2004

The impact of early familial experiences on emotional intelligence

Stephanie Lynne Lattimer-List

THE IMPACT OF EARLY FAMILIAL EXPERIENCES ON EMOTIONAL INTELLIGENCE

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Psychology:

Child Development

---

by

Stephanie Lynne Lattimer-List

December 2004

THE IMPACT OF EARLY FAMILIAL EXPERIENCES ON EMOTIONAL INTELLIGENCE

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

by

Stephanie Lynne Lattimer-List

December 2004

Approved by:

[redacted]

Dr. Laura Kamptner, Chair, Psychology — 11-4-04 Date

[redacted]

Dr. Amanda Wilcox-Herzog

[redacted]

Dr. David Chavez

ABSTRACT

Emotional Intelligence (EI) is regarded as being essential to overall well-being and life satisfaction. The purpose of this study was to examine the effect of early familial influences on the development of young adults' emotional intelligence. It was hypothesized that attachment security would be positively and significantly related to emotional intelligence, and conversely, that insecure attachment would be inversely related to emotional intelligence.

Participants were 191 students from a southwestern college who ranged in age from 18-26 years old (115 females, 76 males) who completed a questionnaire assessing attachment security using the maternal attachment scale from the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), the Parental Attachment Questionnaire (Kenny, 1987), the Relationship Scales Questionnaire (Griffin & Bartholomew 1994), and emotional intelligence using the Emotional Intelligence Inventory (Tapia & Burry-Stock, 1998).

Results showed a moderately positive and significant correlation between EI and attachment. While EI was significantly inversely correlated with fearful attachment, it was unrelated to both dismissing and

preoccupied attachment. Results provide some support of a positive and significant relationship between receiving sensitive, consistent, and responsive care from one's family-of-origin and later healthy emotional and social lives. However, the relationship between the insecure attachment styles and EI warrants further investigation. This study is an important first step toward examining factors that may impact the development of EI.

ACKNOWLEDGMENTS

I would like to thank Dr. David Chavez for the hours spent on this project. Dr. Chavez's classes were always inspirational and the topics thought provoking. I never thought I would miss the challenging discussions once graduate school was complete, but I do.

I would like to thank Dr. Amanda Wilcox-Herzog for the hours spent on this project. Dr. Wilcox-Herzog's classes were challenging and an exciting place to learn. Her leadership in the Child Development program is truly inspirational.

I would also like to thank Dr. Laura Kamptner for her mentorship over the past seven years. Dr. Kamptner's unlimited supply of patience, motivation, and editorial wisdom were a constant source of support during this endeavor and throughout my undergraduate and graduate studies. She helped sustain my excitement for research along with a belief in my abilities. I will be forever grateful for your support and patience.

I would also like to thank my husband Erich List. There are no words to express my thanks for all you have done and for your constant love and support so I could complete my studies. You always believed I could and I finally did!

DEDICATION

To Nancy Lee Lattimer - In Loving Memory

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

Throughout recent history there has been interest in not only what intelligence is, but how intelligence impacts social interaction and emotional development. Lately, there has been a fair amount written about the concept of emotional intelligence (EI), which refers to the emotional awareness of self and others, emotional regulation, empathy, and getting along with others. EI has become a popular research trend in business, education, and psychology because of the increasing awareness of the importance of emotions to workplace functioning, academic settings, and overall well-being. The purpose of the current study is to look at early familial influences on young adults' emotional intelligence.

Historical Overview of Conceptions of Intelligence

Intelligence has been studied in depth for the last 100 years and is commonly defined as:

> general mental ability, especially the ability to make flexible use of memory, reasoning, judgment, and information in learning and dealing with new situations and problems. There is widespread agreement that intelligence is a multifaceted

concept, and there is no consensus on its specific components, including those just cited. (Longman, 1984, p. 348)

Binet and Simon produced the first IQ tests, matching mental age with actual age (Graves-McMahan, 2000). Stanford psychologist Lewis Terman brought IQ tests to the United States in 1916 (Thilam & Kirby, 2002). These IQ tests (both then and now) typically measure "verbal" and "non-verbal" intelligence. Verbal intelligence refers to the sum of a person's knowledge at a given time and age (Feldman, 2003). Non-verbal intelligence, by contrast, is the ability to analyze information and the speed with which it is accomplished (Feldman, 2003). IQ tests gained in popularity and are now used in some form by both schools and businesses in an attempt to assess whether a person will be successful (Graves, 2000; Thilam & Kirby, 2002).

Since the 1980s, the construct of intelligence has been broadened by some to include additional facets (Feldman, 2003). Sternberg's Triarchic Theory of Intelligence, for example, suggests that intelligence has three elements: componential (i.e., how well we analyze and process information), experiential (i.e., how experience is used to generalize to other areas and

problem solve), and contextual [i.e., the intelligence we use in dealing with everyday life] (Sternberg, 1990; 1994). Sternberg believed that how the three intelligences are used together would determine how much a person could achieve (Sternberg, 1994; Sternberg & Grigorenko, 1996). Gardner's theory of multiple intelligences, which debuted in 1983, outlined that "intelligence" includes a variety of different dimensions, i.e., logical-mathematical (problem solvers), linguistic (good use and production of language), musical (good musical skills), spatial (good at abstract representations, e.g., artists, cartographers), bodily kinesthetic (prefer use of the body, e.g. dancer, surgeon, and actors) interpersonal (work well with other people), intrapersonal (knowing yourself, feelings and emotions), and naturalistic [work with nature] (Feldman, 2003; Gardner, 1992; 1995).

Following on the heels of multiple intelligence research, yet another dimension of intelligence was introduced in the 1990s: "emotional intelligence." Emotional intelligence refers to the ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use the information to guide one's thinking and action (Mayer, Caruso, & Salovey, 1999). The concept of EI first became popular in Daniel

Goleman's 1995 bestselling book *Emotional Intelligence: Why it Can Matter More Than IQ*. According to Salovey and Sluyter (1997), EI refers to the "...ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (p. 5). EI is thought by these researchers to be essential to well-being as it helps people manage their distress, manage their emotions, understand the interaction between feelings and thoughts, and to ultimately think more intelligently (Goleman, 1995; Salovey & Mayer, 1990; Salovey & Sluyter, 1997). Current EI research suggests that those lacking in EI will not be as successful or emotionally content; in addition, they will have trouble accurately identifying and acting on their own emotional states, and be more likely to misinterpret others' emotions as well (Goleman, 1995; Salovey & Sluyter, 1997). Further, Goleman (1995) notes that those scoring low on EI will also lack a basic motivation and a zest and zeal for life.

Emotional Intelligence: Five Factors

The research literature identifies five factors of emotional intelligence: knowing one's emotions ("self

awareness"); managing emotions; motivating one's self; recognizing emotions in others ("empathy"); and handling relationships (e.g., Goleman, 1995; Salovey & Mayer, 1990).

The definitions and implications of these capacities are outlined in detail below.

Factor 1: Knowing One's Emotions

Knowing one's emotions refers to self-awareness, which includes the ability to clearly and accurately recognize, interpret, and label feelings (Fletcher & Bladry, 2000).

Individuals who are able to accurately identify their emotions are thought to respond more appropriately to life situations (Fletcher & Bladry, 2000). In addition, the ability to recognize and interpret feelings is important to psychological insight and self-understanding (Goleman, 1995). Individuals with these capabilities tend to have a positive outlook on life, and they can more easily conceptualize what actions to take when faced with strong emotions (Kinney, Smith, & Donzella, 2001). They are also thought to be better able to set clear boundaries (Fletcher & Bladry, 2000; Goleman, 1995; Kinney, Smith, & Donzella, 2001).

Those who inaccurately identify emotions are, by contrast, more likely to overreact or under-react to life situations (Fletcher & Bladry, 2000; Goleman, 1995). Such individuals are less likely to have clear boundaries and tend to become "lost" in their emotional life, i.e., they are more likely to feel they have no control over feelings of depression, rage, or anxiety. Further, they continually feel as if they are "victims" in life rather than active participants (Goleman, 1995).

Factor 2: Managing Emotions

The second factor, i.e., managing emotions, builds upon the idea of self-awareness. It refers to one's ability to regulate his or her emotions and emotional states (Goleman, 1995; Houtmeyers, 2000).

People who are adept at regulating emotions (e.g., anger, stress, and worry) are thought to have a well-balanced emotional life (Goleman, 1995; Grolnick & Kurowski, 1999). These people respond more effectively to difficult emotions [e.g., grief] (Goleman, 1995; Houtmeyers, 2000; Krikorian, 2000). For example, they may better understand that loss is accompanied by grief, sadness, and anger. They may realize this is a part of life and they do not fall into "why me" and "life is so unfair." They are more likely to accept that in life there

will be good days and bad days (Goleman, 1995; Krikorian, 2000).

Individuals who are unable to regulate the duration and intensity of their emotions often experience depression, mania, anxiety, and rage (Goleman, 1995; Krikorian, 2000; McCraty, Atkinson, Tomasino, Goelitz, & Mayrovitz, 1999). For example, if this type of person is cut off by a car, they will experience continual thoughts of outrage and revenge, feeling like the driver cut them off on purpose and hence victimized them (vs. contending that the other driver made a mistake or may have a medical emergency). Thus, they are unable to calm any sense of rage or return to a level emotional state (Goleman, 1995).

Factor 3: Motivation

The third factor, i.e., motivation, encompasses a broad range of attributes which includes achievement, impulse control, delayed gratification, optimism, and self-efficacy (Goleman, 1995; Houtmeyers, 2000; Silverman & Ragusa, 1990).

Individuals who have these traits are better able to set and achieve their goals (Goleman, 1995; Grolnick & Kurowski, 1999). Further, they are able to see the big picture, enabling them to delay gratification (e.g., complete a college education versus take on a full-time

job). For example, after weighing the pros and cons, this person may understand that while a full-time job may bring the immediate gratification of financial independence, a college education will give more career choices along with higher incomes and job stability over the lifespan (Cote & Levine, 2000; Goleman, 1995; Miech, Essex, & Goldsmith, 2001).

Individuals who do not have these traits lack self-confidence and have trouble setting realistic, achievable goals (Alberti & Witryol, 1994; Goleman, 1995; Leondari, & Syngollitou, 1998). They are unable to deny impulses and may find themselves unable to reach their personal goals such as purchasing their first home (Goleman, 1995; Grolnick & Kurowski, 1999; Houtmeyers, 2000; Miech, Essex, & Goldsmith, 2001).

Factor 4: Recognizing Emotions

Recognizing emotions in others builds on self-awareness and is also labeled as "empathy" (Houtmeyers, 2000). It includes recognizing the feelings of self and others, considering other perspectives, reading social cues, and responding emotionally [i.e., empathizing with others and attempting to relieve their distress] (Frey, Hirschstein, & Guzzo, 2000; Goleman, 1995).

People who display empathy tend to have healthier interpersonal relationships and they are better able to read emotional social cues and take others' perspectives (Frey, Hirschstein, & Guzzo, 2000). These individuals demonstrate acceptance, respect, and concern for other people (Frey, Hirschstein, & Guzzo, 2000). May and Alligood (2000) found that people who display more empathetic behaviors have higher life satisfaction, well-being, and better health.

On the other hand, individuals who lack this capacity are often aggressive people who are inattentive to relevant social cues. Further, they presume hostile intent in ambiguous situations and expect aggressive solutions to result in positive outcomes (Frey, Hirschstein, & Guzzo, 2000). In addition, criminal sociopaths often display a complete lack of empathy (Goleman, 1995; Houtmeyers, 2000).

Factor 5: Handling Relationships

The last component of emotional intelligence is handling relationships, i.e., social competence (Goleman, 1995). This concept builds on both the ability to manage emotions and empathy, both of which are factors within the emotional intelligence framework (Goleman, 1995). Social competence is associated with peer acceptance, academic

achievement, and employment success (Elksnin & Elksnin, 2000; Goleman, 1995; Richardson, 2000; Segrin, 2001). People who are socially competent have well-balanced interpersonal relationships: they are good bosses, friends, and negotiators (Dilenschneider, 1996). In addition, they easily give praise and recognition for a job well-done (Cords, 2001; Goleman, 1995; Richardson, 2000).

People who lack the ability to effectively handle relationships have trouble in most areas of their social life (Brigman, Lane, Switzer, Lane, & Lawrence, 1999; Goleman, 1995; Lindsey & Mize, 2001). Segrin (2001) found that people with poor social skills experience more negative life events, more problems on the job, and are more vulnerable to psychological problems (e.g., depression).

Influences on the Development of Emotional Intelligence

The literature mentions several influences on the development of EI. These include: 1) maturation of emotional processes, 2) temperament/personality, 3) social influences (school and peers), and 4) early familial experiences.

Maturation of Emotional Processes

The maturational sequence of acquiring emotional processes is necessary for the development of EI (Zeidner, Matthews, Roberts, & MacCann, 2003). Each period of development represents a window for helping the child acquire emotional skills. For example, emotional perception (e.g., recognizing and interpreting sensory stimuli) originates within the first few days of life and follows a developmental sequence for recognizing different emotions over the next several years (Salovey & Mayer, 1990). Emotional management and regulation begin in infancy with preverbal strategies such as thumb sucking to more planful strategies in preschool (e.g., play as form of self-distraction). Further, emotional interaction with the primary caretaker may influence the neural circuits involved in emotional awareness and regulation (Zeidner et al., 2003).

If interaction with the caretaker is lacking, the child may have developmental delays in language acquisition, cognition, and emotional development, which will influence the acquisition of skills for labeling, understanding, and communicating emotion (Plomin & Stocker, 1989; Zeidner et al., 2003).

Temperament/Personality

Temperament attributes are another biological factor impacting EI (Zeidner et al., 2003). Individual differences in temperament can be seen in infancy and become more evident during the toddler years (Mayer, Caruso, & Salovey, 1999). Denham (1998) notes two areas where differences in temperament are seen. The first is emotional intensity, such as threshold and rise time. The second is regulatory processes, such as attention shifting, which includes what we selectively focus on or ignore, as well as the initiation or inhibition of action.

Children who are both high intensity and high on regulation are commonly seen as shy, withdrawn, inhibited, and they do not enjoy social interaction. On the other hand, children who are high intensity and low on regulation are quick to anger and will act on that anger. Children who display moderate intensity and moderate regulation are seen as reasonable and level-headed (Denham, 1998).

An important interaction between children's biologically-based temperament and parenting behaviors takes place during the emotional socialization of children (Zeidner et al., 2003). For example, the temperamentally uncooperative child is more likely to develop conduct

problems if raised in an environment with limited parental control and structure. The attributes of EI are based more on learned habits that result from the interaction of biological predispositions and environment than on biological predispositions alone (Mayer, Caruso, & Salovey, 1999).

School and Peer Influences on Emotional Intelligence

The school environment and peers also influence the development and enrichment of EI (Denham, 1998; Zeidner et al., 2003; Zsolnai, 2002).

The school environment plays an important role in the development of a child's social competence (Zsolnai, 2002). A socially-competent teacher will react to his or her students' problems with more empathy, openness, and understanding, which creates a positive environment for developing emotional abilities (Zsolnai, 2002). Denham (1998) found that preschool teachers can assist with the positive emotional development of children by providing an environment that is positive, consistent, and supportive of emotional growth.

Peers act as models for each other in different situations, signaling appropriate (and inappropriate) social behavior. Emotional talk between siblings (e.g.,

sisters discuss their feelings about boys) is related to adolescents' emotional understanding (Zeidner et al., 2003). Social interaction and support from peers and teachers is also beneficial for the acquisition of coping strategies (Denham, 1998).

Early Familial Experiences

Family life has been found to have arguably the most significant impact on the development of each of the five factors of emotional intelligence (e.g., Goleman, 1995). This is where we first learn how we feel about ourselves, how others will react to our feelings, and how to think and react to feelings (Goleman, 1995; Salovey & Sluyter, 1997). As such, a review of the family influences that impact the development of each of the five factors of EI will be discussed below.

Familial Influence on Knowing One's Emotions. What facilitates the development of self-awareness, including the ability to recognize, interpret, and label emotions? Parents who discuss emotions freely are building the framework for children to develop the ability to recognize, interpret, and label emotions (Zeidner et al., 2003). Parents who encourage their child to identify and talk about their feelings (e.g., anger, guilt, shame, or frustration) when they occur have children who are more

self-aware (Richburg & Fletcher, 2002). A child's ability to accurately label their emotions is necessary for the development of self-awareness (Raver, 2002; Richburg & Fletcher, 2002). Parents help children develop a vocabulary for their feelings in the following ways: 1) expressing their own feelings with words (e.g., I'm feeling discouraged), 2) helping children label their feelings (e.g., "It looks like you're feeling frustrated with that math problem"), and 3) labeling feelings in other people [e.g., "Daddy is frustrated because the lawn mower is broken"] (Raver, 2002).

Conversely, parents hamper a child's ability to know their emotions by ignoring a child's feelings, treating feelings as if they are trivial or inconvenient, and/or failing to use emotional moments to become closer to the child (Landry, Smith, Swank, Assel, & Vellet, 2001; Salovey & Sluyter, 1997). Parents who minimize their child's emotions undermine the child's ability to know their own emotions (Zeidner et al., 2003). Further, emotionally unresponsive parents (and those who express mostly negative emotions) have children who have trouble recognizing and interpreting emotions in themselves and in others (Landry et al., 2001).

Familial Influences on Managing Emotions. Parents support the development of emotional regulation in the child by discussing emotions in a concrete, goal-directed fashion instead of in the abstract (Zeidner et al., 2003). Further, discussing problem-solving techniques (e.g., "Dad manages his anger by leaving the room for a few minutes") may also help. Parents who are skilled in expressing and coping with aversive emotions such as sadness and anger have children who gain emotional management skills that may mediate the negative effects of stressful life events (Simpkins & Parke, 2001).

Cassidy (1994) found that parents who regulate emotions as a strategy to achieve goals may teach their children that there are appropriate times for the expression of certain emotions (e.g., a child may observe a parent actively managing an emotion, such as sadness, in order to go to work).

Emotion regulation is also socialized by parents who, when faced with a problem, seek out a friend's support to mediate the stressful situation (Cassidy, 1994). Children develop schemas from observing their parents that guide their prediction of what the outcome will be of expressing various emotions [e.g., how to deal with an aggressive peer: should I cry, tell an adult, or assert myself?]

(Cassidy, 1994). Parents who neither suppress emotions nor allow them to dominate, while giving room for the flexible expression of emotions, are more likely to have children who will seek out a parent for help with understanding and dealing with stressful emotions (Cassidy, 1994).

By contrast, parents who use explosive or abusive behaviors when dealing with their anger have children who will manage their anger in a similar fashion (Richburg & Fletcher, 2002). Parents who believe they should suppress all negative emotions have children who will internalize the suppression strategy and use it as their first choice to managing emotions (Zeidner et al., 2003). Parents who consistently respond to aggression in an angry, violent manner have children who will be unable to regulate their own anger (Cassidy, 1994). If a young child has been consistently rejected that child will then develop a strategy to mask emotions (anger, sadness, and joy) and avoid those emotions in an attempt to keep the caregiver close [i.e., the infant learns the caregiver will stay close if emotions are suppressed] (Cassidy, 1994). This child develops a painful fear of alienating his or her parent, which leads to minimizing both anger and joy as a way to minimize their investment in the relationship

(Cassidy, 1994). Further, this child learns suppression as the only means to manage emotions.

Familial Influences on Motivation. Impulse control, delayed gratification, optimism, self-efficacy, and achievement are all aspects of motivation (Goleman 1995; Zsolnai, 2002). Parents who provide explanations are sensitive to their child's needs, are firm, have high maturity expectations, and who view children positively help shape a child's sense of efficacy, self-esteem, and achievement motivation (Baumrind, 1993). These parents give children positive messages about their qualities and competencies, which increase their child's motivation to succeed on a given task (Baumrind, 1993). The development of persistence is influenced by parents who monitor their child's activities (e.g., providing input at appropriate times). Further, they increase autonomy by allowing their child to work at their own pace. The development of persistence is necessary for impulse control, which is a main ingredient in building motivation (Silverman & Ragusa, 1990). Parents who complete projects they start, find new and creative ways to peak interests, and who can relate the process to specific outcomes while delaying gratification teach their children the necessary ingredients of motivation (Richburg & Fletcher, 2002).

On the other hand, parents who over-control and over-direct their children undermine the child's development of persistence, which decreases impulse control and thereby decreases motivation (Silverman & Ragusa, 1990). Further, these children are more impulsive, distractible, and hyperactive -- all qualities that detract from motivation. Leondari (1998) found that children who have trouble delaying impulses also have trouble setting goals and developing the appropriate motivational strategies to attain their goals.

Familial Influence on Recognizing Emotions. What familial factors are linked to the development of empathy, i.e., the ability to recognize ones' own as well as others' feelings?

Zhou et al. (2002) found that a child's observation of and interaction with parents contributes to empathy-related behaviors (e.g., comforting sad peers). Children who observe parents engaging in empathetic behaviors (e.g., I'm sorry that your feelings were hurt when you did not receive the school achievement award), have been found to be more likely to engage in empathetic behaviors with peers. Moreover, Zhou et al. (2002) found that:

> the development of empathy is most likely to occur in a family environment that (1) satisfies the child's own emotional needs and discourages excessive self concern, (2) encourages the child to experience and express a broad range of emotions, and (3) provides opportunities for the child to interact with others who encourage emotional sensitivity and responsiveness.

Denham (1993) found that children who had parents who showed sympathy when a person was sad had children who displayed sympathy towards their mothers and their peers when they were upset. Prosocial behaviors in children are in turn linked to empathetic behaviors (Krevans & Gibbs, 1996; Litvak-Miller & McDougall, 1997). Parents who consistently show care and concern for other people have children who engage in more helping behaviors (Krevans & Gibbs, 1996; Litvak-Miller & McDougall, 1997).

On the contrary, a parent who disciplines harshly tends to have children who display fewer empathic behaviors (Denham, 1993; Krevans & Gibbs, 1996). Parents who become upset and defensive have children who are less adept at empathizing when mom and peers appear sad (Denham, 1993). Research has also found that parents who harshly and ineffectively punish children have children

who are more anti-social and aggressive (Marcus & Kramer, 2001). Parents who display negative behaviors (i.e., threatening, attacking) and who discipline their children by withdrawing love and asserting their power have children who show fewer prosocial and empathetic behaviors (Krevans & Gibbs, 1996; Zhou et al., 2002). Empathy has a direct relationship to aggression. Children who engage in aggressive behaviors (e.g., hitting, kicking) also engage in fewer prosocial behaviors (Denham, 1993). Parents who have trouble recognizing other people's emotions often read aggressive or negative intent in ambiguous situations (Sneed, 2002). Further, they have children who also read negative or hostile intent in ambiguous situations, thereby hampering their ability to make and maintain friendships since they lack the ability to recognize emotions in others.

Familial Influences on Handling Relationships. The ability to effectively handle relationships, i.e., social competence, includes the ability to regulate emotions and empathy (Goleman, 1995). The quality of a child's peer relationship is a direct result of the parent-child relationship (Cohn, 1990).

Children who experience intimate communication and interaction with their caregiver are found to have a

psychological security that provides support and a constant resource of energy to maintain healthy relationships throughout the lifespan (Zsolnai, 2002). Simpkins and Parke (2001) found that children learn how to solve conflicts and utilize friends to deal with problems through observing their parent's interactions with their parent's friends. Mothers who reported their friends as interesting and supportive had children who rated their friends with the same quality (Simpkins & Parke, 2001). Carson and Parke (1996) found that the affect displayed by parents relates to a child's peer competence. Children who are well-liked display positive affect (smiling and laughing). These children have parents who display positive affect in observed physical play with the child (Carson & Parke, 1996). Through parents, children learn how to behave within the context of friendship; they learn qualities of dominance and conflict, as well as helping, sharing, and conflict resolution (Simpkins & Parke, 2001).

Fathers play an important role in the development of self-regulation, an important ingredient in friendship (Simpkins & Parke, 2001). Carson and Parke (1996) found that the children of fathers who display negative affect during observed physical play with their children tend to be more verbally and physically aggressive, share less,

and avoid social interaction. Further, if a father responds with anger to a child's negative affect with negative affect he is teaching his children to escalate conflict -- and their children tend to respond to peers in a similar fashion (Boyum & Parke, 1995; Carson & Parke, 1996). From observing their parents, children develop expectations concerning how their emotions will be reacted to and how they should react to others (Boyum & Parke, 1995; Carson & Parke, 1996). Children who play a game with an adult who punishes them for making mistakes will then react punitively toward their peers when playing the same game (Simpkins & Parke, 2001).

The Relationship of Early Attachment Security to the Development of Emotional Intelligence

The literature reviewed above states that aside from biological predispositions, the parental behaviors that facilitate the development of EI are parents who can openly discuss emotions, and who are warm, sensitive, and supportive of their child's emotional needs. Furthermore, these early interactions with attachment figures become our internal working model of self and others (Main et al., 1985; Levy, Shaver, & Blatt, 1998). These representations include expectations, beliefs, emotional responses, and rules for processing information [e.g.,

what information should we pay attention to and what should be discarded] (Kirsh & Cassidy, 1997; Levy et al., 1998).

The research on securely attached children suggests they would be proficient at each of the five components of EI. Studies clearly support this: securely attached children make friends easily, are flexible, resilient under stress, have good self-esteem, feel worthy of love, expect others' to treat them well, and are more compliant, sympathetic, and competent in social situations (Cassidy 1988; Karen, 1994; Kirsh & Cassidy, 1997). A secure attachment develops when parents are warm, sensitive to their child's needs, and consistent. The internal working model for the securely attached child becomes one of safety and security that will persist throughout the lifespan.

Conversely, insecurely attached children would be expected to have difficulty with each of the components of EI. Studies show that insecurely attached children typically experience difficulty in communicating with peers and forming relationships, and often engage in attention-seeking behaviors, fear abandonment, and have trouble in school (Cassidy, 1998; Karen, 1994). Such a child is raised in an unpredictable and/or chaotic

environment, where there is little or no parental warmth (Karen, 1994; Leondari & Kiosseoglou, 2000). This child forms an internal working model that says the world is unsafe, inconsistent, and feelings of inferiority and fear will persist throughout the lifespan (Cassidy, 1994; Karen, 1994).

What is the link between attachment security and emotional intelligence? A review of existing research suggests that many of the parental behaviors identified as contributing to (or detracting from) the development of EI are parallel to those behaviors that lead to either a secure or insecure attachment. A thorough review of both the EI and attachment literature found no study that directly looked at attachment and EI as a global construct. However, it was possible to perform a comprehensive review of the literature on attachment and each of the five factors of EI (i.e., studies were found on self awareness and attachment, motivation and attachment, and so on). Specific parenting behaviors and the relationship of the EI factors to attachment research are discussed below and briefly summarized in Table 1.

Table 1. Five Factors of Emotional Intelligence and their Relationship to Attachment Research

Emotional Intelligence Factor	Parental Behavior: Related to positive development of EI factor	Parental Behavior: Secure Attachment Status	Parental Behavior: Detracting from the development of EI factor	Parental Behavior: Insecure Attachment Status
Knowing one's emotions	Discuss emotions, teach child to recognize, interpret feelings	Warm, consistent, sensitive to child's needs. Reflect acknowledge child's thoughts & feelings	Ignore feelings, emotionally unresponsive, express negative emotions, invalidate feelings, use shame as motivator	Insensitive or rejecting, aloof, uncomfortable with feelings
Managing emotions	Discuss emotions in concrete, goal-oriented fashion, effectively express aversive emotions	Guide child's emotional experience, direct intervention, selective reinforcement, modeling, & verbal instruction	Using explosive or abusive behaviors, suppress anger, rejecting child	Parents display inadequate or inconsistent emotions
Motivation	Give child positive messages, have high maturity expectations, parents delay gratification	Gives warm positive messages & sensitive to child's needs	Inconsistent behaviors, unable to delay gratification	Inconsistent& inappropriate caregiving
Recognizing emotions	Show empathic behaviors, encourage emotional sensitivity, model prosocial behaviors	Actions match words, look at different perspectives, mirror appropriate behaviors, provide active guidance	Discipline harshly, ineffective punishment, parent displays a lot of aggression	Harsh & inconsistent punishment
Handling relationships	Model healthy friendships, have intimate & meaningful communication, display positive affect	Parent has good friends, express positive emotions, confident in their social interactions	Parent displays negative affect during play is verbally & physically aggressive	Parent more sensitive to their own needs, self-preoccupied, unavailable & rejecting

Knowing One's Emotions and Attachment

As stated previously, the behaviors that contribute to this dimension of EI are parents who discuss emotions freely, encourage the discussion of emotions, and who teach children to recognize, interpret, and label feelings. These parenting behaviors are identical to those that contribute to the development of a secure attachment, i.e., parents who are warm, consistent, and sensitive to their child's needs. Parents who reflect back positive thoughts and feelings had children who were characterized as securely attached (Joireman, Needham, & Cummings, 2001).

Conversely, those parenting behaviors that detract from knowing one's emotions in the EI literature (i.e., ignoring child's feelings, being emotionally unresponsive, and expressing mostly negative emotions) mirror those that lead to an insecure attachment. Parents who do not validate feelings and use shame as a motivator have children who report more incidences of personal distress (Joireman, Needham, & Cummings, 2001).

Parents of insecurely attached children tend to be rejecting, aloof, and uncomfortable with others' feelings. These children, in turn, have trouble with physical

contact, trust, and a basic awareness of their own feelings (Neal & Frick-Horbury, 2001).

Managing Emotions and Attachment

As noted earlier, the parenting behaviors identified in the EI literature that contribute to emotional regulation (i.e., discussing emotions in a concrete, goal-oriented fashion and effectively expressing and coping with aversive emotions) are the same as those identified in the attachment literature as leading to a secure attachment. Parents of securely attached children manage and guide their child's emotional experiences. They use techniques such as direct intervention, selective reinforcement, modeling, and verbal instruction of emotions (Diener, Mangelsdorf, McHale, & Frosch, 2002).

On the other hand, the parenting behaviors that detract from the development of emotional regulation include parents using explosive or abusive behaviors when managing anger, suppressing anger, and rejection of the child. These are similar to those that lead to an insecure attachment: for example, parents who inadequately or inconsistently display emotions have children who do not learn the appropriate expression of emotions and, who in turn, tend to express more negative emotions (Zimmermann, Maier, Winter, & Grossmann, 2001).

Motivation and Attachment

As stated earlier, the parenting behaviors that contribute to this dimension of EI are parents who give children positive messages about their abilities, have high maturity expectations, and are able to delay gratification. These parenting behaviors are identical to those in the attachment literature that contribute to the development of a secure attachment. For example, infants who have caregivers that are warm (e.g., give positive messages) and sensitive to the child's needs have children who are more motivated (Frodi & Grolnick, 1990).

Conversely, those parenting behaviors that detract from motivation in the EI literature (i.e., inconsistent parenting and the inability to delay gratification) mirror those that lead to insecure attachment. Inconsistent and inappropriate caregiving is found to have negative consequences for the development of infant persistence and competence [both necessary precursors to the development of motivation] (Frodi & Grolnick, 1990).

Recognizing Emotions and Attachment

As mentioned earlier, the parenting behaviors that contribute to this dimension of EI are parents who engage in empathic behaviors, who encourage emotional sensitivity and responsiveness, and who, model prosocial behaviors.

These parenting behaviors are identical to those in the attachment literature that contribute to the development of a secure attachment. Parents whose actions match what they say, look at situations from different perspectives, mirror back appropriate behaviors, and provide active guidance have securely attached children who perform more empathic behaviors (van der Mark, van Ijzendoorn, & Bakermans-Kranenburg, 2002).

On the contrary, those parenting behaviors that detract from recognizing emotions (i.e., parents who discipline harshly, use ineffective punishment, and display high degrees of aggression) are similar to those found in children who have an insecure attachment. For example, parents who are harsh and/or inconsistent in their parenting have children who are typically characterized as insecurely attached and, who in turn, are unable to recognize their own and others' emotions [e.g., they are likely to misinterpret normal social cues] (Diener, Mangelsdorf, McHale, & Frosch, 2002).

Handling Relationships and Attachment

As stated earlier, the parenting behaviors that contribute to this dimension of EI are parents who model healthy friendships, have intimate and meaningful communication (with child and others) and display positive

affect during social interactions. These parenting behaviors are identical to those found in the development of a secure attachment. For example, parents who have a person they identify as a good friend, who express positive emotions, and are confident in their social interactions have children who are typically identified as securely attached (Bost, Vaughn, Washington, Cielisnki, & Bradbard, 1998).

On the other hand, those parenting behaviors that detract from social competence in the EI literature (i.e., parents who display negative affect during play and who are verbally and physically aggressive) mirror those in the attachment literature that lead to insecure attachment. Parents of insecure children tend to be more sensitive to their own needs than to their child's, are more self-preoccupied, and are unavailable and rejecting (Bost et al., 1998).

Summary and Purpose of Study

Emotional Intelligence (EI) as a construct is comprised of five factors: knowing one's emotions ("self awareness"), managing emotions, motivation, recognizing emotions ("empathy"), and handling relationships ("social competence"). Studies have shown that people with high

levels of emotional intelligence are more optimistic, more motivated to achieve their goals, more likely to make and maintain healthy interpersonal relationships, have well-balanced emotional lives, are better able to conceptualize appropriate actions to take when faced with strong emotions, are better able to delay gratification, and are more likely to posses self-understanding (Goleman, 1995; Kinney, Smith & Donzella, 2001; Silverman & Ragusa, 1990). Conversely, people with lower levels of EI are unable to set clear boundaries and tend to become "lost" in their emotional lives, unable to deny impulses, and lack self-confidence. They are also more likely to have trouble reading social cues and often presume hostile intent in ambiguous situations. In addition, their inability to regulate and recognize emotions can lead to depression, mania, anxiety, and rage. People with lower levels of EI also typically report more negative life events, have more problems on the job, and are more vulnerable to psychological problems (Alberti & Witryol, 1994; Frey, Hirschstein, & Guzzo, 2000; Goleman, 1995; Leondari & Syngollitou, 1998).

Research suggests that high levels of EI as well as having had a secure attachment in childhood leads to individuals who are self-confident, able to access help in

times of crisis, emotional competence, and are generally happier and healthier throughout the life span. In addition, research indicates that the parenting behaviors that contribute to EI are the same as those that contribute to the development of a secure attachment. Thus, while it can be theoretically supported that EI would be significantly influenced by the quality of early attachment, no one has yet directly measured the impact of the quality of early caregiving and subsequent EI in young adults. The purpose of the present study was to examine this. Specifically, it is expected that:

Hypothesis: Attachment security will be positively and significantly related to emotional intelligence (i.e., knowing one's emotions, managing emotions, motivation, recognizing emotions, and handling relationships). Conversely, insecure attachment will be inversely related to lower levels of emotional intelligence (e.g., knowing one's emotions, managing emotions, motivation, recognizing emotions, and handling relationships).

While there have been numerous studies conducted to define and develop measures for the EI construct, no research to date has looked at how parenting behaviors contribute to the development of EI in individuals. The present study will add to the EI literature by

contributing to the understanding of what impacts its development. The study will also add a relatively new construct to the attachment literature.

CHAPTER TWO

METHOD

Participants

One hundred ninety one students, ranging in age from 18-26 years old (M = 21.6) completed the questionnaire. There were one hundred fifteen females and seventy-six males. An additional 19 questionnaires were completed but excluded from the analysis because the participants' age did not meet the requirements of the study. The sample had a diverse ethnic background: 39.8% were Caucasians, 29.3% were Hispanic, 12.6% were African Americans, 4.7% were Asians, 2.1% were Pacific Islanders, and 1.6% categorized themselves as "other." Participants came from predominately middle to lower-class backgrounds: 17% didn't complete high school, 37%c completed high school, 26% had some college and 20% had bachelor's degrees or higher. Participants were solicited from undergraduate classes at a mid-sized southwestern university, and were offered "extra-credit" for their participation.

Measures

Maternal Attachment

Maternal attachment security was measured using the following three scales.

The first measure was the 25-item maternal scale from the Inventory of Parent and Peer Attachment (IPPA) [Armsden & Greenberg, 1987] (Appendix A). This self-report measure assessed the quality of maternal attachment in older adolescents and young adults. The theoretical underpinnings of this measure are based on the affective-cognitive dimensions of trust in the accessibility and responsiveness of attachment figures and are linked to general psychological well-being as defined by Bowlby (see Karen, 1990). The measure is a 5-point likert type scale (1 = almost or never true; 5 = always true). The maternal relationship is rated along the dimensions of trust, communication, and alienation. The trust subscale relates to mutual understanding and respect (e.g., "My mother accepted me as I was."). The communication subscale assesses the sensitivity of communication between mother and child (e.g., "Talking over my problems with my mother made me feel ashamed or foolish."). The alienation subscale measures feelings of anger and avoidance (e.g., "I felt angry with my mother"). Armsden and Greenberg (1987) found Cronbach's alphas for the trust, communication and alienation scales ranged from .72 to .91. Test/retest reliability at three weeks was .93 for parent attachment.

The second attachment measure was the Parental Attachment Questionnaire [PAQ] (Kenny, 1987). This 55-item self-report measure was designed to adapt the model of attachment as identified by Ainsworth, Blehar, Walters, and Wall (1978) who found that attachment security in late adolescence is based on the adolescent's experience of attachment with parental figures in childhood. Specific parental characteristics such as sensitivity, emotional support, and respect for autonomy are associated with secure attachment and increased social and emotional competence. The questionnaire taps perceived parental availability, understanding, acceptance, respect for autonomy, interest in interaction with parents, and affect toward parents during visits, student help-seeking behaviors in situations of stress, and satisfaction with help obtained from parents. The PAQ is comprised of three subscales. The Affective Quality of Relationships subscale assessed the adolescent's perception of understanding and acceptance by parents (e.g., "In general my parents are persons I can count on to provide emotional support when I feel troubled"). The Parental Fostering of Autonomy subscale assessed the adolescent's perception of parents' respect for autonomy (e.g., "In general my parents are persons who try to control my life."). Finally, the

Parental Role in Providing Emotional Support subscale assessed the adolescents' perception of help available to them during times of stress (e.g., When I have a serious problem or an important decision to make...I look to my family for support, encouragement, and/or guidance.") Participants responded to this measure on a 5-point likert scale (1 = not at all; 5 = very much). Kenny (1990) reported alpha coefficients for the Affective Quality of Relationship scale as .96; and Fostering Autonomy and Emotional Support scales as.88. At two weeks, test-retest stability coefficients ranged from .82 to .91.

The third attachment measure was the Relationship Scales Questionnaire (RSQ) [Griffin & Bartholomew, 1994] (Appendix C). This 30-item self-report measure assessed general orientation to close relationships. According to Bowlby (1973), children over time internalize experiences with caregivers in such a way that early attachment relationships form mental representations that guide subsequent relationships outside the family. The theoretical underpinnings of the RSQ are drawn from Bowlby's (1973) theory of two internal working models. The first is the model of self (positive-negative), e.g., self as worthy vs. unworthy of love and support. The second is the model of others (positive-negative), e.g., others as

trustworthy and available vs. unreliable and rejecting. The RSQ was designed to obtain continuous ratings by using the four-category prototype of attachment: 1) secure model of self and others is positive; secure individuals are typically comfortable with self and with close relationships; 2) dismissing-avoidant model of self is positive and model of others is negative; dismissing individuals typically avoid closeness because of negative expectations but maintain high self-worth by denying the value of close relationships. In addition, they place a high value on independence; 3) preoccupied model of self is negative and model of others is positive. Preoccupied individuals typically have deep-seated feelings of unworthiness, while placing a high value on others. In addition, their self-worth is dependent on others and they seek excessive closeness in personal relationships; and 4) fearful-avoidant model of self and others is negative. Fearful individuals typically have deep-seated feelings of unworthiness and they shun others to avoid the pain of loss or rejection. The measure asked participants to rate on a 5-point likert scale (1 = not at all like me, 5 = very much like me) how well each item fits their characteristic style in close relationships. An example of a dismissing question reads: "It is very important to me

to feel independent." An example of a secure question reads: "I find it easy to get emotionally close to others." An example of a preoccupied question would be: "I worry that others don't value me as much as I value them," while a fearful question would read: "I am uncomfortable being close to others." Scharfe and Bartholomew (1994) found test/retest reliability for the two dimensions of self and other ranged from .72 to .85.

Emotional Intelligence

The Emotional Intelligence Inventory (EQI) was designed by Tapia and Burry-Stock (1998) to investigate the underlying components of emotional intelligence: self-awareness, motivating oneself, empathy, handling relationships, and managing emotions. Participants responded to the 41-item self-report measure[1] (Appendix D) on a 5-point likert type scale (1 = never like me,

[1] In this study, only 33 of the 41 items were used: 8 items were inadvertently omitted, leading to possible overall scores of (33-165)[1]. Analysis of the 33-item scale produced a Cronbach alpha coefficient of .81, suggesting a moderate level of internal consistency. The finding is similar to previous research that produced Cronbach coefficients of .81 and .89 e.g., Tapia, 2001; Sutarso, 1998. The internal consistency of the subscales was also assessed, which resulted in low-to-moderate alphas for some of the scales. Thus, the decision was made to use the global score and not the separate subscales scores for the final analyses.

5 = always like me). The questions related to each of the five factors of EI: self awareness (e.g., "Having car trouble causes me to feel stressful"), motivating oneself (e.g., "I tend to procrastinate"), empathy (e.g. "I can tell when other people's feelings are hurt"), handling relationships ("I can be assertive and forceful in situations where others are trying to take advantage of me"), and managing emotions (e.g., I lose control when I don't win in a sporting contest"). Cronbach alpha reliability coefficient was .87 and test/retest reliability at three weeks was .85 (Sutarso, 1998).

Demographic Information

Participants were asked to provide basic background information including their age, sex, socioeconomic status, and ethnic background (Appendix E).

Procedure

Questionnaires were administered to volunteers in undergraduate classes, completed individually, and returned at the next class meeting or to the peer-advising center. The questionnaire took approximately 20-30 minutes to complete.

CHAPTER THREE

RESULTS

Table 2 shows the scales and their definitions with the means and standard deviations for each participant in this study.

The first hypothesis for this study was that attachment security would be positively and significantly related to emotional intelligence (i.e., knowing one's emotions, managing emotions, motivation, recognizing emotions, and handling relationships). To test this hypothesis, a Pearson correlation was first computed on the attachment and emotional intelligence measures (Table 3). Results supported this hypothesis, showing that there were moderately positive and significant correlations between the global EI measure and the global maternal attachment scale (IPPA), the RSQ secure scale (i.e., viewing the self as worthy of love and viewing others as trustworthy and accepting), and all of the subscales of the Parental Attachment Questionnaire (i.e., Affective Quality of Relationships, Parents As Facilitators of Independence, and Parents as Source of Support).

As a confirmation of the above findings, participants were next divided into "high", "medium", and "low" attachment groups according to the trimedian split procedure for the three attachment scales used in this study. A t-test comparing the "high" vs. "low" attachment groups were, not surprisingly, consistent with the above findings: for all the attachment measures, the "high" attachment group scored significantly higher on the emotional intelligence scale than the "low" attachment group (Table 4).

The second hypothesis was that insecure attachment would be inversely related to lower levels of emotional intelligence. Results only partially supported this hypothesis. While EI was significantly and inversely correlated with fearful attachment, it was surprisingly unrelated to both dismissing and preoccupied attachment (Table 3).

Table 2. Definitions, Means, and Standard Deviations for the Attachment and Emotional Intelligence Scales

Scale	Subscale	Definition	Total Group (N = 191) Mean	SD
I. Attachment:				
Inventory of Parent & Peer Attachment (IPPA)		maternal attachment security (global score)	95.5	20.3
Relationship Scales Questionnaire (RSQ)	Secure	sees self as worthy of love and support and sees others as trustworthy and available	16.5	3.3
	Dismissing	sees self as worthy of love and support, but sees others as unreliable and rejecting	16.3	3.1
	Fearful	sees self as not being worthy of love and support and sees others as unreliable and rejecting	10.9	3.3
	Preoccupied	sees self as not being worthy of love and support and sees others as trustworthy and available	11.4	2.8
Parental Attachment Questionnaire (PAQ)	Affective Quality of Relationships	feels that parents understand and accept them	107.5	20.5
	Parents as Facilitators of Independence	feels that parents encourage and support their autonomy	51.4	10.5
	Parents as Source of Support	feels that parents are available during times of stress and difficult decision making	44.6	9.0
II. Emotional Intelligence:				
Emotional Intelligence Inventory (EQI)		measures EI (global score) empathy, self awareness, motivation, social competence, emotional regulation	116.8	14.1

Table 3. Correlation Between Attachment and (Global) Emotional Intelligence (N = 191)

Attachment:	Emotional Intelligence:
1) IPPA (Global Attachment)	.25***
2) Relationship Scales Questionnaire:	
Secure	.42***
Dismissing	-.05
Fearful	-.15*
Preoccupied	.10
3) Parental Attachment Questionnaire:	
Affective Quality of Relationships	.29***
Parents as Facilitators of Indep.	.19**
Parents as Source of Support	.33***

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

Table 4. T-Test Result Comparing "Low" Versus "High" Attachment Groups on Emotional Intelligence

	Emotional Intelligence			
Attachment Measures:	"Low" Attachment Group Mean	"High" Attachment Group Mean	t	sig.
IPPA (Global Attachment)	112.0	120.9	-3.44	.001
RSQ - Secure (has positive view of self and other')	109.1	125.4	-6.82	.000
PAQ - Affective Quality of Relationships (parents understand them)	112.2	123.2	-4.54	.000
PAQ - Parents as Facilitators of Independence (parents support autonomy)	113.5	121.9	-3.29	.001
PAQ - Parents as Source of Support (parents are available during stress/difficulties)	110.6	123.0	-4.83	.000

Additional Analyses

A stepwise multiple regression was computed to examine predictors of global EI. The intercorrelations among the various attachment subscales were first examined, and to avoid the potential confound of multicollinearity, only the following variables were selected for use in the regression: the RQ-SEC (a measure of secure attachment), the PAQ-IND (the PAQ subscale which

assesses encouragement and support of autonomy by parents), and the IPPA (a measure of global attachment security). Results showed that a significant portion of the variance in emotional intelligence (R^2 = .29) was explained by the RQ-SEC score and the PAQ-IND score $F(2,190) = 38.69$, $p \leq .000$. The RQ-SEC score and the PAQ-IND score were the best predictors of EI.

Although no formal hypothesis was stated regarding gender effects, we also examined the data to determine whether the pattern of relationship between attachment security and emotional intelligence varied for males compared to females. Means and standard deviations for males and females for the attachment and emotional intelligence scales are shown in Table 5. T-tests were computed to compare the means for the attachment and emotional intelligence variables: results revealed no significant differences between male and female scores on any of these variables.

Pearson correlations between the attachment measures and emotional intelligence were then computed separately for males and females, and the result showed a *somewhat* similar pattern for males and females (Table 6). However, there were some differences in the strength of the correlations between males and females. Secure attachment

was more highly correlated with EI for males than for females (for the RSQ scale). Also, the RSQ Preoccupied and Fearful scales showed a stronger negative correlation between EI and attachment for males than for females. Finally, the Parents as Facilitators of Independence (from the PAQ scale) was significantly correlated with EI for females but not for males.

Table 5. Definitions, Means, and Standard Deviations for the Attachment and Emotional Intelligence Scales

Scale	Sub-Scale	Definition	Males (n = 76) Mean	SD	Females (n = 115) Mean	SD	t	sig
I. Attachment:								
a) Inventory of Parent & Peer Attachment (IPPA)		maternal attachment security (global score)	94.3	16.9	96.2	22.3	-.663	.51
b) Relationship Scales Questionnaire (RSQ)	Secure	sees self as worthy of love and support and sees others as trustworthy and available	16.8	3.1	16.3	3.4	1.226	.22
	Dismissing	sees self as worthy of love and support and sees others as unreliable and rejecting	16.6	3.2	16.0	3.0	1.193	.24
	Fearful	sees self as not being worthy of love and support and sees others as unreliable and rejecting	10.6	3.1	11.0	3.4	-.823	.41
	Preoccupied	sees self as not being worthy of love and support and sees others as trustworthy and available	10.9	3.0	11.7	2.6	-1.958	.52
c) Parental Attachment Questionnaire (PAQ)	Affective Quality of Relationships	feels that parents understand and accept them	106.6	17.8	108.1	22.1	-.506	.61

Table 5. Definitions, Means, and Stand Deviations for the Attachment and Emotional Intelligence Scales (continued)

Scale	Sub-Scale	Definition	Males (n = 76) Mean	SD	Females (n = 115) Mean	SD	t	sig.
Parental Attachment Questionnaire (PAQ)	Parents as Facilitators of Independence	feels that parents encourage and support their autonomy	51.5	9.8	51.2	11.0	.195	.85
	Parents as Source of Support	feels that parents are available during times of stress and difficult decision making	43.4	8.5	45.3	9.2	-1.500	.14
II. Emotional Intelligence: Emotional Intelligence Inventory (EQI)		measures EI (global score) empathy, self awareness, motivation, social competence, emotional regulation	116.0	15.6	117.3	13.1	-.628	.53

Table 6. Correlations Between Attachment and Emotional Intelligence Factors

Attachment:	Emotional Intelligence Males	Females
1) IPPA (Global Attachment)	.21	.28**
2) Relationship Scales Questionnaire:		
Secure	.53***	.36***
Dismissing	-.02	-.07
Fearful	-.21	-.12
Preoccupied	-.22	-.02
3) Parental Attachment Questionnaire:		
Affective Quality of Relationships	.28**	.30***
Parents as Facilitators of Indep.	.08	.27**
Parents as Source of Support	.37***	.30***

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

CHAPTER FOUR

DISCUSSION

Overall, the results of this study supported the hypothesis that attachment security would be positively and significantly related to emotional intelligence. These findings are consistent with attachment theory and studies linking characteristics of secure attachment with the factors of emotional intelligence, e.g., knowing one's emotions, managing emotions, motivation, recognizing emotions, and handling relationships. As discussed in the literature, it seems apparent that a secure attachment is a necessary precursor to the development of emotional intelligence. Securely attached individuals have typically had primary caregivers who have been responsive to the child's physical and emotional needs and who have adequately and consistently met those needs (Karen, 1994). Parents who encourage their child to identify, talk about, and develop a vocabulary for their feelings have children who are more self-aware (Richburg & Fletcher, 2002). The development of emotional regulation is supported by parents who discuss emotions in a concrete, goal-directed fashion (Zeidner et al., 2003). Parents who provide explanations are sensitive to their child's needs, are

firm, have high maturity expectations, and view their children positively help shape a child's sense of efficacy, self-esteem, and achievement motivation (Baumrind, 1993). Parents who consistently show care and concern for other people have children who engage in more helping behaviors (Krevans & Gibbs, 1996; Litvak-Miller & McDougall, 1997). Similarly, research supports that children who experience intimate communication and interaction with their caregivers tend to have a psychological security that provides support and a constant resource of energy to maintain healthy relationships throughout the lifespan (Zsoloni, 2002).

In addition to the above, the results of this study only partially supported the hypothesis that insecure attachment is inversely related to emotional intelligence. While EI was significantly and inversely correlated with fearful attachment, there was no relationship between dismissing and preoccupied attachment styles. The fearful attachment style is characterized by deep seated feelings of unworthiness, a high dependence on others for self worth, while simultaneously avoiding intimacy for fear of pain and rejection (Griffin & Bartholomew, 1994). Bowlby proposed that the quality of a child's relationship with their primary caregiver resulted in an "internal working

model" of the self and others that provides the prototype for later social relationships (Bowlby, 1969). As discussed in the attachment literature, insecure individuals have trouble with physical contact, trust, and a basic awareness of their own feelings (Neal & Frick-Horbury, 2001). Insecure individuals have not learned the appropriate expression of emotions, they express more negative emotions, they are unable to recognize their own and others' emotions, and they tend to misinterpret normal social cues (Diener, Mangelsdorf, McHale, & Frosch, 2002; Zimmermann, Maier, Winter, & Grossmann, 2001). This study found, as expected, that fearful attachment, which is characterized by low self-worth coupled with an avoidance of others, was inversely correlated with all factors of EI.

The *lack* of a relationship between EI and the dismissing and preoccupied attachment scales was somewhat surprising. Dismissing individuals avoid closeness because of negative expectations. They maintain a high (false) self-worth by denying the importance of close relationships and placing a high value on independence (e.g., dismissing wants nothing to do with others). This false self-worth and high value on independence may lead these individuals to answer questions that result in a

positive EI score. However, it is also possible that the dismissing insecure attachment scale is tapping into a different construct that is unrelated to what EI measures.

The preoccupied individual has a low opinion of self but a positive opinion of others' which leads them to seek excessive closeness in personal relationships and leaves them vulnerable to others (i.e., preoccupied individuals want to merge completely). The EI scale has questions such as "most people feel comfortable talking to me about their personal feelings" and "I think how I can improve my relationships with those I love". Since preoccupied individuals tend to be preoccupied with relationships, they may have answered "relationship" type of questions similar to secure individuals. When the results for the preoccupied insecure attachment style were examined by gender there was *almost* a significant correlation between RSQ preoccupied and EI for males, but not for females. Why this did not hold true for females is unclear.

Another possible explanation is that the RSQ scale uses only four questions to determine each attachment type. It is possible that more questions would have led to a better assessment of these insecure styles. Future studies may want to address these unexpected finding in more detail.

The stepwise multiple regression found that the RSQ secure subscale and PAQ Parents as Facilitators of Independence (PAQ-IND) subscale were the best of the scales used in this analysis to predict EI. The PAQ-IND subscale was designed to measure the individual's perception of their parents' encouragement and also their support of autonomy. Based upon the previous discussion for the support of this study's hypothesis, it would be expected that this subscale would be a good predictor of EI because individuals who scored high on the subscale have parents who respect individual privacy, encourage independent decision-making, allow for freedom to experiment and learn on their own while at the same time showing trust, confidence, and respect even while disagreeing with decisions or opinions. Similarly, the RSQ secure subscale measures the degree to which a person is comfortable with themselves and with close relationships. Conceptually, it is understandable that the RSQ secure subscale would be a good predictor of EI because when an individual experiences a close, warm, responsive relationship with their primary caregiver they in turn are able to maintain high self-worth and establish healthy relationships. The research on securely attached individuals suggests they would be proficient at each of

the five components of EI, i.e., knowing one's emotions, managing emotions, motivation, recognizing emotions, and handling relationships. The literature clearly states that securely attached individuals make friends easily, are flexible, are resilient under stress, have good self-esteem, feel worthy of love, expect others to treat them well, and are more compliant, sympathetic, and competent in social situations (Cassidy 1988; Karen, 1994; Kirsh & Cassidy, 1997). The Inventory of Parent and Peer Attachment (IPPA) was not as strong a predictor of EI as the RSQ secure and the PAQ-IND scales. A possible cause is that only the maternal attachment subscale was used, while both the RSQ secure and PAQ-IND subscale questions asked questions about both parents and not just the mother.

This study surprisingly found no gender differences in the attachment and emotional intelligence measures. There were, however, differences in the *strength* of some of the correlations for males and females for RSQ preoccupied and RSQ fearful. Regarding the lack of gender differences on EI, the construct of EI is relatively new in psychological research and so far the literature addressing gender differences is limited and the results are mixed. Interestingly, Guastello (2003) studied gender and generational differences of EI and found no gender

differences among the younger generation, but did find gender differences in EI for the older generation (ages 34-80). Krikorian (2000) also found no gender differences where 83% of the participants were between 18-25 years-old. Petrides and Furnham (2000) found that females scored higher on the "social skills" factor of EI, but for all factors no gender differences were found. Goleman (1995) indicates that typically females are more aware of emotions, show more empathy, and have better social skills while men have better self-regard, are more independent, solve problems better, are more flexible, and cope better with stress.

In this study, the lack of gender differences could also be attributed to the participation of psychology students as the primary subjects in this study. In theory, psychology students may be more knowledgeable about or "attuned to" intrapersonal and interpersonal attributes, thereby eliminating the expected gender difference on the EI measure. Psychology students take classes in which they routinely analyze theory relating to thoughts, feelings, and behaviors. In contrast, a great deal of EI research is conducted in business management settings where less emphasis is put on thoughts and feelings and where gender

differences may be more apparent (Dilenschneider, 1996; Goleman, 1995).

Interestingly, the results did show a few differences in the strength of the correlations between the attachment and EI measures for males and females. Secure attachment was more strongly correlated with EI for males than for females. This could perhaps be attributed to the effects of socialization for males and females: females are expected in our culture to be more empathetic, better at handling relationships, and more adept at knowing and managing their emotions. On the other hand, males tend to be encouraged to be independent and to be less emotional (Kindlon & Thompson, 2000). Thus, it may be that a secure relationship with their primary caregiver would be more *significant* for males because it may be their primary source of learning social and emotional skills.

The finding that the preoccupied scale (RSQ) was more strongly (negatively) correlated with EI for males than for females may be related to the above as well, i.e., a poor attachment with the primary caregiver has a more detrimental impact on the development of EI for males than for females, since females would also get support from society for developing EI skills.

Finally, the study also found a correlation between the Parents as Facilitators of Independence scale (PAQ) and EI for females but not for males. The above argument may also apply here, i.e., that females may be more dependent on parents for support of their independence and autonomy since they are less likely to be encouraged by the surrounding culture. Parental influences may not be as significant for males because they will receive support and encouragement for independence through the socialization process. In contrast, whereas females may not receive similar encouragement from society, their homes may therefore be an important source.

Limitations and Future Direction

An obvious limitation to the present study is the inadvertent omission of eight items from the EI scale. While the resulting global EI scale still had reasonable validity, the EI subscales could not be used.

Another related area of concern and a limitation to the present study is the limited number of measures available to study EI. In the field of EI research, the most commonly researched and used measures for EI are prohibitively expensive for a student to obtain (e.g., Multifactor Emotional Intelligence Scale (MEIS) and BarOn

Emotional Quotient Inventory (BARON EQ-I). Although the literature has confirmed the reliability and validity of the EI measure used for this study, both the MEIS and BarOn EQ-I have been used far more extensively and for a much longer period of time. Thus, there is much more empirical data to confirm the reliability and validity of the MEIS and BarOn EQ-I. It is possible that the use of either of these measures may have altered the results of the present study.

The use of all psychology students may have limited the study by failing to recognize expected gender differences in EI. Since many studies of EI as well as studies in areas such as empathy and social skills routinely indicate gender differences, it was anticipated that this study would also find gender differences. The use of a broader range of students to disciplines outside of psychology may have impacted the results of this study.

There are a number of directions for future studies in this field. First, this study has demonstrated a relationship among familial influences and emotional intelligence. However, the research to date is limited and only provides a fragmented understanding of the connections between familial influences and EI. A more comprehensive investigation would provide a clearer

understanding of how familial influences affect the development of emotional intelligence.

Second, the field of emotional intelligence would benefit from additional studies that look at EI across cultures and among more diverse populations here in the United States. Is the construct of EI consistent across cultures and ethnic groups? Culture is a complex force which includes the values, norms, and opportunities found within a particular society. Further research is needed to articulate the ways in which cultural or ethnic variables affect emotional intelligence.

Lastly, if EI is to become a widely accepted construct separate from social competence, more studies are needed to validate the few free EI measures available. The measure used in the present study was a challenge to locate and it has established reliability in only a few studies.

Summary and Conclusion

In the past decade, emotional intelligence (EI) has been widely touted in research and the popular press as a significant contributor to life success and psychological well-being. In this respect, emotional intelligence research is at the forefront of a burgeoning movement

toward the use of nontraditional intelligences in both business and education. This study is a first step toward bridging the fields of emotional intelligence and attachment by providing empirical insight into what influences EI, specifically the link between family experiences and the development of EI. As stated previously, EI has been touted as predicting success in life. As such, it is worthwhile to begin examining in more detail what influences it.

APPENDIX A

INVENTORY OF PARENT AND PEER ATTACHMENT

Each of the following statements asks about your feelings about your **MOTHER**, or the person who acted as your mother. Please circle the response which best characterizes your relationship with your mother.

		Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
1.	My mother respects my feelings.	1	2	3	4	5
2.	I feel my mother does a good job as a mother	1	2	3	4	5
3.	I wish I had a different mother.	1	2	3	4	5
4.	My mother accepts me as I am.	1	2	3	4	5
5.	I like to get my mother=s point of view on things I=m concerned about.	1	2	3	4	5
6.	I feel it=s no use letting my feelings show around my mother.	1	2	3	4	5
7.	My mother can tell when I am upset about something.	1	2	3	4	5
8.	Talking over my problems with my mother makes me feel ashamed or foolish.	1	2	3	4	5
9.	My mother expects too much of me.	1	2	3	4	5
10.	I get upset easily around my mother.	1	2	3	4	5
11.	I get upset a lot more than my mother knows about.	1	2	3	4	5
12.	When we discuss things, my mother cares about my point of view.	1	2	3	4	5
13.	My mother trusts my judgment.	1	2	3	4	5
14.	My mother has her own problems, so I don't bother her with mine.	1	2	3	4	5

		Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
15.	My mother helps me to understand myself better.	1	2	3	4	5
16.	I tell my mother about my problems and troubles.	1	2	3	4	5
17.	I feel angry with my mother.	1	2	3	4	5
18.	I don=t get much attention from my mother.	1	2	3	4	5
19.	My mother helps me to talk about my difficulties.	1	2	3	4	5
20.	My mother understands me.	1	2	3	4	5
21.	When I am angry about something, my mother tries to be understanding.	1	2	3	4	5
22.	I trust my mother.	1	2	3	4	5
23.	My mother doesn't understand what I=m going through these days.	1	2	3	4	5
24.	I can count on my mother when I need to get something off my chest.	1	2	3	4	5
25.	If my mother knows something is bothering me, she asks me about it.	1	2	3	4	5

APPENDIX B

PARENTAL ATTACHMENT QUESTIONNAIRE

The following pages contain statements that describe family relationships and the kinds of feelings and experiences frequently reported by young adults. Please respond to each item by circling the number on a scale of 1 to 5 that best describes your parents, your relationship with your parents, and your experiences and feelings. Please provide a single rating to describe your parents and your relationship with them. If only one parent is living, or if your parents are divorced, respond with reference to your living parent or the parent with whom you feel closer.

		Not At All	Some what	A Moder-ate Amount	Quite a Bit	Very Much
	In general my parents….					
1.	are persons I can count on to provide emotional support when I feel troubled	1	2	3	4	5
2.	support my goals and interests.	1	2	3	4	5
3.	live in a different world.	1	2	3	4	5
4.	understand my problems and concerns.	1	2	3	4	5
5.	respect my privacy.	1	2	3	4	5
6.	restrict my freedom or independence.	1	2	3	4	5
7.	are available to give me advice or guidance when I want it.	1	2	3	4	5
8.	take my opinions seriously.	1	2	3	4	5
9.	encourage me to make my own decisions.	1	2	3	4	5
10.	are critical of what I can do.	1	2	3	4	5
11.	impose their ideas and values on me.	1	2	3	4	5

		Not At All	Some what	A Moder-ate Amount	Quite a Bit	Very Much
	In general my parents….					
12.	have given me as much attention as I have wanted.	1	2	3	4	5
13.	are persons to whom I can express differences of opinion on important matters.	1	2	3	4	5
14.	have no idea what I am feeling or thinking.	1	2	3	4	5
15.	have provided me with the freedom to experiment and learn things on my own.	1	2	3	4	5
16.	are too busy or otherwise involved to help me.	1	2	3	4	5
17.	have trust and confidence in me.	1	2	3	4	5
18.	try to control my life.	1	2	3	4	5
19.	protect me from danger and difficulty.	1	2	3	4	5
20.	ignore what I have to say.	1	2	3	4	5
21.	are sensitive to my feelings and needs.	1	2	3	4	5
22.	are disappointed in me.	1	2	3	4	5
23.	give me advice whether or not I want it.	1	2	3	4	5
24.	respect my judgment and decisions, even if different from what they would want.	1	2	3	4	5
	In general my parents….					
25.	do things for me, which I could do for myself.	1	2	3	4	5
26.	are persons whose expectations I feel obligated to meet.	1	2	3	4	5

		Not At All	Some what	A Moder-ate Amount	Quite a Bit	Very Much
27.	treat me like a younger child.	1	2	3	4	5
	During recent visits or time spent together, my parents were persons...					
28.	I looked forward to seeing.	1	2	3	4	5
29.	with whom I argued.	1	2	3	4	5
30.	with whom I felt relaxed and comfortable.	1	2	3	4	5
31.	who made me angry.	1	2	3	4	5
32.	I wanted to be with all the time.	1	2	3	4	5
33.	towards whom I felt cool and distant.	1	2	3	4	5
34.	who got on my nerves.	1	2	3	4	5
35.	who aroused feelings of guilt and anxiety.	1	2	3	4	5
36.	to whom I enjoyed telling about the things I have done and learned.	1	2	3	4	5
37.	for whom I felt a feeling of love.	1	2	3	4	5
38.	I tried to ignore	1	2	3	4	5
39.	to whom I confided my most personal thoughts and feelings.	1	2	3	4	5
	During recent visits or time spent together, my parents were persons...					
40.	whose company I enjoyed.	1	2	3	4	5
41.	I avoided telling about my experiences.	1	2	3	4	5
	Following time spent together, I leave my parents...					
42.	with warm and positive feelings.	1	2	3	4	5

		Not At All	Some what	A Moder-ate Amount	Quite a Bit	Very Much
43.	feeling let down and disappointed by my family.	1	2	3	4	5
	When I have a serious problem or an important decision to make...					
44.	I look to my family for support, encouragement, and/or guidance.	1	2	3	4	5
45.	I seek help from a professional, such as a therapist, college counselor, or clergy.	1	2	3	4	5
46.	I think about how my family might respond and what they might say.	1	2	3	4	5
47.	I work it out on my own, without help or discussion with others.	1	2	3	4	5
	When I have a serious problem or an important decision to make...					
48.	I discuss the matter with a friend.	1	2	3	4	5
49.	I know that my family will know what to do.	1	2	3	4	5
50.	I contact my family if I am not able to resolve the situation after talking it over with my friends.	1	2	3	4	5
	When I go to my parents for help...					
51.	I feel more confident in my ability to handle the problems on my own.	1	2	3	4	5
52.	I continue to feel unsure of myself.	1	2	3	4	5

		Not At All	Some what	A Moder-ate Amount	Quite a Bit	Very Much
53.	I feel that I would have obtained more understanding and comfort from a friend.	1	2	3	4	5
54.	I feel confident that things will work out as long as I follow my parent's advice.	1	2	3	4	5
55.	I am disappointed with their response.	1	2	3	4	5

APPENDIX C

RELATIONSHIP SCALES QUESTIONNAIRE

Please read each of the following statements and circle the response which best describes your feelings about close relationships.

		Not at all like me		Some-what like me		Very much like me
1.	I find it difficult to depend on other people.	1	2	3	4	5
2.	It is very important to me to feel independent.	1	2	3	4	5
3.	I find it easy to get emotionally close to others.	1	2	3	4	5
4.	I want to merge completely with another person.	1	2	3	4	5
5.	I worry that I will be hurt if I allow myself to become too close to others.	1	2	3	4	5
6.	I am comfortable without close emotional relationships.	1	2	3	4	5
7.	I am not sure that I can always depend on others to be there when I need them.	1	2	3	4	5
8.	I want to be completely emotionally intimate with others.	1	2	3	4	5
9.	I worry about being alone.	1	2	3	4	5
10.	I am comfortable depending on other people.	1	2	3	4	5
11.	I often worry that romantic partners don't really love me.	1	2	3	4	5
12.	I find it difficult to trust others completely.	1	2	3	4	5
13.	I worry about others getting too close to me.	1	2	3	4	5

		Not at all like me		Some-what like me		Very much like me
14.	I want emotionally close relationships.	1	2	3	4	5
15.	I am comfortable having other people depend on me.	1	2	3	4	5
16.	I worry that others don't value me as much as I value them.	1	2	3	4	5
17.	People are never there when you need them.	1	2	3	4	5
18.	My desire to merge completely sometimes scares people away.	1	2	3	4	5
19.	It is very important to me to feel self-sufficient.	1	2	3	4	5
20.	I am nervous when anyone gets too close to me.	1	2	3	4	5
21.	I often worry that romantic partners won't want to stay with me.	1	2	3	4	5
22.	I prefer not to have other people depend on me.	1	2	3	4	5
23.	I worry about being abandoned.	1	2	3	4	5
24.	I am somewhat uncomfortable being close to others.	1	2	3	4	5
25.	I find that others are reluctant to get as close as I would like.	1	2	3	4	5
26.	I prefer not to depend on others.	1	2	3	4	5
27.	I know that others will be there when I need them.	1	2	3	4	5
28.	I worry about having others not accept me.	1	2	3	4	5

		Not at all like me		Some-what like me		Very much like me
29.	Romantic partners often want me to be closer than I feel comfortable being.	1	2	3	4	5
30.	I find it relatively easy to get close to others.	1	2	3	4	5

APPENDIX D

EMOTIONAL INTELLIGENCE INVENTORY

Directions: This inventory consists of statements about your feelings towards societal, personal, and emotional issues. There are no correct or incorrect responses. Read each item carefully. Think briefly about how you regard each statement and circle the appropriate response.

		Never Like Me	Occasion-ally Like Me	Some-times Like Me	Frequen-tly Like Me	Always Like Me
1.	I sympathize with other people when they have problems.	1	2	3	4	5
2.	I go out of my way to help someone in need.	1	2	3	4	5
3.	Overt human suffering makes me feel uncomfortable	1	2	3	4	5
4.	I can tell when other people's feelings are hurt.	1	2	3	4	5
5.	I am uncomfortable when someone is making fun of another person.	1	2	3	4	5
6.	I am sympathetic with a nervous speaker.	1	2	3	4	5
7.	I feel hurt when someone has taken advantage of a less fortunate person.	1	2	3	4	5
8.	When someone is annoying me, I stop to think about the other persons situation rather than losing my temper.	1	2	3	4	5
9.	When I've offended someone, I am aware of it almost immediately.	1	2	3	4	5
10.	In most cases I give people a second chance.	1	2	3	4	5
11.	I feel moved to intervene when someone is abusing a helpless animal.	1	2	3	4	5
12.	Criticism is difficult for me to accept.	1	2	3	4	5

		Never Like Me	Occasion-ally Like Me	Some-times Like Me	Frequen-tly Like Me	Always Like Me
13.	There are times when I let a problem work itself out by waiting.	1	2	3	4	5
14.	It is too stressful to stop unwanted personal habits such as overeating, smoking, nail biting.	1	2	3	4	5
15.	I get emotionally bothered when I am exposed to an upsetting TV show, movie, or book.	1	2	3	4	5
16.	Having car trouble causes me to feel stressful.	1	2	3	4	5
17.	Being expected to take charge of a group activity is upsetting to me.	1	2	3	4	5
18.	I lose control when I do not win in a sporting contest.	1	2	3	4	5
19.	Traffic jams cause me to lose control.	1	2	3	4	5
20.	Most people feel comfortable talking to me about their personal feelings.	1	2	3	4	5
21.	I can be assertive and forceful in situations where others are trying to take advantage of me.	1	2	3	4	5
22.	It is easy for me to openly express warm and loving feelings towards others.	1	2	3	4	5
23.	I avoid responsibility whenever I can.	1	2	3	4	5
24.	My moods are easily influenced by those around me.	1	2	3	4	5

		Never Like Me	Occasion-ally Like Me	Some-times Like Me	Frequen-tly Like Me	Always Like Me
25.	I am aware of even subtle feelings as I have them.	1	2	3	4	5
26.	When I am angry, I express my feelings in a way that deals well with the situation.	1	2	3	4	5
27.	I am able to express my feelings without hurting others.	1	2	3	4	5
28.	I understand why I react the way I do in situations.	1	2	3	4	5
29.	I think about how I can improve my relationships with those I love.	1	2	3	4	5
30.	I think about how I can improve my relationships with those people that I don't get along with.	1	2	3	4	5
31.	I think about why I do not like a person.	1	2	3	4	5
32.	When someone makes me uncomfortable, I think about why I am uncomfortable.	1	2	3	4	5
33.	I tend to procrastinate.	1	2	3	4	5

APPENDIX E

DEMOGRAPHICS

1. Your age _____

2. Your sex (circle one): Male Female

3. What is your ethnic background? (check one):

Asian _____	White/Caucasian_____
Pacific Islander_____	Hispanic/Latino_____
Native American_____	Black_____
Other_____	

4. What was the highest grade in school (or level of education) that your mother completed?

_____

5. What was the highest grade in school (or level of education) that your father completed?

_____

REFERENCES

Alberti, E. T., & Witryol, S. L. (1994). The relationship between curiosity and cognitive ability in third and fifth grade children. *Journal of Genetic Psychology, 155*(2), 129-149.

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*(5), 427-454.

Baumrind, D. (1993). The average expectable environment is not good enough: A response to Scarr. *Child Development, 64,* 1299-1317.

Bowlby, J. (1969). *Parent-child relations: an introduction to parenting*. Columbus, OH: Merrill.

Bost, K., Vaughn, B., Washington, W.N., Cielisnki, K, & Bradbard, M. (1998). Social competence, social support, and attachment: Demarcation of construct domains, measurement, and paths of influence for preschool children attending Head Start. Child Development, 69, 192-218.

Boyum, L. A., & Parke, R. D. (1995). The role of family emotional expressiveness in the development of children's social competence. *Journal of Marriage and the family, 57,* 593-608.

Brigman, G., Land, D., Switzer, D., Lane, D., & Lawrence, R. (1999). Teaching children school success skills. *Journal of Educational Research, 92,* 323-330.

Carson, J. L., & Parke, R. D. (1996). Reciprocal negative affect in parent-child interactions and children's peer competency. *Child Development, 67,* 2217-2226.

Cassidy, J. (1988). Child-mother attachment and the self in six-year-olds. *Child Development, 59,* 121-134.

Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monograph of the Society for Research in Child Development, 59,* 228-249.

Cohn, D. A. (1990). Child-mother attachment of six-year-olds and social competence at school. *Child Development, 61,* 152-162.

Cords, M. (2001). How children handle conflict: Better than we think. *Chronicle of Higher Education, 47,* 15-17.

Cote, J. E., & Levine, C. G. (2000). Attitude versus aptitude: Is intelligence or motivation more important for positive higher educational outcomes? *Journal of Adolescent Research, 15*(1), 58-81.

Denham, S. A. (1993). Mother-Child emotional communication and preschoolers' security of attachment and dependency. *The Journal of Genetic Psychology, 155*(1), 119-121.

Denham, S. A. (1998). *Emotional development in young children*. New York: The Guilford Press.

Dilenschneider, R. L. (1996). Social IQ and MBA's. *Vital Speeches of the Day, 62,* 404-409.

Diener, M., Mangelsdorf, S., McHale, J., Frosch, C. (2002). Infants behavioral strategies for emotion regulation with fathers and mothers: Associations with emotional expressions and attachment quality. Infancy, 3(2), 153-174.

Elksnin, L. K., & Elksnin, N. (2000). Teaching parents to teach their children to be prosocial. *Intervention in School & Clinic, 36,* 27-34.

Feldman, R. (2003). *Development across the life span*. Upper Saddle River: NJ: Prentice Hall.

Fletcher, C., & Bladry, C. (2000). A study of individual differences and self-awareness in the context of multi-source feedback. *Journal of Occupational and Organizational Psychology, 73,* 303-320.

Frey, L., Hirschstein, M. K., & Guzzo, B. A. (2000). Second step: Preventing aggression by promoting social competence. *Journal of Emotional and Behavioral Disorders, 8,* 102-113.

Frodi, A., & Grolnick, W. (1990). Infants of adolescent and adult mothers: Two indices of socioemotional development. Adolescence, 98, 363-375.

Gardner, H. (1992). Multiple intelligences. *Instructor, 102,* 48-50.

Gardner, H. (1995). Reflections on multiple intelligences. *PhiDelta Kappan,* 77, 200-208.

Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ.* New York: Bantam Books.

Graves-McMahan, M. L. (2000). *Emotional intelligence, general intelligence, and personality: Assessing the construct validity of emotional intelligence test using structural equation modeling. Unpublished dissertation.* California School of Professional Psychology. San Diego, CA.

Griffin, D.W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. Advances in Personal Relationships, 5, 17-52.

Grolnick, W. S., & Kurowski, C. (1999). Family processes and the development of children's self-regulation. *Educational Psychologist, 34,* 3-15.

Guastello, D. (2003). Androgyny, gender role behavior, and emotional intelligence among college students and their parents. *Sex Roles,* 663-673.

Houtmeyers, K. A. (2000). Emotional intelligence and attachment in pre-schoolers. Unpublished doctoral dissertation, University of Windsor, Canada.

Joireman, J., Needham, T., & Cummings, A. (2001). Relationship between dimensions of attachment and empathy. North American Journal of Psychology, 3, 63-80.

Karen, R. (1994). *Becoming Attached.* New York: Warner Books.

Kenny, M.E. (1987). The extent and function of parental attachment among first-year college students. Journal of Youth and Adolescence, 16, 17-27.

Kinney, T. A., Smith, B. A., & Donzella, B. (2001). The influence of sex, gender, self-discrepancies, and self awareness on anger and verbal aggressiveness among U.S. college students. *Journal of Social Psychology, 141,* 245-276.

Kirsh, S. J., & Cassidy, J. (1997). Preschoolers' attention to and memory for attachment-relevant information. *Child Development, 68,* 1143-1153.

Krevans, J., & Gibbs, J. C. (1996). Parents' use of inductive discipline: Relations to children's empathy and prosocial behavior. *Child Development, 67,* 3263-3277.

Krikorian, M. (2000). *Emotional intelligences in relation to attachment type.* Unpublished doctoral dissertation, University of Detroit Mercy.

Landry, S. H., Smith, K. E., Swank, P. R., Assel, M. A., & Vellet, S. (2001). Does early responsive parenting have a special importance for children's development or is consistency across early childhood necessary? *Developmental Psychology, 37,* 387-403.

Leondari, A., & Kiosseoglou, G. (2000). The relationship of parental attachment and psychological separation to the psychological functioning of young adults. *Journal of Social Psychology, 140*(4), 451-466.

Leondari, A., & Syngollitou, E. (1998). Academic achievement, motivation, and future selves. *Educational Studies, 24,* 153-164.

Levy, K. N., Shaver, P. R., & Blatt, S. J. (1998). Attachment styles and parental representations. *Journal of Personality and Social Psychology, 74*(2), 407-419.

Lindsey, E. W., & Mize, J. (2001). Interparental agreement, parent-child responsiveness and children's peer competence. *Family Relations, 50,* 348-355.

Litvak-Miller, W., & McDougall, D. (1997). The structure of empathy during middle childhood and its relationship to prosocial behavior. *Genetic, Social and General Psychology Monographs, 123,* 303-325.

Longman dictionary of psychology and psychiatry. (1984). New York: Longman, Inc.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development, 50,* 1-2.

Marcus, R. F., & Kramer, C. (2001). Reactive and proactive aggression: Attachment and social competence predictors. *The Journal of Genetic Psychology, 162,* 260-275.

May, B. A., & Alligood, M. R. (2000). Basic empathy in older adults: Conceptualization, measurement, and application. *Issues in Mental Health Nursing, 21,* 375-386.

Mayer, J. D. (2001). Emotional intelligence and giftedness. *Roeper Review, 23,* 131-138.

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). *Emotional intelligence meets traditional standards for an intelligence.* New York: Ablex Publishing Corp.

McCraty, R., Atkinson, M., Tomasino, D., Goelitz, J., & Mayrovitz, H. N. (1999). The impact of an emotional self-management course on psychosocial functioning and autonomic recovery to stress in middle school children. *Integrative Physiological & Behavioral Science, 34,* 246-269.

Miech, R., Essex, M. J., & Goldsmith, H. H. (2001). Socio-economic status and the adjustment to school: The role of self-regulation during early childhood. *Sociology of Education, 74,* 102-120.

Neal, J., & Frick-Horbury, D. (2001). The effects of parenting styles and childhood attachment patterns on intimate relationships. Journal of Instructional Psychology, 28, 178-184.

Petrides, K.V. & Furnham, A. (2000). Gender differences in measured and self-estimated trait emotional intelligence. *Sex Roles,* 449-461.

Plomin, R., & Stocker, C. (1989). Behavioral genetics and emotionality. In J.S. Reznick (Ed.), *Perspectives on behavioral inhibition* (pp. 219-240). Chicago: University of Chicago Press.

Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report, 26*(3), 3-18.

Richardson, R. C. (2000). Teaching social and emotional competence. *Children & Schools, 22,* 246-252.

Richburg, M., & Fletcher, T. (2002). Emotional intelligence: Directing a child's emotional education. *Child Study Journal, 32*(1), 31-38.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 3,* 185-211.

Salovey, P., & Sluyter, D.J. (Eds.). (1997). *Emotional Development and Emotional Intelligence.* New York: Basic Books.

Segrin, C. (2001). Social skills and negative life events: Testing the deficit stress generation hypothesis. *Current Psychology, 20,* 19-37.

Silverman, I. W., & Ragusa, D. M. (1990). Child and maternal correlates of impulse control in 24-month-old children. *Genetic, Social, and General Psychology Monographs, 116,* 437-474.

Simpkins, S. D., & Parke, R. D. (2001). The relations between parental friendships and children's friendships: Self-report and observational analysis. *Child Development, 72,* 569-582.

Sneed, C. D. (2002). Correlates and implications for agreeableness in children. *Journal of Psychology, 136*(1), 59-69.

Sternberg, R. J. (1990). *Metaphors of mind: Conceptions of the nature of intelligence*. Cambridge, England: Cambridge University Press.

Sternberg, R. J. (1994). *Reasoning, problem solving, and intelligence*. Cambridge, England: Cambridge University Press.

Sternberg, R. J., & Grigorenko, E. (1996). *Intelligence, heredity, and environment*. New York: Cambridge University Press.

Sutarso, T., Baggert, L. K., Sutarso, P., & Tapia, M. (1996). Effect of gender and GPA on emotional intelligence. Paper presented at the annual meeting of the Mid-South Educational Research Association, Tuscaloosa, AL

Tapia M., & Burry-Stock, J. (1998). Emotional Intelligence Inventory. Tuscaloosa, AL: The University of Alabama.

Thilam, L., & Kirby, S. (2002). Is emotional intelligence an advantage? An exploration of emotional and general intelligence on individual performance. *The Journal of Social Psychology, 142,* 133-143.

van der Mark, I., van Ijzendoorn, & M., Bakermans-Kranenburg, M. (2002). Development of empathy in girls during the second year of life: Associations with parenting, attachment, and temperament. Social Development, 11, 452-468.

Zeidner, M., Matthews, G., Roberts, R. D., & MacCann, C. (2002). Does emotional intelligence meet traditional standards for an Intelligence? Some new data and conclusions. *Emotion, 3,* 196-231.

Zeidner, M., Matthews, G., Roberts, R. D., & MacCann, C. (2003). Development of emotional intelligence: towards a multi-level investment model. *Human Development, 46,* 69-96.

Zhou, Q., Eisenberg, N., Losoya, S. H., Fabes, R. A., Reiser, M., Guthrie, I. K., et al. (2002). The relations of parental warmth and positive expressiveness to children's empathy-related responding and social functioning: A longitudinal study. *Child Development, 73,* 893-915.

Zimmermann, P. Maier, M., Winter, M., & Grossmann, K. (2001). Attachment and adolescents' emotion regulation during a joint problem-solving task with a friend. International Journal of Behavioral Development, 25, (4), 331-343.

Zsolnai, A. (2002). Relationship between children's social competence, learning motivation, and school achievement. *Educational Psychology, 22*(3), 318-329.