one’s internal states, preferences, resources, and intuitions.</td>
<td><strong>A. Self-Awareness.</strong></td>
</tr>
<tr>
<td><strong>A2. Accurate Self-Assessment.</strong> Knowing one’s strengths and limits.</td>
<td><strong>A2. Accurate Self-Assessment.</strong> Knowing one’s strengths and limits.</td>
</tr>
<tr>
<td><strong>B. Self-Regulation.</strong> Managing one’s internal states, impulses, and resources.</td>
<td><strong>B. Self-Management.</strong></td>
</tr>
<tr>
<td><strong>B4. Adaptability.</strong> Flexibility in handling change.</td>
<td><strong>B4. Adaptability.</strong> Flexibility in adapting to changing situations or obstacles.</td>
</tr>
<tr>
<td><strong>B5. Innovation.</strong> Being comfortable with novel ideas, approaches, and new information.</td>
<td></td>
</tr>
</tbody>
</table>
C. Motivation. Emotional tendencies that guide or facilitate reaching goals.

C1. Achievement Drive. Striving to improve or meet a standard of excellence.

C2. Commitment. Aligning with goals of the group or organization.

C3. Initiative. Readiness to act on opportunities.

C4. Optimism. Persistence in pursuing goals despite obstacles or setbacks.

Social Competence. How we handle relationships.

D. Empathy. Awareness of others' feelings, needs, and concerns.

D1. Understanding Others. Sensing others' feelings and perspectives, and taking an active interest in their concerns.

D2. Developing Others. Sensing others' developmental needs, and bolstering their abilities.


D4. Leveraging Diversity. Cultivating opportunities through different kinds of people.

D5. Political Awareness. Reading a group's emotional currents and power relationships.

E. Social Skills. Adeptness at inducing desirable responses in others.

B5. Achievement Orientation. The guiding drive to meet an internal standard of excellence.


C. Social Awareness.

C1. Empathy. Understanding others and taking an active interest in their concerns.

D1. Developing Others. Sensing others' developmental needs, and bolstering their abilities.

D2. Service Orientation. Recognizing and meeting customers' needs.

C2. Organizational Awareness. Empathizing at the organizational level.

D. Social Skills.
E1. Influence. Weilding effective tactics for persuasion.
E2. Communication. Listening openly, and sending convincing messages.
E4. Leadership. Inspiring and guiding individuals and groups.
E5. Change Catalyst. Initiating or managing change.
E7. Collaboration and Cooperation. Working with others toward shared goals.
E8. Team Capabilities. Creating group synergy in pursuing collective goals.

D5. Communication. Sending clear and convincing messages.
D3. Leadership. Inspiring and guiding groups of people.


Figure 9. Comparison of the Emotional Competency Inventory and Goleman’s Emotional Competence Framework.

The most current ECI contains a total of 72 items to assess each of 18 competencies in four clusters. To allow for subjective strength of responses, a 6-point scale is used to describe oneself or another person on each competence (Cherniss & Golemann, 2001). Each item in the questionnaire describes a work-related behavior. An example survey item from the others’ assessment is “Listens carefully when you are speaking.” The six-point Likert scale is then used to rate the person: never, rarely, sometimes, often, consistently, and don’t know. The 6th point on the scale provides an
option to answer “I don’t know” or “I have not had the opportunity to observe the person in an appropriate setting.” The self and others’ assessment take 15 to 20 minutes to complete, respectively. According to Gowing (Cherniss & Goleman, 2001), approximately 40 percent of the questions in the ECI are taken from the Self-Assessment Questionnaire (SAQ) developed by Boyatzis and his colleagues (Boyatzis, 1994; Boyatzis, Cowen & Kolb, 1995). The first version of the ECI was pilot tested in the fall of 1998 with 596 people, including samples of managers and salespeople from industrial corporations and graduate students in master’s degree programs in social work, management, and engineering. The reliabilities and intercorrelation of the items were analyzed and the instrument was revised to the ECI used in this study. For scoring purposes, tipping points are identified. Tipping points were determined by prior studies and indicate the score at which an individual is expected to be tipped over into superior performance on that competency on the job. In McClelland’s (1998) analysis of competencies that distinguish star performers from average ones, he found a tipping point effect when people exhibited excellence in six or more competencies and in at least one competency in each of the four clusters.

The Standards for Educational and Psychological Testing (American Educational Research Association, 1999) define reliability as “the degree to which scores are free of errors of measurement for a given group” (p. 180). Cronbach’s alpha, a measure of internal consistency, is used to show scale reliabilities for the ECI. The Standards for Educational and Psychological Testing define an internal consistency coefficient as “an index of the reliability of test scores derived from the statistical interrelationships among item responses or scores on separate parts of a test” (p. 176). Table 1 provides the
Cronbach’s alpha estimates for reliability of the ECI self and others assessment from previous research (Boyatzis, Goleman & Rhee, 1999). The reliabilities for the self-assessments range from .618 for adaptability to .866 for change catalyst. The reliabilities for composite others’ assessment ranged from .798 for emotional self-awareness to .948 for empathy. Sample size is shown in parenthesis following each coefficient alpha. A random sample pulled from the North American ECI Database was used to test reliability. The database is made up of managers and salespeople from several industrial corporations, and graduate students in management, engineering, and social work.

Reliability results of the study on the EI of Award-Winning fitness professionals are reported in Table 2. Reliabilities are reported on N=107. The higher the number of ECI assessment questions the higher the reliability. Reliabilities range from .943 for the ECI composite score (72 items) to .318 for the emotional competency score of transparency (4 items). Reliability for cluster scores ranged from .747 for the social awareness cluster to .861 for the relationship management cluster. Competency scores ranged from .318 for transparency to .761 for teamwork and collaboration. Reliabilities closer to 1.0 are considered high, results of reliabilities lower than .7 must be considered with caution.

The Standards for Educational and Psychological Testing (American Educational Research Association, 1999) state that validity refers to “the degree to which evidence and theory support the interpretations of test scores entailed by proposed use of tests” (p. 9). In other words the validity of psychological tests generally refers to the degree to which a measure or questionnaire actually measures what it is supposed to measure. The
Table 1. Cronbach’s Alpha Reliability Estimates for the ECI. (N in parenthesis).

<table>
<thead>
<tr>
<th></th>
<th>Self-Assessment</th>
<th>Others’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Self-Awareness</td>
<td>.629 (668)</td>
<td>.798 (427)</td>
</tr>
<tr>
<td>Accurate Self-Assessment</td>
<td>.715 (663)</td>
<td>.886 (427)</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>.825 (660)</td>
<td>.909 (428)</td>
</tr>
<tr>
<td>Self-Control</td>
<td>.808 (668)</td>
<td>.906 (427)</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>.667 (667)</td>
<td>.814 (427)</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.816 (664)</td>
<td>.911 (428)</td>
</tr>
<tr>
<td>Adaptability</td>
<td>.618 (664)</td>
<td>.834 (428)</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>.835 (660)</td>
<td>.921 (428)</td>
</tr>
<tr>
<td>Initiative</td>
<td>.754 (663)</td>
<td>.897 (427)</td>
</tr>
<tr>
<td>Empathy</td>
<td>.837 (657)</td>
<td>.948 (425)</td>
</tr>
<tr>
<td>Organizational Awareness</td>
<td>.786 (660)</td>
<td>.913 (426)</td>
</tr>
<tr>
<td>Developing Others</td>
<td>.818 (653)</td>
<td>.927 (426)</td>
</tr>
<tr>
<td>Service Orientation</td>
<td>.854 (628)</td>
<td>.938 (426)</td>
</tr>
<tr>
<td>Leadership</td>
<td>.658 (649)</td>
<td>.824 (427)</td>
</tr>
<tr>
<td>Influence</td>
<td>.767 (637)</td>
<td>.881 (425)</td>
</tr>
<tr>
<td>Communication</td>
<td>.789 (654)</td>
<td>.910 (427)</td>
</tr>
<tr>
<td>Change Catalyst</td>
<td>.866 (637)</td>
<td>.935 (426)</td>
</tr>
<tr>
<td>Conflict Management</td>
<td>.778 (660)</td>
<td>.894 (426)</td>
</tr>
<tr>
<td>Building Bonds</td>
<td>.773 (670)</td>
<td>.882 (427)</td>
</tr>
<tr>
<td>Teamwork and Collaboration</td>
<td>.842 (645)</td>
<td>.943 (426)</td>
</tr>
</tbody>
</table>

Table 2. ECI Reliability Scores for the IDEA Award Winner Study (n=107).

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Items</th>
<th>Alpha Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECI Composite Score</td>
<td>72</td>
<td>.943</td>
</tr>
<tr>
<td>Self-Awareness Cluster (SA)</td>
<td>12</td>
<td>.765</td>
</tr>
<tr>
<td>Self-Management Cluster (SM)</td>
<td>24</td>
<td>.845</td>
</tr>
<tr>
<td>Social Awareness Cluster (SOC)</td>
<td>12</td>
<td>.747</td>
</tr>
<tr>
<td>Relationship Management Cluster (REL)</td>
<td>24</td>
<td>.861</td>
</tr>
<tr>
<td>SA/Accurate Self-Assessment</td>
<td>4</td>
<td>.551</td>
</tr>
<tr>
<td>SA/Emotional Self-Awareness</td>
<td>4</td>
<td>.677</td>
</tr>
<tr>
<td>SA/Self-Confidence</td>
<td>4</td>
<td>.651</td>
</tr>
<tr>
<td>SM/Achievement Orientation</td>
<td>4</td>
<td>.562</td>
</tr>
<tr>
<td>SM/Adaptability</td>
<td>4</td>
<td>.549</td>
</tr>
<tr>
<td>SM/Emotional Self-Control</td>
<td>4</td>
<td>.710</td>
</tr>
<tr>
<td>SM/Initiative</td>
<td>4</td>
<td>.575</td>
</tr>
<tr>
<td>SM/Optimism</td>
<td>4</td>
<td>.687</td>
</tr>
<tr>
<td>SM/Transparency</td>
<td>4</td>
<td>.318</td>
</tr>
<tr>
<td>SOC/Empathy</td>
<td>4</td>
<td>.632</td>
</tr>
<tr>
<td>SOC/Organizational Awareness</td>
<td>4</td>
<td>.619</td>
</tr>
<tr>
<td>SOC/Service Orientation</td>
<td>4</td>
<td>.646</td>
</tr>
<tr>
<td>REL/Change Catalyst</td>
<td>4</td>
<td>.675</td>
</tr>
<tr>
<td>REL/Conflict Management</td>
<td>4</td>
<td>.393</td>
</tr>
<tr>
<td>REL/Developing Others</td>
<td>4</td>
<td>.631</td>
</tr>
<tr>
<td>REL/Influence</td>
<td>4</td>
<td>.582</td>
</tr>
<tr>
<td>REL/Inspirational Leadership</td>
<td>4</td>
<td>.762</td>
</tr>
<tr>
<td>REL/Teamwork and Collaboration</td>
<td>4</td>
<td>.569</td>
</tr>
</tbody>
</table>
process of validation involves accumulating evidence to provide a sound scientific basis for the proposed score interpretations. Content validity is the relationship between the test’s content and the content area it is intended to measure. Construct validity is the relationship between the test’s content and the construct it is intended to measure. According to Gowing (Cherniss & Goleman, 2001), the ECI is supported by evidence of construct validity and content validity from its predecessor instrument, the Self-Assessment Questionnaire (SAQ), 40 percent of the items come from the SAQ.

The ECI authors have undertaken some work to understand the inventory’s internal structure. One study of the content validity of the ECI, focused on the self-awareness cluster, sampled 427 individuals from a variety of organizations (Sala, 2002). It was hypothesized that participants who were rated low by others on the accurate self-assessment subscale of the ECI are less aware of their strengths and limits than those who were rated high on this competency. The 427 participants were categorized as either high or low in accurate self-assessment based on their total others scores. Those who scored in the top 25 percent were considered high in accurate self-assessment and those who scored in the bottom 25 percent were categorized as low in accurate self-assessment. Results showed that those who were low in accurate self-assessment showed a significantly larger mean gap between self and total other scores on each competency as compared to those who were high in this competency. A secondary comparison was made to determine if participants rated themselves higher and lower than others rated them by subtracting total others from self-competency scores. It was found that those who were low in accurate self-assessment rated themselves higher on every competency than others rated them. Those who were high in accurate self-assessment underrated
themselves. According to this study, those who are not very aware of their strengths and weaknesses have difficulty accurately evaluating themselves on EI competencies (Sala, 2002). It was concluded that those who are rated high in accurate self-assessment have a more realistic view of themselves. This study supports the content of the ECI.

Construct validity refers to the degree to which a test or questionnaire is a measure of the characteristic of interest. Sala (2002) reported a study that supported the construct validity of the ECI by comparing multi-rater assessments (manager, peer, and direct reports) obtained on the ECI and participants self-rated Myers-Briggs Type Indicator (MBTI). Participants of the study were 18 paramedics from the greater Denver/Boulder area ranging in age from 19 to 46; 15 were male and 3 female. Pearson correlations were calculated to determine the relationship between the two instruments. Results indicated moderate to strong significant correlations between several EI competencies and two dimensions of the MBTI (sensing/intuiting and thinking/feeling). The Myers-Briggs intuitive types are strong on many of the EI competencies, particularly empathy and adaptability, as well as the competencies from the social awareness cluster. Similarly the Myers-Briggs feeling types correlated with many of the ECI competencies, particularly empathy and the competencies in the social awareness cluster. These results provide good construct validity for the ECI.

Award-winning fitness professionals are selected based on criteria that correspond closely with Goleman’s EI framework. Award-winners scoring high on the ECI could further support content and construct validity of the ECI and its corresponding EI framework.
Data Analysis

Statistical Package for the Social Sciences (SPSS) was used to compile the IDEA Award Winner self and others' assessment, and IDEA non-award winner ECI ratings. The data for research questions one, two, and three were analyzed using multivariate analysis of variance (MANOVA). Linear regression was used to analyze question four. Figure 10 provides an overview of the data analysis of the research questions and data analysis procedures.

Additional Data

Because it was possible that non-award winners may exhibit characteristics much like award winners (which would confound the study), the non-award winners were asked four additional questions based on the criteria used to select IDEA Award Winners. Non-award winners were asked the following questions using the rating scale of (a) none (b) some (c) moderate (d) considerable (e) extensive.

1. Please rate your community involvement and influence on the general public.
2. Please rate your professional credibility and advancement of professional skills.
3. Please rate your fitness program development and implementation.
4. Please rate your contribution to the success of your organization.

IDEA Award winners are nominated by peers, IDEA staff, or self-nominated. Non-award winners may be potential award-winners who have not yet been nominated for an IDEA Award. The answers to these questions may identify potential IDEA Award Winners and help to explain the results of the study. If all non-award winners rate themselves exceptionally high on all four questions and differences do not exist between
**Research Questions:**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Sources</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are there significant differences between award winners and non-award winners on the overall ECI score, four cluster scores, and 18 ECI competencies?</td>
<td>• IDEA Award Winner ECI’s</td>
<td>Multivariate Analysis of Variance (MANOVA)</td>
</tr>
<tr>
<td></td>
<td>• IDEA non-award winner ECI’s</td>
<td></td>
</tr>
<tr>
<td>2. Are there significant differences between the self-ratings of award winners and the ratings of their clients on the overall ECI score, four cluster scores, and 18 ECI competencies?</td>
<td>• IDEA Award Winner ECI’s</td>
<td>MANOVA</td>
</tr>
<tr>
<td></td>
<td>• IDEA Award Winner others’ ratings</td>
<td></td>
</tr>
<tr>
<td>3. Are there significant differences between male and female award winners on the overall ECI scores, four cluster scores, and 18 ECI competencies.</td>
<td>• IDEA Award Winner ECI’s</td>
<td>MANOVA</td>
</tr>
<tr>
<td>4. Is there a relationship between age and the scores of award winners on the overall ECI score, four cluster scores, and 18 ECI competencies?</td>
<td>• IDEA Award Winner ECI’s</td>
<td>Linear Regression</td>
</tr>
</tbody>
</table>

Figure 10. Data Analysis.

non-award winners and IDEA Award Winners on the ECI composite score, four cluster scores, and 18 competency scores, it may further support that non-award respondents are potential award-winners.
Organization of the Dissertation

Chapter III provided an overview of the research design and explanation of the data collection procedures. Chapter III also described the survey instrument and the data analysis that was used for the study. Chapter IV reports the data analysis and research findings for the four research questions. Chapter V provides a summary, conclusions, and recommendations.
CHAPTER IV
FINDINGS AND DATA ANALYSIS

The purpose of this study is to investigate if IDEA Group Fitness Instructor of the Year, IDEA Personal Trainer of the Year, and IDEA Program Director of the Year Award Winners demonstrate higher emotional intelligence than non-award-winning IDEA Health and Fitness Association members, as measured by the Emotional Competence Inventory (ECI). This study will investigate whether significant differences exist between the composite score, four cluster scores, and 18 competencies as measured by the ECI for IDEA Award Winners and IDEA non-award winners who work as personal trainers, program directors, and fitness instructors. The study also investigates if differences exist on the composite score, four cluster scores, and 18 competencies of the IDEA Award Winners by gender, and between self and observer assessments. The study investigates whether or not a relationship exists between age and composite scores, four cluster scores, and 18 competencies.

This chapter first describes the sample and then analyzes the data for each of the four research questions. The IDEA non-award winners were asked an additional four questions to assess whether they possessed select criteria that would make them eligible for an IDEA Award. These results will also be reported.
Profile of Sample

Forty IDEA Award Winners received the self and other assessment, a total of 30 IDEA Award Winners returned completed ECIs, a 75% return rate. Twenty-three women and 7 men responded. Twenty-two of the 30 clients returned the observer assessment, a 73% return rate. Eighty-two ECIs were sent out to non-award winners and 77 non-award winners responded for a 94% return rate (31 fitness instructors, 23 program directors, and 23 personal trainers). Sixty-seven respondents were women and 10 were men. There are 107 total respondents, 90 women and 17 men. Sample results by gender are reported in Table 3.

Table 3. Sample Results by Gender.

<table>
<thead>
<tr>
<th></th>
<th>Non-Award Winner</th>
<th>IDEA Award Winner</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Count</td>
<td>67</td>
<td>23</td>
<td>90</td>
</tr>
<tr>
<td>% Within Award</td>
<td>87.0%</td>
<td>76.7%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Count</td>
<td>10</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>% Within Award</td>
<td>13.0%</td>
<td>23.3%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Count</td>
<td>77</td>
<td>30</td>
<td>107</td>
</tr>
<tr>
<td>% Within Award</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 reports the sample of the 107 total respondents by age. The youngest age of the non-award winner respondents is 23 and the oldest age is 70, mean age is 44.2.
The minimum age of the 30 IDEA Award Winner respondents is 33 and the maximum is 63, mean age is 45.5.

Table 4. Sample Results by Age.

<table>
<thead>
<tr>
<th>Award Classification</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-award Winner</td>
<td>77</td>
<td>23</td>
<td>70</td>
<td>44.2</td>
<td>9.8</td>
</tr>
<tr>
<td>IDEA Award Winner</td>
<td>30</td>
<td>33</td>
<td>63</td>
<td>45.6</td>
<td>7.9</td>
</tr>
</tbody>
</table>

Table 5 reports the mean ages of female and male IDEA Award Winners. The mean age of female IDEA Award Winners is 47.4 and mean age of male IDEA Award Winners is 39.3. Minimum age for female and male IDEA Award Winners is 33, maximum age for females is 63 and for males is 52.

Table 5. Sample Results by Age, Gender, and Award Status.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Gender</th>
<th>N</th>
<th>Min. Age</th>
<th>Max. Age</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-award Winner</td>
<td>F</td>
<td>67</td>
<td>23</td>
<td>70</td>
<td>44.1</td>
<td>9.6</td>
</tr>
<tr>
<td>Non-award Winner</td>
<td>M</td>
<td>10</td>
<td>29</td>
<td>65</td>
<td>45.0</td>
<td>11.4</td>
</tr>
<tr>
<td>IDEA Award Winner</td>
<td>F</td>
<td>23</td>
<td>33</td>
<td>63</td>
<td>47.4</td>
<td>7.2</td>
</tr>
<tr>
<td>IDEA Award Winner</td>
<td>M</td>
<td>7</td>
<td>33</td>
<td>52</td>
<td>39.2</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Research Question One

Research Question One: Are there significant differences between IDEA Award Winners and non-award winners on the overall ECI scores, four cluster scores
MANOVA was used to analyze the data for Research Question One to determine if significant differences exist between IDEA Award Winners and non-award winners on the ECI composite score, four cluster scores (self-awareness, self-management, social awareness, and relationship management), and 18 competency scores. Significant multivariate results were found (Wilk's Lambda = .643, F(18,88)=2.72, p = .001) when IDEA Award Winners and non-award winners were compared on the 18 ECI competencies. Significant multivariate results were also found (Wilks' Lambda=.793, F(4,102)=6.67, p<.001) when IDEA Award Winners and non-award winners were compared on the four cluster scores and on the ECI composite score. The results are presented in Table 6.

There were significant differences between IDEA Award Winners and non-award winners on the ECI composite score (F (1,105)=8.041, p=.005). The IDEA Award Winners were significantly higher than the non-award winners. There were significant differences on three of four clusters of the ECI: self-awareness (F(1,105)=4.29, p=.041), self-management (F(1,105)=4.15, p=.044), and relationship management (F(1,105)=16.82, p=.001). IDEA Award winners were significantly higher than non-award winners on the three clusters of self-awareness, self-management, and relationship management. No significant difference was found on the social awareness cluster.

There were significant differences between IDEA Award Winners and non-award winners on 10 of 18 ECI competencies (Wilkes's Lambda=.643, F (18,88)=2.72, p=.001). IDEA Award Winners scored higher on these 10 ECI competencies: SA/Emotional Self-
Table 6. Means, Standard Deviations, and ANOVA Comparisons of IDEA Award Winners and Non-award Winners on ECI Composite Score, Four Clusters, and 18 Competencies.

<table>
<thead>
<tr>
<th></th>
<th>Award Winner n=30</th>
<th>Non-award Winners n=77</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECI Composite</td>
<td>241.2 17.6</td>
<td>226.6 25.8</td>
<td>8.04</td>
<td>.005*</td>
</tr>
<tr>
<td>Self-Awareness (SA)</td>
<td>41.1 3.8</td>
<td>39.1 4.8</td>
<td>4.28</td>
<td>.041*</td>
</tr>
<tr>
<td>Self-Management (SM)</td>
<td>78.0 5.6</td>
<td>74.4 8.9</td>
<td>4.15</td>
<td>.044*</td>
</tr>
<tr>
<td>Social Awareness (SOC)</td>
<td>42.2 4.1</td>
<td>41.4 5.0</td>
<td>.74</td>
<td>.391</td>
</tr>
<tr>
<td>Relationship Management (RM)</td>
<td>79.9 7.0</td>
<td>71.8 9.9</td>
<td>16.8</td>
<td>.001*</td>
</tr>
<tr>
<td>SA/Accurate Self-Assessment</td>
<td>12.8 1.5</td>
<td>12.5 2.0</td>
<td>.41</td>
<td>.522</td>
</tr>
<tr>
<td>SA/Emotional Self-Awareness</td>
<td>14.1 1.5</td>
<td>13.2 2.1</td>
<td>4.41</td>
<td>.038*</td>
</tr>
<tr>
<td>SA/Self-Confidence</td>
<td>14.2 1.9</td>
<td>13.3 1.9</td>
<td>4.33</td>
<td>.040*</td>
</tr>
<tr>
<td>SM/Achievement Orientation</td>
<td>13.5 1.7</td>
<td>12.6 2.0</td>
<td>4.47</td>
<td>.037*</td>
</tr>
<tr>
<td>SM/Adaptability</td>
<td>13.5 1.6</td>
<td>13.0 2.1</td>
<td>1.27</td>
<td>.262</td>
</tr>
<tr>
<td>SM/Emotional Self-Control</td>
<td>10.8 1.4</td>
<td>11.2 2.3</td>
<td>.56</td>
<td>.454</td>
</tr>
<tr>
<td>SM/Initiative</td>
<td>12.6 2.1</td>
<td>11.0 2.3</td>
<td>10.46</td>
<td>.002*</td>
</tr>
<tr>
<td>SM/Optimism</td>
<td>14.1 1.6</td>
<td>13.1 2.0</td>
<td>5.32</td>
<td>.023*</td>
</tr>
<tr>
<td>SM/Transparency</td>
<td>13.5 1.4</td>
<td>13.5 1.9</td>
<td>.00</td>
<td>.986</td>
</tr>
<tr>
<td>SOC/Empathy</td>
<td>14.2 1.6</td>
<td>13.8 1.9</td>
<td>1.16</td>
<td>.284</td>
</tr>
<tr>
<td>SOC/Organizational Awareness</td>
<td>13.7 2.0</td>
<td>13.3 3.0</td>
<td>.51</td>
<td>.477</td>
</tr>
<tr>
<td>SOC/Service Orientation</td>
<td>14.4 1.5</td>
<td>14.3 1.7</td>
<td>.014</td>
<td>.908</td>
</tr>
<tr>
<td>RM/Change Catalyst</td>
<td>12.6 1.9</td>
<td>10.9 2.3</td>
<td>13.30</td>
<td>.001*</td>
</tr>
<tr>
<td>RM/Conflict Management</td>
<td>10.4 2.1</td>
<td>9.3 2.6</td>
<td>4.26</td>
<td>.041*</td>
</tr>
<tr>
<td>RM/Developing Others</td>
<td>14.6 1.5</td>
<td>13.6 1.8</td>
<td>6.80</td>
<td>.010*</td>
</tr>
<tr>
<td>RM/Influence</td>
<td>14.1 1.4</td>
<td>12.2 2.4</td>
<td>17.52</td>
<td>.000**</td>
</tr>
<tr>
<td>RM/Inspirational Leadership</td>
<td>14.5 1.8</td>
<td>13.0 2.5</td>
<td>8.77</td>
<td>.004*</td>
</tr>
<tr>
<td>RM/Teamwork and Collaboration</td>
<td>13.6 2.1</td>
<td>12.8 2.0</td>
<td>3.71</td>
<td>.057</td>
</tr>
</tbody>
</table>

*p<.05, **p<.001

awareness (F(1,105)=4.42, p=.038), SA/Self-confidence (F(1,105)=4.33, p=.040),
SM/Achievement orientation (F(1,105)=4.478, p=.037), SM/Initiative (F(1,105)=10.46,
Research Question Two

Research Question Two: Are there significant differences between IDEA Award Winners and non-award winners on the overall ECI scores, four cluster scores, and 18 ECI competencies?

MANOVA was used to analyze the data for Research Question Two to determine if significant differences exist between IDEA Award Winners’ self-assessment and their clients’ assessment on the ECI composite score, four cluster scores (Wilk’s Lambda = .704, F(4,47)=4.95, p = .002), and competency scores (Wilke’s Lambda=.288, F(18,33)=4.53, p<.001). The results are presented in Table 7.

There were significant differences between IDEA Award Winners and their clients on the ECI composite score (F(1,50)=11.84, p=.001) and three cluster scores: self-management (F(1,50)=15.49, p<.001), social awareness (F(1,50)=9.21, p=.004, and relationship management (F(1,50)=6.35, p=.015). Significant differences were also found on nine out of 18 ECI competency scores (F(4,102)=6.668, Wilks’s Lambda = .793, p = .005). There were significant differences on ECI competencies including: SA/Self-confidence (F(1,50)=8.95), p=.004), SM/Adaptability (F(1,50)=13.2, p=.001), SM/Emotional Self-Control (F(1,50)=26.86, p<.001), SM/Initiative (F(1,50)=6.54, p=.014), SOC/Organizational Awareness F(1,50)=8.70, p=005), SOC/Service Organization (F(1,50)=6.25, p=.016), RM/Inspirational Leadership (F(1,50)=4.69,
### Table 7. Means, Standard Deviations, and ANOVA Comparisons of IDEA Award Winners and Clients on ECI Composite Score, Four Clusters, and 18 ECI Competencies.

<table>
<thead>
<tr>
<th></th>
<th>Award n=30</th>
<th></th>
<th>Client n=22</th>
<th></th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECI Composite</td>
<td>241.2</td>
<td>17.6</td>
<td>258.9</td>
<td>19.2</td>
<td>11.84</td>
<td>.001*</td>
</tr>
<tr>
<td>Self-Awareness (SA)</td>
<td>41.1</td>
<td>3.8</td>
<td>43.0</td>
<td>3.0</td>
<td>3.62</td>
<td>.063</td>
</tr>
<tr>
<td>Self-Management (SM)</td>
<td>78.0</td>
<td>6.6</td>
<td>85.3</td>
<td>7.8</td>
<td>15.49</td>
<td>.001**</td>
</tr>
<tr>
<td>Social Awareness (SOC)</td>
<td>42.2</td>
<td>4.1</td>
<td>45.6</td>
<td>3.7</td>
<td>9.21</td>
<td>.004*</td>
</tr>
<tr>
<td>Relationship Management (RM)</td>
<td>79.9</td>
<td>7.0</td>
<td>85.0</td>
<td>7.6</td>
<td>6.35</td>
<td>.015*</td>
</tr>
<tr>
<td>SA/Accurate Self-Assessment</td>
<td>12.8</td>
<td>1.5</td>
<td>13.3</td>
<td>2.2</td>
<td>.95</td>
<td>.335</td>
</tr>
<tr>
<td>SA/Emotional Self-Awareness</td>
<td>14.1</td>
<td>1.5</td>
<td>14.2</td>
<td>1.8</td>
<td>.01</td>
<td>.917</td>
</tr>
<tr>
<td>SA/Self-Confidence</td>
<td>14.2</td>
<td>1.9</td>
<td>15.5</td>
<td>0.7</td>
<td>8.95</td>
<td>.004*</td>
</tr>
<tr>
<td>SM/Achievement Orientation</td>
<td>13.5</td>
<td>1.8</td>
<td>14.0</td>
<td>1.7</td>
<td>1.12</td>
<td>.295</td>
</tr>
<tr>
<td>SM/Adaptability</td>
<td>13.5</td>
<td>1.6</td>
<td>15.0</td>
<td>1.2</td>
<td>13.20</td>
<td>.001*</td>
</tr>
<tr>
<td>SM/Emotional Self-Control</td>
<td>10.8</td>
<td>1.4</td>
<td>13.4</td>
<td>2.1</td>
<td>26.86</td>
<td>.001**</td>
</tr>
<tr>
<td>SM/Initiative</td>
<td>12.6</td>
<td>2.1</td>
<td>14.3</td>
<td>2.7</td>
<td>6.54</td>
<td>.014*</td>
</tr>
<tr>
<td>SM/Optimism</td>
<td>14.1</td>
<td>1.6</td>
<td>14.7</td>
<td>1.9</td>
<td>1.62</td>
<td>.210</td>
</tr>
<tr>
<td>SM/Transparency</td>
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<td>.317</td>
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<tr>
<td>SOC/Empathy</td>
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<td>14.7</td>
<td>1.2</td>
<td>1.64</td>
<td>.207</td>
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<tr>
<td>SOC/Organizational Awareness</td>
<td>13.7</td>
<td>2.0</td>
<td>15.7</td>
<td>2.8</td>
<td>8.70</td>
<td>.005*</td>
</tr>
<tr>
<td>SOC/Service Orientation</td>
<td>14.4</td>
<td>1.5</td>
<td>15.3</td>
<td>0.9</td>
<td>6.25</td>
<td>.016*</td>
</tr>
<tr>
<td>RM/Change Catalyst</td>
<td>12.6</td>
<td>1.9</td>
<td>13.5</td>
<td>2.3</td>
<td>2.12</td>
<td>.151</td>
</tr>
<tr>
<td>RM/Conflict Management</td>
<td>10.4</td>
<td>2.1</td>
<td>11.4</td>
<td>4.0</td>
<td>1.33</td>
<td>.253</td>
</tr>
<tr>
<td>RM/Developing Others</td>
<td>14.6</td>
<td>1.5</td>
<td>14.8</td>
<td>1.5</td>
<td>.20</td>
<td>.659</td>
</tr>
<tr>
<td>RM/Influence</td>
<td>14.1</td>
<td>1.4</td>
<td>15.0</td>
<td>1.8</td>
<td>3.70</td>
<td>.061</td>
</tr>
<tr>
<td>RM/Inspirational Leadership</td>
<td>14.5</td>
<td>1.8</td>
<td>15.5</td>
<td>1.0</td>
<td>4.69</td>
<td>.035*</td>
</tr>
<tr>
<td>RM/Teamwork and Collaboration</td>
<td>13.6</td>
<td>2.1</td>
<td>15.0</td>
<td>1.4</td>
<td>6.70</td>
<td>.013*</td>
</tr>
</tbody>
</table>

*p<.05, **p<.001

p=.035, and RM/Teamwork and Collaboration (F(1,50)=6.68, p=.013). In every case, clients scored the IDEA Award Winners higher than the IDEA Award Winners scored themselves.
Research Question Three

Research Question Three: Are there significant differences between male and female award winners on the overall ECI score, four cluster scores, and 18 ECI competencies?

MANOVA was used to analyze the data for Research Question Three to determine if significant differences existed between male and female IDEA Award Winners on the ECI composite score, four cluster scores and competency scores. The results are presented in Table 8.

No significant differences were found between the male and female IDEA Award Winners on the ECI composite score and four cluster scores (Wilk’s Lambda = .987, F(4,25)=.084, p=.987) or the ECI 18 competencies (Wilk’s Lambda = .271, F(18,11)=1.640, p = .203).

Research Question Four

Research Question Four: Is there a relationship between age and scores of award winners on the overall ECI score, four cluster scores, and 18 ECI competencies?

Linear regression was used to determine if a relationship exists between age and the scores of IDEA Award Winners on the ECI composite scores for the IDEA Award Winners. No relationship was found between age and ECI composite scores for IDEA Award Winners. Results are reported in Table 9.

Table 10 reports the results of the linear regression analysis used to determine if a relationship exists between age and the score of IDEA Award Winners on the four cluster scores of the ECI. No significant relationship was found between age and the four cluster scores of the IDEA Award Winners.
Table 8. Means, Standard Deviations, and ANOVA Comparisons of Male and Female IDEA Award Winners on ECI Composite Score, Four Clusters, and 18 ECI Competencies Male and Female IDEA Award Winners.

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=23</td>
<td></td>
<td>n=7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECI Composite</td>
<td>240.5</td>
<td>17.7</td>
<td>243.4</td>
<td>18.7</td>
<td>.14</td>
<td>.710</td>
</tr>
<tr>
<td>Self-Awareness (SA)</td>
<td>40.9</td>
<td>4.1</td>
<td>41.6</td>
<td>2.6</td>
<td>.16</td>
<td>.692</td>
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<tr>
<td>Self-Management (SOC)</td>
<td>77.9</td>
<td>5.5</td>
<td>78.4</td>
<td>6.3</td>
<td>.05</td>
<td>.822</td>
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<tr>
<td>Social Awareness (SA)</td>
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<td>43.0</td>
<td>3.8</td>
<td>.31</td>
<td>.580</td>
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<tr>
<td>Relationship Management (RM)</td>
<td>79.7</td>
<td>6.7</td>
<td>80.4</td>
<td>8.5</td>
<td>.05</td>
<td>.824</td>
</tr>
<tr>
<td>SA/Accurate Self-Assessment</td>
<td>12.9</td>
<td>1.6</td>
<td>12.3</td>
<td>1.3</td>
<td>.91</td>
<td>.349</td>
</tr>
<tr>
<td>SA/Emotional Self-Awareness</td>
<td>14.0</td>
<td>1.5</td>
<td>14.5</td>
<td>1.6</td>
<td>.77</td>
<td>.388</td>
</tr>
<tr>
<td>SA/Self-Confidence</td>
<td>14.0</td>
<td>2.0</td>
<td>14.7</td>
<td>1.4</td>
<td>.74</td>
<td>.397</td>
</tr>
<tr>
<td>SM/Achievement Orientation</td>
<td>13.6</td>
<td>1.8</td>
<td>13.5</td>
<td>1.8</td>
<td>.03</td>
<td>.861</td>
</tr>
<tr>
<td>SM/Adaptability</td>
<td>13.6</td>
<td>1.6</td>
<td>13.0</td>
<td>1.8</td>
<td>.76</td>
<td>.391</td>
</tr>
<tr>
<td>SM/Emotional Self-Control</td>
<td>10.6</td>
<td>1.2</td>
<td>11.7</td>
<td>1.6</td>
<td>4.21</td>
<td>.050</td>
</tr>
<tr>
<td>SM/Initiative</td>
<td>12.9</td>
<td>2.3</td>
<td>11.7</td>
<td>.49</td>
<td>1.67</td>
<td>.207</td>
</tr>
<tr>
<td>SM/Optimism</td>
<td>13.4</td>
<td>1.6</td>
<td>14.4</td>
<td>1.5</td>
<td>.46</td>
<td>.503</td>
</tr>
<tr>
<td>SM/Transparency</td>
<td>13.3</td>
<td>1.4</td>
<td>14.1</td>
<td>1.2</td>
<td>2.04</td>
<td>.164</td>
</tr>
<tr>
<td>SOC/Empathy</td>
<td>13.9</td>
<td>1.6</td>
<td>14.8</td>
<td>1.3</td>
<td>1.74</td>
<td>.197</td>
</tr>
<tr>
<td>SOC/Organizational Awareness</td>
<td>13.9</td>
<td>2.0</td>
<td>13.1</td>
<td>1.7</td>
<td>.71</td>
<td>.406</td>
</tr>
<tr>
<td>SOC/Service Orientation</td>
<td>14.2</td>
<td>1.5</td>
<td>15.0</td>
<td>1.5</td>
<td>1.67</td>
<td>.206</td>
</tr>
<tr>
<td>RM/Change Catalyst</td>
<td>12.9</td>
<td>1.5</td>
<td>11.7</td>
<td>2.9</td>
<td>2.13</td>
<td>.155</td>
</tr>
<tr>
<td>RM/Conflict Management</td>
<td>10.1</td>
<td>2.0</td>
<td>11.1</td>
<td>2.6</td>
<td>1.22</td>
<td>.277</td>
</tr>
<tr>
<td>RM/Developing Others</td>
<td>14.5</td>
<td>1.6</td>
<td>15.0</td>
<td>1.1</td>
<td>.55</td>
<td>.462</td>
</tr>
<tr>
<td>RM/Influence</td>
<td>14.3</td>
<td>1.4</td>
<td>13.6</td>
<td>1.5</td>
<td>1.23</td>
<td>.277</td>
</tr>
<tr>
<td>RM/Inspirational Leadership</td>
<td>14.4</td>
<td>1.9</td>
<td>15.0</td>
<td>1.4</td>
<td>.59</td>
<td>.447</td>
</tr>
<tr>
<td>RM/Teamwork and Collaboration</td>
<td>13.5</td>
<td>2.1</td>
<td>14.0</td>
<td>2.0</td>
<td>.28</td>
<td>.599</td>
</tr>
</tbody>
</table>

82
Table 9. Regression Analysis of the Relationship Between Age and ECI Composite Score of IDEA Award Winners

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Regression    | 49.299 | 1 | 49.299 | .780 | .385 |
| Residual      | 1770.167 | 28 | 83.576 |     |     |
| Total         | 1819.467 | 29 |     |     |     |

a. Predictors: (Constant), OVERALL
b. Criterion Variable: Age

Table 10. Regression Analysis of the Relationship Between Age and the Four ECI Cluster Scores of IDEA Award Winners.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Regression    | 315.299 | 4 | 78.825 | .780 | .293 |
| Residual      | 1504.168 | 25 | 60.167 | 1.310 |     |
| Total         | 1819.467 | 29 |     |     |     |

a. Predictors: (Constant), RELATIONSHIP MANAGEMENT, SOCIAL AWARENESS, SELF-MANAGEMENT, SELF-AWARENESS
b. Criterion Variable: Age

Table 11 reports the results of the linear regression analysis used to determine if a relationship exists between age and the 18 ECI competencies for IDEA Award Winners. No significant relationship was found.

Linear regression was used to determine if a relationship exists between age and the scores of all study participants, IDEA Award Winners and non-award winners, on the ECI composite score for all participants. There relationship was a small positive relationship (p=.033). The results are reported in Table 12.
Table 11. Regression Analysis of the Relationship Between Age and the 18 ECI Competency Scores of IDEA Award Winners.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1358.472</td>
<td>18</td>
<td>75.471</td>
<td>1.801</td>
<td>.160</td>
</tr>
<tr>
<td>Residual</td>
<td>460.995</td>
<td>11</td>
<td>41.909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1819.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Criterion Variable: Age

Table 12. Regression Analysis of the Relationship Between Age and ECI Composite Score of IDEA Award Winners and Non-award Winners.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>384.809</td>
<td>1</td>
<td>384.809</td>
<td>4.646</td>
<td>.033</td>
</tr>
<tr>
<td>Residual</td>
<td>8696.911</td>
<td>105</td>
<td>82.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9081.720</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), OVERALL
b. Criterion Variable: Age

Table 13 reports the results of the linear regression analysis used to determine if a difference exists between age and the score of all participants, IDEA Award Winners and non-award winners, on the four cluster scores of the ECI. No significant relationship was found.
Table 13. Regression Analysis of the Relationship Between Age and the Four ECI Cluster Scores of IDEA Award Winners and Non-award Winners.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>315.299</td>
<td>4</td>
<td>78.825</td>
<td>.780</td>
<td>.293</td>
</tr>
<tr>
<td>Residual</td>
<td>1504.168</td>
<td>25</td>
<td>60.167</td>
<td>1.310</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1819.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), RELATIONSHIP MANAGEMENT, SOCIAL AWARENESS, SELF-MANAGEMENT, SELF-AWARENESS
b. Criterion Variable: Age

Linear regression was used to determine if a difference exists between age and the scores of all study participants, IDEA Award Winners and non-award winners, on the 18 competencies of the ECI. No significant relationship was found.

Non-award Winners IDEA Criterion Survey

The ECI is a self-report assessment tool and the IDEA Award Winners are self-nominated or nominated by another individual. There was committee discussion regarding the possibility of IDEA non-award responders being potential IDEA Award Winners. Four questions were designed to explore involvement based on IDEA criteria. (1) Rate your community involvement and/or influence on the general public. (2) Rate your professional credibility and advancement of your professional skills. (3) Rate your fitness programming, development, and implementation. (4) Rate your contribution to your organization’s success. Forty-eight of the 77 non-award winners responded to the survey that was included at the end of the ECI. Table 15 is an overview of the findings.
Table 14. Regression Analysis of the Relationship Between Age and the 18 ECI Competency Scores of IDEA Award Winners.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1183.439</td>
<td>18</td>
<td>65.747</td>
<td>.733</td>
</tr>
<tr>
<td>Residual</td>
<td>7898.281</td>
<td>88</td>
<td>89.753</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9081.720</td>
<td>106</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


b. Criterion Variable: Age

Table 15. Non-award Winner IDEA Criterion Survey (n=48).

<table>
<thead>
<tr>
<th>None</th>
<th>Some</th>
<th>Moderate</th>
<th>Considerable</th>
<th>Extensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community involvement/ Influence on the general public.</td>
<td>7</td>
<td>5</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Professional credibility/ Advancement of professional skills.</td>
<td></td>
<td>5</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Fitness program development and implementation.</td>
<td>2</td>
<td>10</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Contribution to the success of your organization.</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

Non-award winners rating their involvement as considerable and extensive on this survey may be potential IDEA Award Winners. Non-award winners rating themselves in the considerable and extensive categories may also have rated themselves higher on the
ECI. The IDEA Award Criteria and ECI competencies are closely aligned. The non-award winners who indicated considerable and extensive community involvement and influence, professional credibility and advancement of professional skills, fitness program development and implementation, and contribution to the success of their organization may also be fitness professionals with high levels of emotional competence. The IDEA Award Winners may have scored significantly higher on even more of the ECI competencies if more non-award winners had lower involvement in criteria sought for IDEA Awards. The lower response ratings may be an indicator of lower emotional competencies that could play a role in the following factors; the choice to be more involved and influential in the community, the advancement of professional skills, develop and implementation of fitness programs, and contribution to organizational success.

An independent samples t-test was performed to investigate whether the non-award winners who rated themselves with a 4 (considerable) or a 5 (extensive) on the four-question IDEA Criterion Survey reported in Table 15 had an overall ECI score similar to IDEA Award Winners. The results printed in Table 16 indicated there was no difference between these two groups on the ECI composite score (n=46), M_{high scoring non-award winners} = 240.8, M_{IDEA award winners} = 241.2; t(44) = -2.415, p = .944.

An independent samples t-test was performed to investigate whether a difference existed on the ECI Composite Scores between non-award winners who rated themselves low on the four-question IDEA Criterion Survey and those who rated themselves high. High scorers were those non-award winners who rated themselves with either a 4 (consistently) or 5 (extensively) on each of the four IDEA Criterion Survey questions.
Table 16. Independent Samples t-Test Comparing ECI Composite Scores of Award Winners with Non-Award Winners Scoring High on The IDEA Criterion Survey.

Group Statistics.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>high non-award</td>
<td>16</td>
<td>240.813</td>
<td>18.2363</td>
</tr>
<tr>
<td>award winners</td>
<td>30</td>
<td>241.200</td>
<td>17.6350</td>
</tr>
</tbody>
</table>

Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL</td>
<td>-2.371</td>
<td>44</td>
<td>.944</td>
</tr>
</tbody>
</table>

The low scoring group consisted of everyone else in the non-award winning group. The results reported in Table 17 indicate that there was a significant difference on the ECI Composite score between those rating themselves low on the IDEA Criterion survey and the high scorers (non-award winners). The non-award winners who rated themselves higher on the IDEA Criterion Survey scored significantly higher on the ECI composite score than the non-award winners who rated themselves lower on the IDEA Criterion Survey (n = 62), \( M_{\text{non-award winning IDEA Criterion low scorers}} = 223.625 \), \( M_{\text{non-award winning IDEA Criterion high scorers}} = 240.813 \); \( t(46) = -2.371, p = .022 \).

Forty-eight non-award winners responded to the four-question IDEA Criterion Survey. Of these only one had been nominated for an IDEA Award. Thirty-eight of the non-award winners indicated that they had not considered applying for an IDEA Award and 10 non-award winners had considered applying for an IDEA Award.
Table 17. Independent Samples t-Test Comparing ECI Composite Scores of Non-award Winners Scoring High and Low on the IDEA Criterion Survey.

<table>
<thead>
<tr>
<th>N</th>
<th>Group Statistics</th>
<th></th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL</td>
<td>non-award winners IDEA Criterion low scorers</td>
<td>32</td>
<td>223.625</td>
</tr>
<tr>
<td>OVERALL</td>
<td>Non-award winners IDEA Criterion high scorers</td>
<td>16</td>
<td>240.813</td>
</tr>
</tbody>
</table>

Independent Samples Test

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL</td>
<td>Equal variances assumed</td>
<td>-2.371</td>
</tr>
</tbody>
</table>

Organization of the Dissertation

This chapter reported the findings and an analysis of the data for each of the four research questions along with the results of an additional four-question IDEA Criterion Survey sent to non-award winners as an assessment of their closeness to criteria on which IDEA Award Winners are selected. Chapter V provides a summary, conclusions, and recommendations.
CHAPTER V
SUMMARY, CONCLUSIONS, DISCUSSION,
AND RECOMMENDATIONS

This final chapter provides a summary of the study along with a discussion of the findings. Also included are the conclusions from which the recommendations for training of EI and further EI research are proposed.

Summary

There is a growing body of research in business and education that supports the need for EI skills in the workplace. The fitness industry is comprised of a variety of fitness professionals including fitness instructors, personal trainers, and program directors who work in a variety of fitness business settings and provide an assortment of educational services to clients, community, and staff. Yet, there is no research assessing the EI of fitness professionals. The primary purpose of this study was to determine if fitness professionals who have received national awards for their contribution to the fitness industry exhibit high levels of emotional competence as measured by the ECI. The study also explored the differences of emotional competence between genders, across age, and comparing self and observer assessment of the IDEA Award Winner's on the ECI.

Thirty of 40 IDEA Award Winners and 22 of their clients returned a completed ECI. The comparison group included 77 IDEA members who have not yet won IDEA awards. Of the 107 total respondents, 90 were women and 17 were men, of the 30 IDEA
Award Winners 23 respondents were women and 7 were men. The sample ranged from 23 to 70 years of age, the IDEA Award Winners ranged in age from 33 to 63 years and the non-award winners ages ranged from 23 to 70 years.

Four research questions were analyzed using SPSS. MANOVA was used to test research questions one, two, and three. Linear regression was used to test question four. For all statistical tests, the p<0.05 level of confidence was used.

Conclusions and Discussion

Research question one: Are there significant differences between IDEA Award Winners and non-award winners on overall ECI scores, four cluster scores (self-awareness, self-management, social awareness, and relationship management) and the 18 ECI competencies?

Analysis of the data presented in Chapter IV indicates that IDEA Award Winners scored higher than non-award winners on the ECI composite score and the three out of the four clusters: self-awareness, self-management, and relationship management. IDEA Award Winners also scored higher than non-award winners on 10 of the 18 competencies of three clusters: two out of three self-awareness competencies including emotional self-awareness and self-confidence (there was not a significant difference on accurate self-assessment), three out of six self-management competencies including achievement orientation, initiative, and optimism (there was not significant differences on adaptability, emotional self-control, or transparency), and five out of six relationship management competencies including change catalyst, conflict management, developing others, influence, and influential leadership (there was no significant difference on teamwork and
collaboration). There were no significant differences on the social awareness cluster competencies of empathy, organizational awareness, or service orientation.

This study found that emotional competency levels of IDEA Award Winners were significantly higher than non-award winners in emotional self-awareness, self-confidence, achievement orientation, initiative, optimism, change catalyst, conflict management, developing others, influence, and inspirational leadership. These competencies may play a role in the contribution made by IDEA Award Winners to the fitness industry, which in turn leads to their selection as IDEA Award recipients. Their peers see IDEA Award Winners as successful fitness professionals and perhaps this is due partly to their emotional competencies. The emotional competencies that are strengths of the IDEA Award Winners may be considered desirable workplace traits for fitness instructors, program directors, and personal trainers.

Figures 5, 6, and 7 in Chapter II provided an overview of the emotional competencies that may play a role in achieving the criteria used to select the IDEA Award Winners in the categories of fitness instructor, personal trainer, and program director. The results of this study further support that the criteria used to select IDEA Award Winners aligns with the emotional competencies as measured by the ECI. IDEA Award winners rated themselves higher on the ECI composite score, three out of four clusters and 10 out of 18 ECI competencies than their non-award winning peers. Non-award winners who rated themselves higher on the four-question IDEA Criterion Survey (four - consistent, and five - extensive) had ECI composite scores similar to the IDEA Award Winners (Table 16). Another independent samples t-test indicated that non-award winners who rated themselves higher on the four-question IDEA Criterion Survey scored
significantly higher on the ECI composite score than non-award winners who rated themselves lower on the four-question survey (Table 17).

Research question two: Are there significant differences between the self-ratings of award winners and the ratings of their clients on the overall ECI score, four cluster scores, and 18 ECI competencies?

Analysis of the data presented in Chapter IV indicates that the clients score IDEA Award Winners significantly higher than the Award Winners do on the ECI composite score, the three cluster scores of self-management, social awareness, and relationship management, and eight out of 18 ECI competencies. Clients scored IDEA Award Winners higher on one out of three competencies of self-awareness cluster. The competency of self-confidence was significantly higher; there was no significant difference on the accurate self-assessment and emotional self-awareness scores. Clients scored IDEA Award Winners higher on three out of six of the self-management competencies. Adaptability, emotional self-control, and initiative were scored higher and there were no significant differences on achievement orientation, optimism, or transparency. Clients scored IDEA Award Winners higher on two out of three social awareness competencies, organizational awareness and service orientation; no significant difference was found on the empathy competency. Clients scored IDEA Award Winners higher on inspirational leadership and teamwork and collaboration, two of the six relationship management competencies. There were no significant differences found on change catalyst, conflict management, developing others, and influence. Twenty-two of the 30 clients completed the observer ECI assessments.
These results may be counter to those of Sala (2002), who found self-ratings on the ECI tend to be, on average .21 higher than ratings by others on all competencies suggesting that people view themselves more favorably than others. Sala's study is based on the North American ECI Database, which contains approximately 4,000 participants. Self-raters in the Sala's study were all rated by more than one other person. Mean differences between ECI competencies for total others and self-ratings and self-ratings relationship between self and total others ratings using raw, average item scores were reported in the study (Sala, 2002). In the study of award-winning fitness professionals, the clients score IDEA Award Winners higher than they score themselves on eight of the 18 emotional competencies. In Sala's study, ratings by others were completed by co-workers and were not individuals selected by the self-rater. In the study of award-winning fitness professionals, IDEA Award Winners selected one individual who completed the others assessment. IDEA Award Winners may have asked individuals with whom they had a positive relationship to complete the others assessment. In the case of the personal trainers and group fitness instructors, the other assessment was completed by a client, not a co-worker.

Research question three: Are there significant differences between male and female award winners on the overall ECI score, four cluster scores, and 18 ECI competencies?

Analysis of the data presented in Chapter IV indicated that there are no significant differences between the male and female award winners on the overall ECI score, four cluster scores, and 18 ECI competencies. There were 23 female and 7 male award winners in the study.
Two considerations should be made regarding this analysis. First, this study used a small sample of thirty: seven males and 23 females. Award-winners are a select group that were chosen by their peers, so numbers are limited. There are typically more females than males in the professions of group fitness and program directors, further limiting the number of men in the study. Second, female and male IDEA Award Winners are selected using the same criteria in the selection process, so if emotional competencies measured do play a role in the contributions made by these professionals, the IDEA Award Winners selection process may have already selected fitness professionals that exhibit high emotional competence in the workplace, regardless of gender.

Research question four: Is there a relationship between age and the scores of award winners on the overall ECI score, four cluster scores, and scores of the 18 ECI competencies?

Analysis of the data presented in Chapter IV indicated that no relationship existed between age and scores of the ECI composite score, four cluster scores, and 18 ECI competency scores for the IDEA Award Winners. The age range of subjects was 33 to 63 years of age.

The age range of the IDEA Award Winners may play a role in the results as there is a 30-year span and the range falls slightly below and slightly above the middle age range and the 40 and 50 year old range identified by Bar-On (2000a). He reports that EI scores improve with age and experience and the highest EI scores are those in their 40s and 50s.
Additional Survey Questions

Four additional questions were asked to add depth to this study of award-winning fitness professionals. The results further supported the relevance of emotional competencies in identifying superior performing fitness professionals. The four questions asked were designed from the criteria used to select IDEA Award Winners. The questions were written to determine level of involvement in the community, focus on the advancement of professional skills, development and implementation of fitness programs, and contribution to organizational success. Non-award winners rated themselves on a scale of one (no involvement) to five (extensive) involvement.

Non-award winners rating themselves with a four (considerable) or five (extensive) on all four questions were compared with IDEA Award Winners on ECI composite score, no significant difference was found between these two groups. The results of the independent samples t-test analysis (Table 16) suggest that the 16 non-award winners (those rating themselves at level four and five on this four-question survey) may be potential IDEA Award Winners. The results provide further support that the criteria used to select IDEA Award Winners aligns with the competencies measured by the ECI.

An additional independent samples t-test analysis indicated that the 16 non-award winners who rated themselves higher (level four or five) on the four-question survey scored significantly higher on the ECI composite score than non-award winners (all other respondents to the four-question survey) who rated themselves lower. These results also support that criteria for selecting IDEA Award Winners aligns with ECI competencies.
and that those fitness professionals who meet the criteria used to select IDEA Award
Winners have higher emotional competencies as measured by the ECI.

Only one of the non-award winners had been nominated for an IDEA Award and
10 had considered applying for an IDEA Award. The results of this study suggest that
the 16 non-award winners rating themselves at levels four and five on the four-question
survey should consider application for an IDEA Award.

Recommendations for Future Research

This study was based on IDEA Award Winners and IDEA members and may or
may not be reflective of award winners of other professional fitness organizations.
American Council on Exercise (ACE), American College of Sports Medicine (ACSM),
International Council on Active Aging (ICAA), Fitness Management, and Club Industry
are organizations in the fitness industry that recognize fitness professionals for their
contributions to the fitness industry. Further research using the ECI to measure
emotional competence of award winners from other professional fitness organizations
would be helpful in furthering this study and identifying emotional competencies that are
characteristic of award-winning professionals across the fitness industry. A comparative
analysis of their respective award selection criteria and the ECI competencies may also
justify the need for emotional competence in the fitness industry.

There is a growing body of research that supports the importance of EI and
emotional competence for workplace performance success (McDowelle & Belle, 1997;
Goleman, 1998; Goldsworthy, 2000; Cherniss & Goleman, 2001). This study was based
on IDEA Award Winners and their selection criteria. Fitness instructors, personal
trainers, and program directors are not all IDEA members. These professionals work in a
variety of settings, which may include a small or large private fitness club, a community recreation program, or a YMCA. These professional fitness organizations may have desired traits they seek when hiring and evaluating fitness instructors, program directors, and personal trainers. Further research to determine the importance of emotional competencies in the hiring and performance success in the fitness industry may be done by requesting job descriptions/competency skills, interview checklists, and performance evaluations for fitness instructors, personal trainers, and program directors from a variety of settings in the fitness industry. This research may further support the need for high emotional competence in the fitness industry.

Sixteen of the non-award winners scored themselves at a four (consistent) and five (extensive) on the four-question IDEA Award Criteria Survey. When the ECI composite score results of the 16 rating themselves high on the four-question survey were compared with the IDEA Award Winners, results indicated there was no difference on the ECI composite score between the two groups. When the ECI composite scores of the 16 high and 28 others (on the four-question non-award criterion) were compared with a t-test analysis, the 16 high raters scored significantly higher than their lower rated peers on the ECI composite. Sample numbers were limited, so further research to determine if those who have minimal community involvement, lack professional credibility, contribute little to fitness program development and organizational success, and do little to advance their professional skills also score low on the ECI demonstrating lower emotional competence.

Although previous research supports that EI and competencies associated with EI are developmental and improve with age, this study saw no relationship between age and
high emotional competence of IDEA Award Winners. The sample size was small and the age range was limited (from 33 to 63 years). An additional analysis was included to determine if a relationship existed between age and scores of all study participants, IDEA Award Winners and non-award winners, on the ECI composite score. There was a significant relationship between age and the ECI composite score for all participants. The relationship was a small positive relationship; the age range for the non-award winners was 23-70. There were both younger and older non-award winning fitness professionals in the second analysis. Further studies may include people from outside of the fitness industry to compare ages ranging from 18 to 98 to determine if there are significant differences in 10-year age spans. The ECI focuses on work-related emotional competencies, so another tool may be more appropriate for a study of this nature. Researchers may also explore whether or not EI improves with age and if EI is highest in the 40's and 50's as noted by Bar-On and whether EI declines with age, remains the same, or continues to improve. A 20-year to 30-year longitudinal study of fitness professionals at the beginning of their college studies may also be helpful in determining if age and life experiences change EI and associated emotional competencies.

Male and female fitness professionals participating in this study were award winners selected from the same criteria. This gender-neutral criteria may have already selected fitness professionals with higher emotional competencies. Researchers may further investigate if gender differences occur as measured by the ECI by comparing a larger sample size of fitness professionals who have not won IDEA Awards. A total of ninety women and 17 men participated in this study.
This study used the ECI, a mixed model, as a research tool. There are questions in the literature regarding self-report measures as a determinant of high EI or high performance of emotional competencies. Further studies may make a comparison of the results of studies using the ECI, MSCEIT, and the EQ-i on the same sample of people to determine if results vary between these assessment tools.

Recommendations for Training of Fitness Professionals

If characteristics associated with high EI and strong skills of emotional competence are truly factors that distinguish superior from average performers in a career as a fitness instructor, personal trainer, or program director, it would appear that training of these skills in college, university, workshop, and conference settings would be beneficial to these professionals. Researchers may investigate the curriculum of colleges and universities and professional fitness organizations that prepare and develop training for fitness professionals to see if training of EI and emotional competencies exist within the training programs.

If high self-awareness competencies of emotional self-awareness and self-confidence, high self-management competencies including achievement orientation, initiative, and optimism, and high relationship-management competencies including change catalyst, conflict management, developing others, influence, and inspirational leadership are common characteristics of personal trainers, fitness instructors, and program directors who are selected as IDEA Award Winners, they may be characteristics that would benefit all fitness instructors, personal trainers, and program directors. Further research could study changes in work performance that may occur after these
fitness professionals have completed ECI assessments and training aimed at improving identified weaknesses.

An action model for training of EI has been developed (Cherniss & Goleman, 2001) with consideration of Prochaska's research on stages of change (1999). Training for fitness professionals based on this model would seem to be of benefit to those interested in improving EI. Prior to start of the training, it is essential to gauge readiness and assess the present emotional competence of the individual. Setting clear goals based on these two factors would be the next step. Learning should be self-directed for it to be successful. Methods of training may include case studies, role-play, and virtual reality with technology (e.g., simulation of conflict resolution, varying diversity of clients or co-workers). Ongoing and specific performance feedback is also a key component. Training of the competencies of EI take time, commitment, and support. Research in an organization or other training setting of professionals before and after EI training would be of great benefit.

Conclusions

EI does seem to make a difference in the area of recognizing and awarding leaders in the fitness industry. This study supports the idea that award-winning leaders in the fitness industry have high emotional intelligence as measured by the ECI and that these emotional competencies may play a role in their success. The emotional competencies of emotional self-awareness, self-confidence, achievement orientation, initiative, optimism, change catalyst, conflict management, developing others, influence, and inspirational leadership separated high achievers from others and are all qualities that could make a
difference in a leadership role. These are the emotional competencies that appear to set fitness professionals apart in this study.

The ECI is a self and others assessment. Although there are some people wary of the results of self-reporting, it seems that in the case of emotional competencies, they may be quite accurate for award-winning fitness professionals. The self-fulfilling prophecy may play a positive role in the lives of people who believe they have emotional competencies such as initiative, achievement drive, and inspirational leadership. If a professional believes in herself or himself they may practice these emotional competencies as a professional. In the case of the award-winning fitness professionals in this study, the results of their others assessments and the fact that peers have selected them for awards in their chosen career support that they have high EI. Social awareness was an area where award winners did not rate themselves higher than non-award winners rated themselves, yet clients rated the award-winners higher than they rated themselves. There could have been a couple of factors that played a role in these results. The award winners in this study all spend a great deal of time traveling. Due to their career paths following these awards, they may have become more independent and less in tune with social awareness within an organization. They also could have rated themselves lower than they actually are in this area, as others see them as having strength in social awareness.

Goleman (1998) reported that the emotional competencies that led to the highest level of success included: initiative, achievement drive, adaptability, influence, team leadership, political awareness, empathy, self-confidence, and developing others (p. 38). Division leaders with these strengths outperformed their targets by 15 to 20 percent;
those who lacked them underperformed by almost 20 percent. The IDEA fitness professionals recognized as leaders in their organization as personal trainers, program directors, and group fitness instructors score high on six of these eight competencies. Motivational competencies that typify outstanding performers are achievement drive, commitment, initiative, and optimism (Golemen, 1998). Emotional competencies that differentiated superior performers at Johnson and Johnson were self-confidence, achievement orientation, initiative, leadership, influence, and change catalyst (Cavallo & Brienza, 2003). Fitness industry leaders recognized by IDEA possess these emotional competencies as well.

There may be a variety of factors that play a role in high levels of workplace performance. Knowledge of subject matter, educational credentials, years of experience, and emotional intelligence may all be factors that play a role in professional success. It appears that EI is at least a factor that distinguishes workplace excellence and high achievement. It may be argued that we are either born with emotional intelligence or not, or that some people are born with more than others. Others may suggest that we are all born with emotional intelligence and the experiences we encounter either do or do not provide the nurturing we need to enhance EI. The nature/nurture debate would suggest that we are born with emotional intelligence, some more than others, and in an environment that provides nurturing of the competencies of EI, those skills will grow and thrive. EI may be seen as a product by some and a process by others, growing in a hierarchical fashion. It seems that characteristics of EI can be taught and may have a place in the curriculum of any discipline requiring work with people (Goleman, 1998). A career as a fitness instructor, program director or personal trainer requires a great deal of
interaction with people and development of EI competencies may be helpful to these professionals and those who benefit from their services.

In conclusion, emotional competencies of self-awareness, self-management, social awareness and relationship management appear to be characteristics of fitness professionals who have received national awards for their contribution to the fitness industry. Although this study is not without limitations, the findings support that high levels of emotional competence may benefit professionals in the fitness industry and, in turn, those clients who reap the health-associated benefits through interaction with these leaders.
Appendix A
IDEAFitTips

In This Issue:

Kids Need Obesity Checkups

Mirrors Can Make Women Feel Worse About Working Out

Web Sites Ignore Ephedra Dangers

Schools Use Health Report Cards to Fight Kids' Obesity

Fishing For Answers

2003 IDEA Health & Fitness Award Recipients

IDEA and NASM Create New Educational Alliance

National AIDS Fund Charity Workout

Reebok Women's Triathlon Series

Participate in a Survey

YOGA EXPO Arrives at L.A. Convention Center

 thư 20, 2003:

What are you doing to inspire the world to fitness™? Share your stories with IDEA! No story is too small. E-mail Sandy Todd Webster, editor, at WebsterS@IDEAFit.com or call her directly at (858) 535-8979, ext. 217.

IDEA Events:

FACT Fest & Personal Trainer Congress
April 22-25, 2004
Rosemont, Illinois

IDEA World Fitness & Personal Trainer Convention
July 7-11, 2004
San Diego, California

IDEA Personal Trainer International Summit
October 8-10, 2004
New York, New York

Kids Need Obesity Checkups

Prompted by troubling data on the prevalence of obesity and obesity related disorders in children, the American Academy of Pediatrics is recommending that children should have their body-mass index measurements evaluated yearly as part of the efforts to identify and prevent obesity. MORE...

Mirrors Can Make Women Feel Worse About Working Out

A study published in Health Psychology found that sedentary women who exercised in front of a mirror for 20 minutes felt less energized, less relaxed and less positive and upbeat than women who performed
Participate in a Survey

IDEA members who are fitness instructors, personal trainers and program directors are needed to participate in a survey that will examine work-related behavior and relationships. Your input is very important and the survey will not take long to complete. To receive a copy, e-mail: IDEAEICI@minotstateu.edu
Principal Investigator: Terry Ferebee Eckmann, Assistant Professor of Teacher Education and Human Performance at Minot State University

Purpose: This study is to determine if fitness professionals recognized as IDEA Group Fitness Award Winner, IDEA Personal Trainer Award Winner, and IDEA Program Director have high emotional Intelligence as measured using the Emotional Competence Inventory (ECI).

Duration: The ECI should take approximately 15 to 20 minutes to complete.

Procedure: You will receive the ECI and informed consent by mail. After you have signed your consent form to participate, please complete the enclosed ECI and return them in the enclosed envelope. You will have two weeks to complete the ECI and consent form. Please return it to the principal investigator in the enclosed stamped envelope. Please let me know if you need more time to complete the ECI and necessary arrangements will be made.

Benefits: This research may identify high emotional intelligence as a characteristic common to successful group fitness instructors, personal trainers, and program directors. This evidence could indicate that emotional intelligence is a skill that fitness professionals in these career paths should strive to develop, providing training implications for colleges, universities, and other organizations that prepare these professionals.

Risks: No risks are anticipated although some questions may trigger memories of stressful or unpleasant situations and interactions with co-workers or customers.
Confidentiality:
You are assured confidentiality. Only the PI will have access to the emotional competence inventories. All data will be reported on the group as a whole and no individual scores will be released. Return surveys will be tracked by numbering ECI and envelopes rather than by name.

Contacts:
If you have questions about the research, please call Terry Ferebee Eckmann at (701) 858-3155 or (701) 852-1928, or via electronic mail at IDEAECI@minotstateu.edu. You may also contact Katrina Meyer at (701) 777-3452 or the UND Institutional Review Board at (701) 777-4279.

Participation:
Involvement in this research is voluntary. You may discontinue participation in the study at any time by telling the PI. If you are interested in receiving a copy of the study results, please inform the PI in the body of the e-mail of your returned ECI or in a note attached to the mailed ECI.

Statement of Consent: I hereby indicate that I have read the consent and understand my participation in this research.

___________________________________________ September 2003
(written signature)
September 17, 2003

Dear IDEA Award Winner Client,

Thank you for taking the time to participate in this cutting-edge research on emotional intelligence. Please consider how you think this individual would respond in the following situations as you complete the emotional competency inventory (ECI).

Please place the ECI in the self-addressed stamped envelope and return it by October 8, 2003. All surveys are coded and all individual information is confidential.

Thank you very much for helping to make this research project a success.

Sincerely,

Terry Eckmann, MS
Assistant Professor
Thanks for your response to the IDEA Fit tips request to participate in a survey that examines work-related behavior and relationships. Your willingness to complete the emotional competency inventory (ECI) is greatly appreciated.
*The ECI will take 15-20 minutes of your time.
*You will receive the ECI and informed consent by mail.
*You will have two weeks to sign the informed consent and complete the ECI and return it in an enclosed self-addressed stamped envelope.
*Please respond to this by sending via e-mail your full name, mailing address, and phone number.

You will be participating in cutting edge research as the majority of emotional intelligence research available to date is in the world of business and education and not specific to the fitness industry. Our profession requires the components of emotional intelligence; self awareness, self regulation, social awareness, and social skills to work effectively with people.

All ECI's are confidential and the research will give group data only.
Greetings from Terry Ferebee Eckmann in Minot, North Dakota

Dear IDEA Award Winner,

After the reading the following request please return it to me saying "Yes I will participate".

You were selected as a leader in the fitness industry by your peers and the IDEA Awards Committee. I would like to conduct research with IDEA Award Winners vs. Award Winners from another organization and I need a high level of participation, as you are one of 37 IDEA award winners that are being contacted. Please reply by March 5. I will then contact with you with further details.

I feel fortunate to know many of you through committee work, as a presenter at IDEA events, or from your travels to present workshops in Minot. I hope that I will have the opportunity to work with all of you in this project and through other educational ventures.

I Need Your Help In My Research
I am completing my doctoral studies in educational leadership and I need your help for my dissertation research on emotional intelligence. I believe that you, the leaders in the fitness industry, have high emotional intelligence. The business and education worlds are buzzing since Golemen’s books on Emotional Competency Inventory in my research. I need you to prove what I believe, that you, the leaders in our industry have high emotional intelligence! This will be cutting edge research as the majority of the research available to date is in the world of business and education, not specific to the fitness industry.

What Your Involvement Entails: ONLY 20-30 MINUTES OR YOUR TIME

1. Complete the Emotional Competency Inventory (ECI), which will take you approximately 20 minutes, and return it to me. The ECI can be sent to you Via e-mail or standard mail. I would prefer to use the e-mail version, but will use your preference. (This will be done in a couple months-not by 3/5)

2. Group Fitness Award Winners and Personal Trainer Award Winners will obtain agreement from one client who will fill out the Emotional Competency Inventory in reference to their experience with you. Send me their e-mail address.

Business Person Award Winners will obtain agreement from one staff person who will fill out the Emotional Competency Inventory in reference to their experience with you. Send me that person’s e-mail address.
WHAT'S IN IT FOR YOU?

- GREAT APPRECIATION FROM ME
- MEANINGFUL RESEARCH THAT MAY IMPACT TRAINING OF FUTURE FITNESS PROFESSIONALS

What is Emotional Intelligence?
Integrating the work of Goleman (1998) and Boyatzis (1982) emotional intelligence is observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness, and social skills. Salovey and Mayer (1990), defined emotional intelligence as “the subset of social intelligence that involves 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.

STRICT CONFIDENTIALITY: All ECI’s are confidential. The research will give group data only. No one will ever see the individual scores. Once they are received names will be removed.

I don’t want to take your time with details unless you want them. Feel free to e-mail or call with questions. 1-800-777-0750 ext. 3155 or 701-858-3155.
Hi,

My name is Terry Ferebee Eckmann. I am a long-time IDEA member and presenter. I have worked in the fitness industry for 25 years and am doing my doctoral dissertation at the University of North Dakota on emotional intelligence in the fitness industry. I believe emotional intelligence is key to success in the fitness industry, your help in this research is appreciated. The Emotional Competence Inventory will take 15-20 minutes. Details will be sent with the packet that will be sent tomorrow.
September 17, 2003

Dear IDEA Award Winner,

I am completing my doctoral program in educational leadership at the University of North Dakota. I am conducting a research study that will look at emotional intelligence (as measured by the Emotional Competence Inventory-ECI) in the fitness industry. Results of this study will help us to determine if emotional intelligence is a characteristic valuable to fitness instructors, personal trainers and program directors.

You are invited to participate in this study. Your participation is voluntary; and your assistance would be greatly appreciated in making this a meaningful study.

It should take about 15 to 20 minutes for you to complete the enclosed consent form and ECI. Please return it by October 8, 2003.

Please give the ECI Version 2 identified in the corner with C Code and the corresponding C Code envelope to one of your clients. They should fill it out regarding your work-related behavior, and return it with the enclosed self-addressed envelope. Please ask them to return the completed ECI by October 8.

You are assured confidentiality. Returned surveys will be tracked by a coding system. All data will be reported on the group as a whole and no individual scores will be released.

It is important that you choose the answer that best describes your actual behavior. Your identity will not be revealed in the experiment results. Only group comparisons will be made and reported in summary form.

If you have any questions about this project, please call me at 701-858-3155 or call my adviser, Katrina Meyer at 701-777-3452. If you have questions about the rights of human research participants, you should contact the UND IRB office, 701-777-4279.

Thank you for your participation in this study. If you wish to receive a copy of the research results, please indicate so with a written note on the ECI document returned by postal mail.

Sincerely,

Terry Ferebee Eckmann, M.S.
September 17, 2003

Dear IDEA Award Winner,

My name is Terry Ferebee Eckmann. I am a graduate student in educational leadership at the University of North Dakota. I am conducting a research study that will look at emotional intelligence (as measured by the Emotional Competence Inventory-ECI) in the fitness industry. Results of this study will help us to determine if emotional intelligence is a characteristic valuable to fitness instructors, personal trainers and program directors.

You are invited to participate in this study. Your participation is voluntary; and your assistance would be greatly appreciated in making this a meaningful study.

It should take about 15 to 20 minutes to complete the enclosed consent form and ECI.

You are assured confidentiality. Returned surveys will be tracked by a coding system. All data will be reported on the group as a whole and no individual scores will be released.

It is important that you choose the answer that best describes your actual behavior. Your identity will not be revealed in the experiment results. Only group comparisons will be made and reported in summary form.

If you have any questions about this project, please call me at 701-858-3155 or call my adviser, Katrina Meyer at 701-777-3452. If you have questions about the rights of human research participants, you should contact the UND IRB office, 701-777-4279.

Thank you for your participation in this study. If you wish to receive a copy of the research results, please indicate so with a written note on the ECI document returned by postal mail.

Sincerely,

Terry Ferebee Eckmann, M.S.
Assistant Professor
Minot State University
Appendix D
Request for Address

Thanks for your response to the IDEA Fit tips request to participate in a survey that examines work-related behavior and relationships. Your willingness to complete the emotional competency inventory (ECI) is greatly appreciated.

*The ECI will take 15-20 minutes of your time.

* You will receive the ECI and informed consent by mail.

* You will have two weeks to sign the informed consent and complete the ECI and return it in an enclosed self-addressed stamped envelope.

*Please respond to this by sending via e-mail your full name, mailing address, and phone number.

You will be participating in cutting edge research as the majority of emotional intelligence research available to date is in the world of business and education and not specific to the fitness industry. Our profession requires the components of emotional intelligence; self awareness, self regulation, social awareness, and social skills to work effectively with people.

All ECI's are confidential and the research will give group data only.
Appendix E
Research Proposal

ECI Research Proposal

Submitted to Hay/McBer

By Terry Eckmann, MS

Background

The concept of emotional intelligence continues to be examined as a contributing factor to success in a number of areas. The purpose of this study is to determine if fitness professionals recognized by IDEA Health and Fitness Association as IDEA Award Winners in the categories of group fitness instructor, program director, and personal trainer have high emotional intelligence as compared to non-award winning IDEA members.

In 1995, Daniel Goleman popularized the term emotional intelligence with his book *Emotional Intelligence*. The concept of emotional intelligence has been around in various forms since the days of Aristotle, who believed that those who possess the rare skill to be angry with the right person, to the right degree, at the right time, for the right reason, and in the right way are at an advantage in any domain in life (Langley, 2000). Emotional intelligence is being examined in various professional arenas as a contributing factor to success as a professional. Goleman (1998) believes that most effective leaders are alike in one crucial way, they all have a high degree of what has become known as
emotional intelligence. Bar-On (1997) suggests emotional intelligence addresses the emotional, personal, social, and survival dimensions of intelligence which are often more important for daily functioning than the more traditional cognitive aspects of intelligence. Cooper (1997) has worked extensively with business leaders and organizations and has found three driving forces of competitive advantage: building trusting relationships, increasing energy and effectiveness under pressure, and creating the future. He believes emotional intelligence plays a role in all three. Salovey, P. and Sluyter, D. (1997) state that general intelligence is often said to account for between 10% and 20% of success, leaving about 80% to 90% to be explained by other factors. They believe that emotional intelligence is a contributing factor to success.

Fitness instructors, program directors, and personal trainers are professionals in the fitness industry whose jobs require leadership skills and a great deal of interaction with people. IDEA Health and Fitness Association awards fitness professionals for strong leadership skills in the community and the fitness industry, superior instructional abilities, capability to influence people, creativity, and high degree of motivation. These characteristics are directly related to emotional intelligence. There is a growing body of research related to emotional intelligence, however there is no evidence of research on emotional intelligence in the fitness industry.

**Proposed Study**

The subjects of this study are the IDEA Health and Fitness Association Award Winners and non-award winning IDEA members. IDEA Health and Fitness Association, a membership organization for fitness professionals, has provided the information necessary to survey the Award Winners and has agreed to solicit participation of non-
award winning IDEA members. The IDEA Award Winners who will be surveyed include the IDEA Personal Trainer of the Year, IDEA Fitness Instructor of the Year, and the IDEA Program Director of the Year. There are 18 IDEA Program Director of the Year Award Winners. There are 17 Group Fitness Instructor of the Year Award Winners. The Personal Trainer of the Year Award originated in 1998 and five personal trainers have been recognized. Two of the award winners received two awards, the Program Director of the Year Award in one year and the Fitness Instructor of the Year Award in another year, so there are a total of 38 IDEA Health and Fitness Award winners in the categories of IDEA Fitness Instructor of the Year, IDEA Personal Trainer of the Year and IDEA Program Director of the Year.

IDEA Health and Fitness Award Winners and one of their clients will complete the Emotional Competency Inventory via e-mail. All award winners willing to participate will complete the survey and will provide one client willing to complete the survey regarding their experience with the award winner. Approximately 70% participation is anticipated from award winners. Non-award winning IDEA members will be solicited via the IDEA Fit Tips E-mail publication that is sent to 10,000 IDEA members. A confidentiality statement will precede the survey.

This research may identify high emotional intelligence as a characteristic common to successful group fitness instructors, personal trainers, and program directors. The independent variable is the outcome of the ECI. The dependent variables include the population, IDEA Award winners and non-award winners.
Research Questions

1. Do IDEA Fitness Instructor of the Year, IDEA Personal Trainer of the Year, and IDEA Program Director of the Year Award Winners demonstrate higher emotional intelligence than non-award winning IDEA members as demonstrated by the ECI?
   Hypothesis 1: IDEA Group Fitness Instructor of the Year, IDEA Personal Trainer of the Year, and IDEA Program Director of the Year Award Winners demonstrate higher emotional intelligence than non-award winning IDEA members as measured by the ECI.

2. Do the ECI results reveal higher scores on the personal or social competency scores for the IDEA Award Winners versus the IDEA non-award winners?
   Hypothesis 2: IDEA Award Winners and IDEA non-award winners demonstrate significant differences in the personal or social competency scores as measured by the ECI.

3. Are there significant differences between the self and other assessment ratings of the award winners and their clients?
   Hypothesis 3: Self-ratings and others ratings will not have significant differences.

4. Are there significant differences between the male and female respondents on the ECI competencies.
   Hypothesis 4: There are significant differences on the self-awareness competencies of male and female respondents.
Analyses and Conclusions

A review of the literature indicates that the concept of emotional intelligence is growing in popularity. Emotional intelligence research is becoming more and more prevalent in business and education. There is no evidence of research on the emotional intelligence of professionals in the fitness industry. This research may identify high emotional intelligence as a characteristic common to successful group fitness instructors, personal trainers, and program directors. Such evidence could be the foundation for further research as well having implications for training and development of successful group fitness instructor, program directors, and personal trainers.

References


REFERENCES


