DISSERTATION

INVESTIGATING THE INTEGRATIVE NATURE OF THE SOCIAL COMPETENCE INVENTORY

Submitted by

Morgan J. Morrison

Department of Psychology

In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2005

COLORADO STATE UNIVERSITY

June 28, 2005

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY MORGAN J. MORRISON ENTITLED INVESTIGATING THE INTEGRATIVE NATURE OF THE SOCIAL COMPETENCE INVENTORY BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Committee of Graduate Work

BENJAMIN CLEGG

GEORGE C. THURNTON III

YOLANDA SARASUA

Eric D. Heggestad

Advisor

ERNEST L. CHAVEZ

Department Head

ABSTRACT OF DISSERTATION

INVESTIGATING THE INTEGRATIVE NATURE OF THE

SOCIAL COMPETENCE INVENTORY

In an effort to develop an integrative framework for the multitude of social competence measures developed over the years, Schneider and colleagues (1996, 2002) have created the Social Competence Inventory (SCI), a self-report measure of social competence that encompasses cognitive, trait, and ability components of the construct. The measure is intended to be a broad framework that encompasses more narrow conceptualizations of the construct. This research will investigate the integrative nature of the SCI by simultaneously examining several social competence-related measures, including the recent "hot cognition" of emotional intelligence. The SCI, six other self-report measures of social competence, and the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) were administered to 247 individuals. Joint factor analysis was used to determine whether the MSCEIT and other self-report measures could be represented in SCI factor space. Results indicated that all the extant social competence measures used in this study could be organized under the four SCI factors. The MSCEIT defined a separate fifth factor, suggesting that social competence and emotional intelligence are distinct constructs.

Morgan J. Morrison
Department of Psychology
Colorado State University
Fort Collins, CO 80523
Summer 2005

DEDICATION

For my mother, Barbara.

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Social competence, effectively interacting with others to achieve goals in social situations, is a central part of daily personal and work life. Research shows that individual differences in social competence predict job performance (Riggio & Taylor, 2000; Witt & Ferris, 2003), financial success (Baron & Markman, 2003), promotions within an organization (Kilduff & Day, 1994), leadership emergence (Riggio, Riggio, Salinas, & Cole, 2003), and general life satisfaction (Riggio, Watring, & Throckmorton, 1993; Law, Wong, & Song, 2004). However, each of these studies used different conceptualizations of social competence. Some research defines social competence as an intelligence (Chapin 1942; O'Sullivan & Guilford, 1975), others as a skills set (Ferris, Witt, & Hochwarter, 2001; Riggio, 1986), and still others as a set of personality traits (Snyder, 1974). There is little agreement among researchers as to the nature of social competence, and much confusion exists as to how, or if, these constructs are different from one another. As a result, a need exists for more rigorous definition and integration of these various social competence-related constructs (Ferris, Perrewe & Douglas, 2002; Marlow,

1986; Schneider, Roberts & Heggestad, 2002; Silvera, Martinussen & Dahl, 1991; Witt & Ferris, 2003). Until a generally agreed-upon taxonomy of social competence dimensions is recognized by the research community, progress in this area will be limited.

Schneider and colleagues (Schneider, Ackerman, & Kanfer, 1996; Schneider, Roberts, & Heggestad, 2002) have proposed a unifying framework for social competence and have been refining a self-report measure, the Social Competence Inventory (SCI). The intent of the measure is to provide a taxonomic framework of social competence dimensions to begin to achieve integration in this disjointed field. Initial construct validation efforts for the SCI showed promising convergent validity (e.g., strong positive correlations between social competence and extraversion) and divergent validity (e.g., small correlations between social competence and academic performance). These validation efforts are discussed in more detail later. While the construct validation work with personality and cognitive ability is promising, no work has yet examined multiple social competence-type measures at once to fully evaluate the comprehensiveness of the SCI.

A related construct, emotional intelligence, has been the focus of much study since Salovey and Mayer brought the topic to the forefront of the research community's awareness in 1990. Emotional intelligence involves understanding and utilizing one's own and other's emotions to solve problems and guide social behavior. Social competence and emotional intelligence are clearly similar to one another in that both are needed for effective social functioning, and some initial suggestions as to how the two are conceptually related have been put forth (Salovey & Mayer, 1990; Schneider et al., 2002). However, research is needed to clarify the similarities and differences between the

two construct domains.

Statement of Purpose

The primary purpose of this research is to move the field of social competence research toward a unified framework of social competence dimensions. To accomplish this, multiple existing measures will be administered to a large sample of people, and the interrelations among the measures examined. Working from Schneider's contention that the Social Competence Inventory represents the most integrative effort to date, a number of hypotheses will be developed which propose that all outside measures included in this study will be contained in the same factor space established by the SCI. Joint factor analysis will be used to test the hypotheses. A second purpose is to examine social competence and emotional intelligence to see how, if at all, the two differ.

Defining Social Competence

The study of social competence has its roots in Thorndike's (1920) proposition that intelligence has three broad components: intelligence regarding words, numbers, and ideas; intelligence regarding mechanical devices and physical objects; and intelligence in the social arena. The latter component of intelligence was defined by Thorndike (1920) as an "ability to understand and manage men and women, boys and girls – to act wisely in human relations" (p. 228).

Since Thorndike's original study, social competence has been defined in various ways. Social competence in this study is conceptualized more broadly as a trait complex. A trait complex is a collection of personal attributes that show communality with each

other. For example, Ackerman and Heggestad (1997) discuss how the expression of adult intellect is based on not just the individual's innate intelligence, but also from the interaction between the individual's intelligence and personality traits, and the individual's intelligence and interests. The attributes in the trait complex that Schneider et al. (2002) identify as making up social competence are cognition, ability, trait, and self-regulation variables. Competence refers to being effective in achieving social goals or desired outcomes specifically in social situations. That is, social competence is a collection of latent variables that account for individual differences in the capacity to achieve desired outcomes in social situations. I will speak more about the specific components making up the trait complex, including specific examples, in subsequent sections. To briefly summarize here, however, the cognitive component involves possessing knowledge about the correct ways to behave in different situations, as well as being insightful about why others behave as they do. The ability component refers to variables such as basic verbal communication, as well as abilities to negotiate or manage conflicts. Interpersonal trait variables are relatively enduring attributes that underlie social behavior and include traits such as warmth, empathy, extraversion, and agreeableness. Self-monitoring is also conceptualized as a trait variable, although arguably overlaps with the self-regulation aspect in that the construct involves monitoring social cues and adjusting behavior accordingly. The term competence is used as an umbrella term to encompass these more narrow components.

Brief History of Social Competence Measurement

From a psychometric perspective, isolating the construct as a separate form of

intelligence has proven difficult. Attempts to develop measures of social intelligence have been plagued by high correlations with general intelligence (Keating, 1978; Marlow, 1986; Thorndike, 1937; Walker & Foley, 1973). For example, one of the earliest measures, the George Washington Social Intelligence Test, consisted of matching tests, multiple choice and true-false tests, and a joke completion test. Scores on this measure and general intelligence correlated in the .60 range (Walker & Foley, 1973). In addition, Keating (1978) was unable to isolate a social intelligence factor when multiple social intelligence measures were factor analyzed along with measures of general intelligence. Such results suggested that measures of social intelligence that used written presentation (e.g., surveys, word problems) were basically capturing verbal or abstract intelligence. The O'Sullivan and Guilford Six Factor Tests of Social Intelligence relied on pictures and nonverbal presentation in an attempt to avoid this problem (O'Sullivan & Guilford, 1975); however, the attempt had little impact on the field (Schneider et al., 2002).

Recent advocates of social intelligence argue that such measurement difficulties are not surprising and should not lead to the conclusion that social intelligence does not exist. Gardner (1983) has pointed out that multiple intelligences "typically work in harmony, so their autonomy may be invisible" (p. 9). Cantor and Kihlstrom (1987) define social intelligence as declarative and procedural proficiency for working on the tasks of social life in which social goals are especially salient. They suggest that, "this definition does not necessitate a search for unique cognitive processes underlying "social" tasks of person perception, moral reasoning, and the like" (p. 71). In other words, some correlation between general intelligence and other forms of intelligence, social or otherwise, is to be expected (Ford & Tisak, 1983). The unknown is determining what

constitutes too large of a correlation. This determination is largely a judgment call on the part of each researcher.

Greater measurement success has been achieved using instruments that operationalize social competence in terms of behavioral outcomes (i.e., achieving social goals) rather than solely decoding social information or being insightful about social contexts. Two studies that utilized measures of behavioral outcomes, such as self-ratings and peer ratings based on observation of target subjects (Ford & Tisak, 1983; Marlow, 1986), found clear social competence factors in addition to verbal and abstract intelligence factors. These researchers suggest that possessing intelligence about social situations does not necessarily lead to success in social situations. Success in social contexts also involves actual behavior and skill. However, while researchers use the terms "skill" and "ability," they typically measure these indirectly through the use of self-report surveys. A self-report inventory of oral communication, for example, measures more a respondent's self-perception of his or her skill at communication. However, the term skill or ability is still used to label the constructs regardless of the indirect measurement.

Confusion over the Dimensionality of Social Competence

A contributing factor to the difficulty in measuring social competence is the lack of agreement regarding the dimensionality of social competence. A proliferation of social competence constructs has emerged over the decades. Some of these constructs are particularly intelligence-laden in that they view social competence as possessing knowledge or insight regarding how to behave in different social situations. Other

constructs are viewed in terms of personality traits. More often than not, different factor names and subdimensions are employed to label the constructs, with little communication or integration between subdisciplines of psychology. The result is an exceptionally disjointed research base (Kosmitski & John, 1993; Spitzberg & Cupach, 1989).

Thorndike originally defined social intelligence in multidimensional terms, involving both social understanding and social behavior. However, some researchers work from a relatively unidimensional conceptualization by emphasizing either the understanding component or the behavioral component. The understanding component of social competence involves deciphering others' motivations, feelings, or intentions based on their behavior. In this realm, researchers have proposed constructs such as social insight (Chapin, 1942), empathy (Hogan, 1969; Mehrabian & Epstein, 1972), and interpersonal acumen (Aditya & House, 2002). The behavioral component entails the ability to change one's behavior or self-presentation style according to varying situations. In this area, researchers proposed constructs such as functional flexibility (Paulhus & Martin, 1988), interpersonal adaptability (Pulakos, Arad, Donovan, & Plamondon, 2000) and self-monitoring (Snyder, 1974).

Less attention has been given to self-regulation, or motivational, aspects of social competence, although accomplishing social goals would clearly require the goal choice and goal striving that are central to motivation (Steers & Porter, 1987). Self-efficacy (Bandura, 1977) is the belief that one can successfully execute a course of action. Working from this perspective, several researchers have proposed a construct called social self-efficacy (Fan & Mak, 1998; Sherer & Maddux, 1982), suggesting that

expectancies of success in social situations should lead to persistence in achieving social goals.

The recent trend in social competence research is to identify groups of social skills that more fully describe the multidimensional nature of the construct. Table 1 shows six such attempts. At first glance, the striking feature about Table 1 is the variety of dimension names. Some dimensions sound similar, but are defined in slightly different ways. For example, Riggio's (1986) Emotional Expressivity is defined as the ability to relay nonverbal communication to others, such as expressing feelings through body language. Marlow (1986) proposes a dimension called Emotionality, which also involves expressing emotional information, as well as sensing others' emotions and feeling empathic concern. In addition, Baron and Markman's (2003) Expressiveness dimension involves expressing emotions to "generate enthusiasm in others." The basic meaning of this Expressiveness dimension is the same across the three perspectives, but each has an idiosyncratic meaning as well.

Other commonalities are evident in Table 1. Line 4 shows that four of the studies include a perception component of social competence, alternatively called social perception, interpersonal perception, and social information processing. Across the four studies, this dimension involves understanding others' intentions and motivations (Baron & Markman, 2003), needs, goals, and demands (Zaccaro, 2002), "hidden agendas" and body language (Ferris et al., 2001), and feelings and emotions (Silvera et al., 2001). Line 5 reveals that another similarity is in a dimension involving adjusting one's own behavior in different situations, with labels such as adaptability, social control, and behavioral flexibility. The researchers define their adaptability constructs as involving changing self-

presentation style (Riggio, 1996), adapting and feeling comfortable in a variety of situations (Baron & Markham, 2003), changing behavior "when required" (Zaccaro, 2002), and adapting behavior and emotional expressions according to situational cues (Ferris et al., 2001).

There are also several unique dimensions. For example, in addition to adapting behavior, Zaccaro (2002) proposes that possessing a large repertoire of behaviors from which to choose is worthy of a separate dimension, which he labels Behavioral Complexity. Marlow's Prosocial Attitude represents an interest in engaging in social interactions and a concern for the wellbeing of others. Riggio (1986) proposes a separate dimension for the ability to regulate one's own emotions and facial expressions, Emotion Control.

While the preceding research should be commended for recognizing the multidimensional nature of social competence, the dizzying numbers and definitions of factors and dimensions is hindering real progress in this area. Each perspective represented in Table 1 includes a unique three- to six-factor construct, but no one has yet made a concerted effort to determine where there is overlap and where there is distinctiveness. For example, it may be implied by Riggio's Social Control dimension that in order to effectively adapt one's self-presentation style, one has a large number of styles from which to choose; but Zaccaro chooses to separate this dimension, while Riggio does not. Overall, the confusion over what to call social competence has led researchers to recognize the need for integration of the various forms of social competence (Ferris, Perrewe, & Douglas, 2002; Marlow, 1986; Silvera, et al., 1991;

Schneider et al., 2002, Witt & Ferris, 2003). The current study aims to make progress in the effort to integrate a number of social competence dimensions.

Toward Integration

The most integrative work in the social competence domain by far is being tackled by Schneider (Schneider et al., 1996; Schneider et al., 2002). Schneider's (2002) research takes an individual differences approach and suggests that "social competence is a very broad trait complex comprised of several more specific trait complexes, each of which cuts across individual differences domains" (p. 25). In other words, social competence is conceptualized as a collection of latent constructs, including ability, personality, and skills variables, which work in tandem. Together, they account for individual differences in individual's capacity to achieve desired social outcomes.

Schneider has been refining an omnibus measure of social competence, called the Social Competence Inventory (SCI). Working from an individual differences approach, the focus of his research is on identifying the latent variables that account for covariation among behaviors that make up social competence. No consideration is given to development of a theory that explains why the covariation exists or how social competence develops in different people. The SCI was developed using both a rational and empirical approach to scale construction. An early version of the measure was created by asking psychological consultants and laypeople to list behavioral descriptors of socially effective behavior. A card-sorting task was used to group these descriptions into categories. Factor analysis was used to determine the underlying latent factors, and self-report items were written for each factor. Iterative item writing and analyses over the

years has resulted in the current SCI, which contains 27 scales. Table 2 shows the scales, their definitions, and the number of items in each. The intent of the measure is to provide a taxonomic framework of social competence dimensions to begin to achieve integration in this disjointed field. Factor analyses showed that the SCI scales grouped into four factors. The four factors have subsequently been replicated with self and peer respondents (Morrison & Heggestad, 2005). The four factors and their definitions are as follows.

Factor 1: *Social Mastery*: Achieving a sense of comfort, confidence, control, connection, and understanding in social situations.

Factor 2: *Social Responsiveness*: Expressing felt emotions; demonstrating warmth toward, acceptance of, and interest in socializing with others.

Factor 3: *Social Maturity*: Behaving in a socially mature and appropriate way through control of negative emotions and appreciation of others, including those who differ from oneself; dealing effectively with people who are upset, difficult, or require patience.

Factor 4: *Social Control*: Developing and implementing plans, or utilizing personal charisma, to control (and possibly use or get back at) others.

Construct validation efforts (Schneider et al., 2002) have demonstrated logical associations between the SCI and personality traits measured by the Trait Self-Description Inventory (TSDI) and the Multidimensional Personality Questionnaire (MPQ). For example, Social Mastery, which entails a sense of comfort and confidence in social situations, was correlated positively with related personality traits: .73 with Extroversion on the TSDI and .54 with Social Potency on the MPQ. Social

Responsiveness, which entails expressing felt emotions and warmth, correlated .39 with Agreeableness on the TSDI and .36 with Emotionality on the MPQ. Socially Maturity, which involves behaving in a socially appropriate manner through control of negative emotions, correlated -.44 with Neuroticism on the TSDI and -.55 with Negative Emotionality on the MPQ. Social Control, which entails developing and implementing plans and utilizing charisma to control others, correlated .55 with Social Potency on the MPQ.

Low correlations were reported between all SCI factors and measures of cognitive ability including the Armed Services Vocational Aptitude Battery (ASVAB) and multiple-choice and open-ended tests of vocabulary, general knowledge, visualization, and abstract reasoning. Overall, 20 cognitive variables were correlated with the four SCI factors. Only seven of the 80 correlations were over .30. For example, Social Maturity correlated .32 with the ASVAB verbal composite, while Social Responsiveness was negatively correlated -.46 with a vocabulary test and -.43 with a general knowledge test. No sizeable correlations were seen between any of the cognitive ability measures and Social Mastery and Social Control.

Development of Hypotheses for Social Competence-Type Measures

As stated previously, Schneider's intention was for the SCI to be integrative of other conceptions of social effectiveness-type measures. For example, three of the commonalities found in Table 1 involved emotional expressiveness, social perceptiveness, and adapting behavior to meet situational demands. If the SCI four-factor taxonomy is truly integrative of the various competing social competence domains, then

instruments that purport to measure emotional expressiveness, social perceptiveness, and social adaptability should load somewhere within the factor space of the SCI four latent variables using joint factor analysis. In other words, other measures of social competence should be well organized under the SCI factors. Moreover, some of the unique dimensions from Table 1, such as emotion control, could also be represented by the SCI in order to further the claim that the SCI is integrative.

It is not feasible to include every extant social competence-type measure in this one study. Instead, I have chosen measures that represent the cognitive, trait, skill, and self-regulation aspects of social competence. I also chose measures that were relatively well known and well-developed (e.g., the Self-Monitoring Scale, the Social Skills Inventory). For example, Silvera, Martinussen, and Dahl (2001) developed a short 21-item self-report measure, the Tromso Social Intelligence Scale; however, no evidence has yet been gathered to support the construct validity of the measure. Therefore, it is not included in the current research. Table 3 shows a crosswalk of social competence measures and, based on scale definitions, how they are expected to overlap with the integrative SCI. The crosswalk serves the basis for developing hypotheses. The following is a description of what I hypothesize in Table 3.

Social Skills Inventory. The Social Skills Inventory (SSI; Riggio, 1986) contains six dimensions. The SSI Emotional Sensitivity dimension involves effectively receiving nonverbal communication (e.g., affect, attitudes) from others, and the SSI Social Expressivity dimension involves effectively sending verbal communication. Interpreting behavioral cues and possessing good communication skills contribute to having a sense

of comfort and confidence in social situations, which is central to the SCI factor Social Mastery. The following hypotheses are proposed:

Hypothesis 1a. The SCI Social Mastery factor will load on the SSI Emotional Sensitivity scale.

Hypothesis 1b. The SCI Social Mastery factor will load on the SSI Social Expressivity scale.

The SSI Emotional Expressivity dimension involves effectively sending nonverbal cues. Similarly, the SCI Social Responsiveness factor is defined in part as expressing felt emotions and warmth. Given the similarity in these definitions, the following hypothesis is proposed.

Hypothesis 1c. The SCI Social Responsiveness factor will load on the SSI scale Emotional Expressivity.

The SSI Social Sensitivity scale is defined as possessing an appreciation of social rules and concerns. The SSI Emotional Control dimension involves an ability to control negative emotions. These scales closely match the nature of the SCI Social Maturity factor, which involves behaving in a socially mature and appropriate way through control of negative emotions. The following hypotheses are proposed.

Hypothesis 1d. The SCI Social Maturity factor will load on the SSI Social Sensitivity scale.

Hypothesis 1e. The SCI Social Maturity factor will load on the SSI Emotional Control scale.

Finally, the SSI Social Control dimension includes role-playing ability and self-presentation skills. Similarly, the SCI Social Control factor involves developing and implementing plans and utilizing charisma to influence others in social situations. Given the similarity in the two definitions, the following hypothesis is proposed.

Hypothesis 1f. The SCI Social Control factor will load on the SSI Social Control scale.

Thus, within hypotheses 1a to 1f, I propose that all of the SSI scales will be associated with one of the SCI factors. In other words, the SSI scales will fall within the SCI factor space.

Self-Monitoring Scale. Snyder (1974) proposed that individuals differ in the extent to which they monitor situational cues, their own emotions, and accordingly adjust their behavior and emotional expressions to meet the situational demands. The self-monitoring construct has three components: a concern for social appropriateness, a sensitivity to social cues, and ability to control one's behavioral expressions of feelings in response to those cues. In this way self-monitoring is not simply an ability to behave in a

certain way, but also a value or attitude about how to behave. The SCI Social Maturity factor involves a similar concern for behaving in socially appropriate ways. Socially Mature individuals, according to the SCI, are adept at deciphering situational cues and controlling negative emotions. The following hypothesis is proposed.

Hypothesis 2. The SCI Social Maturity factor will load on the Self-Monitoring Scale.

Social Self-efficacy Scale. Social self-efficacy is a belief in one's abilities to be successful in social situations. Individuals who possess self-efficacy, for example, expect they will have little difficulty making friends, and persist in the face of difficulties to do so. This construct will be measured by the Social Self-Efficacy Scale (SSES; Sherer et al., 1982). The items on this measure reflect a sense of confidence and ease in social situations. Similarly, the SCI Social Mastery factor reflects self-confidence in interactions with others, a feeling of being connected with others, and not being apprehensive about what others think. Given the overlap of these constructs, the following hypothesis is proposed.

Hypothesis 3. The SCI Social Mastery factor will load on the Social Self-efficacy Scale.

Ferris, Witt, & Hochwarter (FWH; 2001) social skills survey. Ferris, Witt, and Hochwarter (2001) define social skill as "interpersonal perceptiveness and the capacity to

adjust one's behavior to different and changing situational demands and to effectively influence and control the responses of others" (p. 1076). In other words, social skill involves recognizing situational cues, adapting one's own behavior and emotional expression accordingly, as well as manipulating other's behavior. Based on this definition, it is expected that the 7-item FWH measure of social skill will highly cross-load on two SCI factors: Social Maturity and Social Control. The SCI Social Maturity factor reflects the interpersonal perceptiveness described by the FHW by deciphering situational cues, as well as the FHW component of being able to adjust behavior by controlling negative emotions when appropriate. In addition, the SCI Social Control factor involves developing and implementing plans and utilizing charisma to influence others in social situations, which would appear to capture the FHW component of influencing and controlling the responses of others. The following hypothesis is proposed.

Hypothesis 4. The Social Maturity and Social Control factors will cross-load on the FWH Social Skills Survey.

Empathy. Two main definitions of empathy have been developed (Mehrabian & Epstein, 1972). In one, empathy is a role-taking ability, or the capacity to, in a purely intellectual sense, understand another person's mental state or emotions. The Hogan Empathy Scale (Hogan, 1969) is one such instrument. High scores on the Hogan Empathy scale indicate an understanding of the feelings of others, as well as being comfortable with oneself and well-accepted by others. As shown in Table 2, the SCI

Social Insight scale entails in part discerning the motivations, feelings, and intentions of others. The Social Insight scale is included in the broader SCI Social Mastery factor; therefore, the Hogan Empathy Scale is expected to load on this factor.

Hypothesis 5. The SCI Social Mastery factor will load on the Hogan Empathy Scale.

The second definition of empathy involves vicariously experiencing another person's emotions. An individual who is empathetic in this sense will, for example, feel sadness upon seeing another person cry. The Questionnaire Measure of Emotional Empathy (QMEE; Mehrabian & Epstein, 1972) is purported to measure this type of empathy. This tendency to actually experience different types of feelings appears to closely match the content of the SCI Social Responsiveness factor, which entails expressing felt emotions and warmth towards others, and it is expected the QMEE will load on this factor.

Hypothesis 6. The SCI Social Responsiveness factor will load on the QMEE.

Emotional Intelligence

An additional component of social functioning, emotional intelligence, has garnered much attention and controversy. Salovey and Mayer (1990) proposed emotional intelligence as part of a class of multiple intelligences in the tradition of Gardner and Sternberg. They defined emotional intelligence as "the ability to monitor one's own and

others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (p. 189). The focus is not just on a general awareness of self and others' emotions, but specifically on the use of emotions to solve problems and regulate behavior. These concepts of understanding emotions and regulating behavior to achieve desired outcomes in social situations are shared by emotional intelligence and social competence; however, the constructs have not been systematically related to each other empirically. Therefore, emotional intelligence will be examined along with a battery of social competence-type measures to examine how, if at all, the two constructs are different.

The current description of emotional intelligence (Mayer, Salovey, & Caruso, 2004) involves four "branches:" 1) perceiving emotions, 2) using emotions to facilitate thought, 3) understanding emotions, and 4) managing emotions. Mayer, Salovey, and Caruso have developed an ability-type test, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) that has two tasks for each of the four branches (see Table 4 for a description of each task). As an ability-type test, there are "more or less" correct answers to each item, based on either general consensus of the normative sample or expert scoring.

The topic of emotional intelligence is controversial because many critics doubt whether emotional intelligence is conceptually different from already-established personality traits such as emotional stability, anxiety, or agreeableness (Davies, Stankov, & Roberts, 1998; Matthews, Roberts, & Zeidner, 2004; Schulte, Ree, & Carretta, 2004). Salovey and Mayer (1990) work from an "ability model," and define emotional intelligence as the capacity to encode, process, and utilize emotional information for

problem solving and personal growth. Proponents of emotional intelligence distinguish this capacity from personality and dispositional characteristics, which reflect relatively enduring ways that individuals differ from one another (Law, Wong & Song, 2004). However, many alternative conceptions of emotional intelligence, for example, those popularized by Goleman (1996; Goleman, Boyatzis, & McKee, 2002) and Bar-on (1997), do not focus on the ability model. The models proposed by Goleman and Bar-on have been termed "mixed" models, basically describing a laundry list of work-related competencies such as stress tolerance, self-confidence, assertiveness, initiative, and optimism.

A second contributing factor in this controversy is that emotional intelligence is sometimes measured with self-report scales. Such scales generally contain items asking people about their behaviors and attitudes related to emotions (e.g., "I have control over my emotions"). The items are similar to those found on self-report measures of the five factor personality traits. Consequently, substantial correlations have been found between the two. Warwick and Nettelbeck (2004) report correlations between the Trait Meta Mood Scale and Big Five traits in the range of .22 (Conscientiousness) to .34 (Extraversion). Schutte et al. (1997) developed a self-report measure of emotional intelligence based on the ability paradigm and still found correlations in the range of .21 (Conscientiousness) to .54 (Openness). In addition, a much-cited factor analysis revealed that all dimensions of emotional intelligence proposed by Mayer and Salovey map onto personality dimensions, with the exception of an Emotion Perception factor (Davies, Stankov, & Roberts, 1998).

When emotional intelligence is measured with their ability test, Mayer, Salovey, and Caruso (2004) report lower correlations between the MSCEIT and the five factor traits, ranging from .06 (Extraversion) to as high as .21 (Agreeableness). However, Schulte, Ree, and Carretta (2004) regressed general cognitive ability, Agreeableness, and sex onto scores from the MSCEIT and found a multiple correlation of .81 after correcting for unreliability. Since much of the variance in MSCEIT scores were explained by these other variables, the added value of emotional intelligence was called into question.

The above construct validation research in emotional intelligence has primarily involved differentiating the construct from major personality traits and general intelligence. The current research questions whether emotional intelligence can be differentiated from social competence. The two constructs are conceptually similar. Emotional intelligence involves understanding and utilizing one's own and other's emotions to solve problems and guide social behavior. Social competence also involves recognizing and controlling emotions in oneself and others, but also recognizing what others are thinking and what motivates others, and using this information to achieve social goals. Salovey and Mayer (1990) suggested that emotional intelligence was a component of social intelligence. Similarly, Schneider et al. (2002) stated that emotional intelligence was likely a narrower construct that could be represented by SCI factors. However, research that demonstrates this is limited. The current study will address this deficit by examining whether emotional intelligence, as measured by the MSCEIT, can be represented in factor space by the SCI factors.

Development of Hypotheses for Emotional Intelligence

MSCEIT. The MSCEIT consists of four branches, with two tasks in each branch. The four branches are 1) perceiving emotions, 2) using emotions to facilitate thought, 3) understanding emotions, and 4) managing emotions. Scores from the four branches can be combined into a Total score. Mayer, Salovey, and Caruso (2004) recommend using scores from the Total or Branch levels, rather than the task levels, which are less reliable when used individually. The current study will use the Branch scores since they form the basis of the definition of emotional intelligence.

Branch 1 of the MSCEIT, Perceiving Emotions, is the capacity to recognize emotions in others based on facial expressions or other nonverbal displays. As shown in Table 2, the SCI Social Insight scale is also defined in part as discerning the motivations, feelings, and intentions of others, and appears to the content of Branch 1. Because the Social Insight scale is included in the broader SCI Social Mastery factor, the following hypothesis is proposed.

Hypothesis 7a. The SCI Social Mastery factor will load on Branch 1 (Perceiving Emotions) of the MSCIET.

Branch 4 of the MSCEIT, Managing Emotions, involves managing and controlling one's own emotions, as well as developing strategies for managing other's feelings to achieve desired outcomes. Similarly, the SCI Social Control factor entails developing and implementing plans to manage others based on knowledge of their feelings and motivations. The following hypothesis is proposed.

Hypothesis 7b. The SCI Social Control factor will load on Branch 4 (Managing Emotions) of the MSCEIT.

Branch 2, Using Emotions to Facilitate Thought, involves the capacity of emotions to assist thought processes. As an example, Mayer and Salovey (1990) suggest that positive emotions are useful for stimulating creative processes or idea generation. Branch 3, Understanding Emotions, involves an understanding of how emotions change in intensity as well as knowledge of the emotions involved in complex social situations. Branches 2 and 3 do not appear to coincide with any of the SCI scales or dimensions, and are not expected to exhibit substantial factor loadings with any of the SCI factors.

CHAPTER II

METHOD

Participants

Participants were 247 undergraduate students from introductory psychology courses who volunteered for partial fulfillment of a course requirement. The sample ranged in age from 18 to 31, with the average age being 20 years old. Thirty-eight percent of the sample was male. The ethnicities of the sample were: 85.8% white, 3.2% Hispanic, 1.6% African American, and 2.4% Asian. The remaining 6.9% of the sample chose not to report their ethnicity.

Measures

Social Competence Inventory (SCI; Schneider, 1998). The SCI (version 2) consists of 368 items. There are 27 scales with anywhere from 4 to 23 items per scale. Table 2 shows the scale names and definitions. Factor analyses in two different samples (Schneider et al., 2002, Morrison & Heggestad, 2004) showed that the SCI scales

grouped into four factors: Social Mastery, Social Responsiveness, Social Maturity, and Social Control. The development of the SCI as well as validation evidence was described in the Introduction. Participants indicated the extent to which the statements were true of themselves on a 5-point Likert-type scale (1 = *Definitely false* and 5 = *Definitely true*).

Mayer-Salovey-Caruso Emotional Intelligence Test (MSCIET) (Mayer, Salovey, & Caruso, 2002). The MSCEIT is a 45-minute test comprised of eight tasks: two to measure each of the four branches of emotional intelligence. Table 4 provides a description of each branch and its associated tasks. There are a number of item formats. For example, two tasks involve identifying emotions in faces and pictures. Respondents are presented with a face (or photograph) and asked to rate how much of five different emotions are present in the face (or photograph). The rating scale for the emotion "excitement" contains five different facial drawings of different levels of excitement. Other tasks involve choosing the best alternative to a series of questions (e.g., "Acceptance, joy, and warmth often combine to form..."), with a response format similar to a multiple choice exam. Because the MSCEIT is an ability-type test, there are more or less "correct" answers. The scoring is based on the general consensus of 5000 test takers included in the normative sample. The MSCEIT user's manual reported that high scores on the MSCEIT were related to outcomes such as greater secure attachment in relationships and lower problem behaviors and violence.

Social Skills Inventory (SSI; Riggio, 1989). The SSI is a 90-item measure encompassing six scales with 15 items per scale. Example items of each scale are as follows: Emotional Expressivity ("I am able to liven up a dull party"), Emotional Sensitivity ("I sometimes cry at sad movies"), Emotional Control ("I am easily able to

make myself look happy one minute and sad the next"), Social Expressivity ("When telling a story, I usually use a lot of gestures to help get the point across"), Social Sensitivity ("Sometimes I think that I take things other people say to me too personally"), and Social Control ("I am usually very good at leading group discussions"). The SSI manual reports convergent and divergent validity evidence for the SSI scales. As an example, correlations supporting convergent validity were shown between the SSI Emotional Expressivity scale and the 16PF dimensions of Outgoing, Assertive, and Bright. In terms of divergent validity, all SSI scales were negatively related to a measure of Social Anxiety. Participants indicated the extent to which each statement was an accurate description of themselves on a 5-point Likert-type scale (1 = *Not at all like me* and 5 = *Exactly like me*).

Self-Monitoring Scale (SMS; Gangestad & Snyder, 1985) The SMS is an 18-item measure that distinguishes between individuals who tend to monitor situational cues and adjust their behavior to match what is appropriate for the situation (called high self-monitors) and individuals who do not (called low self-monitors). Each item is "keyed" true or false, such that high self-monitors tend to answer in the keyed direction. An example item keyed in the "true" direction is, "I can look anyone in the eye and tell a lie with a straight face." An example item keyed in the "false" direction is, "I feel a bit awkward in public and do not show up quite as well as I should."

Witt, Ferris, and Hochwarter (2001) Social Skills Survey. The 7 items on this measure are: a) I find it easy to put myself in the position of others; b) I am keenly aware of how I am perceived by others; c) In social situations, it is always clear to me exactly what to say and do; d) I am particularly good at sensing the motivations and hidden

agendas of others; e) I am good at making myself visible with influential people in my organization; f) I am good at reading others' body language; and g) I am able to adjust my behavior and become the type of person dictated by any situation. Little construct validity evidence is available for this measure, although Ferris et al. (2001) reported positive correlations between the 7 items and related personality traits such as Extraversion and Agreeableness. Witt and Ferris (2003) also demonstrated that social skill was positively related to performance in sales workers, where effective job performance presumably requires effective social interaction. Participants indicated the extent to which they agreed with each statement on a 5-point Likert-type scale (1 = *Strongly Disagree* and 5 = *Strongly agree*).

Social Self-Efficacy Scale (SSES; Sherer et al., 1982). This is a subscale of a larger measure, the Self-Efficacy Scale, which was intended to measure general self-efficacy. Factor analyses in the Sherer et al. (1982) study found two factors, which they labeled general self-efficacy and social self-efficacy. The Social subscale contains 6 items. An example item is, "when I'm trying to become friends with someone who seems uninterested at first, I don't give up easily." Participants indicated the extent to which the statements were true of themselves using a 5-point Likert-type scale (1 = *Definitely false* and 5 = *Definitely true*).

Questionnaire Measure of Emotional Empathy (QMEE; Mehrabian & Epstein, 1972). The QMEE is a 33-item measure of the tendency to experience emotions felt by others. Example items are, "it makes me sad to see a lonely stranger in a group," and "some songs make me happy." Validation efforts reported by Mehrabian and Epstein indicate that high scores on the QMEE are related to lower instances of aggression and

greater helping behavior. Participants responded to each item on a true/false format.

Hogan Empathy Scale (Gough, 1987). The Hogan Empathy scale is made up 38 items of the larger California Personality Inventory (CPI). Items on the CPI were developed using empirical keying methodology, meaning that the items were chosen based on their ability to discriminate between groups of known empathetic and non-empathetic individuals based on an outside criterion. Sample items are "I like poetry," "I would like to be a journalist." The items were answered in true/false format.

Procedure

The study took part in two sessions (a one-hour session, and a two-hour session, for a total of three hours from each subject). In the first session, participants read and completed a consent form, indicating understanding that their responses would be used in aggregate form and for research purposes only. Participants then completed the MSCEIT via computer. Review and completion of the consent form process, providing instructions for the MSCEIT, and completion of this test took one hour. In the second session, subjects completed all survey measures in paper-and-pencil format using scantron forms. To increase the accuracy of the responses, participants were guaranteed anonymity. Completion of the surveys took two hours. Subjects were assigned a 3-digit code that was used to link their responses to the MSCEIT with the paper and pencil surveys they took in the second session.

Planned Analyses

Joint factor analysis will be used to address the dual purposes of this study: a) to determine whether the sample of extant social competence-type measures can be organized in the same factor space as the proposed integrative SCI, and b) to examine whether, if at all, emotional intelligence is different from social competence. A joint factor analysis includes multiple measures of similar constructs that may use different organizing frameworks to conceptualize the constructs. It is a common analysis technique in this line of research. For example, Church (1994) used joint factor analysis to demonstrate that the MPQ higher-order personality constructs could be well organized under the NEO five factor structure, and vice versa. Similarly, Ashton, Jackson, Helmes, and Paunonen (1998) used joint factor analysis to show that factors from the Personality Research Form and the Jackson Personality Inventory mapped onto the Big Five factor space.

In the current study, scale scores from the SCI and all self-report measures will be included in a Principal Axis Factoring (PAF) with Promax rotation. A second PAF will be performed, this time including the four branches of the MSCEIT. Principal Axis Factoring was chosen because it recognizes measurement error and analyzes only the variance shared among the variables. This is in contrast with Principal Components Analysis, which assumes no error in measurement and analyzes all variance (shared, unique, and error). Because the intent of the current research was to examine commonalities among the various social competence constructs, shared variance is of interest. An oblique rotation was used because it is expected the factors will be fairly correlated. The latent factors of a trait complex typically exhibit varying degrees of

correlation. An orthogonal rotation would force the factors to be uncorrelated, thereby masking their true relationships.

A number of criteria can be used to determine how many factors should be retained in a factor analysis. Selecting factors with eigenvalues greater than 1.0 has traditionally been one such criterion. However, particularly when using a large number of variables, this criterion tends to overestimate the number of factors that should be extracted (Tabachnick & Fidell, 2001). Examination of the scree plot, which displays the eigenvalues plotted against factors in a downward slope, is a second criterion. The point at which the slope levels off is the stopping point for extracting factors; however determining this exact point can be somewhat subjective. While examination of the scree plot will be performed in the current analyses, greater consideration will be given for well-defined and interpretable factors. This is a prudent choice particularly given the choice of oblique rotation, which tends to "muddy the waters" of a factor analysis and make interpretation challenging.

Criteria were established a priori to determine what would constitute support for the hypotheses. In order for a hypothesis to be declared "supported," the scale in question must show a factor loading of .35 or above with the intended factor. This loading criterion is somewhat larger than the generally accepted .32 level often used in factor analysis research (Tabachnick & Fidell, 2001). If the scale cross-loads .35 or above with non-intended factors as well as its hypothesized factor, this will be taken as partial support for the hypothesis.

CHAPTER III

RESULTS

Descriptive Statistics and Correlations

Scale intercorrelations, means, standard deviations, and reliability coefficients (Cronbach's alpha) are presented in Table 5. Reliabilities for the most part were over .70, which is generally considered an acceptable level for instruments used in research settings (Nunnally, 1978). The exceptions were four scales which had somewhat lower reliabilities: SCI Adaptability .60, the Self-Monitoring Scale .60, the Hogan Empathy Scale .60, and the FWH Social Skills Survey .65.

The correlation matrix was examined to look for patterns of relationships. Sex (coded 1=female, 0=male) was significantly positively correlated with 22 out of the 41 scales included in the study, indicating that females generally rate themselves higher on social competence compared to males. Age correlated negatively with most social competence scales, although only 11 represent significant relationships. The four

branches of the MSCEIT overall show small correlations with the other scales, generally in the .10 to .20 range.

Several expected correlations in a convergent-divergent validity sense are worthy of note. The SSI Social Expressivity scale (essentially oral communication skills) correlated .76 with SCI Conversation Skills and .60 with SCI Charisma. The SSI Emotional Expressivity scale (essentially nonverbal communication skills) correlated .72 with SCI Nonverbal Expressiveness. The SCI Empathy scale correlated .74 with the Questionnaire Measure of Emotional Empathy, but less so, .27, with the Hogan Empathy Scale. This finding makes sense given that the SCI Empathy scale is designed to measure the felt emotions aspect of empathy, rather than the intellectual understanding-type of empathy captured by the Hogan. The SSI Emotion Control scale correlated .40 with SCI Emotion Control, but negatively correlated with SCI Empathy, -.36, and SCI Nonverbal Expressiveness, -.38. The Social Self-Efficacy Scale correlated .66 with SCI Social Self-Confidence and .78 with SCI Sociability. The FWH Scale, which purports to measure several aspects of social competence, was significantly positively correlated with 23 of the 26 SCI scales.

SCI Factor Structure

Because a primary aim of this study was to demonstrate that measures of social competence can be well organized under the SCI four-factor structure, the first step in the analysis was to confirm there were indeed four factors making up the SCI. The 26 SCI scales were put through a principal axis factoring with Promax rotation. Inspection of the scree plot (shown in Figure 1) suggested that four or five factors be retained; however,

the rotated factors were not easily interpretable in the five-factor solution. For example, the fifth factor was defined by a single scale, Negotiation Skills, an indication that the factor is poorly defined (Tabachnick & Fidell, 2001). A four-factor solution offered better interpretation and closely replicated the results of Schneider's 2002 study. The rotated pattern matrix is shown in Table 6.[1] The factor loadings surrounded by asterisks show the "correct" location of factor loadings according to the framework established by Schneider et al. (2002) that is shown in Table 2. Overall, this four-factor structure was consistent with past research in that 18 of the 26 scales show the expected location of factor loadings, with exceptions as described below.

The first factor is Social Mastery, which accounted for 34.6% of the variance, and was defined by being sociable, calm, and confident in social situations. In contradiction to the Schneider et al. (2002) study, the Social Mastery factor exhibits loadings on four scales (Sociability, Charisma, Negotiating Skills, and Team Orientation) that are expected to define other factors (see Table 2). The second factor, Social Maturity, accounted for 8.2% variance and was defined by listening skills, controlling emotions, handling conflict, and being nonaggressive.

The third factor is Social Responsiveness, accounting for 6% of the variance, and is defined by empathy and expression of emotions, as shown by a high positive loading on Nonverbal Expressiveness and a negative loading on Emotion Control. This factor was expected to load on two other scales: Warmth and Social Memory. Instead, however,

[1] PAF provides both a pattern matrix and a structure matrix. The pattern matrix is typically chosen to interpret the factors in a PAF. The values in the pattern matrix represent the unique contribution of each factor to the variance of each variable, not including the variance that comes from the overlap between the correlated factors. The values in the structure matrix are usually larger, or inflated, because they include the variance that comes from the correlated factors.

Social Responsiveness and Social Maturity cross-load on Warmth, and none of the factors show salient loadings for Social Memory.

The fourth factor is Social Control, accounting, for 4.2% of the variance and is defined by social planning ability and impression management. Although this last factor is defined by only two scales, the scales are highly correlated at .51, and less correlated with other scales (most correlations less than .30), which provides support that the scales can define a factor (Tabachnick & Fidell, 2001).

The communality values in the last column of Table 6 are the proportion of explained variance for each variable, taking into account the correlations between the factors. Many of these values are large, indicating that the variables are well explained by the four-factor structure. A notable exception is the communality for Social Memory, .19, which is also the only scale that showed no salient factor loadings.

The factor correlation matrix for the four-factor solution is shown in Table 7. Social Mastery and Social Maturity are highly correlated at .58. Social Maturity and Social Responsiveness are correlated .39. In contrast, Social Control is relatively uncorrelated with any of the other factors.

Joint Factor Analysis with SCI and Extant Social Competence Measures

The 26 SCI scales, six SSI scales, Self-Monitoring Scale, Social Self-Efficacy Scale, Hogan Empathy Scale, Questionnaire Measure of Emotional Empathy, and Ferris-Witt-Hochwarter Social Skills Survey were put through a principal axis factoring with Promax rotation. Two tests of sampling adequacy were used to ensure that the degree of correlations among the variables was sufficient enough that a factor analysis would help

clarify the relationships between them. First, the Kaiser-Meyer-Olkin (KMO) statistic was .91, which is above the conventional .60 threshold (Tabachnick & Fidell, 2001). Second, Bartlett's test was examined, which tests the hypothesis that the correlations in the correlation matrix are not zero. This test was significant, indicating sufficient intercorrelation to use factor analysis to explain the relationships among the variables. Examination of the scree plot (shown in Figure 2) suggested that either four or five factors could be extracted. The four-factor solution offered a clean interpretation. Therefore, four factors were selected to be retained and Table 8 shows the rotated pattern matrix for the four-factor solution. The scales are shown in the same order as Table 6 for comparison of how including the extant social competence measures impacted the factor loadings. The four factors accounted for 53.2% of the variance. Visual inspection of the factor loadings was used to interpret the factors.

Overall, the factors corresponded well to the four SCI factors. Factor 1 is clearly the Social Mastery factor, with large loadings for seven SCI scales defining this factor (shown in italics, e.g., Social Calmness, Conversation Skills, Social Self-Confidence, Social Influence). Social Mastery loaded on several of the outside measures, including three of the Social Skills Inventory scales (SSI Social Expressivity, SSI Social Control, and SSI Emotional Expressivity), the Social Self-Efficacy Scale, and the Hogan Empathy Scale. In addition, the Self-Monitoring Scale and the FWH Social Skills Survey show their largest factor loadings for this factor, at .69 and .39, respectively, although these two measures exhibit factor cross-loadings with other factors as well. This factor accounts for 32.7% of the variance. Given the large number of scales that define the Social Mastery factor, it appears to be a catch-all factor involving a range of effective social behaviors,

including being confident, charismatic, possessing basic oral and nonverbal communication skills, and influencing others.

Factor 2 corresponds well to the Social Maturity factor and accounts for 8% of the variance. There were large loadings for seven of the SCI scales defining this factor (shown in italics, e.g., Listening Skills, Emotion Control, Nonaggressiveness, Conflict Management). Social Maturity loaded on SSI Emotional Sensitivity and shows a cross-loading with the QMEE as well. The factor appears to involve behaving in a courteous and well mannered way, even in the face of disagreements or conflict. The conflict management and emotion control components entail not being afraid to face disagreements and not getting worked up or upset emotionally during disagreements with others.

Social Responsiveness is the third factor (accounting for 7.8% of the variance), with large loadings for SCI scales Empathy and Nonverbal Expressiveness, both of which are intended to define this factor. SCI Emotion Control shows a cross-loading that is essentially equal to its loading for the Social Maturity factor. Outside measures that help define this factor are SSI Emotional Expressivity and the QMEE. Taking into account these scales, the Social Responsiveness factor seems to represents a tendency to recognize the emotions others are feeling and some component of expressing one's own emotions. The expression of emotions, captured by SCI Nonverbal Expressiveness and SSI Emotional Expressivity, appears split between this factor and Social Mastery.

Factor 4 corresponds well to the Social Control factor and accounts for 4.8% of the variance. The factor is defined by SCI Impression Management, SCI Social Planning ability, and SSI Social Sensitivity, which involve behaving in ways to enhance one's

reputation and an appreciation for social rules. The negative loading for Social Calmness indicates this factor is partially defined by a tendency to be concerned or anxious about what others think.

In summary, a four-factor solution was achieved in this analysis, with all four factors corresponding to the SCI factors. All of the extant social competence measures were organized in the SCI factor space. The communality values shown in the last column of Table 8 indicate the proportion of each variable's variance explained by the factors. For the extant social competence measures, these values range from .37 for the Hogan Empathy Scale to .74 and .76 for the SSI scales. The magnitude of these communalities may be taken as support that the variance in these outside measures is well explained by the four SCI factors.

Table 9 shows the factor correlation matrix for this joint four-factor solution. The pattern of correlations is similar to that of Table 7 (e.g., Social Mastery and Social Maturity exhibit the largest correlation at .47). However, the correlations are of slightly smaller magnitude now that the extant measures are included.

Joint Factor Analysis with SCI, Extant Social Competence Measures, and MSCEIT

The joint factor analysis was repeated, this time including the four branches of MSCEIT to help clarify similarities and differences between emotional intelligence and social competence constructions. A KMO statistic of .90 and a significant Bartlett's test were still indicative that the variables were correlated enough to use factor analysis. Inspection of the scree plot (show in Figure 3) suggested that five or six factors might be retained. A six-factor solution resulted in two relatively ill-defined factors. Therefore, the

five-factor solution was retained.

Table 10 shows the rotated pattern matrix for the five-factor solution. The five factors accounted for 52% of the variance. Again, the scales are presented in the same order as Table 8 to facilitate comparison of how the addition of the MSCEIT might influence the factor loadings. Factors 1 through 4 are similar to the previous factor analysis. The factors are Social Mastery, Social Maturity, Social Responsiveness, and Social Control, respectively. The addition of the MSCEIT did not appreciably alter the location of where the extant social competence measures loaded, nor were the magnitude of the factor loadings impacted.

Factor 5 is clearly Emotional Intelligence, with salient loadings for all four branches of the MSCEIT. None of the other four factors showed salient loadings on the MSCEIT branches. This factor accounted for 2.7% of the variance. The Emotional Intelligence factor did not exhibit salient loadings on any of the SCI or SSI scales involving controlling or expressing emotions, suggesting that the processing of or thinking about emotional information is distinct from the expression of emotions. However, this factor did load .29 on the SCI Social Insight scale. This loading is under my chosen criteria of .35, but since the purpose is to examine similarities and differences between the construct, the loading is salient enough to warrant attention. While the factor loading is not an exact correlation, it can generally be interpreted as showing some degree of relationship between social insight and emotional intelligence. Looking at the correlation between Social Insight and the MSCEIT branches (Table 5, column labeled 6), Social Insight is correlated .20 with Perceiving Emotions and .20 with Understanding Emotions. These correlations make sense considering that the Social Insight scale

involved discerning the motivations and feelings of others by interpreting behavioral cues, including emotional expressions, of others. A slightly larger correlation, .26, is seen between Social Insight and Managing Emotions, which involves knowing how to manipulate one's own or other's emotions.

The communality values shown in the last column of Table 10 are similar as those shown in the previous factor analyses. For the MSCEIT branches, however, the communalities are fairly small, from .19 for Perceiving Emotions to .38 for Managing Emotions. The factor correlation matrix is presented in Table 11. Again, the pattern of the correlations is similar as before, with Social Mastery and Social Maturity showing the highest correlation at .47. Emotional Intelligence was correlated .20 with Social Maturity, and relatively uncorrelated with the other factors.

Examination of Hypotheses

The hypotheses were evaluated based on the final joint five-factor solution. Because of the large number of hypotheses, the results are summarized in Table 12. Three of the 13 hypotheses were supported and three were partially supported.

Overall, the joint factor analysis suggested that all six of the six SSI scales could be organized under the SCI factors. However, only one of the hypotheses was fully supported since most scales loaded on other SCI factors rather than the ones specified in the hypotheses. Hypothesis 1a was that the SCI Social Mastery factor would load on the SSI Emotional Sensitivity scale. This hypothesis was not supported. In fact, SSI Emotional Sensitivity had the highest loading, .48, with the Social Maturity factor. Hypothesis 1b was that the SCI Social Mastery factor would load on the SSI Social

Expressivity scale. This hypothesis was supported by a .85 factor loading, and no large cross-loadings for any other SCI factor. Hypothesis 1c was that the SCI Social Responsiveness factor will load on the SSI Emotional Expressivity scale. This hypothesis was only partially supported. In fact, the SSI Emotional Expressivity scale showed the largest factor loading, .68, with the Social Mastery factor, as well as a loading of .53 with the Social Responsiveness factor. Hypothesis 1d stated that the SCI Social Maturity factor would load on the SSI Social Sensitivity scale, when in fact three factors cross-loaded on this scale. Social Maturity did show a .41 loading on this scale; therefore this hypothesis received partial support. Hypothesis 1e stated that the SCI Social Maturity factor would load on the SSI Emotional Control scale. This hypothesis was not supported. Instead, Social Responsiveness loaded on this scale -.71. Hypothesis 1f stated that the SCI Social Control factor would load on the SSI Social Control scale. This hypothesis was not supported since instead the SCI Social Mastery factor loaded .77 on this scale.

Hypothesis 2 stated that the SCI Social Maturity factor would load on the Self-Monitoring Scale. This hypothesis was not supported. Instead, the Social Mastery factor loaded .71 on the Self-Monitoring Scale.

Hypothesis 3 stated that the SCI Social Mastery factor would load on the Social Self-Efficacy Scale (SSES). This hypothesis was supported, with a factor loading on .74 on the SSES, and no other large factor cross-loadings.

Hypothesis 4 stated that the SCI Social Maturity and Social Control factors would cross-load on the Ferris, Witt and Hochwarter Social Skills Survey (FWH). This

hypothesis was not supported. Instead, the opposite two SCI factors cross-loaded on this scale, with loadings of .41 for Social Mastery factor, and -.36 for Social Responsiveness.

Hypothesis 5 stated that the SCI Social Mastery factor would load on the Hogan Empathy Scale. This hypothesis was supported, with Social Mastery loading .44 on the Hogan scale, and no other large factor cross-loadings.

Hypothesis 6 stated that the SCI Social Responsiveness factor would load on the Questionnaire Measure of Emotional Empathy (QMEE). This hypothesis was only partially supported, with a Social Responsiveness factor loading of .46 and a Social Maturity factor loading of .42 on the QMEE.

Hypothesis 7a stated that the SCI Social Mastery factor would load on Branch 1 of the MSCEIT, Perceiving Emotions. Hypothesis 7b stated that the SCI Social Control factor would load on Branch 4 of the MSCEIT, Managing Emotions. Neither of these hypotheses were supported, as all four branches of the MSCEIT defined their own factor.

Joint Factor Analysis using the Short Version of the SCI

Because there were more SCI scales (a total of 26) than SSI scales and other outside measures (a total of 17), it is possible that the SCI scales could overdetermine the joint factor solution. Therefore, an additional factor analysis was performed using a short version of the SCI.

A 50-item version of the SCI was created in a separate data collection (Morrison & Heggestad, 2004). Homogenous item composites (HIC) were assembled to serve as markers for each of the four SCI factors. To assemble the HICs, items within each SCI factor were randomly assigned to composites in the following manner: The 15 items in

the Social Mastery factor were randomly assigned to 3 HICs. The 14 items in the Social Responsiveness factor were divided into 3 HICs. The 11 items in the Social Maturity factor were divided into 3 HICs. The 10 items in the Social Control factor were divided into 2 HICs. This procedure resulted in a total of 11 HICs for the SCI.

The 11 SCI HICs, and the 17 scales from the outside measures were put through a principal axis factoring with Promax rotation. Inspection of the scree plot suggested that five factors be retained. The rotated pattern matrix is presented in Table 13. In this analysis, the first four factors are clearly the SCI factors and the fifth is again emotional intelligence defined by the four branches of the MSCEIT. All of the SCI factors loaded on their intended HICs. The pattern of loadings for the outside scales is very similar to the previous factor analyses. The Social Mastery factor loads on the same three SSI scales, along with the SSES and Hogan Empathy scale, and now loads solely on the Self-Monitoring Scale and FWH. The second factor is Social Responsiveness, with loadings for the QMEE and SSI Emotional Sensitivity. Factor 3 is Social Maturity, with a salient loading for SSI Emotion Control. The fourth factor is Social Control, with the largest loading for SSI Social Sensitivity.

CHAPTER IV

DISCUSSION

The purpose of this study was to work toward a unified framework of social competence dimensions by examining the interrelations among multiple existing measures of the construct. In addition, this study sought to clarify the similarities and differences between social competence and a related construct, emotional intelligence. The Social Competence Inventory (SCI) was proposed to be the most integrative measure, such that all other measures could be well organized under the four factors of the SCI. A joint factor analysis was conducted including the 26 SCI scales, an ability-type measure of emotional intelligence, and five other social competence-type measures, with the general expectations that a) the four SCI factors would emerge, and b) all measures would be organized in the factor space defined by the SCI.

SCI Inclusive of Extant Social Competence Measures

The results of the joint factor analysis using all 26 SCI scales and the extant social competence measures indicated a four-factor solution. The factors did correspond to the four SCI factors. All of the SSI scales, the Social Self-Efficacy Scale, the Self-Monitoring Scale, the FWH Social Skills Survey, the Hogan Empathy Scale, and the Questionnaire Measure of Emotional Empathy were organized under the SCI factors; however, not always in the hypothesized manner. In fact, only three of the 13 hypotheses were fully supported, and three hypotheses received partial support.

The reason for the failed hypotheses is not immediately apparent. The hypotheses were based on the author's comparison of scale definitions and item content. Perhaps a more rigorous technique for hypotheses development, such as use of a panel of subject matter expects (SMEs) engaged in a card sorting exercise with items, would have resulted in different and more supported hypotheses. The magnitude of the factor correlations is another alternative explanation. For example, I hypothesized that the Social Maturity factor would load on SSI Social Sensitivity and the Self-Monitoring Scale, when in fact the Social Mastery factor loaded on these scales. For another hypothesis just the opposite happened: I hypothesized that Social Mastery would load on SSI Emotional Sensitivity, when in fact Social Maturity loaded on this scale. The correlation between the Social Mastery and Social Maturity factors was .47 and may have been large enough to preclude the ability to specify a priori the exact location of their factor loadings.

In terms of serving as an integrative measure of social competence, the SCI shows excellent promise. Measures of a variety of social competence variables, including verbal and nonverbal communication skills, self-confidence, empathy, and insight regarding

social cues, are all represented by the SCI factor space. In addition, the magnitude of final communalities were large, indicating that variance in these outside measures was well explained by the four SCI factors. Even in the post hoc factor analysis that used fewer SCI markers, the SCI four factors still emerged, and the outside measures were well organized under the four factors. The results offer tentative support that the broad factors Social Mastery, Social Responsiveness, Social Maturity, and Social Control can be used to organize the more narrow dimensions. This finding does not suggest that measures of more narrow social competence dimensions, such as the Self-Monitoring Scale, are somehow less valuable than the SCI. An omnibus instrument such as the SCI may actually be less useful in some situations compared to a more narrow measure. For example, instruments that measure a narrow predictor are better for predicting narrow criteria. However, for the purposes of organizing the multitude of social competence variables in this research area, the SCI represents the best effort to date.

On a more cautionary note, the data from the current study indicate that construct validity work still needs to be done on the SCI. Specifically, some differences in the factor structure of the SCI were noted when comparing this study, which used a student sample, with the Schneider 2002 study, which used a military enlistee sample. Using the military sample as the organizing framework, 18 of the 26 scales in the current study loaded in their intended location. For example, for the military sample, charisma (i.e., inspiring enthusiasm and trust in others) and negotiating skills (i.e., enjoying and being effective at negotiating) are part of the Social Control factor. For the student sample, charisma and negotiating skills are part of Social Mastery factor. The differences in factor structure between the military and student samples suggest that the framework is not yet

well established. Being charismatic and effective at bargaining with others in the student sample contributes to a more general sense of comfort and confidence in social situations, whereas in the military sample, these attributes contribute to developing and implementing plans to control others. This finding suggests that the two samples have a different frame of reference when answering items on the SCI. Similar to items on personality inventories, items on the SCI are noncontextual. They do not provide a specific situation and are open to interpretation of the individual respondent. When answering the SCI charisma item, "when you talk to someone, you make them feel really good about themselves," a student respondent may have considered talking to someone at a party, while a military enlistee respondent may have considered speaking to fellow enlistees during a training exercise.

Research shows that placing items in a specific context does influence the way subjects respond to items. For example, Conscientiousness items show greater criterion-related validity in the prediction of job performance when placed specific work contexts compared to noncontextual items (Bing, Whanger, Davison, & VanHook, 2004). In this study, it appears that failing to include specific contexts may have influenced the factor structure or construct validity/factorial validity of the measure. Such a problem will likely hinder efforts to achieve an integrative taxonomy of social competence dimensions.

In order to determine if the SCI factor structure generalized across two student samples, the SCI rotated pattern matrix from Table 6 is replicated in Table 14, with the addition of data from a previous student sample. The larger font is from the current sample, and the loadings in parentheses are from a similar factor analysis done with a student sample in Morrison & Heggestad (2005). Using the previous student sample as

the framework, 20 of the 26 scales loaded in their intended location, not a vast improvement from the military sample framework. The Social Mastery scale was better replicated with the exception of the Social Insight and Coaching Skills scales. The Social Control factor was completely replicated comparing the student samples, with only two scales (Social Planning and Impression Management) defining the factor. The Social Maturity and Social Responsiveness factors show the greatest inconsistencies in terms of location of factor loadings.

It should be noted that some researchers argue that less concern needs to be given to identifying one common framework of social competence. Rather, research can focus more on the components of social competence that show up again and again. Kosmitski and John (1993) argue that there may not be one prototypical set of factors that make up social competence. Instead, the more useful question may be to ask which factors are more central to the concept of social competence than other factors. Continuing with example of the charisma scale noted above, regardless of what charisma is used for, it is doubtless an important component of overall social competence. The finding that expressing or controlling emotions seems to cut across multiple social competence factors may also support this contention.

Social Competence and Emotional Intelligence

Although Salovey and Mayer (1990) and Schneider et al. (2002) had suggested that emotional intelligence was a subset of social competence, in this study the four branches of the MSCEIT defined their own factor. The communality values for the four MSCEIT branches were also low compared to communalities of other measures,

indicating that the variance in branch scores could not be well explained by the social competence factors. The Emotional Intelligence factor did not exhibit salient loadings on any of the social competence variables related to emotional expression. In addition, the Emotional Intelligence factor was only minimally correlated with any of the social competence factors. These findings suggest that emotional intelligence is not a subset of social competence as originally suggested, but something entirely different. That is, the processing of emotions and thinking about emotional information, captured by the MSCIET, could be distinct from the ability or tendency to communicate emotional information in social settings. However, an alternative explanation is that this fifth factor is merely a method factor. The MSCEIT was the only ability-type measure included in the current study; the rest of the measures were self-report. The items on the MSCEIT are quite different from those on the SCI and other measures. For example, some MSCEIT items resemble situational judgment tests in which there are more or less "correct" responses. It may be that the presence of the fifth factor is due to the difference in item format of the MSCEIT.

Strengths and Limitations

This study makes a contribution to the social competence literature in a few ways. While much social competence research has looked at the interrelations between social competence and personality and cognitive ability, the current study examines multiple social competence measures simultaneously. In doing so, I was able to provide some preliminary evidence that the SCI operates as a measure that is integrative of other existing social competence constructs. The findings add to the research base by

addressing the need for more rigorous definition and integration of the multitude of extant social competence-related constructs. It is an important step in bringing coherence to this disjointed field. In addition, by including the MSCEIT, an ability-type measure of emotional intelligence, this study was able to demonstrate that emotional intelligence, as measured by the MSCEIT, appears distinct from social competence. No research to date had clearly demonstrated that distinction.

There are also limitations of the current study, one of which is the factor analysis technique used. Although factor analysis provided a way to examine the integrative qualities of the SCI, it should be noted that results of factor analysis depend on what measures are included, and that the results of this study could have differed if other measures were included. Although every attempt was made to include a broad range of instruments, there are other measures out there. For example, the Chapin Social Insight test is an ability-type test similar to the MSCEIT with more or less "correct" answers. Perhaps the inclusion of that instrument may have resulted in salient loadings for the Emotional Intelligence factor. In addition, given the multiple measures already included in the study, time constraints precluded the ability to include measures of general cognitive ability and personality traits.

Another limitation of the current study is that, because all variables were collected from a common source, common method variance may have influenced the results. Common rater effects, such as the consistency motif, and item characteristic effects, such as item social desirability, could exert a systematic effect on the observed correlations between the measures. Measurement error due to common rater effects can either inflate or deflate the observed relationships between the variables depending on their true

correlation. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) demonstrated, for example, that if the true correlation between two personality variables is .50, common rater effects will tend to deflate the correlation to .33. If the true correlation between two personality variables is zero, the authors showed that measurement error can cause an observed correlation of .13. Given that the variables included in this study represent similar constructs, there is undoubtedly some true correlation. If measurement error due to common rater effects did deflate the observed correlations in the current study, and thereby the amount of shared variance that could be analyzed by the PAF, it may be that the results were actually understated.

Strategies to deal with the issue of common method variance include procedural and statistical techniques. In the current study, participants were informed that their responses were anonymous and encouraged to respond to items honestly. This procedure was done in an attempt to reduce participants' evaluation apprehension and increase the accuracy of their responses. Statistical methods to identify and/or control for common method variance, such as Harmon's one factor test or single common method factor approach (Podsakoff, et al., 2003), have the disadvantage of potentially masking the true relationships between the variables. In the current study, the first factor does account for a large amount of variance, 30%. While the variance accounted for by the first factor in principal axis factoring is normally larger than the other factors, it also potentially signals a common method factor. However, the variables in this study are all measures of social competence; therefore, there are valid functional relationships between them. It would be impossible in the current study to determine what portion of the variance accounted for

by a common method factor is from the method and what portion is from the actual relationship between the social competence variables.

The State of Social Competence Research and Suggestions for Future Research

The current research is an initial effort to bring coherence to the very disjointed field of social competence research. Working towards a unifying framework of social competence dimensions is just one issue facing this area. Other areas that require attention include a lack of theoretical foundation and a lack of grounding in actual behavior.

Social competence research is purely descriptive and consists mainly of showing relationships between social competence, personality, and cognitive ability variables. The current research is no different. Development of or application of theories to help explain the phenomenon (e.g., how it develops, whether and how it can be trained) would be great advances for the field. Personality trait research is similar in its predominantly descriptive nature. A notable exception is Eysenck's theory of the physiologic bases of the personality traits Extraversion, Introversion and Neuroticism (Eysenck, 1967). Eysenck theorized that extraverts have a suboptimal level of cortical arousal and therefore look for additional stimulation by being outgoing and seeking out the company of others. Introverts experience too much cortical arousal and prefer peace and quiet. Eysenck also believed that Neuroticism is based on activation thresholds of the sympathetic nervous system. High neuroticism results from a low activation threshold and is characterized by being nervous and anxiety, while people who are less neurotic, or emotionally stable have higher activation thresholds and can more easily control

emotional reactions. Perhaps this theory could be applied to explain individual differences in the capability to control negative emotions described by the SCI Social Maturity factor, or the sociability and charisma components of the SCI Social Mastery factor.

Social cognitive theory (Bandura, 1986) might be applied to describe how social competence dimensions develop and which can be improved and/or trained. Social cognitive theory describes how people acquire and maintain behavioral patterns. The theory includes concepts of observational learning, expectations of the outcomes of behavior, reinforcement, and dynamic interaction of the person, behavior and environment. It is likely that some dimensions are more trainable than others (e.g., coaching and team orientation more so than charisma and warmth), and a solid theoretical foundation can help guide hypotheses regarding the trainability of social competence.

Future research should examine alternative methods of measuring social competence. While the trait complex social competence is said to encompass cognitive, ability, trait, and self-regulation components, the measurement of the construct, as in this study, is mainly through self-report surveys. Such surveys are regarded by some researchers as an indirect measure of such attributes (Riggio, 1996). Future research should address more direct measurement methods, especially those that are grounded in behavior. Without that grounding, we cannot know for sure whether we are measuring respondent's actual socially competent behaviors, or if we are simply evaluating their mental models or ways of understanding social situations. It is likely that multiple measurement methods would be the best approach to accurately assess a person's social competence. Self-report could be used in conjunction with peer ratings, as both sources

have strengths and weaknesses in terms of judgmental accuracy. In addition, assessment centers have been used for decades to assess attributes like oral communication and interacting effectively with others. Research into the overlap between these different measurement methods would be useful to determine what combination of methods is optimum. For example, preliminary research examining the correspondence between self- and peer-ratings of the SCI shows higher inter-rater correlations for Social Mastery and Social Responsiveness than for Social Maturity and Social Control (Morrison & Heggestad, 2005). Similar research comparing self-reports of social competence and performance on assessment center exercises designed to measure aspects of social competence is needed. Such research may begin to evaluate the extent to which maximal performance measures such as assessment center exercises are more accurate than self-report for assessing certain of these components.

Although the current study included a broad range of social competence measures, replication of the results should be done using other measures of social competence. In addition, research that addresses the need for definition and integration of social competence dimensions will need to at some point go beyond the factor analysis approach. For example, research with the FWH Social Skills Survey (Witt & Ferris, 2003) and the SSI (Riggio & Taylor, 2000) show prediction of performance criteria with sales associates and hospices nurses, respectively. One line of research might ask whether or which social competence measures provide incremental prediction over other measures.

Conclusion

The results of the joint factor analysis provide some initial support that Social Competence Inventory is serving its intended purpose of integrating the numerous extant social competence dimensions found in the literature. While the data suggest that emotional intelligence could be an entirely distinct construct, the other extant social competence measures were well organized under the four SCI factors. On a more cautionary note, some questions still remain about the exact factor structure of the SCI. In addition, the lack of theory and grounding in actual behavior are issues that will need to be addressed by social competence researchers before we can achieve a truly unifying framework of social competence dimensions.

REFERENCES

Ackerman, P. L., & Heggestad, E. D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. *Psychological Bulletin, 121*, 219-245.

Aditya, R., & Hause, R. J. (2002). Interpersonal acumen and leadership across cultures: Pointers from the GLOBE study. In R. Riggio, S.E. Murphy, and F. J. Pirozzolo (Eds.) *Multiple intelligences and leadership* (pp.215-240). New Jersey: Lawrence Erlbaum Associates.

Ashton, M. C., Jackson, D. N., Helmes, E., and Paunonen, S.V. (1998). Joint factor analysis of the Personality Research Form and the Jackson Personality Inventory: Comparisons with the big five. *Journal of Research in Personality, 32*, 243-250.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

(Bandura, A. 1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs: NJ: Prentice Hall.

Bar-on (1997). The Emotional Quotient Inventory (EQ-i). Multi-Health Systems website: http://www.emotionalintelligencemhs.com/EQi.htm.

Baron, R. A., & Markman, G. D. (2003). Beyond social capital: The role of entrepreneur's social competence in their financial success. *Journal of Business Venturing, 18*, 41-60.

Bing, M. N., Whanger, J. C., Davison, H. K., & VanHook, J. B. (2004). Incremental validity of the frame-of-reference effect in personality scores: A replication and extension. Journal of Applied Psychology, 89, 150-157.

Cantor, N., & Kihlstrom, J. F. (1987). *Personality and social intelligence*. Englewood Cliffs: Prentice-Hall, Inc.

Chapin, F. S. (1942). Preliminary standardization of a social insight scale. *American Sociological Review, 7*, 214-225.

Church, A. T. (1994). Relating the Tellegen and five-factor models of personality structure. *Journal of Personality and Social Psychology, 67*, 898-909.

Davies, M., Stankov, L., & Roberts, R. D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*, 989-1015.

Eysenck,H. J. (1967). *The biological basis of personality.* Springfield, IL: Charles C. Thomas.

Fan, C. & Mak, A. S. (1998). Measuring social self-efficacy in a culturally diverse student population. *Social Behavior and Personality, 26*, 131-144.

Ferris, G. R., Perrewé, P. L., and Douglas, C. (2002). Social effectiveness in organizations: Construct validity and research directions. *Journal of Leadership and Organizational Studies, 9*, 49-63.

Ferris, G. R., Witt, L. A., & Hochwarter, W. A. (2001). Interaction of social skill and general mental ability on job performance and salary. *Journal of Applied Psychology, 86*, 1075-1082.

Ford, M. E. & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology, 75*, 196-206.

Gangestad, S. & Snyder, M. (1985). "To carve nature at its joints": On the existence of discrete classes in personality. *Psychological Review, 92*, 317-349.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books: Inc.

Goleman, D. (1996). *Emotional intelligence*. New York: Bantam Books.

Goleman, D., Boyatzis, R., and McKee, A. (2002). *Primal leadership*. Boston: Harvard Business School Press.

Gough, H. (1987). *California Psychological Inventory Administrator's Guide*. Palo Alto, CA: Consulting Psychologists Press.

Kilduff, M. & Day, D. V. (1994). Do chameleons get ahead? The effects of self-monitoring on managerial careers. *Academy of Management Journal, 37*, 1047-1060.

Keating, D. P. (1978). A search for social intelligence. *Journal of Educational Psychology, 70*, 218-223.

Kosmitski, C., & John, O. P. (1993). The implicit use of explicit conceptions of social intelligence. *Personality and Individual Differences, 15*, 11-23.

Law, K. S., Wong, C. S., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology, 89*, 483-496.

Marlow, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of Educational Psychology, 78*, 52-58.

Matthews, G., Roberts, R. D., & Zeidner, M. (2004). Seven myths about emotional intelligence. *Psychological Inquiry, 15*, 179-196.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). Mayer-Salovey-Caruso Emotional Intelligence Test: User's Manual. Toronto: Multi-Health Systems, Inc.

Mayer, J. D., Salovey, P, & Caruso, D. R. (2004). Emotional intelligence: Theory, Findings, and Implications. *Psychological Inquiry, 15*, 197-215.

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40*, 525-543.

Morrison, M. J. & Heggestad, E. D. (2005). A comparison of self- and peer ratings of social competence. Paper presented at the 20th annual conference of the Society for Industrial Organizational Psychology, Los Angeles, CA.

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill

O'Sullivan, M. & Guilford, J. P. (1975). Six factors of behavioral cognition: Understanding other people. *Journal of Educational Measurement, 12*, 255-271.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903.

Pulakos, E., Arad, S., Donovan, M., & Plamondon, K. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology, 85*, 612-624.

Riggio, R. E. (1986). Assessment of basic social skills. *Journal of Personality and Social Psychology, 51*, 649-660.

Riggio, R. E. (1989). *Social Skills Inventory Manual, Research Edition.* Consulting Psychologists Press.

Riggio, R. E., Riggio, H. R., Salinas, C., & Cole, E. J. (2003). The role of social and emotional communication skills in leader emergence and effectiveness. *Group Dynamics: Theory, Research, and Practice, 7*, 83-103.

Riggio R. E., & Taylor, S. J. (2000). Personality and communication skills as predictors of hospice nurse performance. *Journal of Business and Psychology, 15*, 351-359.

Riggio, R. E., Watring, K. P., & Throckmorton, B. (1993). Social skills, social support, and psychosocial adjustment. *Personality and Individual Differences, 15*, 275-280.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185-211.

Schulte, M. J., Ree, M. J., & Carretta, T. R. (2004). Emotional intelligence: Not much more than g and personality. *Personality and Individual Differences, 37*, 1059-1068.

Schneider, R. J. (1998). *PDRI Social Competence Inventory.* Unpublished instrument, Personnel Decisions Research Institute, Inc., Minneapolis, Minnesota.

Schneider, R. J., Ackerman, P. L., & Kanfer, R. (1996). To "act wisely in human relations:" Exploring the dimensions of social competence. *Personality and Individual Differences, 21*, 469-481.

Schneider, R. J., Roberts, R. D., & Heggestad, E. D. (2002). Exploring the structure and construct validity of a self-report Social Competence Inventory. In L. M. Hough (Chair), *Compound traits: The next frontier of I/O personality research.* Symposium conducted at the 17th Annual Conference of the Society of Industrial and Organizational Psychology, Inc., Toronto, Ontario, Canada.

Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports, 51*, 663-671.

Silvera, D. H., Martinussen, M. & Dahl, T. I. (1991). The Tromso Social Intelligence Scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology, 42*, 313-319.

Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*, 526.527.

Spitzberg, B. H. & Cupach, W. R. (1989). Handbook of interpersonal competence. New York: Springer-Verlag.

Steers, R. M. & Porter, L. W. (1987). The role of work motivation in organizations. In R. M. Steers & L. W. Porter (Eds.) Motivation and work behavior (4th edition) (pp. 3-23). New York: McGraw-Hill.

Tabachnick, B. G. & Fidell, L. S. (2001). Using multivariate statistics. Boston, MA: Allyn and Bacon.

Thorndike, E. L. (1920). Intelligence and its uses. *Harpers Magazine, 140*, 227-235.

Thorndike, E. L. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin, 34*, 275-285.

Walker, R. E., & Foley, J. M. (1973). Social intelligence: Its history and measurement. *Psychological Reports, 33*, 451-459.

Warwick, J. & Nettelbeck, T. (2004). Emotional intelligence is...? *Personality and Individual Differences, 37*, 1091-1100.

Witt, L.A., & Ferris, G.R. (2003). Social skill as moderator of the conscientiousness-performance relationship: Convergent results across four studies. *Journal of Applied Psychology, 88*, 809-820.

APPENDICES

APPENDIX A: TABLES

APPENDIX B: FIGURES

APPENDIX A

TABLES

Table 1.

Selected List of Multi-dimensional Social Competence Constructs

	Riggio (1986)	Marlow (1986)	Silvera et al. (1991)	Baron & Markman (2003)	Zaccaro (2002)	Ferris et al. (2001)
1.	Emotional Expressivity	Emotionality		Expressiveness		
2.	Social Expressivity					
3.	Emotional Sensitivity	Empathy	Social Awareness			
4.			Social Information Processing	Social Perception	Social Perceptiveness	Interpersonal Perceptiveness
5.	Social Control			Social Adaptability	Behavioral Flexibility	Adaptability
6.		Social Skills	Social Skills			
7.		Prosocial Attitude				
8.		Social Anxiety				
9.					Social Influence Skills	Influencing Others
10.	Social Sensitivity					
11.	Emotion Control					
12.					Metacognitive Reasoning	
13.					Behavioral Complexity	
14.					Social Knowledge	

Table 2.

SCI Scales

	Scale Definition	# items
Social Mastery factor		
Social Calmness	Is not apprehensive about what others think of him/her; is at ease around other people	14
Social Influence	Easily persuades and influences people; seizes the initiative and emerges as a leader; enjoys leading; controls social situations; is assertive and decisive	15
Social Connectedness	Has the same values, beliefs, and opinions as at least some other people; has at least a few close friends; does not feel betrayed or used by those he/she trusted; feels he/she has been treated justly by others	12
Conversation Skills	Converses easily with all kinds of people; steers conversation toward topics of common interest and away from uncomfortable topics	15
Social Insight	Discerns the motivations, feelings, and intentions underlying people's behavior by correctly interpreting behavioral cues; accurately predicts others' behavior	23
Vocal Quality	Speaks in a clear, understandable, and pleasant tone of voice; presents information clearly, logically, and compellingly when speaking to others; speaks effectively in front of groups	9
Social Self-Confidence	Believes he/she can succeed in any social situation	6
Social Knowledge	Was taught, and knows, how to behave in a variety of social situations; seeks knowledge of appropriate and effective social behaviors	12
Social Responsiveness factor		
Empathy	Deeply feels emotions encountered during social interactions and exposure to media such as television, newspapers, books, and movies	19

Table 2.

SCI Scales

	Scale Definition	# items
Nonverbal Expressiveness	Expresses emotion through facial gestures and body language; communicates partly with facial gestures and body language	12
Sociability	Is comfortable with, and energized by, other people; makes friends easily	10
Warmth	Demonstrates warmth, affection, and compassion toward others; praises others; is approachable; is accepting of, and gets along well with, others	13
Social Memory	Remembers faces, names, voices, and details about people	17
Social Maturity factor		
Emotion Control	Does not express negative emotions when experiencing them	13
Non-Aggressiveness	Seldom displays anger and irritation; does not seek retribution when provoked; does not enjoy participating in or witnessing physical or verbal aggression	12
Conflict Management	Confronts and reduces interpersonal conflict without giving in to demands that go against his/her own interests; has no difficulty dealing with people who are angry or otherwise upset	15
Listening Skills	Listens carefully and with interest to others; makes sure that he/she understands what others are saying; finds a balance between talking and listening	12
Coaching Skills	Enjoys and excels at teaching and mentoring; is patient with learners; provides accurate feedback/criticism without upsetting, de-motivating, or alienating others	16
Social Openness	Enjoys interacting with, and learning about, people of different races, gender, and cultures; appreciates the differences between people	12
Social Appropriateness	Does not make social errors; takes social obligations and protocol seriously	12

Table 2.

SCI Scales

	Scale Definition	# items
Team Orientation	Enjoys working in a team environment; works well as part of a team; believes in a team approach to getting things done	15
Social Control factor		
Social Planning Ability	Develops and implements effective plans for achieving social goals; uses knowledge of other people to influence them	10
Charisma	Inspires enthusiasm, trust, and passionate faith and loyalty in others; inspires others to do things they thought they could not; is someone who others want to emulate, be with, and please	16
Negotiating Skills	Negotiates successfully with others; enjoys the negotiating process; prepares carefully prior to negotiating with others; is not susceptible to others' negotiating and selling tactics	12
Impression Management	Seeks to, and behaves in ways that, protect and enhance his/her reputation	22

Other SCI Scales:

Overall Social Effectiveness (4 items): Is happy with, and effective in, his/her overall social life

Social Adaptability (15 items): Flexibly and intelligently utilizes a wide array of social behaviors and strategies to interact effectively with a variety of different individuals and groups

Table 3.

Crosswalk of the Expected Relationships between the Social Competence Inventory (SCI) and Other Measures

	Social Mastery: Achieving a sense of comfort, confidence, control, connection, and understanding in social situations.	**Social Responsiveness**: Expressing felt emotions; demonstrating warmth toward, acceptance of, and interest in socializing with others.	**Social Maturity**: Control of negative emotions and appreciation of others, including those who differ from oneself; dealing effectively with people who are upset, difficult, or require patience.	**Social Control**: Developing and implementing plans, or utilizing personal charisma, to control (and possibly use or get back at) others.
Social Skills Inventory (Riggio, 1986)	Emotional Sensitivity (+) Social Expressivity (+)	Emotional Expressivity (+)	Social Sensitivity (+) Emotion Control (+)	Social Control (+)
Self-Monitoring Scale (Snyder, 1977)	+			+
Social Self-Efficacy (Sherer, 1982)	+			
Ferris, Witt, & Hochwarter (2001) 7-item social skills measure	+			
Tromso Social Intelligence Test (Silvera et al., 2001)	Social Information Processing Social Awareness			
Questionnaire Measure of Emotional Tendency (Mehrabian, 1972)		+		
Hogan Empathy scale from the CPI (Hogan, 1969)	+			
Mayer, Salovey, & Caruso Emotional Intelligence Test (MSCEIT)	Perceiving Emotions (+)			Managing Emotions (+)

Table 4.

Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT): Branches and Tasks

Name of Branch and task	Goal of Task
Branch 1: Perceiving Emotions	
a) Faces	Identify the emotions conveyed by facial expressions
b) Pictures	Identify the emotions conveyed by pictures and designs
Branch 2: Using Emotions to Facilitate Thought	
c) Sensations	Compare emotions to other sensory stimuli
d) Facilitation	Identify the emotions that would best facilitate completion of specific tasks
Branch 3: Understanding Emotions	
e) Changes	Identify when/how emotions increase, decrease, or change into other emotions
f) Blends	Identify the emotions involved in complex affective states
Branch 4: Managing Emotions	
g) Emotion Management	Respond to hypothetical scenarios about how to manage or change own emotions
h) Emotion Relationships	Respond to hypothetical scenarios about how to manage others' feelings to achieve a desired outcome

Table 5.

Scale Correlation Matrix

Scale	Mean	sd	1	2	3	4
1. Sex	-	-				
2. Age	19.57	1.95	-.26	-		
3. SCI-Social Appropriateness	3.62	.54	.30	-.16	(.73)	
4. SCI-Social Knowledge	3.93	.47	.19	-.18	.65	(.72)
5. SCI-Social Memory	3.48	.52	.26	-.28	.36	.23
6. SCI-Social Insight	3.51	.42	.01	-.06	.47	.42
7. SCI-Adaptability	3.34	.38	.14	-.13	.48	.37
8. SCI-Planning Ability	3.00	.57	-.10	-.07	-.16	-.05
9. SCI-Warmth	3.99	.58	.31	-.17	.66	.60
10. SCI-Sociability	3.53	.72	.20	-.17	.48	.53
11. SCI-Social Influence	3.42	.60	.02	-.11	.35	.46
12. SCI-Social Calmness	3.06	.69	-.00	-.03	.24	.46
13. SCI-Social Connectedness	3.55	.64	.14	-.10	.45	.34
14. SCI-Nonaggressiveness	3.49	.60	.23	-.00	.37	.12
15. SCI-Social Openness	3.76	.57	.22	-.02	.34	.30
16. SCI-Social Self-Confidence	3.49	.70	.03	-.12	.48	.58
17. SCI-Team Orientation	3.28	.56	-.00	-.02	.34	.33
18. SCI-Empathy	3.50	.58	.46	-.17	.37	.24
19. SCI-Charisma	3.51	.56	.13	-.19	.55	.54
20. SCI-Impression Management	3.16	.44	.12	-.10	.17	.211
21. SCI-Emotion Control	3.35	.69	-.25	-.01	.27	.224
22. SCI-Conversation Skill	3.55	.61	.16	-.11	.52	.638
23. SCI-Listening Skill	3.69	.53	.08	-.09	.56	.413
24. SCI-Vocal Quality	3.61	.68	.14	-.03	.33	.397
25. SCI-Nonverbal Expressiveness	3.69	.60	.36	-.17	.42	.392
26. SCI-Coaching Skill	3.62	.45	.10	.01	.48	.414
27. SCI-Conflict Management	3.24	.53	-.00	-.02	.37	.236
28. SCI-Negotiating Skill	2.90	.56	-.29	-.03	.07	.253
30. Self-Monitoring Scale	9.87	3.04	-.01	-.03	.12	.311
31. Hogan Empathy Scale	22.76	4.49	.02	-.08	.24	.309
32. Ferris-Witt-Hochwarter	3.46	.53	.02	.01	.44	.456
33. Social Self-Efficacy Scale	3.44	.72	.12	-.19	.44	.510
34. QMEE	21.59	4.58	.39	-.12	.25	.151
35. SSI-Emotional Expressiveness	3.17	.54	.32	-.11	.22	.305
36. SSI-Emotional Sensitivity	3.26	.57	.32	-.12	.41	.379
37. SSI-Emotional Control	3.02	.51	-.31	.09	-.01	.041
38. SSI-Social Expressivity	3.08	.80	.15	-.12	.39	.492
39. SSI-Social Sensitivity	3.07	.58	.24	-.10	.21	.038
40. SSI-Social Control	3.54	.61	.09	-.07	.43	.491
41. MSCEIT-Perceiving Emotions	102.43	13.49	.08	-.08	.15	.115
42. MSCEIT-Facilitating Emotions	98.31	13.55	.12	-.12	.18	.104
43. MSCEIT-Understanding Emotions	95.94	9.97	.10	-.10	-.01	-.037
44. MSCEIT-Management Emotions	96.16	9.26	.19	-.19	.22	.153

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 5.

Scale Correlation Matrix

Scale	5	6	7	8	9	10
1. Sex						
2. Age						
3. SCI-Social Appropriateness						
4. SCI-Social Knowledge						
5. SCI-Social Memory	(.76)					
6. SCI-Social Insight	.32	(.80)				
7. SCI-Adaptability	.33	.47	(.60)			
8. SCI-Planning Ability	-.04	-.11	-.09	(.72)		
9. SCI-Warmth	.40	.39	.59	-.19	(.87)	
10. SCI-Sociability	.29	.16	.42	-.14	.67	(.82)
11. SCI-Social Influence	.21	.41	.34	-.02	.48	.55
12. SCI-Social Calmness	.19	.26	.22	-.27	.38	.56
13. SCI-Social Connectedness	.23	.34	.32	-.29	.53	.56
14. SCI-Nonaggressiveness	.11	.28	.31	-.34	.35	.05
15. SCI-Social Openness	.21	.30	.46	-.19	.48	.31
16. SCI-Social Self-Confidence	.18	.35	.35	-.11	.58	.66
17. SCI-Team Orientation	.25	.23	.44	-.27	.49	.53
18. SCI-Empathy	.31	.21	.37	-.20	.57	.31
19. SCI-Charisma	.24	.33	.45	.03	.73	.65
20. SCI-Impression Management	.07	.00	.17	.51	.17	.25
21. SCI-Emotion Control	.05	.28	.22	-.20	.22	.08
22. SCI-Conversation Skill	.30	.37	.46	-.14	.70	.76
23. SCI-Listening Skill	.34	.52	.53	-.30	.63	.30
24. SCI-Vocal Quality	.20	.29	.33	-.01	.43	.44
25. SCI-Nonverbal Expressiveness	.34	.23	.45	-.09	.66	.62
26. SCI-Coaching Skill	.32	.45	.52	-.10	.60	.39
27. SCI-Conflict Management	.23	.44	.43	-.37	.43	.30
28. SCI-Negotiating Skill	.07	.15	.01	.31	.10	.19
30. Self-Monitoring Scale	.03	.17	.18	.14	.22	.41
31. Hogan Empathy Scale	.21	.36	.43	-.18	.48	.49
32. Ferris-Witt-Hochwarter	.13	.50	.31	.013	.38	.34
33. Social Self-Efficacy Scale	.27	.25	.44	-.11	.60	.78
34. QMEE	.23	.15	.27	-.11	.45	.22
35. SSI-Emotional Expressiveness	.13	.08	.26	.02	.48	.63
36. SSI-Emotional Sensitivity	.30	.44	.42	-.00	.57	.34
37. SSI-Emotional Control	-.02	.19	.03	.11	-.17	-.20
38. SSI-Social Expressivity	.21	.19	.41	-.02	.54	.82
39. SSI-Social Sensitivity	.06	.06	.18	.17	.13	-.01
40. SSI-Social Control	.26	.33	.44	-.16	.56	.63
41. MSCEIT-Perceiving Emotions	.14	.20	.14	-.12	.11	.12
42. MSCEIT-Facilitating Emotions	.11	.13	.17	-.29	.21	.18
43.MSCEIT-Understanding Emotions	.17	.20	.08	-.07	.02	-.09
44.MSCEIT-Management Emotions	.25	.26	.21	-.21	.26	.12

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 5.

Scale Correlation Matrix

Scale	11	12	13	14	15	16
1. Sex						
2. Age						
3. SCI-Social Appropriateness						
4. SCI-Social Knowledge						
5. SCI-Social Memory						
6. SCI-Social Insight						
7. SCI-Adaptability						
8. SCI-Planning Ability						
9. SCI-Warmth						
10. SCI-Sociability						
11. SCI-Social Influence	(.83)					
12. SCI-Social Calmness	.53	(.85)				
13. SCI-Social Connectedness	.44	.51	(.79)			
14. SCI-Nonaggressiveness	-.08	.07	.30	(.70)		
15. SCI-Social Openness	.18	.20	.21	.24	(.80)	
16. SCI-Social Self-Confidence	.47	.57	.53	.16	.29	(.75)
17. SCI-Team Orientation	.33	.38	.50	.14	.36	.37
18. SCI-Empathy	.20	.03	.31	.24	.39	.14
19. SCI-Charisma	.64	.37	.48	.09	.26	.65
20. SCI-Impression Management	.07	-.24	.02	-.10	.00	.12
21. SCI-Emotion Control	.04	.32	.19	.45	.21	.36
22. SCI-Conversation Skill	.67	.67	.58	.15	.37	.67
23. SCI-Listening Skill	.28	.27	.35	.38	.36	.30
24. SCI-Vocal Quality	.55	.47	.40	.12	.22	.35
25. SCI-Nonverbal Expressiveness	.46	.32	.44	.15	.32	.38
26. SCI-Coaching Skill	.51	.34	.39	.25	.44	.35
27. SCI-Conflict Management	.29	.42	.45	.50	.36	.34
28. SCI-Negotiating Skill	.30	.26	.06	-.25	.05	.23
30. Self-Monitoring Scale	.45	.33	.19	-.19	.05	.38
31. Hogan Empathy Scale	.41	.44	.37	.16	.41	.45
32. Ferris-Witt-Hochwarter	.37	.25	.22	.13	.27	.41
33. Social Self-Efficacy Scale	.59	.60	.56	.13	.30	.66
34. QMEE	.08	-.08	.13	.18	.30	.07
35. SSI-Emotional Expressiveness	.53	.37	.46	-.14	.17	.36
36. SSI-Emotional Sensitivity	.29	.13	.20	.19	.40	.35
37. SSI-Emotional Control	-.04	-.04	-.18	.07	.03	-.02
38. SSI-Social Expressivity	.61	.56	.46	-.05	.29	.63
39. SSI-Social Sensitivity	-.19	-.51	-.12	.12	.09	-.07
40. SSI-Social Control	.65	.71	.52	.12	.33	.60
41. MSCEIT-Perceiving Emotions	.10	.14	.22	.10	.09	.08
42. MSCEIT-Facilitating Emotions	.16	.14	.25	.14	.14	.04
43. MSCEIT-Understanding Emotions	-.01	-.02	.10	.12	.03	-.05
44. MSCEIT-Management Emotions	.10	.11	.18	.22	.20	.13

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 5.

Scale Correlation Matrix

Scale	17	18	19	20	21	22
1. Sex						
2. Age						
3. SCI-Social Appropriateness						
4. SCI-Social Knowledge						
5. SCI-Social Memory						
6. SCI-Social Insight						
7. SCI-Adaptability						
8. SCI-Planning Ability						
9. SCI-Warmth						
10. SCI-Sociability						
11. SCI-Social Influence						
12. SCI-Social Calmness						
13. SCI-Social Connectedness						
14. SCI-Nonaggressiveness						
15. SCI-Social Openness						
16. SCI-Social Self-Confidence						
17. SCI-Team Orientation	(.81)					
18. SCI-Empathy	.32	(.85)				
19. SCI-Charisma	.32	.38	(.89)			
20. SCI-Impression Management	.01	.12	.23	(.79)		
21. SCI-Emotion Control	.21	-.10	.15	-.17	(.85)	
22. SCI-Conversation Skill	.44	.32	.68	.14	.18	(.86)
23. SCI-Listening Skill	.44	.37	.41	-.01	.39	.37
24. SCI-Vocal Quality	.23	.10	.45	.07	.09	.57
25. SCI-Nonverbal Expressiveness	.38	.59	.56	.19	-.13	.60
26. SCI-Coaching Skill	.44	.38	.49	.04	.25	.53
27. SCI-Conflict Management	.45	.17	.26	-.23	.57	.43
28. SCI-Negotiating Skill	.20	-.14	.19	.08	.13	.27
30. Self-Monitoring Scale	.06	.03	.43	.32	-.03	.50
31. Hogan Empathy Scale	.37	.27	.35	-.02	.26	.54
32. Ferris-Witt-Hochwarter	.16	.11	.42	.16	.21	.47
33. Social Self-Efficacy Scale	.42	.21	.58	.08	.27	.75
34. QMEE	.17	.74	.26	.15	-.16	.16
35. SSI-Emotional Expressiveness	.31	.44	.54	.24	-.32	.59
36. SSI-Emotional Sensitivity	.12	.52	.51	.13	.04	.39
37. SSI-Emotional Control	-.03	-.36	-.11	-.05	.40	-.07
38. SSI-Social Expressivity	.43	.24	.60	.27	.05	.76
39. SSI-Social Sensitivity	-.08	.29	.08	.46	-.21	-.14
40. SSI-Social Control	.40	.18	.56	-.00	.25	.75
41. MSCEIT-Perceiving Emotions	.15	.02	.02	.01	.04	.13
42. MSCEIT-Facilitating Emotions	.16	.18	.09	-.07	.02	.18
43. MSCEIT-Understanding Emotions	-.07	.09	.00	-.01	-.03	.00
44. MSCEIT-Management Emotions	.20	.24	.15	-.10	.02	.14

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 5.

Scale Correlation Matrix

Scale	23	24	25	26	27	28
1. Sex						
2. Age						
3. SCI-Social Appropriateness						
4. SCI-Social Knowledge						
5. SCI-Social Memory						
6. SCI-Social Insight						
7. SCI-Adaptability						
8. SCI-Planning Ability						
9. SCI-Warmth						
10. SCI-Sociability						
11. SCI-Social Influence						
12. SCI-Social Calmness						
13. SCI-Social Connectedness						
14. SCI-Nonaggressiveness						
15. SCI-Social Openness						
16. SCI-Social Self-Confidence						
17. SCI-Team Orientation						
18. SCI-Empathy						
19. SCI-Charisma						
20. SCI-Impression Management						
21. SCI-Emotion Control						
22. SCI-Conversation Skill						
23. SCI-Listening Skill	(.76)					
24. SCI-Vocal Quality	.35	(.75)				
25. SCI-Nonverbal Expressiveness	.31	.38	(.81)			
26. SCI-Coaching Skill	.47	.39	.52	(.75)		
27. SCI-Conflict Management	.50	.24	.21	.46	(.76)	
28. SCI-Negotiating Skill	.08	.14	.03	.15	.10	(.72)
30. Self-Monitoring Scale	.05	.39	.27	.21	.00	.20
31. Hogan Empathy Scale	.35	.37	.32	.40	.39	.07
32. Ferris-Witt-Hochwarter	.30	.33	.21	.34	.28	.19
33. Social Self-Efficacy Scale	.30	.40	.53	.38	.40	.22
34. QMEE	.30	.11	.44	.27	.04	-.11
35. SSI-Emotional Expressiveness	.08	.34	.72	.29	.06	.11
36. SSI-Emotional Sensitivity	.34	.23	.45	.42	.21	-.01
37. SSI-Emotional Control	.07	-.00	-.38	.06	.20	.14
38. SSI-Social Expressivity	.19	.48	.56	.37	.22	.26
39. SSI-Social Sensitivity	.06	-.09	.13	-.02	-.19	-.23
40. SSI-Social Control	.34	.54	.46	.47	.40	.18
41. MSCEIT-Perceiving Emotions	.14	.14	.11	.15	.19	-.00
42. MSCEIT-Facilitating Emotions	.20	.17	.23	.19	.20	-.14
43. MSCEIT-Understanding Emotions	.07	.03	.08	.04	.06	-.22
44. MSCEIT-Management Emotions	.23	.20	.25	.25	.20	-.14

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 5.

Scale Correlation Matrix

Scale	30	31	32	33	34	35	36
1. Sex							
2. Age							
3. SCI-Social Appropriateness							
4. SCI-Social Knowledge							
5. SCI-Social Memory							
6. SCI-Social Insight							
7. SCI-Adaptability							
8. SCI-Planning Ability							
9. SCI-Warmth							
10. SCI-Sociability							
11. SCI-Social Influence							
12. SCI-Social Calmness							
13. SCI-Social Connectedness							
14. SCI-Nonaggressiveness							
15. SCI-Social Openness							
16. SCI-Social Self-Confidence							
17. SCI-Team Orientation							
18. SCI-Empathy							
19. SCI-Charisma							
20. SCI-Impression Management							
21. SCI-Emotion Control							
22. SCI-Conversation Skill							
23. SCI-Listening Skill							
24. SCI-Vocal Quality							
25. SCI-Nonverbal Expressiveness							
26. SCI-Coaching Skill							
27. SCI-Conflict Management							
28. SCI-Negotiating Skill							
30. Self-Monitoring Scale	(.60)						
31. Hogan Empathy Scale	.38	(.60)					
32. Ferris-Witt-Hochwarter	.44	.33	(.65)				
33. Social Self-Efficacy Scale	.34	.51	.41	(.74)			
34. QMEE	.02	.25	.12	.09	(.75)		
35. SSI-Emotional Expressiveness	.45	.32	.23	.50	.34	(.73)	
36. SSI-Emotional Sensitivity	.21	.29	.47	.34	.48	.34	(.78)
37. SSI-Emotional Control	.08	-.00	.25	-.07	-.29	-.41	-.03
38. SSI-Social Expressivity	.56	.51	.44	.74	.15	.66	.45
39. SSI-Social Sensitivity	-.01	-.14	.09	-.14	.38	.02	.35
40. SSI-Social Control	.47	.54	.47	.71	.06	.49	.30
41. MSCEIT-Perceiving Emotions	.02	.10	.03	.11	.04	.10	-.00
42. MSCEIT-Facilitating Emotions	.06	.13	.08	.12	.13	.16	.10
43.MSCEIT-Understanding Emotions	.05	.10	-.03	-.00	.14	.03	.05
44.MSCEIT-Management Emotions	.01	.17	.10	.11	.20	.07	.26

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 5.

Scale Correlation Matrix

Scale	37	38	39	40	41	42	43	44
1. Sex								
2. Age								
3. SCI-Social Appropriateness								
4. SCI-Social Knowledge								
5. SCI-Social Memory								
6. SCI-Social Insight								
7. SCI-Adaptability								
8. SCI-Planning Ability								
9. SCI-Warmth								
10. SCI-Sociability								
11. SCI-Social Influence								
12. SCI-Social Calmness								
13. SCI-Social Connectedness								
14. SCI-Nonaggressiveness								
15. SCI-Social Openness								
16. SCI-Social Self-Confidence								
17. SCI-Team Orientation								
18. SCI-Empathy								
19. SCI-Charisma								
20. SCI-Impression Management								
21. SCI-Emotion Control								
22. SCI-Conversation Skill								
23. SCI-Listening Skill								
24. SCI-Vocal Quality								
25. SCI-Nonverbal Expressiveness								
26. SCI-Coaching Skill								
27. SCI-Conflict Management								
28. SCI-Negotiating Skill								
30. Self-Monitoring Scale								
31. Hogan Empathy Scale								
32. Ferris-Witt-Hochwarter								
33. Social Self-Efficacy Scale								
34. QMEE								
35. SSI-Emotional Expressiveness								
36. SSI-Emotional Sensitivity								
37. SSI-Emotional Control	(.71)							
38. SSI-Social Expressivity	-.09	(.91)						
39. SSI-Social Sensitivity	-.06	-.01	(.78)					
40. SSI-Social Control	-.04	.69	-.28	(.82)				
41. MSCEIT-Perceiving Emotions	-.04	.07	-.05	.18	(.85)			
42. MSCEIT-Facilitating Emotions	-.06	.12	-.04	.22	.41	(.69)		
43.MSCEIT-Understanding Emotions	-.03	-.09	.05	.06	.21	.18	(.67)	
44. MSCEIT-Management Emotions	-.09	.05	.09	.22	.25	.37	.36	(.70)

Note: SCI=Social Competence Inventory; SSI=Social Skills Inventory; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; QMEE=Questionnaire Measure of Emotional Empathy. Sex coded 1=female, 2= male. Correlations greater than |.11| significant at $p < .05$; correlations greater than |.15| significant at $p < .01$.

Table 6.

Rotated Pattern Matrix for SCI Scales Table 6.

Rotated Pattern Matrix for SCI Scales

Scale	I. SM	II. SMT	III. SR	IV. SC	h^2
SCI Social Calmness	***.93***	-.15	-.25	**-.35**	.73
SCI Sociability	**.80**	-.15	*.23*	-.03	.70
SCI Conversation Skills	***.86***	.00	.07	-.02	.79
SCI Social Influence	***.78***	-.08	-.02	.07	.54
SCI Social Self-Confidence	***.71***	.13	-.14	.01	.56
SCI Charisma	**.60**	.12	.13	*.20*	.62
SCI Vocal Quality	***.56***	.04	-.02	.03	.34
SCI Social Connectedness	***.53***	.08	.14	-.23	.46
SCI Social Knowledge	***.52***	.27	-.06	.20	.50
SCI Negotiating Skills	**.47**	-.01	**-.41**	*.28*	.29
SCI Team Orientation	**.35**	*.20*	.15	-.16	.35
SCI Listening Skills	-.01	***.73***	.07	-.01	.57
SCI Emotion Control	.02	***.71***	**-.52**	-.11	.59
SCI Nonaggressiveness	-.32	***.68***	.10	-.22	.44
SCI Conflict Management	.14	***.61***	-.14	-.30	.60
SCI Social Insight	*.08*	**.61**	-.11	.12	.39
SCI Social Adaptability	.04	**.58**	.20	.12	.51
SCI Social Appropriateness	.16	***.57***	.12	.15	.55
SCI Coaching Skills	.26	***.43***	.13	.05	.48
SCI Warmth	.33	**.42**	***.36***	.04	.79
SCI Social Openness	.04	***.41***	.19	-.04	.30
SCI Social Memory	.07	.28	*.18*	.06	.19
SCI Empathy	-.10	.21	***.73***	-.07	.59
SCI Nonverbal Expressiveness	**.41**	-.05	***.60***	-.01	.67
SCI Social Planning	-.01	-.07	-.27	***.79***	.66
SCI Impression Management	.01	.05	.12	***.62***	.43
Percent of Variance	34.6%	8.2%	6.0%	4.2%	

Note: SCI= Social Competence Inventory; SM=Social Mastery, SMT=Social Maturity, SR=Social Responsiveness, SC=Social Control, h^2=communality. Factor loadings surrounded by * are those that replicate Schneider 2002 framework. .

Table 7.

Factor Correlation Matrix - SCI scales only

	1	2	3
1. Social Mastery			
2. Social Maturity	.58		
3. Social Responsiveness	.39	.37	
4. Social Control	.06	-.16	.19

Table 8.

Rotated Pattern Matrix for Joint Four-Factor Solution of SCI and Extant Social Competence Measures

Scale	I. SM	II. SMT	III. SR	VI. SC	h^2
SCI Social Calmness	***.75***	-.09	-.07	**-.42**	.73
SCI Sociability	**.75**	.03	*.23*	-.01	.72
SCI Conversation Skills	***.80***	.15	.04	-.02	.80
SCI Social Influence	***.73***	.00	-.02	.04	.54
SCI Social Self-Confidence	***.64***	.20	-.12	-.00	.55
SCI Charisma	**.58**	.25	.07	*.20*	.61
SCI Vocal Quality	***.54***	.11	-.05	.02	.35
SCI Social Connectedness	***.44***	.18	.19	-.28	.47
SCI Social Knowledge	***.48***	**.35**	-.14	.16	.48
SCI Negotiating Skills	**.45**	-.11	-.30	*.14*	.21
SCI Team Orientation	.29	*.28*	.13	-.24	.36
SCI Listening Skills	-.00	***.74***	-.06	-.11	.56
SCI Emotion Control	.03	***.50***	**-.53**	-.27	.58
SCI Nonaggressiveness	-.31	***.67***	-.01	-.26	.42
SCI Conflict Management	.10	***.57***	-.18	**-.40**	.60
SCI Social Insight	*.10*	**.62**	-.27	.09	.43
SCI Social Adaptability	.14	**.60**	.02	.06	.48
SCI Social Appropriateness	.18	***.64***	-.04	.11	.54
SCI Coaching Skills	.26	***.51***	-.00	-.01	.47
SCI Warmth	.32	**.59**	*.22*	.00	.78
SCI Social Openness	.05	***.51***	.06	-.05	.32
SCI Social Memory	.07	**.35**	*.08*	.01	.18
SCI Empathy	-.13	**.47**	***.64***	-.01	.70
SCI Nonverbal Expressiveness	**.39**	.17	***.52***	.01	.67
SCI Social Planning	.13	-.25	-.24	***.64***	.46
SCI Impression Management	.17	.02	.00	***.64***	.43
SSI Social Expressivity	***.85***	-.06	.09	.13	.74
SSI Social Control	**.76**	.08	-.04	*-.13*	.66
SSI Emotional Expressivity	**.67**	-.25	***.54***	.07	.76
SSI Emotional Sensitivity	*.10*	**.50**	.12	.28	.45
SSI Emotional Control	-.05	*.28*	**-.72**	.17	.47
SSI Social Sensitivity	**-.40**	***.40***	.18	**.55**	.57
Social Self-Efficacy Scale	***.75***	.10	.02	-.09	.66

Table 8.

Rotated Pattern Matrix for Joint Four-Factor Solution of SCI and Extant Social Competence Measures

Scale	I. SM	II. SMT	III. SR	VI. SC	h^2
Self-Monitoring Scale	**.69**	*-.17*	-.14	**.33**	.46
Hogan Empathy Scale	***.42***	.24	.01	-.13	.37
QMEE	-.20	**.42**	***.52***	.11	.52
Ferris Witt Hochwarter Scale	**.39**	***.38***	-.34	*.31*	.47
Percent of Variance	32.7%	8.0%	7.8%	4.8%	

Note: SCI=Social Competence Inventory; SM=Social Mastery; SMT=Social Maturity; SR=Social Responsiveness; SC=Social Control; QMEE=Questionnaire Measure Emotional Empathy; h^2=communality. Factor loadings surrounded by * are those that replicate Schneider 2002 framework, and show factor loading locations expected hypotheses.

Table 9.

Factor Correlation Matrix – SCI and Extant Social Competence Measures

	1	2	3
1. Social Mastery			
2. Social Maturity	.47		
3. Social Responsiveness	.21	.24	
4. Social Control	-.04	-.05	.24

Table 10.

Rotated Pattern Matrix for Joint Five-Factor Solution (Including MSCEIT)

Scale	I. SM	II. SMT	III. SR	VI. SC	V. EI	h^2
SCI Social Calmness	*.75*	.09	-.06	**-.44**	.04	.71
SCI Sociability	**.74**	.09	.27	*-.02*	-.17	.76
SCI Conversation Skills	*.81*	.14	.04	-.03	.00	.59
SCI Social Influence	*.76*	-.04	-.03	.04	.11	.56
SCI Social Self-Confidence	*.63*	.23	-.09	-.02	-.17	.58
SCI Charisma	**.59**	.26	.07	*.21*	-.10	.62
SCI Vocal Quality	*.56*	.05	-.07	.01	.19	.39
SCI Social Connectedness	*.45*	.19	.18	-.28	.05	.48
SCI Social Knowledge	*.48*	.34	-.13	.15	-.07	.48
SCI Negotiating Skills	**.44**	-.10	-.27	*.12*	-.20	.25
SCI Team Orientation	.29	*.32*	.15	-.24	-.09	.38
SCI Listening Skills	.01	*.73*	-.09	-.08	.04	.55
SCI Emotion Control	.01	*.55*	**-.51**	-.29	-.19	.64
SCI Nonaggressiveness	-.30	*.68*	-.03	-.23	.02	.43
SCI Conflict Management	.12	*.56*	-.19	**-.39**	.04	.59
SCI Social Insight	*.14*	**.53**	**-.35**	.11	.29	.53
SCI Social Adaptability	.16	**.58**	-.01	.08	.04	.48
SCI Social Appropriateness	.19	*.64*	-.05	.12	-.05	.55
SCI Coaching Skills	.29	*.47*	-.04	.00	.10	.47
SCI Warmth	.32	**.63**	*.21*	.03	-.10	.80
SCI Social Openness	.07	*.51*	.04	-.02	.00	.31
SCI Social Memory	.09	.32	*.05*	.02	.14	.20
SCI Empathy	-.10	**.50**	*.58*	.06	.02	.68
SCI Nonverbal Expressiveness	**.41**	.18	*.50*	.04	.07	.67
SCI Social Planning	.12	-.26	-.22	*.61*	-.13	.47
SCI Impression Management	.16	.02	.02	*.62*	-.13	.41
SSI Social Expressivity	*.85*	-.05	.12	.12	-.10	.74
SSI Social Control	**.77**	.04	-.04	*-.15*	.15	.68
SSI Emotional Expressivity	**.68**	-.25	*.53*	.09	.06	.76
SSI Emotional Sensitivity	*.12*	**.48**	.08	.32	.05	.46
SSI Emotional Control	-.05	*.22*	**-.71**	.13	.00	.47
SSI Social Sensitivity	**-.40**	*.41*	.15	**.58**	-.05	.57
Social Self-Efficacy Scale	*.74*	.13	.05	-.10	-.11	.68

Table 10.

Rotated Pattern Matrix for Joint Five-Factor Solution (Including MSCEIT)

Scale	I. SM	II. SMT	III. SR	VI. SC	V. EI	h^2
Self-Monitoring Scale	**.71**	*-.25*	-.15	.31	.14	.50
Hogan Empathy Scale	***.44***	.21	.00	-.12	.09	.37
QMEE	-.17	**.42**	***.46***	.18	.07	.51
Ferris Witt Hochwarter Scale	**.41**	*.32*	**-.36**	*.31*	.05	.48
MSCEIT - Understanding Emotions	*-.09*	.03	.03	-.04	**.52**	.28
MSCEIT - Managing Emotions	-.03	.23	.09	-.12	**.50**	.38
MSCEIT - Facilitating Emotions	.07	.07	.14	-.23	**.45**	.30
MSCEIT - Perceiving Emotions	.09	.03	.01	*-.17*	**.39**	.19
Percent of Variance	30%	7.5%	7.2%	4.6%	2.7	

Note: SM=Social Mastery; SMT=Social Maturity; SR=Social Responsiveness; SC=Social Control; EI=Emotional Intelligence; QMEE=Questionnaire Measure Emotional Empathy; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test; h^2=communality. Factor loadings surrounded by * are those that replicate Schneider 2002 framework, and show factor loading locations expected hypotheses.

Table 11.

Factor Correlation Matrix

	1	2	3	4	5
1. Social Mastery					
2. Social Maturity	.47				
3. Social Responsiveness	.16	.21			
4. Social Control	-.01	-.03	.21		
5. Emotional Intelligence	.07	.20	.11	.10	

Table 12.

Summary of Hypotheses and Results

Hypothesis	Scale	Expected Factor	Actual Factor(s)	Hypothesis Supported?
H1a	SSI Emotional Sensitivity	Social Mastery	Social Maturity	No
H1b	SSI Social Expressivity	Social Mastery	Social Mastery	Yes
H1c	SSI Emotional Expressivity	Social Responsiveness	Social Mastery, Social Responsiveness	Partial
H1d	SSI Social Sensitivity	Social Maturity	Social Mastery, Social Control, Social Maturity,	Partial
H1e	SSI Emotion Control	Social Maturity	Social Responsiveness	No
H1f	SSI Social Control	Social Control	Social Mastery	No
H2	Self-Monitoring Scale	Social Maturity	Social Mastery	No
H3	Social Self-Efficacy	Social Mastery	Social Mastery	Yes
H4	FWH Social Skills	Social Maturity and Social Control	Social Mastery, Social Responsiveness	No
H5	Hogan Empathy	Social Mastery	Social Mastery	Yes
H6	Questionnaire Measure of Emotional Empathy	Social Responsiveness	Social Responsiveness, Social Maturity	Partial
H7a	MSCEIT Branch 1	Social Mastery	Emotional Intelligence	No
H7b	MSCEIT Branch 4	Social Control	Emotional Intelligence	No

Table 13.

Rotated Pattern Matrix for Joint Five-Factor Solution using short SCI

Scale	I. SM	II. SR	III. SMT	IV. SC	V. EI	h^2
SM_1	**.83**	-.01	.01	.03	-.01	.68
SM_2	**.82**	.08	-.04	-.09	-.07	.74
SM_3	**.60**	.07	.07	-.06	.05	.44
SR_2	.02	**.83**	.00	-.06	-.03	.70
SR_3	.23	**.61**	.14	.04	-.03	.54
SR_1	**.36**	**.50**	-.04	.03	.02	.53
SMT_1	-.04	.12	**.70**	-.10	-.04	.51
SMT_2	.20	-.12	**.70**	-.12	-.05	.58
SMT_3	-.06	.24	**.59**	-.17	.05	.47
SC_1	.00	.04	-.10	**.61**	-.00	.40
SC_2	.11	-.15	-.12	**.34**	-.22	.27
SSI Social Expressivity	**.86**	.05	-.09	.02	-.10	.75
SSI Social Control	**.77**	-.05	.08	-.20	.12	.71
SSI Emotional Expressivity	**.62**	.19	**-.51**	-.04	.00	.75
SSI Emotional Sensitivity	.26	**.51**	.11	.33	-.00	.50
SSI Emotional Control	.08	**-.35**	**.60**	.25	.01	.54
SSI Social Sensitivity	-.22	**.42**	-.03	**.69**	.03	.60
Social Self-Efficacy Scale	**.73**	.09	.10	-.16	-.08	.66
Self-Monitoring Scale	**.76**	-.30	-.13	.25	.11	.55
Hogan Empathy Scale	**.47**	.16	.16	-.08	.05	.38
QMEE	-.10	**.72**	-.11	.20	.03	.53
FWH Scale	**.56**	.01	.29	.28	.02	.46
MSCEIT - Managing Emotions	-.02	.14	.02	.03	**.58**	.42
MSCEIT - Facilitating Emotions	.07	-.02	-.02	-.07	**.58**	.37
MSCEIT - Perceiving Emotions	.07	-.11	-.07	-.07	**.53**	.27
MSCEIT - Understanding Emotions	-.08	-.01	-.03	.07	**.50**	.23
Percent of Variance	26.1%	9.9%	7.9%	5.4%	3.4%	

Note: SM=Social Mastery; SR=Social Responsiveness; SMT=Social Maturity; EC=Emotion Control; SC=Social Control; EI=Emotional Intelligence; h^2=communality. SM_1= the first HIC for the Social Mastery factor; SM_2= the second HIC for the Social Mastery factor, and so on.

Table 14.

Rotated Pattern Matrix for SCI Scales – Comparing the Current Study with Morrison & Heggestad (2005)

Scale	I. SM	II. SMT	III. SR	IV. SC	h^2
SCI Social Calmness	***.93 (62)***	-.15	-.25	**-.35**	.73
SCI Sociability	**.80** (.66)	-.15	.23	-.03	.70
SCI Conversation Skills	***.86 (.75)***	.00	.07	-.02	.79
SCI Social Influence	***.78 (.85)***	-.08	-.02	.07	.54
SCI Social Self-Confidence	***.71 (.69)***	.13	-.14	.01	.56
SCI Charisma	**.60** *(.57)*	.12	.13	.20	.62
SCI Vocal Quality	***.56 (.50)***	.04	-.02	.03	.34
SCI Social Connectedness	***.53 (.50)***	.08	.14	-.23	.46
SCI Social Knowledge	***.52 (.48)***	.27	-.06	.20	.50
SCI Negotiating Skills	**.47** *(.55)*	-.01	**-.41**	.28	.29
SCI Team Orientation	**.35** (.26)	.20	.15	-.16	.35
SCI Listening Skills	-.01	***.73 (.47)***	.07	-.01	.57
SCI Emotion Control	.02	***.71 (.80)***	**-.52**	-.11	.59
SCI Nonaggressiveness	-.32	***.68 (.58)***	.10	-.22	.44
SCI Conflict Management	.14	***.61 (.60)***	-.14	-.30	.60
SCI Social Insight	.08 *(.40)*	**.61**	-.11	.12	.39
SCI Social Adaptability	.04	**.58**	.20	.12	.51
SCI Social Appropriateness	.16	***.57 (.40)***	.12	.15	.55
SCI Coaching Skills	.26 (.36)	***.43***	.13	.05	.48
SCI Warmth	.33	**.42**	**.36** *(.53)*	.04	.79
SCI Social Openness	.04	***.41***	.19 *(.40)*	-.04	.30
SCI Social Memory	.07	.28	.18 *(.44)*	.06	.19
SCI Empathy	-.10	.21	***.73 (.59)***	-.07	.59
SCI Nonverbal Expressiveness	**.41**	-.05	***.60 (.67)***	-.01	.67
SCI Social Planning	-.01	-.07	-.27	***.79 (.64)***	.66
SCI Impression Management	.01	.05	.12	***.62 (.72)***	.43
Percent of Variance	34.6%	8.2%	6.0%	4.2%	

Note: SCI= Social Competence Inventory; SM=Social Mastery, SMT=Social Maturity, SR=Social Responsiveness, SC=Social Control, h^2=communality. Factor loadings in parentheses are from PAF done on student sample in Morrison & Heggestad (2004).

APPENDIX B

FIGURES

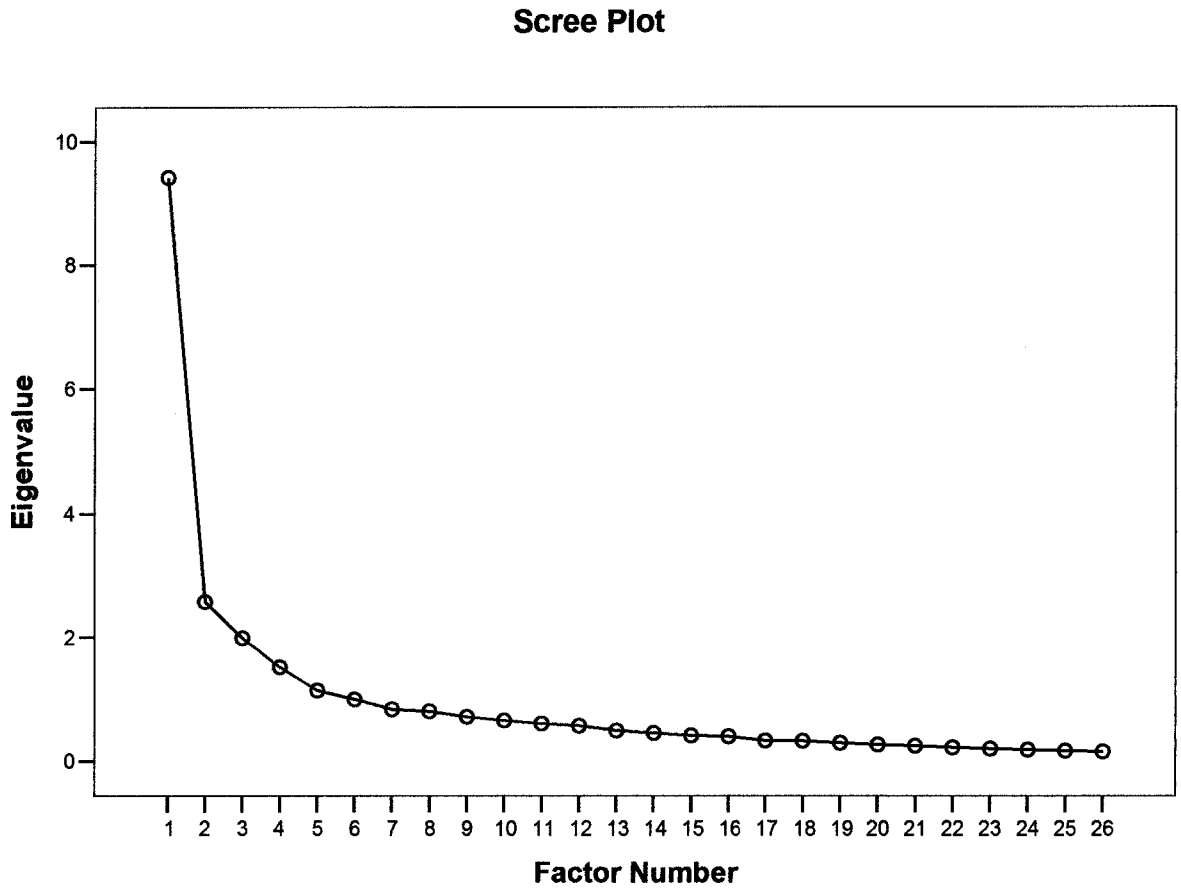

Figure 1. Scree Plot for Principal Axis Factoring of Social Competence Inventory

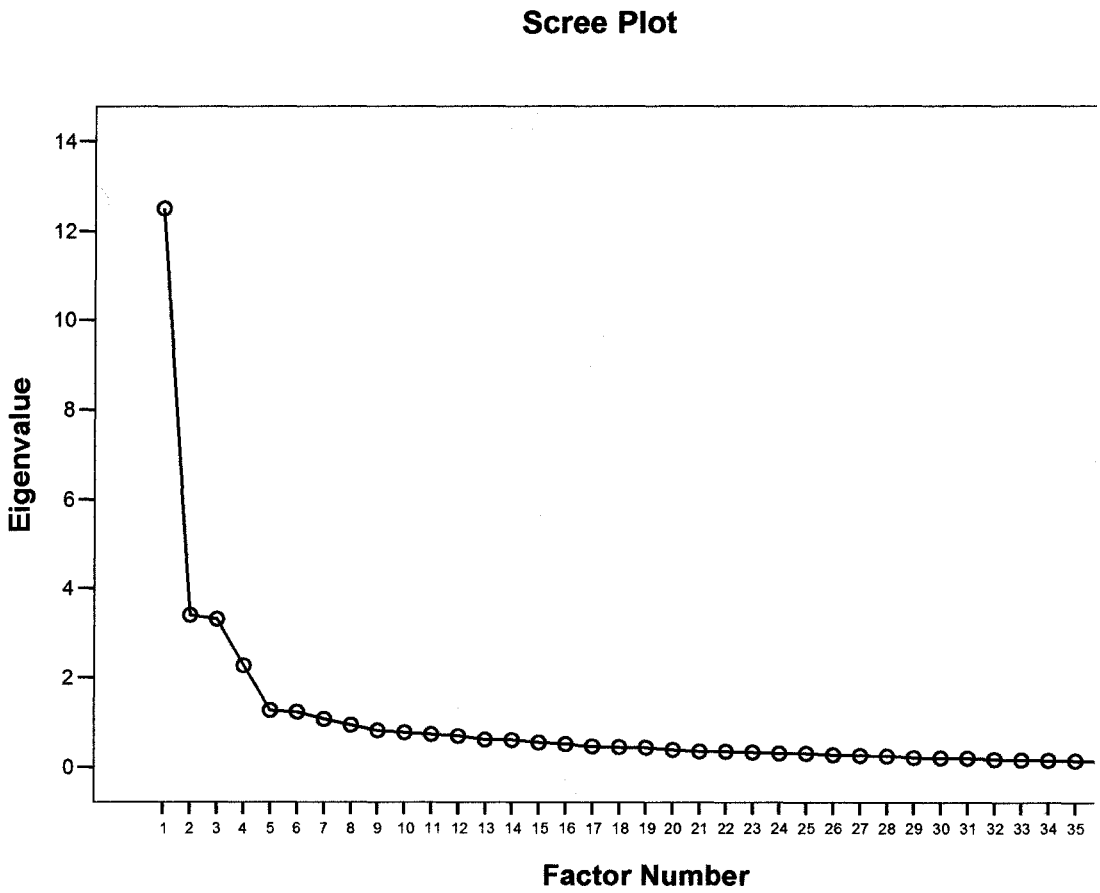

Figure 2. Scree Plot for Joint Factor Analysis of Social Competence Inventory and Extant Social Competence Measures

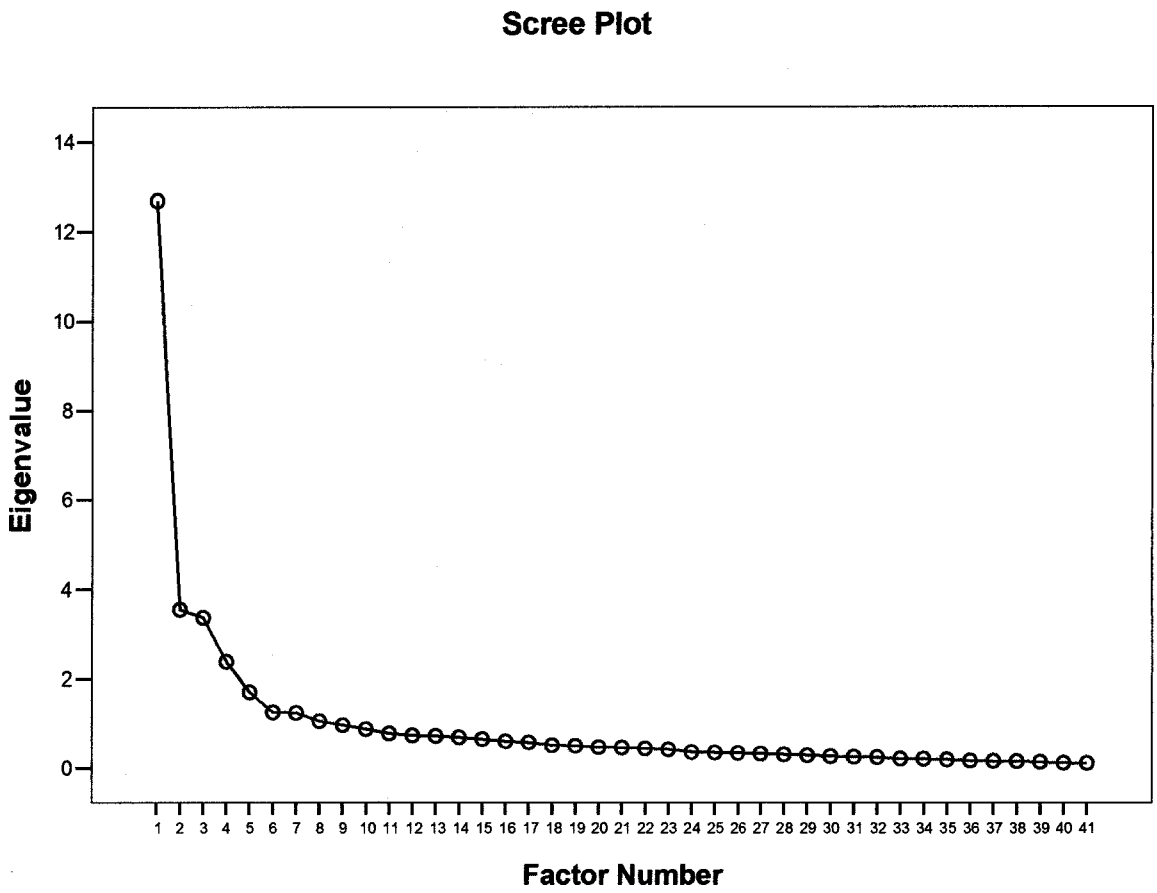

Figure 3. Scree plot for Joint Factor Analysis of Social Competence Inventory, Extant Social Competence Measures, and Mayer-Salovey-Caruso Emotional Intelligence Test