

THE RELATIONSHIP BETWEEN TEACHER BURNOUT AND EMOTIONAL  
INTELLIGENCE: A PILOT STUDY

by

Nancy De Vito

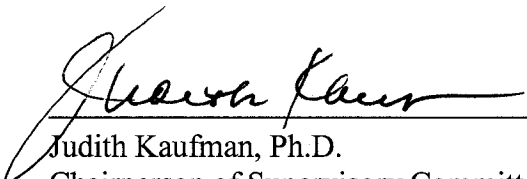
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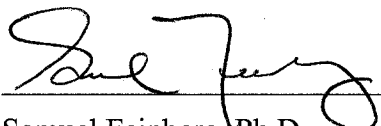
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Abstract

The Relationship between Emotional

Intelligence and Teacher Burnout:

A Pilot Study

by Nancy De Vito

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This study investigated the relationship Between Emotional Intelligence (EI) and teacher burnout in a sample of 64 secondary high school teachers in a suburban, public school system. Emotional Intelligence was measured using the BarOn Emotional Quotient Inventory: Short Development Edition (BarOn EQ:i:S; Bar-On, 2004). Teacher burnout was measured using the Maslach Burnout Inventory-Educator's Survey (MBI-ES; Maslach, Jackson, & Leiter, 1996). The participants completed a demographic questionnaire. The first research question assessed whether a relationship exists between burnout and Emotional Intelligence. No significant relationship was found between Emotional Exhaustion, Depersonalization, and Emotional Intelligence total score. However, a significant difference was found between the Emotional Intelligence total score and one aspect of burnout, Personal Accomplishment. Further analyses revealed a positive relationship between Personal Accomplishment, and Intrapersonal, Interpersonal, and General Mood subscales of Emotional Intelligence. The second research question examined whether differences exists between demographic variables and burnout. No

significant differences were found between three aspects of burnout, and any of the demographic variables under investigation. The third research question examined whether differences exist between demographic variables and Emotional Intelligence total score. Results showed a statistical difference between age, years of teaching experience, and Emotional Intelligence total score. However, additional analyses showed no significant differences exist between age subgroups and the Emotional Intelligence total score. Significant differences were found between years of teaching experience and the Emotional Intelligence total score. The fourth research question examined whether differences exist between demographic variables and subscales of Emotional Intelligence. Additional analyses showed a statistical significance between age, Stress Management, and General Mood subscales of Emotional Intelligence. Further analyses revealed statistical differences between years of teaching experience and Intrapersonal, Stress Management, and Adaptability subscales. Limitations of this investigation, implications for practice, and future research areas were discussed.

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## Introduction

### *Emotional Intelligence*

In the past decade the concept of Emotional Intelligence (EI) has generated an enormous amount of interest both within and outside the field of psychology and in the popular literature, particularly sparked by Daniel Goleman's best seller, *Emotional Intelligence* (1995). Emotional intelligence connects with several cutting-edge areas of psychological science, including the neuroscience of emotion, self-regulation theory, studies of metacognition, and the search for human cognitive abilities beyond "traditional" academic intelligence (Zeidner, Matthews, & Roberts, 2004).

Although Thorndike's (1921), Guildford (1956), and later, Gardner's (1983) research in the area social intelligence hints at the importance of emotions in intellectual functioning, the term EI was not brought into the mainstream psychology until the 1990s (Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990). Gardner's (1983) model of Multiple Intelligence emphasized the linguistic, cognitive, developmental, biological, and cultural significance of emotion in learning (Gardner, 1983). Emotional intelligence was first defined by Salovey and Mayer (1990) and was later popularized by Daniel Goleman (1995). Bar-On (1997) coined the phrase "emotional quotient" (EQ).

The interest in EI has been so widespread that, for example, it has been associated with enhanced job performance, school success, self-esteem, and enhanced social skills and is thought to moderate or mitigate negative life events. Whether in business, medicine, education, or in life in general, "being smart" is insufficient to ensure success and positive mental health. The notion of emotional intelligence arose out of the search

for a set of measurable tendencies and capabilities which, in addition to IQ, may serve as valid predictors of academic, occupational, and life successes (Fox & Spector, 2000).

### *Definitions and Models of Emotional Intelligence*

Emotional intelligence has been defined as a set of skills that enable us to negotiate a complex world (Stein & Book, 2006). Emotional intelligences connects the fields of emotion and intelligence. Emotions become an important information source in negotiating the world and navigating social environments (Salovey & Grewal, 2005). Emotional intelligence is a set of skills for processing emotion-relevant information (Mayer & Salovey, 1997). More specifically, it is the ability to perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions to promote emotional and intellectual growth. Emotional intelligence is the driving force behind the factors that affect personal success and everyday interactions with others (Harrod & Scheer, 2005).

Emotional intelligence can be divided into five domains: 1) knowing one's emotions, 2) managing emotions, 3) motivating oneself, 4) recognizing emotions in others, and 5) handling relationships (Richburg & Fletcher, 2002). Goleman (1995) describes the first domain as knowing one's emotions and recognizing a feeling as it happens. The second domain concerns managing emotions or the ability to handle feelings in an appropriate manner. Managing emotions is very essential in order to increase self-awareness (Goleman, 1995). The third domain is motivating oneself; reflecting the ability to create positive affect to enhance motivation and achieve one's personal goals (Lane, 2000). The fourth domain, recognizing emotions in others, takes into consideration the emotions and needs of other individuals. This sensitivity molds

social skills, enhances empathetic perspective, and increases social competence (Richburg & Fletcher, 2002). The fifth domain, handling relationships, refers to the degree to which an individual forms and maintains relationships which reflect one's level of self-awareness and social competence (Richburg & Fletcher, 2002).

There are alternative models that define emotional intelligence in terms of behavior and skills, including stress management skills and social skills (Bar-On, 2000; Bar-On, Brown, Kirkaldy, & Thome, 2000; Boyatzis, Goleman, & Rhee, 2000; Goleman, 1998; Higgs & Dulwicz, 1999). Brain theory suggests that through genetically determined processes, the emotional brain (amygdala along with other limbic structures) tends to dominate over the rational brain (neocortex) and controls the thought processes of individuals (Bear, Connors, & Paradiso, 1996).

While there are some conceptualizations of emotional intelligence which include a range of adaptive characteristics associated with emotions (Goleman, 1995), other conceptualizations of emotional intelligence (Mayer, Salovey, & Caruso, 2000), emphasize the cognitive elements, such as emotions aiding judgment and memory. In addition, other researchers have conceptualized emotional intelligence both as an ability and as a trait (Goleman, 1995; Mayer et al., 2000; Schutte & Malouff, 1999).

According to Bar-On (1997), emotionally intelligent people "are generally optimistic, flexible, realistic, and successful at solving problems and coping with stress, without losing control" (p. 156). Bar-On's Model (1997) defines the concept of EI as all non-cognitive abilities, knowledge, and competencies that enable a person to successfully deal with various life situations. Bar-On (1997) identified components of EI. These components include Self Knowledge (emotional self-awareness, self-confidence, self-

regard, self-actualization, independence); Interpersonal Skills (empathy, interpersonal relationships, social responsibility); Adaptability (problem-solving, reality testing, flexibility); Stress Management (stress tolerance, impulse control), General Mood (happiness, optimism).

The stress management realm of emotional intelligence concerns the ability to withstand stress without caving in, falling apart, losing control, or going under (Bar-On 1997). Bar-On (1997) defined stress tolerance as the ability to understand adverse events and stressful situations without developing physical or emotional symptoms by actively and positively coping with stress.

### *Emotional Intelligence and Cognitive Intelligence*

There has been a great amount of research on the relationship between IQ and EIQ. Psychologists are aware that general intelligence predicts an individual's academic achievement and occupational status. Weschsler (1944, p. 3) defined intelligence as "the aggregate of global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment." General intelligence subsumes psychological ability, defined as the "ability to judge correctly the feelings, moods, and motivations of individuals" (Wedek, 1947). Cognitive intelligence represents the specialization of general intelligence in the domain of cognition in ways that reflect experience and learning about cognitive processes such as memory (Schaie, 2001; Brody, 2004).

When studying intelligence many psychologists focused attention on cognitive components. However, others realized that non-cognitive domains were equally significant. More specifically it was believed that an aspect of an individual's IQ known as social intelligence was defined as the ability to understand others and act appropriately

in interpersonal relations (Thorndike & Stein 1937). Emotional intelligence may reflect the idea that success is not simply determined by well-known abilities, such as verbal and quantitative abilities, but also by abilities pertaining to emotions (Cote & Miners, 2006).

Research has shown that individuals with high cognitive intelligence tend to have high emotional intelligence and individuals with low cognitive intelligence tend to have low emotional intelligence (Cote & Miners, 2006).

Cognitive ability is predictive of outcome in a wide variety of areas, for example educational success, occupational training success, job performance, decision-making performance, health, and social outcomes (Gottfredson, 2004; Hunter, 1980, 1986; Jensen, 1998; LePine, Colquitt, & Erez, 2000; Lubinski, 2000; Neisser, Boodoo, Bouchard, Boykin, Brody, Ceci et al., 1996). Claims have been made within the literature regarding the criticality of emotional intelligence for effective leadership, successful learning, and maintaining positive interpersonal relationships (Van Rooy, Viswesvaran, & Pluta, 2005).

According to Goleman (1995) emotional intelligence can contribute greatly to several important life outcomes including improved learning, less aggression, better decision making, and characteristics that imply successful living. Furthermore, qualities such as impulse control, persistence, empathy, good moods, hope, and optimism have been hypothesized to be qualities of emotionally intelligent individuals. Goleman suggests that emotional intelligence is twice as important as technical skills and more important than IQ for success in jobs at all levels. Both Goleman (1995) and Bar-On (1997) suggest that emotional intelligence is highly related to a variety of social, behavioral, and academic benefits. However, there is only a limited amount of empirical

evidence that exists indicating that emotional intelligence contributes to any form of successful learning.

The focus of emotional intelligence has been on skills associated with emotional intelligence and individual success. High emotional intelligence in parents has been found to have a positive impact on the social and emotional development of their children (Gottman, Katz, & Hooven, 1997; Hooven, Gottman, & Katz, 1995). Individuals with high emotional intelligence skills are prone to have better social support networks (Cohen & Syme, 1985; House, Landis, & Umberson, 1988; Vandervoort, 1999). These researchers further indicate that there is a strong inverse association between low emotional intelligence skills and mental health problems such as depression, anxiety, and hostility. Furthermore, these researchers claim that higher emotional intelligence skills are associated with better physical health and longevity. General intelligence is often said to account for between 10 to 20 percent of such success, leaving about 80 to 90 percent of it to be explained by other factors (Gardner, 1995). Some of the factors have been attributed to emotional intelligence.

#### *Emotional Intelligence and Gender*

Conventional wisdom and pseudoscience suggest that men and women have significantly different styles of emotional intelligence (Reiff, Hatzes, Bramel, & Gibbon, 2001). It is expected that men and women would differ in the degree to which they exhibit various components of emotional intelligence (Lyusin, 2006). According to ideas common in popular and scientific psychology, women are more competent than men in the emotional sphere (Lyusin, 2006).

Sutarso, Baggert, Sutarso, and Tapia (1996) examined the relationship between gender, grade point average, and emotional intelligence among college students. Sutarso et al. (1996) reported gender differences in terms of intensity of emotional experience, empathy, body image, self-esteem, aggressive feeling and social monitoring, coping human relations, emotional development, parenting and family support, and depression. Many studies have reported that women tend to demonstrate greater compassion and empathy than men; however, the literature is mixed in terms of gender differences on self-awareness and self-control (Bernet, 1996; Sutarso et al., 1996). Bernet (1996) found that women demonstrated slightly greater abilities in social and emotional intelligence. Furthermore, women tend to be more likely to doubt their feelings and decisions and place less emphasis on intellect.

According to Lyusin (2006) women are better at sensing the emotions of other individuals and have a greater tendency toward psychological analysis of behavior. In comparison to men, women had lower scores on the Intrapersonal EI (management of one's own emotion) and Intrapersonal EI (control of expression) (Lyusin 2006). In conclusion, the educational field found gender differences between men and women in the area of emotional intelligence (Reiff et al., 2001).

#### *Emotional Intelligence and Job Performance*

Precipitated by the construct of EI, it has been argued that EI may predict key determinants of workplace performance more so than traditionally used constructs such as general intelligence and personality (Mayer, 2001; Watkin, 2000). Speculations are that performance relies more on interpersonal relationships, tolerance, adaptability, and teamwork, and it has been proposed that EI constitutes the building blocks to these

important interpersonal workplace behaviors (Goleman, 1998). Generally, EI can be seen to underlie the broad notion of interpersonal effectiveness and may therefore be a useful contributor to our understanding of such variables as effective networking, communication, negotiation, performance, leading, and motivating (Goleman, 1998).

Currently, there is empirical support for the relationship between emotional intelligence and work performance (Kaipiainen & Fletcher, 2001; Slaski, 2001). However, research on emotional intelligence and job performance are mixed. Some studies suggest that emotional intelligence and job performance are positively related. Emotional intelligence predicts performance of undergraduate students on a single task, classroom performance of managers and professionals (Sue-Chan & Latham, 2004), and sales performance (Wong, Law, & Wong, 2004). However, other studies report no relationship or an inconsistency between emotional intelligence and job performance (Austin, 2004; Day & Carroll, 2004).

#### *EIQ, IQ, and Job Performance*

Researchers have argued that emotional intelligence explains variance in job performance that is not explained by constructs such as cognitive intelligence (Mayer & Salovey, 1997; Goleman, 1998). This argument proposes that emotional intelligence and cognitive intelligence make independent and complementary linear contributions to job performance (Cote & Miners, 2006). Cognitive intelligence moderates the association between emotional intelligence and job performance, so that the association becomes more positive as cognitive intelligence decreases (Cote & Miners, 2006). Some researchers argue that emotional intelligence contributes to occupational success. More emotionally intelligent individuals might succeed at making their workers feel better, at



communicating in interesting ways, and at designing projects that involve infusing products with feelings and aesthetics (Mayer & Salovey, 1997).

### *Emotions*

According to Leeper (1948), emotions are primarily motivating forces; they are “processes which arouse, sustain, and direct activity” (p. 17). Emotions are reported to influence learning, in addition to influencing a range of behaviors such as helping, negotiating, altruism, risk taking, and compliance (Isen, 1984). Emotions are a fundamental and integral part of an individual’s life and can have an impact on the world of work. The roles of emotions in the workplace and the relationship between cognition and emotions have been the focus of recent research (Askanasy, Hartel, & Zerbe, 2000).

### *Emotions and Health*

Recently, there has been an increasing interest in how emotional reactions and experiences affect both physical and psychological health (Tsaousis & Nikolaou, 2005).

According to Salovey and Mayer (1990) and Mayer and Salovey (1995) higher levels of emotional intelligence result in better psychological and physical well-being. A study conducted by You, Lee, and Lee (1999) found a relationship between lower levels of emotional intelligence and psychological burnout. Furthermore, Salovey, Stroud, Woolery, and Epel (2002) found higher levels of emotional intelligence were associated with better psycho-physiological coping when faced with stressors. Some of the psychophysiological areas included lower levels of cortisol, passive coping rumination, and lower blood pressure. A study conducted by Salovey, Bedell, Detweiler, and Mayer (1999) discovered that individuals who are able to regulate their emotional states are healthier because they “accurately perceive and appraise their emotional states, know

how and when to express their feelings and can effectively regulate their mood states” (p. 161). This suggests that there is a direct connection between emotional intelligence skills and physical as well as psychological health (Tsaousis & Nikolaou, 2005). Individuals are emotionally intelligent then they can cope better with life’s challenges and control their emotions more effectively (Taylor, 2001).

### *Historical Background of Stress*

The term stress is derived from the Latin word *stringere*, which means “to draw tight” (Cartwright & Cooper, 1997). In the 18<sup>th</sup> century, the term stress referred to an individual’s force, pressure, strain, or strong effort. These earlier definitions were used in physics and engineering which began to influence the notion that stress may affect individuals, where forces are seen to exert pressure on an individual, producing strain (Hinkle, 1977). In the 1930’s stress was applied to animals and humans during threatening situations which caused states of physical arousal. Cannon’s (1932) research in biological psychology led him to describe the “flight or fight” of the Sympathetic Nervous System (SNS) to threats. Cannon found that SNS arousal in response to a perceived threat involves several elements which prepare the body physiologically either to take a stand or fight off an attacker or flee from danger.

Selye (1950) theorized that all individuals respond to all types of threatening situations in the same manner. He called this the General Adaptation Syndrome. He proposed that there are three stages in response to stress: alarm, resistance, and exhaustion. The first stage in this model, alarm, occurs when a phase of lowered resistance is followed by shock and defense mechanisms becoming active. The second stage, resistance, occurs when the individual struggles and is exposed to health risk and

distress. The third stage, exhaustion, occurs if resistance is not successful and leads to collapse. Selye's theory was criticized because the psychological impact was ignored as was the ability to change the situation after recognizing the stress (Cartwright & Cooper, 1997).

### *Definitions of Stress*

The most common types or definitions of stress may be categorized into three types (Beehr & Franz, 1987). The first type is referred to as stimulus-based, which views stress as a situational or environmental based stimulus, impinging upon the person. The second type is response-based, defining stress as an individual's psychological or physiological response to environmental/situational forces. The third type is known as stressor-strain, which defines stress as both the stimulus and the response. Theories based upon the third definition are usually considered to be superior since they offer a more "complete" view of the dynamics of stress and can account for documented differential experiences within a single situation (Arnold, Cooper, & Robertson, 1998).

### *Reactions to Stress*

The experience of stress is the manifestation of negative emotions triggered by danger, threat, or challenge and which signal to the body the need to prepare for actions of defense and protection (Slaski & Cartwright, 2002). Derogatis (1987) conducted research using the Derogatis Stress Profile (DSP), a psychological questionnaire to measure individuals' stress predispositions. According to Derogatis, stress may be defined as a state of psychological pressure influenced by three main sources of domain: personality mediators (constructs of time pressure, driven behavior, attitude posture, relaxation potential, and role definition); environmental factors (constructs of vocational

satisfaction, domestic satisfaction, and health posture); and emotional responses (constructs of hostility, anxiety, and depression).

Daily events predict changes in psychosomatic health better than life events (Lazarus & Folkman, 1984; Admiraal, Korthagen, & Wubbels, 2000). Lazarus and Folkman (1984) claim that when confronted by an event, an individual engages in a process of primary appraisal whereby the event may be seen as stressful or benign, depending on the individual and the situation. Next, the individual will engage in a process of secondary appraisal. In this process, an individual will engage in the cognitive evaluation of his or her personal and environmental resources to deal with the stressful event. These researchers predict that individuals will use their cognitive and behavioral strategies of adaptation to deal with a given stressful event (Montgomery & Rupp, 2005).

#### *Models of Occupational Stress*

Occupational stress is defined as a complex, dynamic process in which various stressors and modifying variables are interrelated (Karasek & Theorell, 1990; Siegrist, 1996). Several models of stress relating to occupational stress have been developed in an attempt to better understand the relationship between work characteristics and employee well-being. The Job Demands-Control model of occupational stress is based upon the proposition that the interaction between job demand and job control will explain strain outcomes (Karasek, 1979; Karasek & Theorell, 1990). Karasek defined job demand as the independent variable that measures stressors, such as workload demands. He theorized that when job demands are high and job control is low, strain occurs, which leads to both mental and physical health problems. The Effort-Rewards Imbalance model (Marmot, Siegrist, Theorell, & Feeney, 1999) examines both situational and personal

characteristics of the work environment. These researchers hypothesize that work-related benefits depends on a reciprocal relationship between the efforts and the rewards obtained from work. Furthermore, they claim that if an imbalance occurs due to an individual's high effort and low reward, this deficit causes stress which leads to disease and ill-health.

A third model of occupational stress is the Job-Demands Resources model (Baker, Demerouti, DeBoer, & Schaufeli, 2003). This model assumes that stress confronted in the workplace is a result of the interaction between individuals and their environment. This model is related to the Burnout Model (Maslach & Jackson, 1981; Maslach, Schaufeli, & Leiter, 2001). Burnout is defined as a psychological syndrome developed in response to chronic interpersonal stressors on the job and is characterized by overwhelming exhaustion, feelings of cynicism and detachment from the job, and feeling a sense of ineffectiveness and lack of accomplishment (Maslach, Schaufeli, & Leiter, 2001).

#### *Factors of Job Stress*

Stress may result from poor work conditions, lack of control (autonomy), poor social relations, lack of social relations, lack of social support, lack of rewards, work overload, or routinization (Karasek & Theorell, 1990; Lait, & Wallace, 2002). According to Oginska-Bulik (2005) emotion at work, which is related to stress is expressed either positively or negatively toward clients.

Cooper and Marshall (1978) initially identified six causes of stress at the workplace and later researchers agreed with them. The six major factors which contribute to work stress are 1) factors intrinsic to the job, 2) role in the organization,

3) relationship at work, 4) career development, 5) organizational structure and climate, and 6) organizational interface with outside. The first category identifies causes of work stress in the workplace that relate to factors intrinsic to the job. Examples of factors intrinsic to the job which may be related to an individual experiencing occupational stress are poor working condition, long hours, shift work, travel, risk and danger, new technology, work overload, and work under load (Cartwright & Cooper (1997). The second category, role in the organization, encompasses the demands and behaviors associated with the job that an individual performs (Cooper, Dewe, & O'Driscoll, 2001). The third category of potential stresses in the workplace is known as relationships at work. Relationships with others in the workplace in terms of quality and social support are suggested to be potential sources of job-related strain (Cartwright & Cooper, 1997). These authors claimed that problems with emotional stability often occur when the relationship between the individual and their superior is unhealthy.

The fourth category identifies antecedents of occupational stress and is termed career development. Cooper and Marshall (1978) identified two clusters of potential stressors in the area of career development: lack of job security (a fear of job loss or retirement) and status incongruity (reaching career ceiling, under or over promotion). Potential stressors in this area is often caused by the lack of advancement in the organization and also may be present when employees feel promoted beyond their capabilities (Cooper et al., 2001) The fifth category of potential causes of occupational stress is organizational structure and climate. According to Cooper and Marshall (1978) lack of participation in the decision-making process; lack of a sense of belonging; lack of effective consultation; poor communication; restrictions on behavior; and office politics

can be potential causes of occupational stress. Lastly, the final source of occupational stress is termed organizational interface with outside. The changes in the structure of families, the increase of women in the workforce, and changes in technology have blurred the boundary between life on and off the job (Cooper et al., 2001). According to these researchers, these aforementioned stressors do not occur in isolation, but rather occur in combination and the subjective perception is crucial in understanding the relationship between stressors and strain.

### *Categories of Occupational Stress*

The majority of researchers agree that major strains of occupational stress can be grouped into three categories: psychological, behavioral, and physical. According to Downs, Driskill, and Wuthnow (1990), the experience of stress has been related to the psychological areas of depression, fatigue, low self-esteem, anger, irritability, guilt, moodiness, boredom, accidents, withdrawal, and burnout. Psychological strain also contributes to dissatisfaction, anxiety, dysphoria, complaints of insomnia, and restlessness (Edwards, Caplan, & Harrison, 1990). The second major strain associated with occupational stress is physical strain. Downs et al. (1990) noted that stress has been physically related to cardiovascular disease, hypertension, ulcers, asthma, and migraine headaches. Lastly, the third category is known as a behavioral strain. Research has associated cigarette smoking, increased alcohol and recreational drug abuse, violence, stuttering, overeating, and frequent utilization of health care services with symptoms of behavioral strain (Harrison, 1978; Quick, Horn, & Quick, 1987; Edwards, Caplan, Harrison, 1998). In conclusion, according to the literature if the outcome of a stressor

leads to any of the three classifications of occupational stress, psychological, physical, or behavioral, it is considered harmful to the individual.

### *Consequences of Occupational Stress*

The problems associated with occupational stress experienced by individuals are being more recognized. Occupational stress has a very severe impact on both the individual and the organization. For the individual, it is a severe threat to health, quality of life, goal achievement, self esteem, and personal development, while for the organization, it is also a major risk factor for poor communication, increased absenteeism and turnover, reduced quantity and quality of work, reduced job satisfaction and morale, increased problems of recruitment and conflict (Michie, 2002).

The rates of sickness absence and illness due to stress, such as hypertension, coronary heart disease, cardiovascular disease, musculoskeletal problems, gastric ulcer, gastrointestinal dysfunction, ulcerative colitis, constipation, and thyroidomania are increasing (Verhaeghe, Mak, Maele, Kornitzer, & Backer, 2003). The Health and Safety Executive in the United Kingdom calculated that 180 million working days every year were lost due to stress-related illness (Sigman, 1992). Some of the identified potential consequences of chronic stress identified in the literature include: alcoholism, job dissatisfaction, obesity, excessive smoking, drug addiction, accidents, family conflict, divorce, and suicide (Gann, 1981; Zahn, 1980; Pines & Aronson, 1981; Goldberg 1978).

Ciarrochi, Deane, and Anderson (2002) conducted a study which examined the relationship between stress and measures of psychological health, including depression, hopelessness, and suicidal ideation. A negative correlation was found between stress, ill health, and emotional intelligence levels. Thus, those who score high on emotional



intelligence skills are expected to cope more effectively with environmental demands and pressures associated with occupational stress and health outcomes than those who score low on EI (Nikolaou & Tsaousis, 2002; Slaksi & Cartwright, 2002). Dulewicz, Higgs, and Slaski (2002) examined the role of stress, distress, morale, poor quality of working life, and emotional intelligence and found that emotional intelligence was highly correlated with both physical and psychological health. Tsaousis and Nikolaou (2005) similarly discovered a negative relationship between increased levels of emotional intelligence and low physical and psychological health. Therefore, results suggest that higher levels of emotional intelligence can have an important role in positive health outcomes.

#### *Connection Between Emotional Intelligence and Job Stress*

There are limited studies which explore the relationship between emotional intelligence and job stress. The link between emotional intelligence and stress is founded on the notion that negative emotions and stress are the result of some dysfunctional relationship between aspects of the self and the environment (Slaski & Cartwright, 2002). Emotion may play more of a role in the stress process than previously thought.

It has been found that managers with higher emotional intelligence revealed less stress and manifested higher physical and psychological well-being. Three empirical studies have shown that emotional intelligence is strongly linked to Transformational Leadership, a factor that is considered to impact on subordinate stress and performance (Barling, Slater, & Kelloway, 2000; Gardner & Stough, 2002; Palmer, Walls, Burgess, & Stough, 2000). A study conducted by Bar-On (2000) discovered that police officers who scored significantly higher on emotional intelligence were less vulnerable to experience

stress and were better able to cope with daily demands. A study conducted by Gohm, Grant, Corser, and Dalsky (2005) revealed that emotional intelligence was associated with relatively lower reported stress levels. Helping individuals feel able to deal with difficult events and providing a greater awareness of personal strengths lowers stress levels (Gohm et al., 2005).

A study conducted by Oginska-Bulik (2005) using a sample representing physicians, nurses, teachers, probation officers, and managers revealed a significant relationship between emotional intelligence and perceived stress in the workplace. Individuals with high levels of emotional intelligence skills reported they experienced lower levels of stress. In addition, these researchers indicated a significant relationship between stress experienced in the workplace and general health status, somatic complaints, anxiety/insomnia, and depression. The ability to effectively deal with emotions and emotional information in the workplace assists employees in managing occupational stress and maintaining psychological well-being (Oginska-Bulik, 2005). Whether a stressor produces an enduring health outcome or not depends on the extent to which the individual “reads” the situation as stressful and chooses to respond to it. Perception of stress and responsibility are essential components of EI.

Among the areas with the strongest connections to EI is the occupational environment. Weisinger (1998) suggests that there is a direct link between EI and success at work. Dulewicz and Higgs (1998) compared the contribution of cognitive competencies and EI competencies to work performance. These researchers found that EI accounted for 36% of the total variance in organizational achievement whereas IQ accounted for 27%. These researchers conclude that the results suggest that EI

contributes slightly more to career development than does IQ. According to Nelson and Low (2003) emotional intelligence is the single most important influencing variable in personal achievement, career success, leadership, and life satisfaction. They believe that an emotionally fit person should be able to identify, understand, experience, and express human emotions in a healthy and productive way.

Bar-On, Brown, Kirkcaldy, and Thome (2000) explored the relationship between EI and occupational stress among two groups, police officers and paraprofessional personnel in mental health and child care professionals. The results of their study revealed that police officers scored significantly higher than either of the care worker practitioner groups. This suggests that the ability of police officers to be more aware of themselves and of others makes them more adaptable to stressful events and provide them with better coping strategies (Bar-On et al., 2000).

#### *Sources of Teacher Stress*

Kyriacou (2001) reports that the main sources of teacher stress stem from a) teaching students who lack motivation; b) maintaining discipline in the classroom; c) confronting general time pressures and workload demands; d) being exposed to a large amount of change; e) being evaluated by others; f) having difficult or challenging relationships with colleagues, administration, or management; and g) being exposed to generally poor working conditions. The sources of stress experienced by individual teachers will depend on the complex interaction between his or her personality, values, skills, and circumstances.

According to Travers and Cooper (1996) teachers' stress was also a result of a lack of social recognition, large class size, isolation, fear of violence, lack of classroom

control, role ambiguity, and limited professional opportunities. Managing disruptive students, student violence and apathy, and poor relationships between teachers and students were identified as the best predictors of teacher burnout, followed by administrative insensitivity and lack of support, bureaucratic incompetence, and lack of voice in organizational decision-making (Friedman & Lotan, 1985; Farber, 1991).

Three sources of distress affecting teachers include societal, organizational, and role-related. These three areas are interrelated. Societal sources of distress result from the pressure placed upon schools by social and political forces in the community. Iwanicki (2001) claimed that as a result of the poor public image of education, teachers suffer from diminished self esteem and from increased productivity when the financial support for education has been reduced. Organizational distress results when teachers feel that insufficient resources have been made available to meet performance expectations, or when curriculum or instructional directives conflict with what the teachers believe is best for students (Iwanicki, 2001). The sources of role-related distress are classroom discipline problems, difficulty in developing appropriate instructional programs for students with special needs, finding sufficient time for professional development, and developing positive relations with administrators, peer teachers, or parents (Iwanicki, 2001).

Some researchers argue that teachers in special education may experience higher levels of stress than their colleagues in general education (Williams & Gersch, 2004). High stress levels in special educators result in various adverse organizational phenomena such as job dissatisfaction, burnout, and leaving the field of teaching or transferring to mainstream schools (Lazurus, 2006). According to Male and May (1997)

special education teachers spend a lot of their working time with pupils who have significant emotional needs.

Various studies in different countries have shown high levels of stress and mental distress among teachers (Pedrabissi, Rolland, & Santinello, 1991; Wang, Lan, Li, & Wang, 2002). Teachers, especially in the middle and primary schools, are engaged in a complex and mentally stressful job because of insufficient personnel, heavy responsibilities, poor employment conditions, and high expectations from society and parents (Wu, Li, Wang, Wang, & Li, 2006). Excessive stress may damage their mental and physical health and decrease their work ability.

#### *Teacher Burnout*

In the literature, stress is typically equated with burnout because of the similarities these concepts share. Burnout began to appear in the literature in the early 1970's, a construct formulated separately by Freudenberger and Pines. Burnout was defined as becoming exhausted from extensive demands on energy, strength, or resources (Freudenberger, 1974). Maslach (1978) was the first to gather empirical data on burnout and defined it as "emotional exhaustion resulting from the stress of interpersonal contact". Teacher burnout received extensive attention in the literature (Blasé, 1982; Cedoline, 1982; Farber, 1984, 1991; Shirom, 1986; Friedman, 1992, 2000, Byrne, 1994; Van Horn, Schaufeli, & Enzmann, 1999) and burnout among teachers has received the most attention of any occupational group (Schaufeli, 1998). Travers and Cooper (1993) found in comparison to other occupations, teachers experience much higher levels of stress. This is supported by a research report from the Health and Safety Executive which confirmed that teaching is one of the most stressful professions, with 41% of

teachers reporting high levels of occupational stress (Smith, Brice, Collins, Matthews, & McNamara, 2000).

### *Definitions of Teacher Burnout*

Burnout is described as a tripartite syndrome that includes feelings of emotional exhaustion, depersonalization, and lack of personal accomplishment that is a response to chronic stress in jobs where individuals work with people (Maslach, Jackson, & Leiter, 1996). Emotional exhaustion is defined as feelings of being emotionally overextended and feelings of a strong reduction of one's emotional resources. When these feelings become chronic, educators find they can no longer give themselves to students as they once could. Depersonalization refers to a negative, callous and detached attitude towards the individuals with whom one works. Some of the many ways educators can display indifferent, negative attitudes toward their students are a) using derogatory labels, b) exhibiting cold or distant attitudes, c) physically distancing themselves from students (for example, barricading themselves behind their desks), and d) tuning out students through psychological withdrawal (Maslach, Jackson, & Leiter, 1996). Reduced personal accomplishment is defined as the feeling of no longer being effective in working with students or in fulfilling other school responsibilities (Iwanicki, 2001). When educators no longer feel that they are contributing to students' development, they are vulnerable to experiencing profound disappointment. The level of burnout experienced by teachers is a function of the frequency and intensity of their feelings of emotional exhaustion, depersonalization, and reduced personal accomplishment (Iwanicki, 2001).

### *Models of Teacher Burnout*

There are numerous theoretical models which have attempted to explain teacher burnout. Friedman (2000) suggests that lack of self-efficacy may be the critical psychological mechanisms underlying burnout. According to Schaufeli (1998) teacher burnout is the result of a lack of reciprocity in relationships with students, colleagues, and administrators. Burnout is not merely a psychological state, but the subjective experience of a predominately social problem, the result of a dynamic interaction between an individual teacher and a social world (Sakharov & Farber, 1983). Teachers define their educational goals and when they attempt to reach their goals but fail, because of stresses and a demand from the organizational environment, the result is burnout (Blasé, 1982). Pines and Aronson (1981) identified four strategies for dealing with teacher burnout: being aware of the problem, taking responsibility for doing something about it, achieving some degree of cognitive clarity, and developing procedures for coping.

According to Shirom (1993) the transactional model posits that burnout can be explained as a result of an interaction between triggering environmental variables and intra-personal traits, which may facilitate or inhibit the manifestation of burnout. Many teachers in the United States have been reporting feelings of irritability, fatigue, frustration, and anger (Gold, 2001).

### *Symptoms of Teacher Burnout*

The most common symptoms of teacher burnout are physical and emotional exhaustion and anxiety. Farber (1991) claims that some teachers are fearful and hypervigilant and worry about their personal safety. Research has documented that teacher burnout affects mental health, psychosomatic complaints (including insomnia,

headaches, and ulcers), and somatic complaints (including abdominal pain, nausea, difficulty breathing, dizziness, loss of appetite, muscle tightening, cold sweats, back pains, and occupational injuries) (Belcastro, 1982; Shirom, 1986; Sakharov & Farber, 1983; Brenner & Bentall, 1984).

Individuals may experience burnout as a result of stress itself, a sudden breakdown of their mediating coping mechanisms, or an ineffectiveness of their mediating coping mechanisms over a long period of time (Guglielmi & Tatrow, 1998; Vandenberghe & Huberman, 1999). Pines and Aronson (1981) noted that burnout is characterized by physical depletion, by feelings of helplessness and hopelessness, by emotional drain, and by the development of a negative self concept and a negative attitude toward work, life, and other people.

#### *Personality Traits and Burnout*

Kaplan (1996) postulates that stable personality characteristics predispose individuals to view adverse events in a particular way that can either impair or facilitate the adaptation process and its psychological and physical health outcomes. The five-factor model of personality is considered to be a well-developed model. Costa and McCrae (1992) described the five-factor model in terms of neuroticism (the susceptibility of psychological distress, inability to control urges, proneness to unrealistic ideas, and inability to cope with stress), extraversion (the disposition towards positive emotions, sociability, and high activity), openness (the proclivity towards variety, intellectual curiosity, and aesthetic sensitivity), agreeableness (the inclination towards interpersonal trust and consideration of others), and conscientiousness (the tendency towards persistence, industriousness, and organization).



The use of the five-factor model of personality to study the process of burnout has been used in numerous research studies. Zellars, Perrewe, and Hochwarter (2000) studied burnout in a sample of nurses, and found that neuroticism predicted emotional exhaustion; that extraversion and agreeableness predicted depersonalization, and that openness and extraversion predicted personal accomplishment. Mills and Huebner (1998) discovered that neuroticism and introversion correlated with the three dimensions of burnout in a sample of school psychologists. Furthermore, the results revealed that emotional exhaustion was associated with conscientiousness and agreeableness; depersonalization was associated with agreeableness; and personal accomplishment was associated with conscientiousness.

Research on the personality correlates of teacher burnout has indicated that neuroticism was associated with burnout (Maslach, Schaufeli, & Leiter, 2001; Burke & Greenglass, 1995, 1996). Fontana and Abouserie (1993) used the Eysenck model of personality (Eysenck & Eysenck, 1985) to study the links between stress levels, gender, and personality in a sample of teachers. These researchers found correlations between burnout and high scores on neuroticism, introversion, and psychoticism. According to Kokkinos and Davazoglou (2005) teachers' personality traits were the most significant predictors of the three burnout dimensions compared with contextual and demographic variables.

Kokkinos (2007) conducted a study which examined the link between job stressors, personality characteristics, and dimensions of burnout in a sample of primary school teachers from Cyprus. In terms of specific job stressors, results revealed that managing student misbehavior and time constraints were the two sources of stress that

predicted dimensions of burnout. In terms of personality traits, results showed that higher scores on neuroticism increased levels of emotional exhaustion and depersonalization. Teachers with high scores on conscientiousness and extraversion and low scores on neuroticism were more likely to experience feelings of increased personal accomplishment and low burnout. Findings revealed that low scores on openness predicted more feelings of depersonalization, whereas teachers with high scores on this personality dimension reported more feelings of personal accomplishment. In conclusion, this study suggested that certain personality characteristics may increase or hinder the incidence of burnout among teachers.

#### *Teacher Stress and Burnout*

Teacher stress has received a considerable amount of attention and been the focus of research for decades. Consequently, this resulted in the development of teacher stress scales and various strategies to address the negative effects of stress and burnout. Chronic stress causes debilitating effects on a personal and professional level, and if left unattended can lead to burnout (Farber, 1991). Research has shown mixed results in finding a relationship between demographic variables, stress, and burnout. Demographic characteristics of teachers, such as age, number of years in teaching, gender, and type of class instructed is not correlated in any systematic way to stress and burnout (Friesen & Williams, 1985; Holland & Michael, 1993; Kyriacou & Sutcliffe, 1978a).

Russell, Altmaier, and VanVelzen (1987) analyzed sociodemographic variables (gender, age, marital status, community size), and job variables (years of teaching experience, grade taught, size of school, class taught, and level of education). Results indicated that younger teachers reported more stressors than did older teachers. It is not

clear, however, if older teachers develop better coping strategies, teaching skills, and modify their expectations, or if teachers experiencing high stress levels have simply left the teaching profession (Zabel & Zabel, 1982). Consequences of teachers who remain in the profession in spite of their burned out condition will experience less idealism, reduced work goals, and emotional detachment (Hughes, 2001).

Research has shown inconsistent findings regarding the relationship between gender and stress levels among teachers. Some studies have reported higher levels of job stress for male teachers (Burke & Greenglass, 1989b), while others have report higher levels of stress for female teachers (Calabrese & Anderson, 1986). According to Burke and Greenglass (1989c) the sources of male stress are related to environmental demands, whereas women primarily report problems with time management. Since male teachers are more likely to leave the teaching profession, and the profession is therefore becoming increasingly feminized, it is not unreasonable to assume that females represent a larger proportion of teachers who are experiencing chronic burnout (MCEETYA, 2003).

#### *Teacher Characteristics, Stress, and Burnout*

Empirical studies of teacher burnout have attempted to identify teacher characteristics that are associated with higher burnout levels. Findings have indicated that age, sex, and grade level taught are significant predictors of scores on the Maslach Burnout Inventory (MBI; Anderson & Iwanicki, 1984; Beck & Gargiulo, 1983; Crane & Iwanicki, 1983; Schwab & Iwanicki, 1982b; Schwab, Jackson, & Schuler, 1984).

Greater emotional exhaustion was reported by younger teachers and by teachers who taught larger classes (Russell, Altmaier, & Velzen, 1987). A weak relationship was found between teacher characteristics and reports of job-related stress (Russell, Altmaier,

& Velzen, 1987). Research has shown that greater emotional exhaustion was reported by younger teachers and more negative attitudes toward students (depersonalization) was reported by male and secondary teachers. Finally, a greater sense of personal accomplishment was reported by elementary school teachers (Russell, Altmaier, & Velzen 1987). Results obtained in the Russell, Altmaier, and Velzen (1987) study found that the only predictor that was significantly related to the number of stressful events was age.

Borthwick, Thornell, and Wilkinson (1982) evaluated over 1000 Mississippi teachers using the MBI. Results revealed that younger teachers express higher burnout tendencies, females express burnout tendencies more than males, and white teachers express higher burnout tendencies than minority teachers. Primary teachers (K-6) work with fewer students, experience more frequent demands for individual attention, and have more frequent contact with parents than do secondary teachers (7-12), who work with larger numbers of more independent students (Jones, 1985). According to Jones (1985) primary (K-6) teachers showed higher levels of distress in comparison to secondary (7-12) teachers.

### *Purpose of Study*

Stress is seen as one of the most important factors in human behavior. Workplace stress and its impact upon teachers is a growing concern in our nation. Research documents that teaching is one of the most stressful professions. Occupational stress may have a huge impact both on an individual's well-being and on the organization. It may affect productivity, job performance, and staff retention, and may increase the amount of money that a company spends on covering sick days (Ganster & Schaubroeck, 1991;

O'Driscoll & Cooper, 1996; Sethi & Schuler, 1984). In addition, research has documented that emotional intelligence contributes to an individual's career success and helps the individual manage stress more efficiently.

### *Research Questions and Hypotheses*

- I. Is there a relationship between aspects of burnout and emotional intelligence?  
The null hypothesis is that there is no relationship between aspects of burnout and emotional intelligence.
- II. Are there significant differences between demographic variables and aspects of burnout? The null hypothesis is that there are no significant difference between demographic variables and aspects of burnout.
- III. Are there significant differences between demographic variables and emotional intelligence? The null hypothesis is that there are no significant differences between demographic variables and emotional intelligence.
- IV. Are there significant differences between demographic variables and subscales of emotional intelligence? The null hypothesis is that there are no significant differences between demographic variables and subscales of emotional intelligence.

## Method

### *Participants*

Participants for the present study were eighty three general education teachers and 17 special education teachers who were employed in the Huntington High School in the Huntington Union Free School District in Huntington, New York. There were 35 male and 65 female teachers. This school district is part of the New York Metropolitan area. The school district is comprised of the following student racial/ethnic origin: 13% Black or African American, 23% Hispanic or Latino, 1% Asian or Native Hawaiian/Other Pacific Islander, and 62% White. Families that reside in the district have a low to middle socio-economic status (SES).

A breakdown of the demographics of the participants is presented in Table 1. More than three-quarters of these participants (77%) were general education teachers with the remainder teaching special education (23%). Most of these teachers were females (59%), between the ages of 30-39 (39%), and Caucasian (89%). In regard to their professional experience, the majority of teachers had Master's degrees (64%), were tenured (62%), and had been teaching five years or less (41%).

Table 1

## Number and Percent for Demographic Description of the Sample

Variable	N	%
<u>Teaching Status</u>		
General Education	49	77
Special Education	15	23
<u>Gender</u>		
Male	26	41
Female	38	59
<u>Age</u>		
16-29 years	10	16
30-39 years	25	39
40-49 years	17	27
>=50 years	12	19
<u>Ethnicity</u>		
Caucasian	57	89
Non-Caucasian	7	11
<u>Degree</u>		
Master's	41	64
Adv. Cert. or Doc.	23	36
<u>Tenure Status</u>		
Tenured	40	63
Non-Tenured	24	37
<u>Years of Teaching</u>		
0-5 years	26	41
6-10 years	13	20
11-15 years	10	16
16+ years	15	23

*Note.* Adv. Cert. = Advanced Certificate; Doc. = Doctorate

Permission to conduct the present study was obtained from the school district's Assistant Curriculum Superintendent and the High School principal. During a mandated monthly faculty meeting, all teachers present were informed of the research study during the review of the meeting agenda. At the close of the faculty meeting, the researcher discussed the purpose of the study and provided background information on emotional intelligence and teacher burnout. Prior to the distribution of the surveys and consent forms (see Appendix A), the following passages were read to the participants:

*"The purpose of this study is to investigate the relationship between emotional intelligence and teacher burnout. Your participation in this study involves completing two surveys which assesses emotional intelligence and teacher burnout, as well as a demographic survey. The packets can be completed either at home or at work. Completion of the packet should be done when you are not under extreme stress or overly tired. The packet should be completed within one sitting. The two surveys and one demographic survey take approximately 30-40 minutes to complete. One survey will measure emotional intelligence. The second survey will measure degrees of teacher burnout. In addition, a demographic survey will ask you to provide the following information: teaching status, gender, age, ethnicity, educational background, total number of years teaching, tenured status, grade level and academic subject taught, number of students taught in a class, marital status, and number of children. These measures will assess levels of emotional intelligence skills and teacher burnout. There will be minimal risk involved in this study. However, if you feel that the material will make you feel uncomfortable or anxious, you are free at any time to not participate in this study. All of your responses will be anonymous. The only place where you need to*



*supply your name is on the consent form. To ensure confidentiality, written consent forms and survey forms will be collected separately. You are free to withdraw from this study at any time. I greatly appreciate your time and cooperation."*

Written consent was obtained at the faculty meeting prior to submission of the packets. A debriefing form ( see Appendix C) was placed in the packet given to all participants. After the participants returned the packet, if a participant needed to express his/her feelings about the surveys or ask questions pertaining to the research study, an appointment was scheduled with the researcher. Participants anonymously completed a self-report questionnaire packet, which incorporated measures of emotional intelligence, teacher burnout, and a demographic survey.

Participants were encouraged to return the completed packet within four days in a locked drop off mailbox, located in the main office. After the third day, a follow-up letter was placed in each of the participant's school mailbox as a reminder to return the completed surveys the following day. Sixty-four percent of the high school teachers returned the packet. Participant's names were only written on the consent form and not on the emotional intelligence survey, teacher burnout survey, or demographic survey. The participants were informed about confidentiality issues and their right to withdraw from the study at any time. Furthermore, participants were encouraged to not discuss the surveys with any staff members.

### *Instruments*

*Demographic Questionnaire* (see Appendix B). The participants completed a demographic survey. The following items were included in the demographic

questionnaire: teaching status, gender, age, ethnicity, degree, tenure status, and years of teaching experience.

*Emotional Intelligence.* The BarOn Emotional Quotient Inventory: Short Development Edition (BarOn EQ-i:S) (Bar-On, 2004) is a 51-item self-report rating scale designed to measure emotional intelligence across eight scales (i.e., Inconsistency Index, Positive Impression Scale, Total EQ, Intrapersonal EQ, Interpersonal EQ, Stress Management EQ, Adaptability EQ, and General Mood EQ). Completion of the form takes between 10 to 15 minutes. Published in 2002 by Bar-On, the BarOn EQ-i: S is a shortened form of the BarOn Emotional Quotient Inventory. The short form's items were culled from the 133-item long form. Both forms of the instrument are based on the BarOn Model of emotional intelligence. The BarOn EQ-i:S uses a five point Likert scale (i.e., very seldom or not true of me, seldom true of me, sometimes true of me, often true of me, and very often true of me).

Raw scores for each of the eight scales are calculated and subsequently converted to standard scores with a mean of 100 and a standard deviation of 15. The Inconsistency Index score provides a method for determining validity of the profile through an examination of consistency in response patterns. The Positive Impression scale is also used to evaluate validity of a profile. High scores on this scale indicate a person's attempt to create an exaggerated positive impression (i.e., positive impression of 130) whereas low scores (i.e., positive impression of 70) may indicate malingering. Standard scores are interpreted using emotional intelligence theory and are compared to the instrument's normative sample. In general, high scores (e.g., 130+) are indicative of a well-adjusted individual with high social and emotional capacity. In contrast, low

standard scores (e.g., under 70) are indicative of an individual who has a marked impairment with regard to social and emotional capacity.

The manual describes characteristics of individuals who obtain high scores on the following scales: *Intrapersonal EQ Scale*: These individuals are in touch with their feelings, feel good about themselves, and feel positive about what they are doing in their lives. These individuals are able to express their feelings, are independent, strong, confident in conveying their ideas and beliefs. *Interpersonal EQ Scale*: These individuals are responsible and dependable who have good social skills-they understand, interact, and relate well to others and teamwork. *Adaptability EQ Scale*: These individuals are generally flexible, realistic, effective in understanding problematic situations, and competent at arriving at adequate solutions. They are capable of finding good ways of dealing with everyday difficulties. *Stress Management EQ Scale*: These individuals are generally calm, rarely impulsive, and work well under pressure. They can handle tasks that are stressful or anxiety provoking or that involves an element of danger. *General Mood EQ Scale*: These individuals are generally cheerful, positive, hopeful, and optimistic who know how to enjoy life.

High EQ: i scores indicate that the emotional intelligence skills being measured are strong, well-developed, and functioning efficiently; low scores suggest a deficiency and a need to improve particular competencies and skills in meeting environmental demands (Bar-On, 2004). Scores around 100 indicate average ability and typical healthy functioning. The total EQ score gives a general indication of how emotionally intelligent the respondent is; encapsulates how successful the individual is coping with

environmental demands and presents a “snapshot” of his or her present emotional well-being (Bar-On, 2004).

Bar-On (2004) provides a qualitative description for each level of his scale. The manual's interpretative guidelines for the EQ:i standard scores are as follows: 130+ is Markedly High (atypically well developed emotional capacity), 120-129 is Very High (extremely well developed emotional capacity), 110-119 is High (well developed emotional capacity), 90-109 is Average (adequate emotional capacity), 80-89 is Low (under developed emotional capacity), 70-79 is Very Low (extremely under-developed emotional capacity), and Under 70 is Markedly Low (atypically impaired emotional capacity).

However, for the purpose of this current study, the present researcher made the decision to combine the seven scaled score categories into three scaled score categories. The rationale for combining the qualitative description of the standard scores on the EQ:i:S is after the research reviewed the literature revealed that other emotional intelligence measures do not make such a qualitative distinction between standard scores. Therefore, the researcher combined the standard scores into three descriptive categories. For the purpose of the current study, standard scores of 110-130+ are in the high range (well developed emotional capacity), 90-109 are in the average range (adequate emotional capacity), and below 70- 89 are in the low range (under-developed emotional capacity).

The BarOn EQ-i: S normative sample of 3, 174 adults (1,543 males and 1,631 females) across the United States and Canada. The Northern American sample was the largest (N=3,831) and the most diverse regarding age, socioeconomic, educational, and

occupational/professional breakdown (Bar-On, 2004). Data related to the psychometric properties of the instrument are organized by gender and according to four broad age groups (i.e., 16 to 29 years, 30 to 39 years, 40 to 49 years, and 50 and older). Caucasians were the largest group of participants in the normative sample (79%), with Asian (8.1%), with African Americans (7.1%), with Hispanic (2.8%), and other racial designations (2.3%) making up the remainder of the participants.

Internal reliability coefficients for each of the BarOn EQ-i: S were examined by age and gender. Overall, the instrument has acceptable internal consistency reliability with most values in the .70-.80 range. Test-retest reliability estimates ranged between .46 and .80 for each of the scales by gender. The BarOn EQ-i: S is a well-documented tool in terms of validity. Evidence of construct validity is documented in several ways.

Confirmatory factor analysis and other correlational studies support the use of separate subscales. Results of studies with positive implications for convergent and divergent validity are presented. According to Bar-On (2004) correlations ranging from .73 to .97 between the full scale instrument (Bar-On: i) support the validity of the short form.

Correlation matrices displayed for each age-based norm group provide evidence that the BarOn EQ:i:S functions similarly across respondents of different ages (American Educational Research Association, American Psychological Association, & National Council on Measurement In Education, 1999). There are high correlations between the BarOn EQ:i and BarOn EQ:i:S.

*Teacher Burnout.* The Maslach Burnout Inventory-Educator's Survey (MBI-ES) is 22-item self-report instrument to assess perceived levels of three dimensions of burnout.

The MBI-Es takes about 10 to 15 minutes to fill out. The authors define burnout as a

“syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity”. The respondent is to rate each item on a seven point scale ranging from Never to Everyday, to describe the frequency with which the respondent experiences the feeling described in the item. The MBI-ES produced three scores, which collectively indicate the extent of burnout. The scores are summed ratings for three aspects: Emotional Exhaustion (nine items referring fatigue or stress), Depersonalization (five items referring to feelings of callousness or indifference in regard to recipients or students), and Personal Accomplishment (eight items about feelings of enthusiasm and effectiveness in working with people). Emotional Exhaustion provides a measure of fatigue that comes from managing stressors stemming from problem solving encountered when working with people in crisis or with a continuous stream of individuals seeking assistance or guidance. Depersonalization assesses the extent of accommodation one makes to minimize the effects of highly charged situations by distancing oneself from others. Personal Accomplishment reflects one’s sense of progress, the attainment of one’s goals, and other successes.

Burnout is conceptualized as a continuous variable, ranging from low to moderate to high degrees of experienced feelings (Maslach, Jackson, & Leiter, 1996). A high degree of burnout is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales and in the low scores on the Personal Accomplishment. An average degree of burnout is reflected in average scores on the three subscales. A low degree of burnout is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales and in high scores on the Personal Accomplishment. Scores

are considered high if they are in the upper third of the normative distribution, average if they are in the middle third, and low if they are in the lower third (Maslach, Jackson, & Leiter, 1996). There are numerical cut-off points for the ranges of experienced burnout experienced by teachers (K-12). On the Emotional Exhaustion subscale the following cut-off points include Low (less than or equal to 16), Average (17-26), High (greater than or equal to 27). On the Depersonalization subscale, the following cut-off points include Low (less than or equal to 2), Average (3-8), and High (greater than or equal to 9). On the Personal Accomplishment subscale, the following cut-off points include Low (greater than or equal to 37), Average (36-31), and High (less than or equal to 30).

Norm information in the manual is derived from a number of studies of each version. There are three versions of the MBI: Educator's Survey (ES), Human Services Survey (HSS), and General Survey (GS). The total sample for the combined HSS/ES norms is 11, 067 workers in various occupations. The examinees included 4,163 teachers (Grades K-12), 635 postsecondary teachers, 1,538 social service workers, 1,104 medical workers including physicians and nurses; 730 mental health workers, and 2, 897 others. Males represented about 40% of the sample and Caucasians represented slightly more than 82%. Separate HSS/ES norms are provided for various demographic groups. Most of the items refer to current state, rather than to a deteriorated status.

The questionnaires are short and reliability is adequate. Cronbach's alphas were .90, .79, and .71 for Emotional Exhaustion, Depersonalization, and Personal Accomplishment, respectively. Studies cited test-retest coefficients for the three scales over a few weeks (.82, .60 and .80, respectively); 3 months (.75, .64, and .62, respectively); and up to one year (.60, .54, and .57, respectively). Some evidence for the

validity of the MBI scales resides in the results of numerous factors analytic studies confirming the three-factor structure of burnout.



## Results

The purpose of the study was to explore the relationship between Emotional Intelligence and teacher burnout among high school teachers. Furthermore, demographic were investigated to determine whether these variables were moderating factors among Emotional Intelligence and teacher burnout. The demographic variables included the following: teaching status, gender, age, ethnicity, level of education, and tenure status.

Table 2 presents the means and standard deviations of the three aspects of burnout and the total Emotional Intelligence score. The means and standard deviations were computed and compared to the normative sample of the Maslach Burnout Inventory and the BarOn EQ:i:S. Based on this sample of teachers can be characterized as “low” on depersonalization ( $\leq 6$ ) and on personal accomplishment ( $\geq 39$ ), but “average” on emotional exhaustion (17-26). The total score of emotional intelligence falls within the “average” range (90-109) of this measure.

Table 2

Means and Standard Deviations of the Maslach Burnout Inventory and BarOn EQ:i:S

Scale	<i>M</i>	<i>SD</i>	Category
<u>Maslach Burnout Inventory</u>			
Emotional Exhaustion	19.57	11.97	Average
Depersonalization	5.87	5.20	Low
Personal Accomplishment	38.92	5.26	Low
<u>BarOn:EQ:i:S</u>			
EQ Total	99.91	17.31	Average

*Note.* Maslach Burnout Inventory scores are reported as raw scores;  
BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )  
EQ = Emotional Intelligence Quotient

Pearson Correlations were computed to examine the relationship between Emotional Intelligence and the three aspects of burnout-Emotional Exhaustion, Depersonalization, and Personal Accomplishment. As seen in Table 3, for this sample there are no statistically significant relationship between the Emotional Intelligence total and Emotional Exhaustion ( $r = -.163, p > .05$ ) or Depersonalization ( $r = -.173, p > .05$ ). However, the Emotional Intelligence measure is statistically, positively, and moderately related to the Personal Accomplishment subscale of the burnout measure ( $r = .300, p = 0.16$ ).

Table 3

Correlations Between Maslach Burnout Inventory and BarOn EQ:i:S Emotional Intelligence Quotient

Scale	
<u>Maslach Burnout Inventory</u>	<u>EQ Total</u>
Emotional Exhaustion	-.163
Depersonalization	-.173
Personal Accomplishment	.300*

*Note.* \* $p < .05$

Since the correlation between the Personal Accomplishment dimension of the burnout measure and the total score of the Emotional Intelligence measure is statistically significant, the subscales of Emotional Intelligence and their correlations with Personal Accomplishment were examined. By doing so, this may clarify our understanding of the relationship between the one aspect of burnout, Personal Accomplishment, and the total Emotional Intelligence scale. Table 4 presents the correlations between Personal Accomplishment and the five subscales of the total Emotional Intelligence quotient.

Only three of the five Emotional Intelligence subscales exhibit statistically significant associations with Personal Accomplishment. Specifically, Intrapersonal, Interpersonal, and General Mood subscales display positive, statistically significant associations with Personal Accomplishment. Those teachers with higher scores on these three aspects of Emotional Intelligence report higher levels of competence and successful achievement in one's work with people.

Table 4

Correlations Between the Maslach Burnout Inventory Personal Accomplishment Subscale and the BarOn EQ:i:S Subscales

Scale	
<u>BarOn EQ:i:S Subscales</u>	<u>Personal Accomplishment</u>
Intrapersonal	.313*
Interpersonal	.397*
Stress Management	.053
Adaptability	.138
General Mood	.268*

*Note.* \* $p < .05$

Table 5 presents the outcomes of a series of *t*-tests across aspects of burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) and EQ total for both general and special education teachers. For the Emotional Exhaustion subscale the mean score for general education teachers ( $M = 19.53$ ,  $SD = 11.52$ ) was slightly lower than that of special education teachers ( $M = 19.73$ ,  $SD = 13.80$ ), however, the difference was non significance ( $t = -.052$ ,  $p = .959$ ). For the Depersonalization subscale, there was no statistical significance ( $t = .114$ ,  $p = .910$ ) between the mean score of general education teachers ( $M = 5.91$ ,  $SD = 5.13$ ) and the mean score of special education

teachers ( $M = 5.73$ ,  $SD = 5.59$ ). For the Personal Accomplishment subscale, there was no statistical difference ( $t = -.577$ ,  $p = .569$ ) between the mean score of general education teachers ( $M = 38.73$ ,  $SD = 5.53$ ) and that of special education teachers ( $M = 39.53$ ,  $SD = 4.40$ ). Lastly, for the EQ total, there was no statistical significance ( $t = .120$ ,  $p = .906$ ) between the mean score of general education teachers ( $M = 100.04$ ,  $SD = 17.92$ ) and the mean score of special education teachers ( $M = 99.47$ ,  $SD = 15.71$ ).

Table 5

Means and Standard Deviations for the Maslach Burnout Inventory and BarOn EQ:i:S for General and Special Education Teachers

	<u>General Ed. (n=49)</u>		<u>Special Ed. (n=15)</u>		
Scale	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
<hr/>					
<u>Maslach Burnout Inventory</u>					
Emotional Exhaustion	19.53	11.52	19.73	13.80	.959
Depersonalization	5.91	5.13	5.73	5.59	.910
Personal Accomplishment.	38.73	5.53	39.53	4.40	.569
 <u>BarOn EQ:i:S</u>					
EQ Total	100.04	17.92	99.47	15.71	.906

*Note.* General Ed = General Education; Special Ed = Special Education; EQ = Emotional Intelligence Quotient  
Maslach Burnout Inventory scores are reported as raw scores; BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )

To examine whether differences exist between male and female teachers on the three aspects of burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) as well as for the EQ total  $t$ -tests were used. Table 6 presents the results of those  $t$ -tests. On the Emotional Exhaustion subscale, the mean score of male teachers ( $M = 16.65$ ,  $SD = 10.43$ ) was lower than the mean score of female teachers ( $M = 21.57$ ,  $SD = 12.67$ ). However, the difference between the mean score did not reach

statistical significance ( $t = -1.698, p = .095$ ). On the Depersonalization subscale, no statistical difference ( $t = -.533, p = .596$ ) was found between the mean score of male teachers ( $M = 5.46, SD = 4.92$ ) and the mean score of female teachers ( $M = 6.15, SD = 5.43$ ). On the Personal Accomplishment subscale, the mean score of male teachers ( $M = 39.03, SD = 4.82$ ) was slightly higher than the mean score of female teachers ( $M = 38.82, SD = 5.61$ ). The difference, however, was not statistically significant ( $t = .150, p = .882$ ). On the EQ total, the mean score of male teachers ( $M = 98.46, SD = 20.52$ ) and the mean score of female teachers ( $M = 100.89, SD = 14.94$ ) did not reach statistical significance ( $t = -.518, p = .607$ ).

Table 6

Means and Standard Deviations for the Maslach Burnout Inventory and BarOn EQ:i:S by Gender

	<u>Male (n=26)</u>		<u>Female (n=38)</u>		
Scale	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
<hr/>					
<u>Maslach Burnout Inventory</u>					
Emotional Exhaustion	16.65	10.43	21.57	12.67	.095
Depersonalization	5.46	4.92	6.15	5.43	.596
Personal Accomplishment	39.03	4.82	38.82	5.61	.882
 <u>BarOn EQ:i:S</u>					
EQ Total	98.46	20.52	100.89	14.94	.607

*Note.* Maslach Burnout Inventory scores are reported as raw scores; BarOn EQ:i:S scores are reported as Standard Scores ( $M=100, SD=15$ )  
EQ = Emotional Intelligence Quotient

To examine whether differences exist between Caucasian teachers and Non-Caucasian teachers on aspects of burnout and EQ total *t*-tests were used. Table 7 presents the results of *t*-tests across aspects of burnout (Emotional Exhaustion, Depersonalization,

and Personal Accomplishment) and EQ total. For the Emotional Exhaustion subscale, the mean score of Caucasian teachers ( $M = 19.63$ ,  $SD = 12.23$ ) did not differ significantly from the mean score of Non-Caucasian teachers ( $M = 19.14$ ,  $SD = 10.47$ ). For the Depersonalization subscale, the mean score of Caucasian teachers ( $M = 5.94$ ,  $SD = 5.18$ ) did not differ significantly from the mean score of Non-Caucasian teachers ( $M = 5.28$ ,  $SD = 5.76$ ). For the Personal Accomplishment subscale, the mean score of Caucasian teachers ( $M = 39.10$ ,  $SD = 5.19$ ) was lower than the mean score of Non-Caucasian teachers ( $M = 37.42$ ,  $SD = 6.07$ ). However, the difference between the Personal Accomplishment mean scores did not reach statistical significance. For the EQ total, the mean score of Caucasian teachers ( $M = 100.00$ ,  $SD = 17.41$ ) was higher than the mean score of Non-Caucasian teachers ( $M = 99.14$ ,  $SD = 17.72$ ). However, the difference did not reach statistical significance.

Table 7

Means and Standard Deviations for the Maslach Burnout Inventory and BarOn EQ:i:S by Ethnicity

	<u>Caucasian (<i>n</i>=57)</u>		<u>Non-Caucasian (<i>n</i>=7)</u>		
Scale	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
<u>Maslach Burnout Inventory</u>					
Emotional Exhaustion	19.63	12.23	19.14	10.47	.912
Depersonalization	5.94	5.18	5.28	5.76	.780
Personal Accomplishment	39.10	5.19	37.42	6.07	.507
<u>BarOn EQ:i:S</u>					
EQ Total	100.00	17.41	99.14	17.72	.907

*Note.* Maslach Burnout Inventory scores are reported as raw scores; BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )  
EQ = Emotional Intelligence Quotient

To examine whether differences exist between tenured status teachers and non-tenured status teachers *t*-tests were used. Table 8 presents the results of *t*-tests across aspects of burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) and EQ total. On the Emotional Exhaustion subscale, the mean score of tenured status teachers ( $M = 20.57$ ,  $SD = 11.13$ ) did not differ significantly from the mean score of non-tenured teachers ( $M = 17.91$ ,  $SD = 13.35$ ). On the Depersonalization subscale, no statistical significance was found between the mean score of tenured status teachers ( $M = 6.10$ ,  $SD = 4.49$ ) and the mean score of non-tenured status teachers ( $M = 5.50$ ,  $SD = 6.29$ ). On the Personal Accomplishment subscale, the mean score of tenured status teachers ( $M = 39.07$ ,  $SD = 5.25$ ) did not differ significantly from the mean score of non-tenured status teachers ( $M = 38.68$ ,  $SD = 5.38$ ). On the EQ total, no statistical significance was found between the means score of tenured status teachers ( $M = 101.60$ ,  $SD = 14.19$ ) and the mean score of non-tenured status teachers ( $M = 97.08$ ,  $SD = 21.58$ ).

Table 8

Means and Standard Deviations for the Maslach Burnout Inventory and BarOn EQ:i:S by Tenure Status

	<u>Tenured (<i>n</i>=40)</u>		<u>Non-Tenured (<i>n</i>=24)</u>		
Scale	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
<hr/>					
<u>Maslach Burnout Inventory</u>					
Emotional Exhaustion	20.57	11.13	17.91	13.35	0.417
Depersonalization	6.1	4.49	5.5	6.29	0.685
Personal Accomplishment	39.07	5.25	38.68	5.38	0.768
 <u>BarOn EQ:i:S</u>					
EQ Total	101.6	14.19	97.08	21.58	0.367

*Note.* Maslach Burnout Inventory scores are reported as raw scores; BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )

EQ = Emotional Intelligence Quotient

To examine whether differences exist among teachers with a Master's Degree and Advanced Certificate or Doctorate  $t$ -tests were used. Table 9 presents the results of  $t$ -tests across aspects of burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) and EQ total. For the Emotional Exhaustion subscale, the mean score for Masters' level teachers ( $M = 19.73$ ,  $SD = 11.34$ ) did not differ significantly from the mean score of teachers with an Advanced Certificate or Doctorate degree ( $M = 19.30$ ,  $SD = 13.29$ ). For the Depersonalization subscale, the mean score for Master level teachers ( $M = 5.21$ ,  $SD = 4.94$ ) did not differ significantly from the mean score of teachers with an Advanced Certificate or Doctorate degree ( $M = 7.04$ ,  $SD = 5.54$ ). For the Personal Accomplishment subscale, the mean score for Master level teachers



( $M = 38.68$ ,  $SD = 5.60$ ) did not differ significantly from the mean score of teachers with an Advanced Certificate or Doctorate degree ( $M = 39.34$ ,  $SD = 4.68$ ). For the EQ total, no statistical significance was found between the mean score of Masters level teachers ( $M = 98.49$ ,  $SD = 13.98$ ) and the mean score of teachers with an Advanced Certificate or Doctorate degree ( $M = 102.43$ ,  $SD = 22.18$ ).

Table 9

Means and Standard Deviations for the Maslach Burnout Inventory and BarOn EQ:i:S by Level of Education

	<u>Master's (<i>n</i>=41)</u>		<u>Advanced Certificate or Doctorate (<i>n</i>=23)</u>		
Scale	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
<hr/>					
<u>Maslach Burnout Inventory</u>					
Emotional Exhaustion	19.73	11.34	19.30	13.29	.897
Depersonalization	5.21	4.94	7.04	5.54	.197
Personal Accomplishment	38.68	5.60	39.34	4.68	.615
 <u>BarOn EQ:i:S</u>					
EQ Total	98.49	13.98	102.43	22.18	.446

*Note.* Maslach Burnout Inventory are reported as raw scores; BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )  
EQ = Emotional Intelligence Quotient

The next two set of analyses are Analysis of Variance (ANOVA) in which four different age groups and four different years of teaching experience groups are compared on the same set of outcome measures (aspects of burnout and emotional intelligence).

Table 10 presents the findings from the first of these analyses. As seen in the table below, there are no statistically significant age differences on any of the three burnout measures ( $p > .05$ ). However, there is a statically significant difference between age and

the Emotional Intelligence total score ( $f = 2.76, p = .05$ ). A Bonferroni-adjusted, post-hoc test was used to determine which pairs of age subgroups differed significantly on the EQ total. However, no pair of age subgroups were significantly different using a Bonferroni-adjustment,  $p \leq .05$  level.

Table 10

Means and Standard Deviations for Maslach Burnout Inventory and BarOn EQ:i:S

Emotional Intelligence Quotient by Age Groups

Maslach Burnout Inventory	<i>M</i>	<i>SD</i>	<i>p</i>
Emotional Exhaustion Age Group			.472
16-29	22.80	10.78	
30-39	18.44	10.65	
40-49	21.82	12.67	
> = 50	16.08	14.55	
Depersonalization Age Group			.371
16-29	7.30	6.21	
30-39	4.76	4.69	
40-49	7.17	4.72	
> = 50	5.16	5.92	
Personal Accomplishment Age Group			.722
16-29	37.40	5.18	
30-39	39.56	5.22	
40-49	39.23	4.52	
> = 50	38.41	6.63	
<u>EQ Total Age Group</u>			.050*
16-29	94.60	14.69	
30-39	103.16	15.03	
40-49	92.47	21.25	
> = 50	108.08	13.47	

*Note.* Maslach Burnout Inventory scores are reported as raw scores; BarOn EQ:i:S scores are reported as Standard Scores ( $M=100, SD=15$ )

\* $p = .05$  (significant only before Bonferroni Adjustment)

The second set of Analysis of Variance (ANOVA) was used to compare years of teaching experience and three aspects of burnout and EQ Total. As seen in Table 11 there was no statistical significant differences ( $p > .05$ ) between years of teaching experience subgroups and the three aspects of burnout. However, a difference was found on the EQ total score ( $f = 5.02, p = .004$ ) and years of teaching experience. Post-hoc comparisons indicated that teachers with 0 to 5 years of teaching experience scored, on average, significantly lower ( $M = 93.50$ ) on the Emotional Intelligence EQ total score than did teachers with 16+ years of teaching experience ( $M = 111.40$ ). Similarly, teachers with 11-15 years of experience ( $M = 93.20$ ) scored significantly lower on the EQ total score than did teachers with 16+ years of experience ( $M = 111.40$ ). Teachers with 16 plus years of experience scored significantly higher than both the teachers with 0 to 5 and the teachers with 11 to 15 years of experience

Table 11

Means and Standard Deviations for the Maslach Burnout Inventory and BarOn EQ:i:S  
Emotional Intelligence Quotient by Years of Teaching Experience

Maslach Burnout Inventory	<i>M</i>	<i>SD</i>	<i>p</i>
Emotional Exhaustion			.903
0-5 years	20.88	12.50	
6-10 years	18.07	11.65	
11-15 years	18.60	11.76	
16+ years	19.26	12.45	
Depersonalization			.899
0-5 years	6.42	5.81	
6-10 years	5.69	5.54	
11-15 years	5.80	4.73	
16+ years	5.13	4.42	
Personal Accomplishment			.419
0-5 years	38.53	5.24	
6-10 years	38.92	5.17	
11-15 years	41.40	5.10	
16+ years	37.93	5.50	
<u>EQ Total</u>			.004*
0-5 years*	93.50	19.55	
6-10 years	104.62	13.11	
11-15 years*	93.20	16.70	
16+ years*	111.40	8.28	

*Note.* Maslach Burnout Inventory scores are reported as raw scores;  
BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )

\*  $p < .01$

Since there was evidence of a statistically significant difference on the Emotional Intelligence total score prior to Bonferroni Adjustments for age and years of experience, additional analyses were conducted to investigate differences among age subgroups and years of teaching subgroups on the five subscales of the Emotional Intelligence measure. Table 12 reports the findings from the age subgroup analysis.

As seen in Table 12, two of the five subscales of the Emotional Intelligence measures-Stress Management ( $p = .033$ ) and General Mood ( $p = .023$ ) were statistically significant ( $p < .05$ ). With regard to Stress Management, post hoc comparisons indicated that teachers between the ages of 40 to 49 ( $M = 91.29$ ) report significantly lower Stress Management scores than teachers between the ages of 30 to 39 ( $M = 104.92$ ). In regard to General Mood, teachers between the ages of 40 to 49 ( $M = 90.53$ ) report significantly lower mean scores on this measure than do teachers 50 or older ( $M = 105.42$ ).

Table 12

## Means and Standard Deviations of BarOn EQ:i:S Subscales by Age Groups

BarOn EQ:i:S Subscales	<i>M</i>	<i>SD</i>	<i>p</i>
Intrapersonal Age Groups			.116
16-29 years	92.60	14.56	
30-39 years	102.20	17.72	
40-49 years	98.59	18.87	
> = 50 years	109.83	13.71	
Interpersonal Age Groups			.553
16-29 years	101.30	10.64	
30-39 years	105.40	10.61	
40-49 years	101.18	16.84	
> = 50 years	107.25	15.43	
Stress Management Age Groups			.033*
16-29 years	104.80	12.26	
30-39 years*	104.92	16.37	
40-49 years*	91.29	19.08	
> = 50 years	104.50	9.70	
Adaptability Age Groups			.126
16-29 years	92.60	13.84	
30-39 years	99.48	15.41	
40-49 years	89.41	19.48	
> = 50 years	101.25	11.53	
General Mood Age Groups			.023*
16-29 years	91.20	10.78	
30-39 years	100.20	13.18	
40-49 years*	90.53	19.61	
> = 50 years*	105.42	10.47	

*Note.* BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )

\* $p < .05$

Analysis of Variance was used to examine the Emotional Intelligence total score and years of teaching experience (see Table 13). As seen in this table, there are statistical differences between years of teaching experience and three of the five subscales of the Emotional Intelligence measures-Intrapersonal, Stress Management, and Adaptability ( $p < .05$ ). With regard to Intrapersonal subscale post hoc comparisons indicate that teachers with 0 to 5 years of teaching experience ( $M = 94.46$ ) report significantly lower scores than do teachers with 16+ years of teaching experience ( $M = 113.93, p < .05$ ). On the Stress Management scale, teachers with 11 to 15 years of teaching experience ( $M = 91.40$ ) report significantly lower scores on the stress management than do teachers with 6-10 years of teaching experience ( $M = 109.00$ ) or teachers with 16+ years of teaching experience ( $M = 109.20, p < .05$ ). On the Adaptability scale, teachers with 0 to 5 years of teaching experience ( $M = 91.19$ ) and those with 11-15 ( $M = 86.10$ ) years of teaching experience report significantly lower scores than do teachers with 16+ years of experience ( $M = 105.40, p < .05$ ).

**Table 13**

## Means and Standard Deviations of the BarOn:i:S subscales for Years of Teaching

## Experience

BarOn EQ:i:S subscales	<i>M</i>	<i>SD</i>	<i>p</i>
Intrapersonal Subscales			.005*
0-5 years*	94.46	18.43	
6-10 years	100.77	15.01	
11-15 years	100.00	16.39	
16+ years*	113.93	11.29	
Interpersonal Subscales			0.46
0-5 years	100.85	13.80	
6-10 years	106.62	10.57	
11-15 years	104.40	16.20	
16+ years	106.87	12.92	
Stress Management Subscales			.004*
0-5 years	94.46	17.50	
6-10 years*	109	13.54	
11-15 years*	91.40	17.52	
16+ years*	109.20	8.49	
Adaptability Subscales			.002*
0-5 years*	91.19	16.88	
6-10 years	102.69	9.37	
11-15 years*	86.10	20.56	
16+ years*	105.40	8.36	
General Mood Subscales			.074
0-5 years	94.19	19.09	
6-10 years	99.23	14.58	
11-15 years	90.80	7.78	
16+ years	104.93	8.13	

*Note.* BarOn EQ:i:S scores are reported as Standard Scores ( $M=100$ ,  $SD=15$ )

\*  $p < .05$



## Discussion

The purpose of the present study was to investigate the relationship between aspects of burnout and emotional intelligence. Furthermore, the present study was an attempt to discover whether there were demographic differences among the constructs of burnout and Emotional Intelligence. The participants were high school teachers in a suburban school. Two-thirds were regular education teachers and one third were special education teachers.

Four research questions were examined in the present study. A relationship was found between the EQ total and one aspect of burnout, Personal Accomplishment. Since a statistical difference was found on the EQ total, further analyses were conducted to determine whether a relationship existed between Personal Accomplishment and the EQ subscales. The results showed a positive relationship between Personal Accomplishment and Intrapersonal, Interpersonal, and General Mood subscales of Emotional Intelligence. The results suggest that teachers who feel positive about what they are doing in their lives, relate well to people, and are generally optimistic feel a sense of competence and successful achievement in their work with people.

In order to understand whether demographic variables were moderating factors of Emotional Intelligence and burnout, additional analyses were conducted. No significant findings were found between Emotional Intelligence total score, burnout, and the following demographic variables: teaching status, gender, ethnicity, tenure status, and educational level. The results of the present study do not support the research findings of previous studies which do find significant differences between demographic variables and the constructs of Emotional Intelligence and burnout. Lazaras (2006) studied

differences in the stress levels of general and special educators in Greece. His results revealed that special education teachers tend to experience higher levels of job stress than general education teachers. The discrepancy of findings between the Lazarus (2006) study and the present study may be due teachers in Greece experiencing different levels of stress in comparison to teachers in the United States.

The research on determining whether a relationship exists between gender and Emotional Intelligence remains unclear. Gender differences in emotional intelligence have been widely investigated, and a majority of studies have found females to show higher Emotional Intelligence than males (Day & Carroll, 2004; Ciarrochi, Chan, & Bagar, 2001; Mayer, Caruso, & Salovey, 1999; Palmer, Monach, Gignac, & Stough, 2003; Van Rooy, Alonso, & Viswesvaran, 2005). The inconsistency between the results of the previous research and the present research could be related to the fact that the sample populations in the previous studies were university students and the present study participants were high school teachers. Results by Palmer et al. (2003) found that women scored higher than men on Emotional Intelligence and excelled especially in interpersonal skills and emotional self-awareness. The discrepancy between findings can be due to Palmer et al.'s (2003) study taking place in Australia and the present study being conducted in the United States. Therefore, cultural factors could be a critical variable which significantly impacts the discrepant results.

BarOn and Parker (2000) specified that gender differences develop in the nature of emotional intelligence rather than in the general level of emotional intelligence. Women showed better interpersonal skills than men, while men scored higher on Stress Tolerance and Impulse Control than women. On the BarOn Emotional Quotient

Inventory (BarOn:i), gender did not differ on the General Mood subscale or Stress Management subscale of the Emotional Intelligence (BarOn & Parker, 2000). These findings support the present study's results which showed no gender differences among the General Mood and Stress Management subscales. The inconsistent results between the present study and Ciarrochi et al.'s (2001) study can be related to age differences among the participants. In Ciarrochi et al.'s (2001) study, the participants were young adolescents and in the present study the participants ranged from young adulthood to later adulthood.

There was a statistically significant difference between the demographic variable, age, and the Emotional Intelligence total score. Also, there was a statistically significant difference between the demographic variable, years of teaching experience, and the Emotional Intelligence total score. Additional analyses were conducted to determine which age subgroups and years of teaching experience subgroups were statistically significant with the Emotional Intelligence total score. Further analyses showed no age subgroups were statistically significant with the Emotional Intelligence total score. Since a statistical significance was found between age and the Emotional Intelligence total score, additional analyses were conducted to determine whether subscales of Emotional Intelligence were statistically significant to age. The results showed that a statistically significant difference was found between age and the Stress Management subscale of Emotional Intelligence. Also, the results revealed a statistically significant difference was found between age and the General Mood subscale of Emotional Intelligence. The results suggest that teachers between the ages of 40 to 49 have more difficulty tolerating stress, maintaining self-control and calmness, and feel less optimistic.

Research has documented that Emotional intelligence develops with age and experience from childhood to adulthood. Unlike the findings obtained from previous research, the present study did not support the notion that older people are more likely to have higher levels of Emotional Intelligence skills. The present study did not find age subgroup differences, which contradicts conceptualization of Emotional Intelligence as a result of maturation, learning, and training (Bar-On & Parker, 2000).

Existing research indicates a relationship between emotional intelligence and age (Fariselli, Massimiliano, & Freedman, 2008). A study conducted by Fariselli et al.'s (2008) included 405 American people working in diverse job professions. The results revealed that Emotional Intelligence increased slightly with age. The findings suggest that emotional intelligence is a developing ability; it is likely that accumulated life experiences contribute to Emotional Quotient. However, the results of the present study are not consistent with the previous research findings. Some factors which could have contributed to the dissimilar findings obtained in Fariselli et al. (2008) study and the present study could be attributed to Fariselli et al. (2008) study using a different instrument to measure Emotional Intelligence (Six Seconds Model), including a variety of job professions, and using a wider age span of participants (20 years to 70 years). In contrast to the present study, the Bar-OnEQ:i:S was used to assess Emotional Intelligence skills, teachers were selected as participants, and the developmental span ranged between the mid 20's to the mid 50's.

For the second demographic variable, years of teaching experience, results showed that teachers with 16 and more years of teaching experience scored higher on the Emotional Intelligence total score in comparison to their colleagues with less teaching

experience. Further analyses found a statistical significant difference between the demographic variable, years of teaching experience, and three subscales of Emotional Intelligence. The results showed that teachers with 16 and more years of teaching experience scored higher on the Intrapersonal, Stress Management, and Adaptability subscales of Emotional Intelligence. It is possible that teachers with 16 and more years of teaching experience are more flexible, more realistic, more effective in understanding problematic situations, and more competent at arriving at adequate solutions more so than their colleagues with less teaching experience.

A possible explanation for teachers with 16 and more years of experience having higher scores on the Emotional Intelligence subscales and Emotional Intelligence total score is that younger, less experienced teachers have more difficulty understanding their own and others' emotions correctly and using these emotions intelligently to produce socially desirable transactional outcomes. Since teachers with more teaching experience scored higher than their less experienced colleagues, it can be assumed that teaching experience may be a factor in the development of Emotional Intelligence skills among teachers.

However, since there is no previous research to support these findings, it appears that a statistical anomaly occurred between years of teaching experience and dimensions of Emotional Intelligence. The results show that every four years teachers' emotional states fluctuate. In the beginning of their teaching career teachers can be characterized as being dependent, lacking self-confidence, and being unsure of their career decisions. Then after five years, teachers learn to manage to work under pressure, and are generally calm in stressful or anxiety provoking situations. In the next phase of their teaching

career (11 to 15 years) teachers are generally anxious, impulsive, feel less productive when working under time constraints, and experience difficulty facing the demands of meeting environmental stressors. Lastly, teachers with 16 and more years of teaching experience are independent, confident, calm, less impulsive, realistic, and effective in understanding problematic situations and arriving at logical solutions. The results of the present study suggest that teaching is cyclic, and teachers experience periods of feeling positively and periods of feeling negatively in their career.

The present study does not delineate those identifying characteristics which are associated with higher levels of burnout. Findings have indicated that a relationship exists between job-related stress and burnout and socio-demographic variables (i.e., gender, age, marital status, and community size) and variables related to the teacher's job (i.e., education, years of teaching experience, grade level taught, size of school, and average class size) (Anderson & Iwanicki, 1984; Beck & Garguilo, 1983; Crane & Iwanicki, 1983; Schwab & Iwanicki, 1982b; Schwab, Jackson, & Schuler, 1984). A study which included 600 school teachers found higher degrees of Emotional Exhaustion reported by younger teachers who taught larger classes, higher degrees of Depersonalization were reported by male secondary level teachers, and married primary level teachers reported greater feelings of Personal Accomplishment (Russell et al., 1987). The contradictory findings between previous studies and the present study may be attributed to the present study not including demographic variables such as marital status, grade level, or class size, the small sample size, and using only secondary high school level teachers.

### *Limitations*

There are multiple limitations to the present investigation which may have significantly impacted the results. The data limits the extent to which the results of the present study can be generalized. The results of the present study are inconsistent and do not support the extensive research on Emotional Intelligence and burnout. The present research study did not reveal any significant differences between emotional intelligence, burnout, and many of the demographic variables examined. The lack of significant differences found between several of the demographic variables on the burnout and Emotional Intelligence subscales may be due to the small sample size and the homogeneity of the participants involved in the study. Therefore, the results might be reflective of the homogeneity of the participants and small sample size selected from a single high school. Furthermore, the participants were predominately white, female, tenured, and were at the Master's level. The participants used in the study were a convenient sample and were not randomly selected from a larger representative population of teachers. These factors may have limited variability, thus not reflecting the general population of teachers. Therefore, these characteristics may be reasons for the lack of replication of prior research studies.

The results of the present study may have been affected by the restriction of range for age and experience which may make it difficult to detect relationships between these variables and aspects of Emotional Intelligence. Another possibility for the lack of significance found in the present study may be due to the teachers completing the surveys in June. This may have affected the teacher's degree of burnout because the teachers may have felt more optimistic since the school year was almost over.

*Implications for Practice*

There has been considerable debate regarding the construct of Emotional Intelligence. Researchers continue to analyze the validity of this popular phenomenon. One of the arguments against the theoretical soundness of the concept of Emotional Intelligence is due to the constant and broadening of the definition. Other factors which complicate the ability to elucidate the construct of Emotional Intelligence include various methods of measuring emotional intelligence, and the competing measures of emotional intelligence (e.g., mixed versus ability models) complicate the ability to elucidate the construct of emotional intelligence. Furthermore, critics of the construct of emotional intelligence debate whether measures of emotional intelligence are assessing personality traits rather than emotional intelligence skills. Goleman's early work has been criticized for assuming that Emotional Intelligence is a type of intelligence.

The controversy over the construct of Emotional Intelligence indicates a strong need for additional research to further validate its relationship to success and academic achievement. The lack of statistical differences found on the remaining demographic variables should not be generalized to mean that there are no relationships among demographic variables, emotional intelligence, and burnout. Instead, researchers should continue to investigate emotional intelligence and determine whether this construct impacts the level of burnout experienced by educators. The lack of significance in the study appears to be more reflective of the sample's limitations rather than the limitations of the construct of Emotional Intelligence.

Even though the present study did not find statistical significance between many of the demographic variables under investigation, the present researcher continues to



support the construct of Emotional Intelligence and its impact on the personal, emotional, and social development of individuals. First, the extensive amount of research conducted on the construct of Emotional Intelligence supports a relationship between school success, self-esteem, and social skills. Second, the BarOn: EQ: i: S used in the present study is a scientifically developed and validated measure of Emotional Intelligence, which reflects an individual's ability to effectively deal with daily environmental changes. It has been claimed that Emotional Intelligence is an important factor in determining life success and psychological well-being (Bar-On, 2000). Furthermore, Emotional Intelligence plays a vital role in intimate relationships and friendships (Goleman, 1995).

Even though the present study failed to find statistical significance using the construct of Emotional Intelligence, previous researchers have documented the success of promoting and developing emotional intelligence skills. Based on previous research results, school-based social and emotional learning programs should be developed within school settings for educators. Given the widespread importance and interest in promoting children's social-emotional competence, educators need to consider developing similar programs geared toward teachers. Social and emotional learning programs geared toward teachers should focus on developing the following Emotional Intelligence skills: self-awareness, self-management, social awareness, relationship skills, and decision making skills. Teachers have a significant impact on students' social development. Teachers impact students' lives on a daily basis. It would be beneficial to develop teachers' Emotional Intelligence skills because this may lead to an improvement in students' behavior and positively impact the climate of both the classroom and the school setting.

In conclusion, it is critical for research to establish evidence-based programs for educators so that they can learn to utilize the emotional intelligence skills to feel better equipped to confront society's educational demands.

#### *Future Research*

The lack of diversity among the participants in the present study creates difficulty in generalizing to other high schools settings. Therefore, it is recommended that the present study be replicated with a larger more representative and diverse sample of the American teacher population, among primary, middle, and high school level teachers. This may identify differences in Emotional Intelligence among different teaching levels.

Future research should examine demographic variables such as marital status, academic subjects taught, and grade level taught. Future research should combine self-reporting measures with other measures based on objective performance. Lastly, in future research, surveys should be administered in the middle of the school year. A possibility of the lack of significance found in the present study may be that the surveys were administered during the last month of school. Therefore, future exploration should be done to determine whether teachers feel higher levels of burnout in the middle of the school year.

In recent years, teacher stress and burnout have become topics of extensive discussion and research. There has been a surging interest in the construct of Emotional Intelligence within a school context. Although some studies in the field of education have focused on the emotional intelligence of students and on the role that this plays with respect to academic achievement, demonstrating that students with higher Emotional Intelligence had more success at school (Di Fabio, Giorgi, & Palazzeschi, 2008; Parker,

Summerfeldt, Hogan, & Majeski, 2002), other studies have demonstrated that teachers who promote emotional intelligence skills emphasize the value of individual differences, enhance group work and problem-solving ability, and channel students to develop adequate social competences (Kaufold & Johnson, 2005).

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## Appendix A: Consent Form

### Informed Consent

To the participant:

The purpose of this study is to investigate the relationship between emotional intelligence and teacher burnout. Your part in the study will involve completing two separate surveys on each of the following constructs: emotional intelligence and teacher burnout. In addition, you will complete a demographic survey about yourself.

There will be minimal risk involved; however, some of the material may be explicit. If you feel that this material may be too upsetting to you, please choose not to participate. Your participation in this study is to investigate the relationship between emotional and teacher burnout. Furthermore, this study will seek to explore whether demographic variables have an impact on these constructs. Please do not hesitate to ask any questions if anything appears uncertain. All of your responses will be anonymous. This form is the only one that will have your name on it, and it will be separated from the rest of the packet once it is handed in.

The collective results will be used in the research study and no individual identifying information is presented. If you are interested in the results, I will gladly share them with you when the study is completed. You are free to withdraw from this study at any time without consequences. Please return the completed packet in my mailbox at school within four days.

Your cooperation is very much appreciated.

Thank You,  
Nancy DeVito

After reading the above, I hereby voluntarily consent to participation in this study.

Print name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Experimenter: \_\_\_\_\_

If you are uncertain about any part of the process, please do not hesitate to contact me at 631-673-2013.

If you have questions about the study, please contact Dr. Judith Kaufman in the Psychology Department at Fairleigh Dickinson University at 201-692-2815.

If you have any questions regarding your rights as a subject in this study, please contact Dr. Elizabeth Parietti, Chair of the Institutional Review Board at 201-692-2881.



## Appendix B: Demographic Questionnaire

**For each item, please complete/circle the information that best describes you:**

Teaching Status:	General Education	Special Education
Gender:	Male	Female
Check next to your age group:	16 to 29 _____	30 to 39 _____
	40 to 49 _____	50 and older _____
Ethnic group:	African American _____	Caucasian _____
	Latino/Latina _____	Asian _____
	Other: (please specify) _____	
Highest degree obtained:	Bachelor's _____	Master's _____
	Advanced Certificate (Above a Master's degree) _____	
	Doctorate _____	
Tenured:	Yes	No
Total number of years teaching: (Including this year) _____		
Place a check below next to the number of years teaching		
0-5 _____	6-10 _____	
11-15 _____	16+ _____	

## Appendix C: Debriefing Form

### Debriefing Form

Thank you for your participation in this study. Please read all of the following information.

The purpose of this study was to explore the relationship between emotional intelligence and teacher burnout among secondary high school teachers. Furthermore, demographic variables such as gender, age, and years of experience will be examined to investigate the impact of these variables on emotional intelligence and teacher burnout. Emotional intelligence is described as the ability to perceive and express emotion, the ability to incorporate emotion in thought, the ability to understand and analyze emotion and the ability to regulate emotions. Burnout is described as feeling emotional exhaustion resulting from the stress of interpersonal contact. Burnout includes feelings of emotional exhaustion, depersonalization and lack of personal accomplishment that is a response to chronic stress where individuals work with people.

One questionnaire that you completed was a self report measure of emotionality and socially intelligent behavior that provides an estimate of emotional-social intelligence. The second measure you were given assessed perceived levels of three dimensions of burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment). Finally, the background information that you provided was designed to allow the researcher to see if any similarities or differences across groups of people would affect scores on these measures.

Please remember that your individual responses will remain anonymous and that the data will be examined on a group basis. Your consent form with your name on it has already been separated from your answers. No one outside of the research team will have access to your data.

It is important that you refrain from discussing this study with others as any such discussions might influence future subjects' responses.

If you have any concerns about your participation in this study, or are interested in obtaining information about the results of this study, please call Nancy Gallo at 631-673-2013 or send an email to [ndevito@hufsd.edu](mailto:ndevito@hufsd.edu).

Again, thank you for your cooperation and participation.