COMMUNICATION COMPETENCE OF MALAYSIAN LEADERS AS A FUNCTION OF EMOTIONAL INTELLIGENCE AND COGNITIVE COMPLEXITY

A dissertation presented to
the faculty of
the Scripps College of Communication of Ohio University

In partial fulfillment
of the requirements for the degree
Doctor of Philosophy

Lailawati Mohd Salleh
June 2007
This dissertation titled
COMMUNICATION COMPETENCE OF MALAYSIAN LEADERS AS A FUNCTION
OF EMOTIONAL INTELLIGENCE AND COGNITIVE COMPLEXITY

by
LAILAWATI MOHD SALLEH

has been approved for
the School of Communication Studies
and the Scripps College of Communication by

Tom D. Daniels
Professor of Communication Studies

Gregory J. Shepherd
Dean, Scripps College of Communication
Abstract

MOHD SALLEH, LAILAWATI, Ph.D., June 2007, Organizational Communication

COMMUNICATION COMPETENCE OF MALAYSIAN LEADERS AS A FUNCTION OF EMOTIONAL INTELLIGENCE AND COGNITIVE COMPLEXITY (197 pp.)

Director of Dissertation: Tom D. Daniels

Emotional intelligence is a popular construct among the public due to the claim that it has the potential to increase work satisfaction, better relationships, and improve deviant behaviors. Since it was first brought to scientific attention by Salovey and Mayer (1990) and later popularized by Goleman (1995) for public use, many researchers have conducted vigorous tests on the construct and incremental validity of emotional intelligence. Apart from the claim that emotional intelligence improves quality of life, theorists of emotional intelligence also assert that leaders who are emotionally intelligent are also communicatively competent. This study, then, aims to examine the relationship between emotional intelligence and communication competence.

While researching the literature on emotional intelligence and communication competence another construct which has the potential to be conceptually similar to emotional intelligence emerged. The construct, cognitive complexity, is often studied in the communication literature as an individual ability which contributes to communication competence. Hence, this construct, cognitive complexity may well be emotional intelligence studied under a different name. Therefore, cognitive complexity was studied with emotional intelligence to determine which of the two constructs better predicts communication competence.
This study was conducted in an institution of higher education in Malaysia. Overall finding shows that there were no relationships among the three constructs. On further analysis, male cognitive complexity was found to be related to communication competence and emotional intelligence. This result indicates that there is a possibility that cognitive complexity is a mediating variable. Also, the findings suggest that age, culture, gender, and organizational position may have some impact on the outcome of the study. Suggestions for future research are provided.

Approved:

Tom D. Daniels
Professor of Communication Studies
For,

My mum, Mailimah and dad, Mohd. Salleh,

my husband, Ibrahim,

my children, Abdurrahman Mukhlis, Sajidah, Muhammad Fahmi, and Khalilah,

my sister, Salehati, and brothers; Sulaiman, Ibrahim, Musa, Mohd. Isa and Mohd. Yunus

♥♥♥ To all of you, this dissertation is for YOU ♥♥♥

May Allah bless us all.
Acknowledgements

First and foremost, I would like to express my syukur to Allah for blessing me with the patience and persistence to complete this dissertation. Allah has been the source during my moments of need for consolation, hope, and motivation. Alhamdulillah.

I wish to express my wholehearted gratitude and sincere thank you to my advisor, Dr. Tom D. Daniels, who has been with me from the first day I arrived in Athens. His thoughtful comments and valuable insights are priceless. Dr. Daniels is someone very special in wisdom and in character and I shall always remember him as a mentor who is very patient, supportive, and above all, understanding.

I would like to extend my world of thank you to Dr. John R. Schermerhorn Jr., a professor and committee member, who has untiringly kept me on track and taught me the many lessons of scholarship. I am grateful for your care and concern to see me through and to succeed. Dr. Schermerhorn, terima kasih banyak-banyak.

To my committee members, Dr. Caryn Medved, Dr. Elizabeth Graham, and Dr. Brian Quick, thank you very much. You have all been part of this dissertation and have contributed in your own unique ways. A special acknowledgement for Dr. Medved, who had patiently listened and shared with me my hopes and despair.

For my very, very best friend, professor, and favorite conversation partner, Dr. Thomas Bolland, I shall cherish the moments of our friendship and all those that you and your wife, Janet, have contributed to make this journey pleasant and wonderful. Thank you very much for your kindness.

Also, to Dr. James, Dr. Hale, and Dr. Rao, who in their big and small ways have contributed to making my days at the department pleasant and less stressful and to all the
professors at COMS who have read my work, allowed me to sit in their classes, and shared my passion - my sincere thank you.

To Dr. George Johanson, who has guided me with smiles and open arms and professors at the College of Business for accommodating me in your classes and a warm welcoming reception when I first arrived in Athens. I shall remember your hospitality.

My friends at the library, Graduate Studies, COMS, and the innumerable individuals who are just so many to note – thank you.

Not forgetting all the key personnel and staff of Universiti Putra Malaysia who have contributed their time, effort, and words of wisdom – *ribuan terima kasih*.

And finally and most important of all, to my beloved family members: Mum and dad, I know you had never stopped praying for me but sad that you are not able to share my moments of joy and success. I love you both for the person you prayed me to become and the never ending passion and love you gave me. For my husband, thank you for sharing this journey with me and spending sleepless nights to keep me awake. No other moments of our lives have been as meaningful as these. My children, you have been my dream and inspiration and without you I would not have survived long. You made me realize that every drop of love counts no matter how small it is. My sister - the anchor for me to hang on to and who has toiled with me through my sweat and tears – thank you for giving me strength to keep going. And, my brothers and uncle, Pak Usu, thank you for your prayers.

*** To all of you, thank you, thank you very much ***
Table of Contents

Abstract .........................................................................................................................4
Dedication .....................................................................................................................6
Acknowledgements ......................................................................................................7
List of Tables ...............................................................................................................12
List of Figures .............................................................................................................13

CHAPTER 1

INTRODUCTION ......................................................................................................... 14
   Background of the Problem ....................................................................................16
   Overview of the Major Theories and Measures of Emotional Intelligence ..........17
   Cognitive Complexity .........................................................................................22
   Communication Competence ..............................................................................23
Statement of the Problem .........................................................................................26
Purpose and Objectives of the Study .......................................................................28
Significance of the Study ........................................................................................29

CHAPTER 2

REVIEW OF LITERATURE AND HYPOTHESES ..................................................32
   Introduction .........................................................................................................32
   Leadership ..........................................................................................................35
   Leadership Communication and Leadership Effectiveness ..............................36
   Communication Competence ..............................................................................38
   Definitions of the Term ......................................................................................39
   Zeroing in on the Definition of Communication Competence ..........................47
   Leadership and Communication Competence ..................................................52
   Emotional Intelligence .......................................................................................54
   How Emotional Intelligence Became Popular ..................................................57
   History and Development of the Construct .......................................................58
   Introduction to the Theories of Emotional Intelligence ......................................61
   Major Theories and Measures of Emotional Intelligence .................................63
   Bar-On Model of Emotional-Social Intelligence and the EQ-i ..........................64
   Goleman's EI-based Theory of Performance and the ECI .................................66
   Mayer et al. and the Mayer-Salovey-Caruso-Emotional-Intelligence-Test ... (MSCEIT) ........................................................................................................................................67
Controversies and Critiques of EI.................................................................70
  Goleman (1995)......................................................................................... 72
  Bar-On (2000)......................................................................................... 73
  Mayer and Salovey (1997)........................................................................ 75
  Model for the Study.................................................................................... 77
  Different Names for Different Models...................................................... 80
  Emotional Intelligence and Communication Competence.................... 80
  Cognitive Complexity.................................................................................. 83
  Cognitive Complexity and Communication Competence....................... 85
  Cognitive Complexity and Emotional Intelligence................................... 87
  The Nexus of the Constructs..................................................................... 88
  Relationship between Communication Competence, Emotional Intelligence and
  Cognitive Complexity................................................................................ 88
  Leader's Cognitive Complexity, Communication Competence, and
  Emotional Intelligence.............................................................................. 93
  Context of the Study.................................................................................. 94
  Contextualizing Malaysia.......................................................................... 95
  Research Questions and Hypotheses....................................................... 96

CHAPTER 3

RESEARCH METHODS AND PROCEDURES.............................................99
  Study Participants...................................................................................... 99
  Organization............................................................................................... 99
  Participants...............................................................................................100
  Descriptive Statistics................................................................................102
  Instruments...............................................................................................103
    Role Category Questionnaire (RCQ)......................................................... 103
    Communication Competence Questionnaire (CCQ).................................. 105
      Reliability.............................................................................................107
      Scale Intercorrelation..........................................................................107
    Mayer-Salovey-Caruso-Emotional-Intelligence Test (MSCEIT).............. 107
      Reliability.............................................................................................108
      Scale Intercorrelation..........................................................................110
  Data Collection and Preparation Procedures...........................................110
    Data Collection....................................................................................... 110
    Preparation Procedures..........................................................................115
  Statistical Analysis Procedures...............................................................116
    Additional Analyses................................................................................116
  Ancillary Data Collection and Analysis...................................................117
    Data Collection Procedures.................................................................118
    Data Analysis.........................................................................................119
## CHAPTER 4

RESULTS

- Results of the Data Analysis
- Additional Analyses
- Open-ended Question and Interview Data
- Open-ended Question
- Interviews

## CHAPTER 5

CONCLUSION

- Summary
- Discussion
  - Emotional Intelligence and Cognitive Complexity
  - Communication Competence and Emotional Intelligence
  - Communication Competence and Cognitive Complexity
  - Communication Competence, Emotional Intelligence, and Cognitive Complexity
  - Emotional Intelligence and the MSCEIT
  - Communication Competence, Emotional Intelligence and Gender
- Limitations of the Study
- Conclusions
- Implications of the Study
- Suggestions for Future Research

End Notes

References

Appendixes

- Appendix I
- Appendix II
- Appendix III
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Theoretical Perspectives on Communication Competence</td>
<td>51</td>
</tr>
<tr>
<td>2.2</td>
<td>A Comparison between Models of Emotional Intelligence</td>
<td>78</td>
</tr>
<tr>
<td>2.3</td>
<td>Characteristics of Emotional Intelligence, Cognitive Complexity, and</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Communication Competence</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Distribution of Survey Instruments</td>
<td>102</td>
</tr>
<tr>
<td>3.2</td>
<td>Demographic Profile of Participants</td>
<td>103</td>
</tr>
<tr>
<td>3.3</td>
<td>Range of Scores for Cognitive Complexity</td>
<td>105</td>
</tr>
<tr>
<td>3.4</td>
<td>Item details for the CCQ and the MSCEIT Instruments</td>
<td>106</td>
</tr>
<tr>
<td>3.5</td>
<td>Descriptive Statistics for the Emotional Intelligence Scale, MSCEIT</td>
<td>109</td>
</tr>
<tr>
<td>3.6</td>
<td>Intercorrelations Among the MSCEIT Branch scores</td>
<td>110</td>
</tr>
<tr>
<td>4.1</td>
<td>Correlations between Communication Competence, Emotional Intelligence, and</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Cognitive Complexity</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Correlations between Selected Demographic Variables and Communication</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>Competence, Emotional Intelligence, and Cognitive Complexity</td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>Correlation between Gender, Cognitive Complexity, and the Sub-scales of</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Communication Competence Questionnaire (CCQ) and branches of the Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT)</td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td>Correlations Between Gender Groups, Communication Competence, Cognitive</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>Complexity, and Emotional Intelligence</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>A Comparison of Demographic Profiles of Participants and Normative Sample</td>
<td>148</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>A Suggested Relationship between Communication Competence, Emotional</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td>Intelligence, and Cognitive Complexity</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

Leadership effectiveness has been an important theme in organizational studies. Several theories and models have emerged over the years including leadership traits, styles and personality types (Bass, 1990). One of the most recent research areas in leadership studies is emotional intelligence. Proponents of the theories of emotional intelligence claim that emotional intelligence predicts life successes and leadership effectiveness where leaders who possess high emotional intelligence are said to have positive influence on employee motivation and their work performance (Bar-On, 2005; Goleman, 1998a; Mayer, Salovey & Caruso, 2004; Weisinger, 1998).

Additionally, emotional intelligence theorists (such as Goleman, 1995; Mayer, Salovey & Caruso, 2004; Weisinger, 1998) claim that emotionally intelligent leaders are good communicators. The potential contribution that emotional intelligence may provide, above and beyond other predictors, in explaining the variance in communication competence signals a justification for studying emotional intelligence within the communication field. To further strengthen the rationale for such a study, Metts, Magsamen, and Lamb (2005) note that both emotional intelligence and communication competence have two common characteristics: cognitive ability and behavioral ability. While this claim suggests a possible relationship between emotional intelligence and communication competence, it also implies that emotional intelligence may be conflated with cognitive constructs, e.g. cognitive complexity, a variable known to predict communication competence (Burleson & Caplan, 1998).
Despite the claim that emotional intelligence enhances positive quality of life, the construct has received heavy criticism from various scholars particularly in the field of psychology. Critics argue that the conceptual definition of emotional intelligence is problematic (Landy, 2005; Locke, 2005) and that the measurements lack scientific validity (Landy, 2005; Matthews, Zeidner & Roberts, 2002). Also, there are studies which show that emotional intelligence “adds little or nothing to the explanation or prediction” of some common outcomes (Landy, 2005, p. 418), which leads to the possibility that emotional intelligence might just be “an old wine in a new bottle” (Mayer, 2004). For example, in the communication literature, some aspects of emotional intelligence could have already been studied under different constructs such as cognitive complexity or empathy. The concerns and controversies that have arisen in studies of this potentially important construct in human development warrant further examination.

In consideration of the concerns raised by scholars on the instability and “premature application” of the construct (Landy, 2005), this study attempts to address the controversies which surround the issues of discriminant and predictive validity of emotional intelligence. The first part of the study will examine the discriminant validity of the construct by employing a psychological-related variable often found in the communication literature, cognitive complexity, to determine whether or not there is any conceptual overlap between emotional intelligence and cognitive complexity. Assuming that there is discriminant validity, the second part of the study will determine the possible relationships between emotional intelligence, cognitive complexity, and leadership communication competence. This part of the study will also examine any potential incremental validity of emotional intelligence that has not been captured by cognitive
complexity to explain the criterion variable. Here, emotional intelligence and cognitive complexity will serve as predictor variables and communication competence, the outcome variable.

Background of the Problem

Emotional intelligence is a popular construct in academic research as well as in the popular press. Brought to academic attention by Salovey and by Mayer (1990) and popularized by Goleman (1995) through his book, *Emotional Intelligence*, this construct has gained widespread interest due to its application in a variety of contexts and the claim that emotional intelligence plays a crucial role in life successes. Proponents of emotional intelligence suggest an association between emotional intelligence and positive outcomes ranging from improved academic performance (Bar-On, 2005) to greater communication competence (Goleman, 1998a). Goleman (1998b) has called emotional intelligence, “the *sine qua non* of leadership” (p. 94).

In a span of just 15 years, publications on emotional intelligence, a new branch of psychology, have perhaps exceeded other fields of behavioral science (Kunnanatt, 2004). A search in two search engines and four academic databases on October 11, 2005 shows a stark contrast in the number between scientific and nonscientific publications on emotional intelligence. *Google.com* produced 1,950,000 hits and *Yahoo.com* had 2,400,000 hits while *PsycINFO*, *Communication & Mass Media Complete*, *Academic Search Premier*, and *Business & Management Practices* had 531, 25, 376, and 292 respectively. The discrepancy in the number of publications between popular press and scholarly outlets has raised concerns among scholars and researchers of the rapid
acceptance of the construct in the practical world. Some researchers argue that the construct could just be a fad (Matthews et al., 2002) and may not hold true to the claims made by the proponents of the theories (Landy, 2005). A review of the emotional intelligence literature reveals that the fundamental issues of concern are the conceptualization and construct validity of the construct.

Overview of the Major Theories and Measures of Emotional Intelligence

The three major theorists of emotional intelligence are Bar-On (2005), Goleman (2001) and, Mayer, Salovey and, Caruso (Mayer & Salovey, 1997; Mayer et al., 2004). Examination of the basic theoretical foundation of the construct shows that each of the major theorists of emotional intelligence has a different approach to the conceptualization of the construct. Bar-On (2005) states that, “emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands” (p. 3). Bar-On emphasizes the importance of intrapersonal and interpersonal competencies to be able to effectively adapt and cope with interpersonal and social relationships. The instrument for this model, Emotional Quotient Inventory (EQ-i), measures self-awareness and self-expression, social awareness and interpersonal relationship, emotional management and regulation, change management, and self-motivation.

According to Bar-On (2005), emotional intelligence, as measured by the EQ-i, contributes to successful performance at school. Other researchers, however, found that EQ-i has a correlation of 0.01 with GPA; that EQ-i composites have no significant
association with GPA (see Conte, 2005 for a review). The EQ-i is also reported to overlap with measures of personality traits and disposition (Palmer, Gardner & Stough, 2003). So, even though Bar-On (2005) claims that EQ-i “possess good construct validity” (p.11) others have shown research which disputes this claim.

Goleman’s model of emotional intelligence is based on competencies which were identified in his research on outstanding performers in organizations (Goleman, 2001). Goleman asserts that to be emotionally competent one has to be emotionally intelligent, a necessary but insufficient ability. He continues:

> although our emotional *intelligence* [italics in original] determines our potential for learning the practical skills that underlie the four EI clusters, our emotional *competence* [italics in original] shows how much of that potential we have realized by learning and mastering skills and translating intelligence into on-the-job capabilities. (Goleman, 2001, p.28)

In a study on developing the Emotional Competence Inventory (ECI), Goleman, Boyatzis and McKee (2002) found support for eighteen competencies with four clusters: self-awareness, self-management, social awareness, and relationship management. Earlier, Boyatzis, Goleman and Rhee (2000) reported that the internal consistency of the ECI scale ranges from .61 to .85 for self assessment and .80 to .95 for peer and supervisor-ratings. In spite of this report, the validity of the ECI has been challenged because the instrument is proprietary, and access to the ECI data set for peer-review assessments is limited (Conte, 2005).

Those few researchers who were able to examine the scale found that the ECI content overlaps with four of the Big Five personality dimensions that are
Conscientiousness, Emotional Stability, Extraversion, and Openness as well as other psychological concepts in leadership and motivation (Conte, 2005). In another study, Newsome, Day and Catano (2000) found that the ECI lacks predictive validity. Thus, on the basis that ECI lacks discriminant and predictive validity evidence, “the scale does not deserve serious consideration until peer-reviewed empirical studies using this measure are conducted” (Conte, 2005, p. 24).

Unlike Bar-On who approaches the emotional intelligence conceptualization from a social-emotional perspective and Goleman from a competency perspective, Mayer, Salovey, and Caruso’s theorizing of the construct is based on the connection between intelligence and emotion (Mayer et al., 2004). According to Mayer et al., emotional intelligence, a form of [hot] intelligence, operates on emotional information which “may be conveyed through its own unique communication channels, as well as through patterns of associated signals from proprioceptive, affective, and cognitive channels” (p. 197).

The abilities and skills to perform these activities are divided into four branches: perception and expression of emotion, use of emotion to facilitate thought, understanding of emotion, and managing emotion. In all these functions, emotional information received from perception is processed by intelligence to generate relevant cognitive structures in order to understand and manage the messages produced. Mayer, Caruso, and Salovey, (1999) then developed the MEIS to measure their emotional intelligence model. Mayer, Salovey, and Caruso (2002) later developed a newer version of the measure, the MSCEIT.
This model, too, is not without criticism. Matthews et al. (2002) and Roberts, Zeidner, and Matthews (2001) claim that the MEIS (the earlier version of MSCEIT V.2) has low reliability and “is among the worst in the battery” (Roberts et al., 2001, p. 224). It is also not clear that this model can be validated as discriminantly different from other intelligences. To counter these arguments, Mayer, Salovey, Caruso, and Sitarenios (2003) conducted reliability tests and factor analysis and demonstrated that the MSCEIT V.2 has high reliability and that the four-factor model is a viable representation of the emotional intelligence domain. In another study, Ciarrochi, Chan and Caputi (2000) claim that the MEIS is related to mood management, but, not the ability to prevent mood from biasing judgment, which, surprisingly, is related to IQ. This leads to the assertion made by Mayer et al. (2004) that IQ (cognitive intelligence) is required in understanding emotional process. Other researchers also provide empirical evidence for its construct validity (e.g. Day & Carroll, 2004) and were more receptive of the MSCEIT as the measurement for emotional intelligence (Conte, 2005; Daus & Ashkanasy, 2005).

A few researchers recognize that differences in conceptualization can be a worthwhile outcome. Gohm (2004) argues for a variety of definitions of a concept to obtain the benefits of the different perspectives, and so is the case for emotional intelligence. Even though this assertion could be useful for some, in this case this belief may pose a problem. The point is, are the theorists talking about the same part of the “elephant” or are they describing the elephant with what they “see.” One may be talking about the tail, the other the leg and the third the head – yes, they are “conceptualizing” the elephant but they are all talking about the different parts of the elephant. So, to have consistency one question ought to be asked: “What is it that these theorists are
conceptualizing and would like to measure: ability, competency, trait, or the behavioral aspect of emotional intelligence?"

One possible approach in addressing the above question is to begin with the basic terms used in the construct: emotion and intelligence. Since emotional intelligence is an intelligence construct, explicating its underlying cognitive-related elements would be a reasonable first step to take. When the basic foundation of this construct has been understood, then other dimensions such as competencies and behavior can be studied. A firm conceptual foundation would allow for a stronger establishment of construct validity.

While such an undertaking might be theoretically useful, the conflation of emotional intelligence with cognitive constructs poses a concern about redundancy, especially when emotional intelligence is posited as a predictor of communication competence. So, the question of, “What is it that emotional intelligence theorists want to capture?,” would lead to the next question, “have we already captured the essence of it in other constructs?” Cognitive complexity is a prime candidate for consideration in this case since it is related to communication competence.
Cognitive Complexity

Cognitive complexity is probably the most researched cognitive disposition in communication scholarship during the last two decades of the 20th century (Daly, 2002). According to Burleson and Caplan (1998):

Cognitive complexity is an individual-difference variable associated with a broad range of communication skills and related abilities. In general, the term indexes the degree of differentiation, articulation, and integration within a cognitive system. That is, cognitive system composed of a comparatively large number of finely articulated, abstract, and well-integrated elements is regarded as relatively complex. Strictly speaking, the term *cognitive complexity* [emphasis in original] is content free and can be applied to any cognitive domain. In practice, however, cognitive complexity has been treated as an aspect of social cognition, with research focusing on individual differences in the complexity of cognitive structures applicable to self and, especially other persons. (p. 233)

Communication processes involve perceiving, interpreting, coordinating and producing messages (Burleson & Caplan, 1998). All these processes require individual social information-processing capability and as such differ with every individual in terms of their cognitive ability in processing the information. Burleson and Caplan assert that individuals with high cognitive complexity possess more sophisticated social perception skills (such as identifying others’ states of disposition, forming interpersonal impressions, making social evaluation), are adept at person-centered message reception and production, are more effective in social relationships, and have good control of interactional management (e.g. topic during conversation and memory for conversation).
In more specific communicative behaviors, cognitively complex individuals have greater listening comprehension than do the less cognitively complex individuals (Beatty & Payne, 1984) and they display more effective communication instructions than their less cognitively complex counterpart as shown in a study conducted by Hale (1980). Additionally, cognitively complex encoders tend to construct messages which have high informational value compared to the less complex encoders (Saine, 1976).

Cognitively complex individuals also demonstrate elements of emotional sensitivity. In a study conducted by Burleson and Samter (1990), the researchers found that cognitively complex individuals rate affect important in a relationship. Cognitively complex individuals perceive affectively oriented skills such as ego support to be more important in friendship relationship than do noncomplex individuals. Interestingly, noncomplex individuals perceive nonaffectively oriented skills such as referential skill as more important than do those high in cognitive complexity. Therefore, the element of sensitivity to emotional cues in cognitive complexity provides an indication that cognitive complexity may entail criterial attributes that also are associated with emotional intelligence. Given the established role of cognitive complexity in communication competence and more recent assertions of the potential importance of emotional intelligence in communication competence, it is important to know whether cognitive complexity and emotional intelligence can even be distinguished from each other.

**Communication Competence**

The ultimate interest in this dissertation is prediction and explanation of leader communication competence. Interest in communication competence has a long history as
evidenced by an essay on effective speaking for the son of a Pharaoh and a book about effective communication dating back to 3000 B.C. (McCroskey, 1984). This interest follows through to this day where communication skill is still regarded central in the school curriculum.

Definitions of communication competence are diverse. Chomsky (1965) asserts that competence is “the speaker-hearer’s knowledge of his language” (p. 4) but Hymes (1972) views communication competence as “dependent on both (tacit) knowledge and (ability for) use” (p.282) and adds that noncognitive factors are important in the determination of competence: “In speaking of competence, it is especially important not to separate cognitive from affective and volitive” (p. 283). Hymes suggests that knowledge and skill (ability for use) are required to be perceived competent and that cognition, affection, and volition as part of achieving competency.

In addition to knowledge and skills, to understand an individual’s communicative performance (and hence competence), one has to take into consideration the individual and his or her interlocutor’s competence and the interactional event (Hymes, 1972). However, even though both Chomsky’s and Hymes’s earlier definitions contribute to the understanding of competence, their definitions of the concept lack detailed explanations to be useful as a theoretical concept of competence (Cooley & Roach, 1984).

Later, in a review of work on competence, Wiemann and Backlund (1980) note that two similar categories of competence appear, which, are cognition and behavior, noting that competence in the communication literature is mainly situated in the behavioral category. Arguing that competence should involve both cognition and behavior, Wiemann and Backlund continue to suggest that one needs to know (have
knowledge) and know how (have the skills) to demonstrate the appropriate behavior to be perceived communicatively competent.

Apart from cognitive and behavioral ability, communicatively competent individuals also adapt and demonstrate appropriate behaviors. Duran (1992) notes that adaptability is the most pertinent feature and seems to be a universally accepted component in the communication competence construct. Spitzberg (1988), on the other hand, found appropriateness and effectiveness to be mostly present in his assessment of the communicative competence literature.

The various views on communication competence above show that communication competence requires knowledge (cognitive ability) which is demonstrated through appropriate use of behavioral skills to adapt to a given situation. While the relationship between various aspects of communication competence and cognitive complexity is well established, from this same viewpoint, communication competence could be explained by some of the theoretical concepts in emotional intelligence. Emotional intelligence, which emphasizes the use of cognition to process emotional information, is also demonstrated through desirably accepted behaviors. Assuming that cognitive complexity and emotional intelligence can be discriminated, which of the two provides a better prediction of communication competence?
Statement of the Problem

Despite the extensive amount of literature available on emotional intelligence, concerns and criticisms on the conceptualization of the construct and the validity of its measures are abound. Two possible factors might contribute to this unsettling debate. One, Bar-On and Goleman’s models (also referred to as “mixed models”) cover a range of personality characteristics and qualities which result in difficulty of differentiating the conceptual definition between each of the qualities or characteristics (Gannon & Ranzijn, 2005; Zeidner, Roberts, & Matthews, 2004) and with emotional intelligence. This in turn poses a problem of a consensual definition of emotional intelligence. Different from Bar-On and Goleman, who made no explicit claim on the cognitive aspect of emotional intelligence, Mayer et al. (2004) assert that “EI from this theoretical perspective refers specifically to the cooperative combination of intelligence and emotion” (p. 197).

Even when they first conceptualized the construct, Salovey and Mayer (1990) have indicated that their theoretical framework of emotional intelligence is in the realm of the intelligence literature and have since provided support and evidence of the cognitive component of their emotional intelligence conceptualization (Mayer et al., 2004). A close look at the three models shows a difference in conceptual focus. Bar-On seeks to develop a general measure of personality traits (Mayer et al., 2004) based on the social and emotional variables predictive of an individual’s emotional well-being and adaptation while Goleman focuses on the emotional competencies which he claims can be learned to produce outstanding performance at work. Mayer et al. (2004), on the other hand, emphasize the intelligent element of emotion in the construct. The different focuses
on explaining the same construct makes the conceptualization of emotional intelligence problematic.

The second factor which seems to give rise to this troubling issue is that most of the validity studies revolve around a few general, psychological concepts. Thus far, examinations of the emotional intelligence construct validity centers on concepts such as the Big Five personality, general intelligence (g), and anxiety. If emotional intelligence were to contribute to life satisfaction, then other factors such as communication behavior should be part of the study. Studies have shown that cognitive complexity is an important contributor to a person’s communication competence (Duran & Kelly, 1985; Hale, 1980). As shown in the discussion above, both cognitive and emotional sensitivity are present in the communication of an individual with high cognitive complexity. Hence, it might turn out that cognitive complexity could be part of emotional intelligence or perhaps even the same construct renamed emotional intelligence. Thus, examining the relationship between emotional intelligence and cognitive complexity may alleviate some of these doubts.

What seems more disturbing is that the measures of emotional intelligence have been employed in various studies world-wide, even though the concept of emotional intelligence is still in the refinement stage. Based on the assertion made by the proponents of emotional intelligence (such as Bar-On, 2005; Goleman, 1995; Mayer et al., 2004; Weisinger, 1998) that emotional intelligence predicts life success, practitioners have held onto the belief that emotional intelligence is an important element in organizational performance and productivity which leads to the many training programs conducted to improve individual’s emotional intelligence, including those of leaders.
(Freshman & Rubino, 2002). To train leaders, who are seen as the drivers of a country’s economic and political force (much less for social well-being) in a competency that is based on a construct which is still developmental may pose a risk. If it turns out that the prediction that emotional intelligence predicts life success is true, then there is a lot to gain. However, if the prediction turns out to be flawed, much cost would have been incurred for the training and other programs related to the enhancement of this competency. So, it is vital to examine the relationship between emotional intelligence and leadership communication competence.

Purposes and Objectives of the Study

The first purpose of the study is to determine whether or not the emotional intelligence construct is distinctly a different construct from cognitive complexity. Literature review of both these concepts shows that there is some overlap in their definitional explanations which warrants a study on the possible redundancy between the two constructs. A second, but equally important purpose of the study is to verify the claim that emotionally intelligent leaders are communicatively competent as claimed by researchers (e.g. Goleman, 1998b; Weisinger, 1998). The following are the objectives of the study:

1. To examine the relationship between emotional intelligence and a related communication variable, cognitive complexity.
2. To explicate (any) potential conceptual redundancies between emotional intelligence and cognitive complexity.
3. To predict leadership communication competence employing emotional intelligence and cognitive complexity as predictor variables.

Accordingly, the study addresses the following research questions:

RQ 1 Is the construct of emotional intelligence conceptually redundant with cognitive complexity? If yes, to what extent are they redundant?

RQ 2 Does emotional intelligence predict leadership communication competence?

RQ 3 Which is a better predictor of leadership communication competence; emotional intelligence or cognitive complexity?

Significance of the Study

Although claims that leaders’ emotional intelligence has positive effects on employee performance and motivation (Gardner & Stough, 2002; Goleman, 1998b; Goleman et al., 2002; Rosete & Ciarrochi, 2005; Zhou & George, 2003), measurements used in these studies are diverse. For example, Gardner and Stough (2002) measure emotional intelligence with the SUEIT developed by Palmer and Stough (2001), Rosete and Ciarrochi (2005) employ the Mayer et al. (2002) instrument, the MSCEIT 2V, Goleman and Boyatzis employs the ECI, and Bar-On, the EQ-i. With different instruments used to measure a supposedly same construct, emotional intelligence, this signals a conceptual issue in defining the underlying theoretical elements of the construct. The controversies and issues of conceptual and construct validity make this study important. In conducting this study, it is hoped that the findings will add to the
accumulation of empirical evidence on the determination of the discriminant validity of emotional intelligence.

With claims that emotional intelligence is important in leadership, a study employing a communication variable will be useful in providing evidence for the predictive validity of the construct. Cognitive complexity, which taps into the cognitive component of the brain, will serve as the bridge between emotional intelligence and communication competence. An examination of these relationships can spark some light for future communication research on emotional intelligence.

This study hopes to make the following contributions to knowledge:

1. Theoretical development of the construct. On the assumption that there is discriminant validity, this result shows support that emotional intelligence is distinctively a different concept from other intelligence variables, in this case, cognitive complexity.

2. Removing the notion of an already studied concept using a different name. Cognitive complexity, a frequently employed cognitive concept in communication studies, is tested against a similar cognitive construct in psychology, emotional intelligence to verify if the two are conceptually related or different. Findings from this study will inform us of their relationship and probably bridge the gap.

3. Researchers of emotional intelligence frequently conclude that leaders with high emotional intelligence are also good communicators. This study hopes to contribute to the understanding of the relationship between leadership communication competence and emotional intelligence.
4. Since this study was done in Malaysia, the data collected will contribute to the intercultural component of the emotional intelligence and leadership communication competence data set. Results from this study may also contribute to the enrichment of the intercultural communication literature.

5. Findings from this study will provide practitioners with more information on the viability of the construct that they are using in their training programs. Also the reliability of the claim that emotional intelligence contributes to leadership communication competence would greatly enhance organizational communication dynamics in achieving their goals.
Chapter 2

REVIEW OF LITERATURE AND HYPOTHESES

This chapter begins with an overview of the related literature on leadership effectiveness and communication competence. The next section provides some theoretical conceptions of communication competence and the relationship between leadership and communication competence, including a short discussion of leadership emotional intelligence, to lead readers into the next section for a general description of emotional intelligence and its related theories and measurements. This section highlights the controversies and issues of the emotional intelligence construct leading into another section of a discussion, that is, cognitive complexity and its interrelationships with emotional intelligence and communication competence. Finally, this review of literature concludes with a proposition of a possible intersection between the three constructs that are used in this study: emotional intelligence, cognitive complexity, and communication competence. The chapter ends with the research questions and hypotheses.

Introduction

I see both Churchill and Einstein as leaders—as individuals who significantly influence the thoughts, behaviors, and/or feelings of others.

(Gardner, 1995, p.6)

According to Gardner (1995), Churchill was a “direct leader”, who exerted influence through the stories he told. Einstein was an “indirect leader” who influenced
through the ideas that he proposed in the form of theories or treatise. Both exhibited effective communication that captured the minds and feelings of others. Effective leadership is about good communication, but before discussing effective leadership and communication competence, readers will first be brought to look at one of the recent developments in the study of leadership effectiveness.

Studies on leadership effectiveness span time and region. The prime factor for the ongoing and endless quest for effective leadership characteristics is the view that a leader is the key figure to the success or failure of an organization, society or nation. Many theories of leadership have been (re)developed and (re)modeled; some taking shape and others still to come. As long as people live together, there will be someone who will be a leader, elected or emergent. The essence of the matter is whether or not the leader is effective in leading the people, organization, or nation.

One of the most recent areas of interest in leadership studies is emotional intelligence. Leaders who are emotionally intelligent are found to effect positive organizational outcomes; they enhance employee creativity (Zhou & George, 2003), increase employees’ job satisfaction and extra-role behavior (Wong & Law, 2002), and lead self-managing teams (Wolff, Pescosolido & Druskat, 2002). Along with the desired impacts on organizational outcomes, these leaders are also said to be competent communicators. Leaders who are emotionally intelligent effect employee work performance and motivation through the way they communicate organizational goals and vision. In describing the qualities of emotionally intelligent executives, Cooper and Sawaf (1997) suggest that executives be sensitive to the feelings and emotions of others,
that by perceiving and understanding emotional cues, they shall be better able to express appropriate and relevant behaviors to address the situation.

In the excitement with this new “found” construct which supposedly has the potential to enhance quality of life, researchers involved in the examination of emotional intelligence have reservations as to its conceptual and construct validities. The base of the concern is the issue that this new construct has not been scientifically examined and validated, but its measurement has been used in organizational development programs. The acceptance that emotional intelligence is a *sine qua non* of leadership (Goleman, 1998b) and that “by now, most executives have accepted that emotional intelligence is as critical as IQ to an individual effectiveness” (Druskat & Wolff, 2001, p.81) adds to the disturbing state of affairs. At this time, emotional intelligence measurements are employed in the employment selection process and training programs (Dearborn, 2002; Sy & Côté, 2003).

On the next level are the issues of psychometric properties and predictive validity. Studies have shown that some models of emotional intelligence overlap with existing personality trait variables making it seem that this “new” construct is nothing more than “old wine in a new bottle.” Also, the claim that emotional intelligence is able to predict life successes begs the question of incremental predictive validity of the construct.

When emotional intelligence is said to relate to leadership communication competence (Goleman, 1998b; Weisinger, 1998), a very important question comes to mind: Has this phenomenon been studied by communication scholars under other variable names such as empathy or cognitive complexity? There is a lot of research which has investigated various aspects of empathic functioning and cognitive complexity in
interpersonal interactions such as friendship. So, is this “new” construct another name for an existing concept? These very interesting questions will be addressed later in the chapter but for now let us explore some relevant leadership literature which relates to communication competence.

Leadership

The history of leadership is as old as humankind. On this note, Bass (1990) states:

The study of leadership rivals in age the emergence of civilization, which shaped its leaders as much as it was shaped by them. From its infancy, the study of history has been the study of leaders –what they did and why they did it. (p. 3)

Leadership studies cut across history, philosophy and the social sciences –all with the aim to generate leadership principles (Bass, 1990). In fact, to this day, interest in leadership still pervades many sectors of the knowledge domain as can be seen in the plethora of conference and journal articles in a myriad of disciplines and the existence of many leadership institutions and centers.

Despite extant studies and research on leadership, many believe that there is more to be done. Some even think that the field has not moved forward very much. For example, Hunt (1999) attributes this quote to an anonymous leadership scholar: “Once I was active in the leadership field. Then I left for about ten years. When I returned it was as if I had been gone only ten minutes” (p.129). From earlier research foci on external observable leadership qualities such as traits, skills, and situational contexts, researchers are now beginning to delve into the internal dimension of leadership personal qualities.
such as authenticity (e.g., Fry, 2005) and spirituality (e.g., Reaves, 2005). Inherent in these qualities and skills is the ability to communicate effectively.

**Leadership Communication and Leadership Effectiveness**

Leadership is a “form of human (symbolic) communication” (Hackman & Johnson, 2004, p. 31) and because of that nothing is more crucial than good leadership communication. Well-planned organizational strategies fumble with weak leadership communication. And, of course, anecdotes and cases of failing organizations revived by good leadership and effective communication are plentiful. Where strategic plans are in place, appropriate and accurate use of relevant communication theories make a mark. This can be seen in the best communication practices at the *Dell Computer Corporation* where application of the High-Speed Management Theory has given *Dell* a competitive edge over its competitor (Cushman & King, 2003). The High-Speed Management system works by reducing product delivery cycle time and eliminating information bottlenecks. This concept of speedy customer service enabled Dell to leave behind its main competitors who lost their market share and had to restructure their marketing strategies. Behind this powerful communication tool are the people who make it work – the leaders and employees.

In another instance, a company benchmarked for its organizational leadership communication is General Electric Company (GE). Cushman and King regard GE as “a World-Class Leadership Communication System” and Jack Welch, the former CEO of GE, as a highly effective communicator based on the company repeated success and Welch’s recognitions by notable business magazines such as *Fortune 500, Financial*
According to Cushman and King, Welch’s successful performance through transformational leadership was founded on a “backbone leadership communication process” incorporating a clear articulation of the company threats and a vision in overcoming the threats (p. 6). On top of his excellent functional communication skills, Welch also acknowledges the human (emotional) side of communication: “The leader must become an even more engaged coach, an even more engaging person. You’re going to have to create an environment where excitement reigns, where the challenges are everywhere, and where the rewards are both in the wallet, yes, but also in the soul” (cited in Walmsley, 2003).

Even though “there are almost as many different definitions of leadership as there are persons who have attempted to define the concept” (Bass, 1990, p. 11), for the most parts, leadership is about effective communication in gaining employee compliance, persuading, power relations, and effects of interactions. In order to achieve positive results for these said processes, a leader ought to be communicatively competent. Leadership communication competence can be observed through a demonstration of effective communication skills. The two sets of communication skills essential to leadership effectiveness suggested by Hackman and Johnson (2004) are functional and emotional skills. Functional communication skills are those initiatives which involve (1) linking internal and external organizational members; (2) thinking and reasoning to solve problems and develop plans and visions; and (3) regulating through influential processes such as negotiation and compliance gaining. Emotional communication skills entails: (1) perception, appraisal, and expression of emotion; (2) attending to the emotions of others; (3) emotional facilitation of thinking; (4) understanding and analyzing emotional
information and employing emotional knowledge; and (5) regulation of emotion. Hence, both cognitive and emotional competencies are vital in leadership and leadership success which depends on how well leaders are able to integrate emotion and cognition (Hackman and Johnson, 2004), the result of which is associated with leaders’ communication competence.

Communication Competence

In tracing the historical development of the communication competence construct, McCroskey (1984) noted that interest in the construct dates back to at least 3000 B.C. in an essay addressed to the son of a Pharoah Huni, Kagemni. A book, Precept, about teaching effective communication to another Pharoah’s son and composed by an Egyptian, Ptah-Hotep, appears to have been written in 2675 B.C. The rest of the history on communication competence is too vast to be discussed in this brief overview of contemporary scholarship on communication competence.

Researchers interested in communication found that communication competence is an important element in successful business, marriage, adaptation in life, and social interaction (Powers & Lowry, 1984). Spitzberg (1988) claims that a lack of communication competence has social implications such as loneliness, depression, stress and anxiety, hypertension, psychological well-being, and many other mental illness. In order to capture these various phenomena, researchers have studied communication at several levels of analysis: interpersonal, group, and organizational (for a summary see Jablin & Sias, 2001).
In an organizational context, communication is both a process and product of organizational functioning (Sypher, 1984); without which organizations may not accomplish their set goals if a large number of members in the organization lack effective communication skills. Spitzberg and Cupach (2002) state that the “skill in interpersonal communication is essential to an individual’s ability to manage relationships” (p. 567) which applies to any kind of interaction be it in friendships, marriages, or the workplace. Implied in the importance of effective communication is the ability to communicate competently.

Communication competence has been studied in a diverse array of scholarship such as human-computer interaction, marketing, gerontology, institutional contexts, conflict, and intercultural relations (for more, see Wilson & Sabee, 2003). Interesting to note though, despite this vast literature, communication competence lacks definitional consensus (Jablin & Sias, 2001; Wilson & Sabee, 2003). Even though a plethora of studies on communication competence exist, scholars studying the concept are still perplexed with what constitutes communication competence and also others express concern about the lack of theory (Wilson & Sabee, 2003). Tracing the related literature on communication competence might provide some insights into the underlying concepts of communication competence.

**Definitions of the Term**

For decades, linguists have been interested in the notion of competence (Cooley & Roach, 1984). Chomsky’s (1965) earlier conception that competence is “the speaker-hearer’s knowledge of his language” (p. 4) omits performance which to Hymes (1972)
lacks the interactional (behavioral) element of communication. Based on this critique, Hymes (1972) offers a description of communication competence as:

> I should take competence as the general term for the capability of a person.

> Competence is dependent on both (tacit) *knowledge* and (ability for) *use*. … The specification of ability for use as part of competence allows for the role of noncognitive factors, such as motivation, as partly determining competence. In speaking of competence, it is especially important not to separate cognitive from affective and volitive. (p. 282-283)

Basically, Hymes suggests that knowledge and ability for use (skill) are required to be perceived competent and that cognition, affection, and volition as part of achieving that level. Additionally, to understand an individual’s communicative performance (and hence competence), one has to take into consideration the individual and his or her interlocutor’s competence and the interactional event (Hymes, 1972). Even though both Chomsky and Hymes contribute to the understanding of competence, their early definitions of the concept lack detailed explanations to be useful as a theoretical concept of competence (Cooley & Roach, 1984).

Moving away from the linguists whose interest on competence is language-based, scholars of communication have been more concerned with the pedagogical aspect of communication competence (Cooley & Roach, 1984; McCroskey, 1984). Wiemann and Backlund’s (1980) review of work in competence noted two similar categories of competence, namely the cognitive and behavioral perspectives, noting that communication is situated in the behavioral category. Arguing that competence should
involves both cognition and behavior, Wiemann and Backlund offer their view of communication competence as:

The ability [i.e. cognitive ability] of an interactant to choose among available communicative behaviors in order that he (she) may successfully accomplish [by employing skills] his (her) own interpersonal goals during an encounter while maintaining the face and line of his (her) fellow interactant within the constraints of the situation [adaptation and appropriateness]. (p. 188)

Cooley and Roach (1984) offer three criteria on coming to terms with a general theorizing of the concept. They suggest that a theory of competence would take into consideration the physiological (age, sex and the like), psychological (that is cognitive constructs, affective constructs, personality constructs, and motivation) and social/cultural makeup of the individuals suggesting physiological and psychological categories as the minimal requirements to be perceived competent. Hence, a general definition which might fit into this suggestion at this point would be: “Communication competence is the demonstration of communication knowledge through the appropriate use of communication skills.”

In addition to knowledge and skill, two other features which often emerge in the discussions of communication competence are adaptability and appropriateness. Duran (1992) notes that adaptability is the most pertinent feature, and adaptability seems to be a universally accepted component in the communication competence construct. Spitzberg (1988), on the other hand, found appropriateness and effectiveness to be mostly present
in his assessment of the communicative competence literature. Researchers with these views regard communication competence as:

(i) “an individual’s ability to adapt effectively to the surrounding environment over time” (Spitzberg & Cupach, 1984, p. 5).

(ii) “a function of one’s ability to adapt to differing social constraints” (Duran, 1983, p. 320).

(iii) important in interpersonal interactions asserting that “adaptation is an essential, defining feature of interpersonal communication” (Burgoon, Stern, & Dillman, 1995, p.5).

(iv) “the ability of an individual to demonstrate knowledge of the appropriate communicative behavior in a given situation” (Larson, Backlund, Redmond & Barbour, 1978, p.16).

(v) “can be demonstrated by observing a communication situation and identifying behaviors that would be appropriate or inappropriate in that situation” (McCroskey & Beatty, 1998, p. 227).

(vi) “the knowledge of appropriate communication patterns in a given situation and the ability to use the knowledge [italics in original]”(Cooley & Roach, 1984, p.25).

(vii) interculturally dependent. “ICC (intercultural communication competence) involves the knowledge, motivation, and skills to interact effectively and appropriately with members of different cultures” (Wiseman, 2002, p. 208). “competent communication consists of behaviors that are regarded as effective and appropriate” (p. 209).
Others, who disagree with these two features, question the validity of what is appropriate and effective (Wilson & Sabee, 2003) which differs when taken into context.

Individuals can accomplish effective communication through adaptation which can be seen in four patterns of behavior (Burgoon et al., 1995). First, behavioral matching occurs when behaviors of both interactants are very much like one another. These patterns include mirroring, interactional synchronicity, reciprocity, and convergence. Complementarity is when each individual’s patterns are different from the other but complements the other in some ways. Then divergence, as the name implies, shows a pattern dissimilar from at least one of the interactants such as dissynchrony where there is an obvious lack of coordination between the interactants. And finally, compensation occurs when interactants have opposite but avoidance patterns of behavior.

So, when adapting, individuals follow patterns which assist them in creating a smooth, comfortable, and conducive environment. In most instances, adaptation to a particular communication situation employs appropriate and effective use of knowledge and skills.

The task of considering whether or not a communicative behavior is appropriate is a difficult one. Who gets to say that a speech is appropriate, or by what standards is a behavior appropriate? (Wilson & Sabee, 2003). In a study of cultural differences on the perception of appropriate skills in communication, Hwang, Chase, & Kelly (1980) found that Chinese Americans and Chinese differ in their perception of some aspects of the communication competence in the scale developed by Kelly. A principal components analysis shows that Chinese construe effectiveness as both efficacy and problem-solving while Chinese Americans differentiate efficacy from empathy. Another interesting result
shows that in the Chinese sample, “opinion leadership” emerges as one of the factors of competence while in the Chinese American sample, “charisma” was factored.

In the Malaysian context, culture plays a big role in communication. As a country which is comprised of three ethnic groups; the Malays (52 %), Chinese (30%) and Indians (8%) (Wikipedia, 2007), perceptions of communication competence can be varied. However, Asma (1996) asserts that, “while we differ in many symbolic expressions, our common denominator lies in our deep-seated Asian values” (p. xiii). A study of the three groups on Malaysian workplace communication competence, Choon (2004) found that three dimensions of communication competence emerged: self-confidence, respect-relational and, self-image. Looking at the communication style of one of these ethnic groups, the Malays, Lailawati (2006) contends that for the Malaysian Malays (who are mainly Muslims), their communication is partly shaped by the religion they embrace. On this note, Asma (1996) recommends that Malay leaders and managers who wish to win the hearts and minds of their subordinates are expected to role model their behaviors based on the cultural and religious values of their subordinates. Asma continues to provide suggestions on Malaysian effective leadership behaviors (and hence communication) which include building relationships, demonstrating expertise in both technical and human management, expressing concern for subordinates’ welfare and development through IMAN (faith in God), and sharing stories through talks and chats.

So needless to say, judgment of appropriateness is contextually, situationally, and culturally bound, which means that appropriate communicative behavior in one situation may not apply in another. However, with adaptation, a particular behavior may seem
appropriate in other cultures (or context or situation, for that matter) depending on how well one is able to use the skills that they have.

Communication competence can be studied from different organizational communication perspectives. The mechanistic perspective views human communication as a transmission process with channel as the locus of communication, the psychological perspective centers on the effect of individuals’ characteristics on communication via informational stimuli, the interpretive-symbolic perspective maintains individual’s ability to create and shape social reality through their communication process, and finally the systems-interaction perspective, which takes on the overall communication system, and produces the patterned sequential behavior within the system (Krone, Jablin, & Putnam, 1987).

For this present research, the study of organizational leadership communication adapts the psychological perspective in that the locus of communication process is “conceptual filters” which consists of attitudes, cognitions, and perceptions. Subsequently, these conceptual filters which “include all those unobservable internal states of individuals that significantly affect not only what information is intended to, conveyed, and interpreted but also how this information is processed” (Krone, Jablin & Putnam 1987, p. 25) function by encoding and decoding information from the environment. The scale to be used was developed by Monge, Backman, Dillars, & Eisenberg (1982). The researchers derived organizational communication skills factors from works by Norton (1978), Berlo (1960), and Farace, Taylor, and Stewart (1978) where encoding and decoding skills appear to be pertinent in the organizational contexts. Also, in this perspective, communication is receiver-oriented rather than “patterns of
coordinated behavior” as in the interpretive-symbolic perspective (Krone, Jablin, & Putnam, 1987).

In a related observation, communication competence and communication skills have at times been used interchangeably as though to mean the same thing. So, a distinction between competence and skill has to be made. According to Spitzberg and Cupach (2002), ‘an individual’s interpersonal skills, along with his or her knowledge and motivation, enable the occurrence of certain outcomes that are judged interpersonally competent in a particular interactional context” (p. 574). Relatedly, McCroskey and Beatty (1998) assert that competence lies “within the cognitive domain” while skill is demonstrated “within the psychomotor domain” (p. 227) claiming that skill is still necessary in competence (McCroskey, 1984). In this respect, competence has both knowledge and skills component. The difference, then, between competence and skill is that competence is the use of knowledge and the appropriate application of that knowledge in adapting to a situation while skill is a specific behavior which someone is good at, for example listening, persuading, interviewing, and motivating but, might not use it appropriately to adapt to the situation.

Therefore, communication competence resides in the human cognitive domain, but both the process and product are demonstrated through the use of skills in the expression of verbal and nonverbal communication. In line with this train of thought, emotional intelligence would be the internal processing of communication messages which begins with the accurate perception of emotional information and ends in the production of appropriate, effective messages. It is communicative behaviors which take these messages beyond the confinement of the cognitive domain.
Narrowing the concept of communication competence, Spitzberg (1983) suggests that relational competence involves five assumptions: that are contextual, appropriate and effective, judged as a continuum of effectiveness and appropriateness, functional, and an interpersonal impression formed between the communicators. In another examination of the competence criteria, Spitzberg and Capuch (2002) delineate six qualities that they found related to interpersonal relations: fidelity, satisfaction, efficiency, effectiveness, appropriateness, and ethics. Of these, appropriateness and effectiveness are the most common hybrid (Spitzberg & Capuch, 2002). These propositions suggest that both appropriate communicative behavior and relationship maintenance require an individual to utilize his or her reasoning ability and to be able to demonstrate the chosen skills for effective interactions.

Other reviews of the competence literature include competence as goal achievement, effectiveness, and successful relationship building in addition to the existing categories of behavior and social cognition. Discussions of these elements of communication competence can be found elsewhere (e.g. Farace et al., 1978; Jablin, Cude, House, Lee & Roth, 1994; Jablin & Sias, 2001; Spitzberg & Cupach, 1984).

Zeroing In On the Definition of Communication Competence

Wilson and Sabee (2003) assert that definitional problems and lack of theory of communication competence are interrelated concerns which can possibly be treated by employing a “theoretical term” rather than a construct. According to these researchers, a construct is defined individually and can be “in isolation from larger theories … and their meaning arises from, vertical connections with observables” (p. 6) whereas a theoretical
term “derives its meaning not just from summarizing observables, but primarily ‘from the part it plays in the whole theory in which it is embedded, and from the role of the theory itself’ [Kaplan, 1965, p. 55 cited in Wilson and Sabee, 2003]” (p. 6). So, proposing a theoretical term in defining communication competence (rather than treating it as a construct), Wilson and Sabee argue that:

a call to explicate communicative competence no longer is satisfied solely by a conceptual definition, nor even by an accompanying measurement procedure. Rather, a call to explicate communicative competence is an appeal to analyze its meaning and role within a theory of communication (i.e., its horizontal connections). (p.7)

With a theoretical approach in mind when explicating the communication competence construct, Wilson and Sabee draw together five theories of communication they believe to relate to communication competence and present them as families of communication theories: four psychologically-based (subdivided into message processing and message production) and one socially-driven (see Table 2.1). As can be seen from the choice of theories, communication competence is heavily situated in the realm of cognitive processing and the products of these processes demonstrated in the interactional exchanges of verbal and nonverbal communication in the social domain.

Looking across Table 2.1, the theories are divided into a cognitive and a social dimension. The cognitive dimension emphasizes the need to have knowledge for message processing and the ability to process the knowledge for message production. Apart from the need to have knowledge, relevant skills are required to process and produce messages. These skills are used in accurately perceiving, identifying and recognizing
stimuli, particularly important messages which are implied and buried under nonverbal behaviors. A skillful communicator, then, would be one who is able to recognize the discrepancy between verbal and nonverbal cues, who associates those messages which appear to be related, and then transforms the perceived and stored information into appropriate and adaptable responses. So, in message processing and message production, knowledge and skills are critical in developing and producing effective messages.

The social dimension of this theoretical explication delineates the interactional aspect of the communication process. Knowledge involves knowing the personal, relational, and cultural standards of competences and the skills are depicted in the behavior of the communicator. Inability to perform the “standards” of what is considered competent results in perception of incompetent communication.

From the explication of the theoretical concepts of communication competence above, a common thread which seems to run through all the theories is that communication is a psychological as well as a physiological process, at the minimum, and sociological/cultural make-up at the best (Cooley & Roach, 1984). Even though “communication competence will not have one set meaning” (Wilson & Sabee, 2003, p.41), the least that such diverse usage of a term would depict is some common underlying basic characteristics of what constitutes communication competence. Otherwise, with so “many” meanings for a single term, communication competence could mean “almost anything related to communication effectiveness” and possibly end up like the situation in emotional intelligence –the problematic conceptualization of the construct.
So, even though no consensual agreement on what constitutes communication competence has been reached (Jablin & Sias, 2001; Redmond, 1985; Wilson & Sabee, 2003), some common features seem to appear in the definitions of communication competence presented in this review. Based on the viewpoints and expositions of these concepts, four elements largely emerge: knowledge, skill, adaptation, and appropriateness. So, for the purpose of this study, communication competence refers to one’s adaptation of a communication situation by demonstrating skills in appropriating knowledge relevant to the communication situation and context. Said differently, to be competent, one has to have the communication knowledge in order to develop the appropriate skills that can be used to adapt to situational demands.
### Table 2.1 Theoretical Perspectives on Communication Competence

<table>
<thead>
<tr>
<th>Psychological Perspectives</th>
<th>Social Perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theories of message processing</strong></td>
<td><strong>Theories of message production</strong></td>
</tr>
<tr>
<td>Expectancy Theories</td>
<td>Attribution Theories</td>
</tr>
<tr>
<td><strong>Central theme</strong></td>
<td><strong>Competent communicators are responsive to expectations</strong></td>
</tr>
<tr>
<td><strong>Qualities needed for competence:</strong></td>
<td></td>
</tr>
<tr>
<td>a. <strong>Knowledge</strong></td>
<td>1. Situationally and culturally relevant expectancies</td>
</tr>
<tr>
<td></td>
<td>2. Factors affecting own reward valence</td>
</tr>
<tr>
<td></td>
<td>3. Possible mitigating information</td>
</tr>
<tr>
<td>b. <strong>Skills</strong></td>
<td>1. Identifying relevant expectancies</td>
</tr>
<tr>
<td></td>
<td>2. Recognizing strategic violations</td>
</tr>
<tr>
<td></td>
<td>3. Following or positively violating expectancies</td>
</tr>
<tr>
<td></td>
<td>4. Recognizing multiple potential interpretations</td>
</tr>
<tr>
<td><strong>Potential source of incompetence</strong></td>
<td>1. Lack of knowledge</td>
</tr>
<tr>
<td></td>
<td>2. Inaccurate assessment of reward valence</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Wilson & Sabee (2003), *Handbook of Communication and Social Interaction Skills.*
Leadership and Communication Competence

In the past, communication has received limited attention in leadership theories. The focus on leadership traits, behaviors and situational factors; which basically highlights leaders’ personal characteristics and dispositions, seems to diminish the communicative importance of the leadership process. Here, leadership is about achieving organizational goals through effective strategies and accurate assessments of environmental challenges and opportunities. Employees serve as the means to accomplish organizational tasks while communication is a means towards an end. From a transactional perspective of “a mere exchange” of leader rewards and “followers’ fulfillment of agreements” to receive the rewards (Bass 1990), Burns (1978) presented a more employee-centered paradigm of transformational leadership. Within this paradigm, communication becomes an important leadership quality where leaders’ transformational characteristics are exhibited through demonstration of individualized consideration, inspiration, intellectual stimulation, and idealized influence (Bass, 1990). These transformational leaders have strong communicative capability which enables them to articulate a clear and vivid vision and to display desirable relational behaviors in order to stay connected with their followers. Barge (1994) asserts that, “the key to more complex leadership behavior and more adaptability to new situation is good communication skills” (p. v)

In a leadership context,

‘doing leadership’ entails competent communicative performance which, by influencing others, results in acceptable outcomes for the organization (transactional/task-oriented goal), and which maintains harmony within the team
or community of practice (relational/people-oriented goal). (Holmes, Schnurr, Chan & Chiles, 2002).

Related to leadership communication competence are style, linguistic forms, personal qualities (Bass, 1990), and emotional intelligence (Goleman, 1998b; Mayer et al., 2004). Among these, emotional intelligence is a recent addition to the desired leadership quality list and has been purported to be a positive factor in organizational outcomes such as employee motivation and commitment (Mayer et al., 2004), and creativity in the workplace (Zhou & George, 2003). Other studies also found that leaders with high emotional intelligence are rated effective by their subordinates (Rosete & Ciarrochi, 2005).

A few researchers claim that leadership emotional intelligence influences employee work performance in the workplace (Caruso, Mayer & Salovey, 2004; Goleman, 1998b). According to Caruso et al. (2004), leaders who have self awareness of their emotions are also able to identify emotions in their followers. This self awareness assists the leaders to perceive emotions accurately and to use the emotional information to guide their thinking process so as to manage their own emotion and others and express those emotions into appropriate and acceptable behaviors. Leaders who manage their emotions well can build stronger relationships with employees as compared to leaders who are less capable: “Leadership, which embraces the emotional side of directing organizations, pumps life and meaning into management structures, bringing them to full life” (Barach & Eckhardt, 1998 p. 4). On the same note, Bennis and Nanus (1997) claim that, unlike managers who focus on the organizational physical resources, leaders need to work on the emotional and spiritual resources. Often, a leader plays the role of a
motivator and inspirational figure in elevating employee self esteem and work performance: “It is an emotional appeal to some of the most fundamental of human needs – the need to be important, to make a difference, to feel useful, to be part of a successful enterprise” (Bennis & Nanus, 1997, p. 85-86). Individuals who are often considered to possess the ability and skills to motivate and inspire through emotions are the charismatic and transformational leaders (Bass, 1985; Conger, 1989).

So far, the assertion that emotional intelligence contributes to leadership communication competence seems a potentially valuable addition to the leadership literature. However, at this point, the emotional intelligence validity issue makes this entry problematic. Before further claims on the predictive validity of emotional intelligence can be made, an investigation into the conceptual vis à vis measurement validity of the construct should first be conducted. For this, readers are now turned to an overview of the emotional intelligence construct, its proposed theories and measurements, and the critiques and debates that surrounds its validity issues.

Emotional Intelligence

The notion that emotional intelligence (compared to IQ) “adds far more of the qualities that make us more fully human” (Goleman, 1995, p.45) intrigues many people. Individuals who are said to possess high emotional intelligence have better quality of life: higher social interaction quality (Lopes, Brackett, Nezlek, Schütz, & Salovey, 2004), higher leadership perception from employees (Gardner & Stough, 2002), decreased stress and anger levels (Luskin, Aberman, & DeLorenzo, 2005) and reduced deviant behaviors (Mayer et al., 2004). Due to the impressive outlook for this new construct, practitioners
of private and public organizations believe in the promise of this idea and incorporate it into their development programs (Druskatt & Wolff, 2001). This alluring effect of emotional intelligence raises a stark concern among scholars and researchers. The problem lies in the “infancy” of a construct which seems to be in a “bandwagon” which is “too fast to live, [but] too young to die” (Zeidner, Roberts, & Matthews, 2004). Researchers, although fascinated with the popularity and the possible potential for the construct to enhance quality of life, are skeptical of the rapidity of its acceptance at a very early stage of its development.

Often, a number of theories or concepts from related fields and disciplines are used to explain a particular phenomenon. This practice provides a better insight into the phenomenon under study. To illustrate this point, consider the following concepts regarding adaptation in human relationships:

- **interpersonal sensitivity** – “the ability to sense, perceive accurately, and respond appropriately to one’s personal, interpersonal, and social environment” (Bernieri, 2001, p. 3);

- **empathy** – a state of mind “consisting of internal emotional and cognitive processing and external behavioral manifestation” (Meyer, Boster, & Hecht, 1988, p. 20) with perspective-taking as the most agreed upon common element in empathy (Meyer et al., 1988; Weaver, 1998)

- **emotional intelligence** – “the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to
assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth” (Mayer et al., 2004, p. 197).

**cognitive complexity** – an awareness held by “individuals [who] possess relatively differentiated, abstract, and organized systems of cognitive structures for interpreting the thoughts and behavior of others” (Burleson, 1987, p. 305) and whose perceptions “are more accurate [than less complex individuals] at identifying others’ emotional states, are more inclined to make sophisticated inferences about others’ dispositional qualities, and are more likely to use information present in the situation when making inferences about dispositions” (Burleson & Caplan, 1998, p. 246).

All the above concepts basically support the idea of a common human endeavor; social adaptation through information processing. They seem to be explaining a similar human relation phenomenon; the ability to understand and adapt with others through identification of their feelings and thoughts. What then distinguishes these concepts? According to Mayer, Caruso, and Salovey (2000a), the differences between concepts lie in the way they are defined and the approach used to measure the constructs. For example, the emotional intelligence model proposed by Mayer and his colleagues (Mayer & Salovey, 1997; Mayer et al., 2004) concerns emotional information processing, a
cognitive-related activity, in understanding and managing oneself and others for enhanced personal and social relationships. Cognitive complexity, which also touches on cognition and information processing, on the other hand, deals with structures of cognitive constructs related to the communication process. Here, this concept focuses on the utilization of the cognitive structural schemas while emotional intelligence emphasizes the ability to process both cognition and emotional information. This distinction notwithstanding, emotional intelligence as defined by Mayer et al. (2004) and cognitive complexity as defined by Burleson and Caplan (1998) appear to share similar attributes and effects.

How Emotional Intelligence Became Popular

In just over 15 years after its introduction into the public sphere, the construct of emotional intelligence has gone through extensive criticism and rounds of debate from scholars and researchers alike. The fact that such a relatively “new” construct has gained immediate and immense popularity stems from a book, *Emotional Intelligence*, authored by Daniel Goleman which was published in 1995. Goleman gave emotional intelligence a special credit and a very promising positive outlook which has lured many to believe that emotional intelligence is a wonderful attribute. For example:

The high-IQ pure type (that is, setting aside emotional intelligence) is almost a caricature of the intellectual, adept in the realm of mind but inept in the personal world. … Still, of the two, emotional intelligence adds far more of the qualities that make us more fully human. (Goleman, 1995, p. 44-45)
Views that emotional intelligence is superior to IQ have attracted popular media and many organizations. Business entities were among the first organizations to adopt and integrate this concept into their training and development programs. The eiconsortium of emotional intelligence website offers a selected number of training programs (see website).

**History and Development of the Construct**

The thought that emotion affects cognition, either positively or negatively, has long been an interest in rhetorical studies since ancient Greece (Hyde, 1984). Aristotle, in *The Nicomachean Ethics*, relates emotions to cognition when he states: “Anyone can become angry – that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way – this is not easy” (cited in Goleman, 1995, p. ix). Even in his teachings, Aristotle’s treatise on the art of persuasion, the *Rhetoric*, consists of a classification of the major canons of rhetoric in which intellectual capability and emotional appeals are to be used in framing messages.

In about 200 BCE to 300 CE, when the era of the Stoic movement was strong, emotion was viewed as unreliable to the extent that “the wise person admitted no emotion or feeling whatsoever” (Mayer, Salovey, & Caruso, 2000, p. 94) for which a high value was placed on logic and rationality – a Stoic philosophy (Payne, 1986 cited in Mayer et al., 2000). During that time, the Stoic philosophy was influential among the Jews and Christians and even after its downfall after the third century CE, it still had a strong hold in Western civilization – resulting in the rejection of emotion in Western thought (Mayer et al., 2000).
Perhaps due to the long reign of Stoic philosophy in Western thought (Mayer et al., 2000) and an emerging interest in humanistic psychology (by individuals such as Abraham Maslow, Gordon Allport, and Carl Rogers) during the 1960s, the idea of intelligence in emotion motivated others (for example Cooper & Sawaf, 1997; Goleman, 1995; Weisinger, 1998) to share in the contribution of the emerging conceptualization of the construct.

The acceptance of emotional intelligence into Western thinking in the mid 1990s was seen as a zeitgeist in which there was interest in the intersection between emotion and reason (Mayer et al., 2000). Prior to that, in the 1960s, several uprisings of emotionality occurred in which political activism, social movements, and artistic expression were signaling that emotion should not be taken for granted but be heeded. Incidents such as, ‘acute attacks of rage’ (Pouissant, 1970 cited in Mayer et al., 2000) among the southern civil rights workers were a demonstration of angry emotion of a feeling of unjust treatment. Additionally, the Bell Curve (written by Richard Herrnsten and Charles Murphy, 1994) issue which seemed to offer a pessimistic view on the less intelligent, partly contributed to the interest in emotional intelligence (Matthews et al., 2002). In fact, the word emotional intelligence is interesting even without having others to say what they think (Sternberg, 2002a). As the conflict between emotion and reason prevailed, Damasio (1995) and LeDoux (1998) reported that new brain research indicated that there is more integration between the emotional and cognitive systems than before (cited in Mayer et al., 2000).

Tracing back the origin of the construct, emotional intelligence seems to have been studied since the nineteenth century as found in the work of Charles Darwin on
emotional expression for survival and adaptation (Bar-On, 2005). Some years later, in 1920, Edward Thorndike introduced a related concept social intelligence; that interest was picked up by other scholars such as Edgar Doll (1935) and David Wechsler (1940) who asserted that non-intellective factors were said to influence “intelligent behaviors.” Later, Wechsler (1943) argued that, to have a complete model of intelligence, these factors have to be well defined. However, other theorists of IQ lacked interest in this concept which they perceived as “manipulative” and, in 1960, an influential intelligence tests textbook “pronounced social intelligence a ‘useless concept’” (Goleman, 1995, p.42).

The integration of emotion and intelligence was illuminated by W.L. Payne (1986) in his unpublished doctoral dissertation, A Study of Emotion: Developing Emotional Intelligence; Self-integration; Relating to Fear, Pain, and Desire” (Mayer, et al., 2000). However, this line of thinking was not developed until Salovey and Mayer (1990) picked it up and introduced emotional intelligence into the discourse of the scientific community. It has been a hotly debated topic in psychology and elsewhere until about 2006 when it has more or less subsided.

The main reason for the debate started with a controversy on the public utilization of a scientifically unvalidated construct (Matthews et al., 2002; Mayer et al., 2004). Many concerned researchers and scholars were doubtful and skeptical that this “new” construct could be the answer to many human problems. Peer-reviewed publications began to appear examining the construct validity of emotional intelligence and addressing some of the issues of conceptual and psychometric validities. After several exchanges of constructive criticisms, comments and suggestions, the major theorists of emotional
intelligence redeveloped their version of the model and measurement (for example, the Mayer et al. model has been gradually refined as seen in Salovey & Mayer, 1990; Mayer & Salovey, 1997; Mayer et al., 2000b; Mayer et al., 2002, Mayer et al., 2004).

All these theories have been undergoing the test for construct and incremental validities. Mayer et al.’s theory has received far more evaluation than the others. Such attention seem to suggest that the model proposed by Mayer and colleagues is more promising as a theory of emotional intelligence (Daus & Ashkanasy, 2005; Landy, 2005; Sternberg, 2002a). To provide a better understanding of the debate and controversies of the issues, a discussion of the major theories and measurements follows.

Introduction to the Theories of Emotional Intelligence

Generally speaking, emotional intelligence is an individual’s capacity to integrate and utilize the emotional and cognitive capability of the mind in meeting the daily demands of human functioning –from self-reflection to social interaction. Unlike the conventional conception of intelligence where the analytical aspect of the human mind is the base for measuring intelligence (Stonier, 1992), for emotional intelligence, the ability to utilize and manage emotional and cognitive information becomes the yardstick. These emotional-cognitive process outputs can be measured either through a self report, other report or performance test depending on the model of emotional intelligence that is used. The question now is: of the proposed conceptions and measurements of emotional intelligence, which model can be accepted as the emotional intelligence theory?

Among the various conceptualizations of emotional intelligence, three models pervade the debate on its theoretical and measurement development: the Bar-On Model
of Emotional-Social Intelligence (Bar-On, 2005), the EI-based Theory of Performance (Goleman, 2001), and the Mayer and colleague’s Theory of Emotional Intelligence (Mayer & Salovey, 1997; Mayer et al., 2004). To begin with the fundamental issue of conceptual validity of the construct, two main conceptions have been put forth, the “mixed” model, which are Bar-On’s (2005) and Goleman’s (2001) models and the ability model, which is Mayer and colleagues (1997 and 2004) model. With further testing and explication of the mixed model, studies have led researchers to believe that the mixed models provide appropriately a trait model of emotional intelligence (Petrides & Furnham, 2001). (Note: When discussing these models, I shall interchangeably refer to the theoretical conception of emotional intelligence as the model of emotional intelligence or the theory of emotional intelligence depending on the frame of reference at the point of discussion).

Since the call to conduct more scientific research on the validity of the theories and reliability of the measures of emotional intelligence (Matthews et al., 2002; Sternberg, 2002a), various tests have been conducted to verify the conceptual and psychometric validities of the construct (e.g. Bastian, Burns & Nettleback, 2005; Ciarrochi, et al., 2000; Newsome et al., 2000; Petrides, & Furnham, 2001; Van Rooy, Viswesvaran & Pluta, 2005). So, the next section deals with the theories and measures of emotional intelligence.
Major Theories and Measures of Emotional Intelligence

There are two forms of the emotional intelligence model: the mixed (or trait) model and the ability model. These models are categorized as such based on the different approaches taken to explain the theoretical underlying concepts which appear to make up the construct. Subsequent to these theories are their respective measurements.

The basic idea of emotional intelligence is believed to have started with Charles Darwin’s work on emotional expression for survival and adaptation (Bar-On, 2005). This was followed by Edward Thorndike (1920) who introduced a related concept social intelligence and later David Wechsler (1940), with the non-intellective factors. Other research which relates to this early interest in emotional and social intelligence includes studies on alexithymia (that is the (in)ability to recognize, understand, and describe emotions), psychological mindedness, and emotional awareness (Bar-On, 2005). Then following this line of thought and through his argument that the process of “information-processing psychology” is too mechanistic, Howard Gardner (1993) suggested that the “human symbolic systems” be included as part of the cognitive processes and calls them “human intelligences” (p. 8). Among the multiple intelligences that Gardner proposed, personal (intra- and inter-) intelligences seem closer to the understanding of emotional intelligence. Based on the work laid out by Sigmund Freud (on the self) and William James (on individual relationship with the community), Gardner developed the intra- and interpersonal intelligence as personal intelligence. In intrapersonal intelligence, the core capacity at work here is access to one’s own feeling life – one’s range of affects or emotions: the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to
draw upon them as a means of understanding and guiding one’s behavior.

(Gardner, 1993, p. 239)

Interpersonal intelligence on the other hand, “turns outward, to the other individuals. The core capacity here is the ability to notice and make distinctions among other individuals [italics in original] and, in particular, among their moods, temperaments, motivations, and intentions” (Gardner, 1993, p. 239). The works of these earlier scholars in one way or another have contributed to the conceptualization of the mixed or trait model of emotional intelligence.

The other view of emotional intelligence is the ability model which is based on the key terms of the construct: emotion and intelligence. With an emphasis on the connection between intelligence and emotion, Mayer and colleagues have produced a series of publications explaining, supporting, and arguing for the unique integration of the intelligence and emotion component in the construct (e.g. Mayer et al., 2000a; 2001; 2004). Since an intelligence component is present in their model, Mayer and colleagues make a claim and an explicit defense on maintaining that their model deserves to be the emotional intelligence theory. This claim, however, has yet to be affirmed. A description of each theory and respective measurement follows.

(i) Bar-On Model of Emotional-Social Intelligence and the EQ-i.

According to Bar-On (2005), the development of the emotional-social intelligence model has been influenced by the works of Darwin, Thorndike, Wechsler, Sifneos, and Applebaum. Based on these works, Bar-On was able to discern five sets of abilities which
he regards as the key components in the emotional-social intelligence definition and conceptualizations:

(a) the ability to recognize, understand and express emotions and feelings;

(b) the ability to understand how others feel and relate with them;

(c) the ability to manage and control emotions;

(d) the ability to change, adapt and solve problems of a personal and interpersonal nature; and

(e) the ability to generate positive affect and be self-motivated. (p. 3)

These sets of abilities provide the theoretical framework for the Bar-On model and its measurement, the EQ-i. Emotional-social intelligence, then,

is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands. (Bar-On, 2005, p. 3)

Bar-On’s model of emotional intelligence focuses on non-cognitive personality traits (Newsome et al., 2000). According to Bar-On (2000) the conceptual development of his model is based on the findings from studies conducted around the world in 17 years, and for that he claims that it has empirical evidence for its construct validity. Even though Bar-On (2000) claims that the EQ-i was developed to measure an individual’s emotional and social intelligence, not personality traits or cognitive capacity, research has shown that the EQ-i has moderate relationships with other personality trait measures and hence lacks discriminant validity (e.g. Conte, 2005).
In his popular book, *Emotional Intelligence*, Goleman (1995) suggests that humans have two minds: one that thinks (rational mind) and the other that feels (emotional mind). His theory speaks on the neocortical and limbic systems of the human brain (particularly which relates to the amygdala) in explaining the “emotional brain” which forms the basis for his conception of emotional intelligence. At the same time, Goleman adapts and expands on Salovey and Mayer’s (1990) ability model into five domains: knowing one’s emotions, managing emotions, motivating oneself, recognizing emotions in others, and handling relationships. He then developed a measure for them and employed the measurement in the workplace. This practice was heavily criticized by scholars who argue that the construct has not gone through scientific verifications and particularly Mayer et al. (2000a; 2001), who posit that for a construct to be called an intelligence, that particular construct should meet the requirements of a test of intelligence.

So, after a series of exchanges and debates on the conceptual and measurement validity of his model, Goleman (2001) proposed the EI-Based Theory of Performance. This model, although it makes no explicit claim on the emotional intelligence terminology, acknowledges the necessity of an underlying emotional intelligence ability to enable an individual to be “emotionally competent.” Goleman argues that even though emotional *intelligence* is the potential through which individuals learn practical skills, emotional *competence* demonstrates how much those skills are employed and translated into the workplace. A framework of this latest model, the Emotional Competencies is comprised of self-awareness, self-management, social awareness, and relationship
management. Because of the wide range of skills and competencies present in this model (Van Rooy et al., 2004), researchers who examine the discriminant validity of this construct find that it overlaps with many other personality traits such as the Big Five and other psychological constructs in leadership literature (for a discussion see Conte, 2005), so they name it the mixed (or trait) model (Caruso, 2004).

Because the measurement for this model, Emotional Competency Inventory (ECI), is unavailable for public investigation due to proprietary reasons, it raises a concern about the “independent replication” of the study leading researchers to conclude that “these reported findings on the ECI are tentative at best” (Conte, 2005, p. 434). Researchers who are wary of this proprietary claim raise several questions particularly those pertaining to the data set, from data collection to the data analysis (for example, see Landy, 2005).

(iii) Mayer et al. and the Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT).

In contrast to the broader definition of both Bar-On and Goleman’s model of emotional intelligence, Mayer et al.’s model focuses on a more limited view of the construct that is emotion and intelligence (Mayer et al., 2004). As claimed by the proponents of this model, the focus on mental abilities intertwined with emotional processing would qualify this model as an intelligence construct and not a personality trait (Mayer et al., 2000a; Mayer et al. 2001; Mayer et al., 2004). According to Mayer et al. (2000a), a concept can be claimed an intelligence only if it meets three criteria of intelligence testing: conceptual, correlational, and
developmental, and for that, they devoted a whole article (Mayer et al., 2000a) to support the claim that their model is intelligence-based (see also Mayer et al., 2001). Several studies have found that ability-based emotional intelligence has a very high correlation with cognitive ability (Brackett, Mayer & Warner, 2004; Mayer et al., 2000a; Mayer et al., 2001; Van Rooy et al., 2005) and little or no correlation with personality traits (Livingstone & Day, 2005; Mayer et al., 2004), thus affirming that this model is an intelligence construct (Daus & Ashkanasy, 2005).

In this model, an important point to note in the definition of the construct is that emotion is taken into consideration in the reasoning process (Mayer et al., 2004). Stated differently, “emotion makes thinking more intelligent and that one thinks intelligently about emotions” (Mayer & Salovey, 1997, p. 5). In a revised version of the definition (earlier version in Salovey & Mayer, 1990; Mayer & Salovey, 1997), Mayer et al. (2004) state that emotional intelligence is:

the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth. (p.197)

Unlike social intelligence where the focus lies on social relationships (Mayer et al., 2000a), emotional intelligence spans the internal and external interactions of emotional-cognitive processes in self and with others. For example, in an emotion-laden situation where strong feelings of emotion may have undesirable consequences, the appropriate use of cognition to manage emotions and conversely emotion to facilitate thought
becomes an important step to take. A person who cares to moderate the situation would have to be one who is sensitive to the emotional cues (information) through the verbal and nonverbal communication, understands and processes the information using own thoughts and emotion, and manage that information so as to produce desirable outcomes for self and the other.

Mayer and colleagues’ model of EI consists of four branches of emotional intelligence:

(a) Perceiving Emotions: The ability to perceive emotions in oneself and others as well as in objects, art, stories, music, and other stimuli.

(b) Facilitating Thought: The ability to generate, use, and feel emotion as necessary to communicate feelings or employ them in other cognitive processes.

(c) Understanding Emotions: The ability to understand emotional information, to understand how emotions combine and progress through relationship transitions, and to appreciate such emotional meanings.

(d) Managing Emotions: The ability to be open to feelings, and to modulate them in oneself and others so as to promote personal understanding and growth.

(adapted from www.eiconsortium.org)

The measurement for Mayer et al.’s model, MSCEIT V.2 (Mayer-Salovey-Caruso-Emotional-Intelligence-Test Version 2), has so far been rigorously tested for its convergent and discriminant validity. Even though there are a few cases of discrepancies in the result obtained with that claimed by the theorists, on the whole, the MSCEIT appears to withstand the test of construct validity (Livingstone & Day, 2005), convergent,
discriminant, and predictive validities (see Daus & Ashkanasy, 2005). This, however, has not fully addressed the question of “is emotional intelligence old wine in a new bottle?” (email exchanges between John Mayer and Frank Landy in 2004; Matthews et al., 2002). Therefore, a test of discriminant validity with other related concepts which have not yet been used in the field of psychology but often used in other fields may possibly shed light on the uncertainty of whether or not emotional intelligence is after all a “new” concept in its own name. The particular concept being referred to is cognitive complexity which will be discussed in a later section.

**Controversies and Critiques of EI**

One of the comments which stirred the controversy relating to emotional intelligence was offered by Matthews et al. (2002) who asserted that,

> Claims about EI have created considerable excitement about the potential of EI both in the business community and in the general public although, unfortunately, these claims tend towards the extravagant and hyperbolic (if not outrageous). Overall, …, there is precious little evidence to back up these claims, with the empirical research that allegedly supports many of these claims pretty thin – if not altogether ephemeral. (p. 467)

Other similar remarks include the lack of predictive validity (Zeidner et al., 2004), similarity to personality trait (MacCann, Matthews, Zeidner & Roberts, 2004), broad conceptualizations (Locke, 2005), and inappropriate choice of the dependent variable (Landy, 2005). Also, there are too many theories and measurements of emotional intelligence.
In the construction of the measurements, some emotional intelligence measures seem to “run before the gun”, in that these measures are employed in the public domain even when the theoretical framework of the construct is still under development and has not yet received scientific validation. Even though this may not be true for all of the emotional intelligence measures, the practice has created an uproar among scholars who believe that a construct needs to be first scientifically validated before it can be made for public use.

When the construct was initially made known to the public, scholars were also concerned with the inappropriate application of the construct in the public arena (Matthews et al., 2002; Sternberg, 2002a). Although the movement can widen the scope and understanding of IQ and IQ-related measures, the downside “is that it is crass, profit-driven, and socially and scientifically irresponsible” (Sternberg, 2002a, p. xii). The consequence of such phenomenon, Robert Sternberg a prominent intelligence scholar remarks, would be analogous to an untested drug which goes into the market:

We would not want drugs to go to market that are essentially untested and that have only their promoters’ claims to back them up. Yet we routinely rely on such claims to buy educational and organizational products and services. People’s lives may be affected in much the same way that their lives can be affected by drugs, but in this case, they have not even the appearance of protection. (Sternberg, 2002a, p. xii)

Other researchers have implied that this “creation of popular self-help movement” is a myth and not science or could have been “some longstanding, but hitherto poorly articulated, concerns of psychology” (Matthews et al., 2002, p. xvi) which have not been
developed. The latter comment, among others, could have been one of the reasons for the mushrooming of the many theories and measurements of the construct. Alongside these efforts is the recent growth of scientific studies and research on emotional intelligence in many scholarly venues and publication outlets.

One other concern is the claim of predictive validity. Even though a few researchers find evidence for these claims, there are others who obtain contradictory results. For example, Conte (2005) claims that emotional intelligence provides little or no incremental prediction of work outcomes. With the overview of the critiques on the construct, readers are now turned to the specific comments and concerns of each model.

(a) Goleman (1995)

Scholarly interest in Goleman’s conceptualization of the construct is attributable to his claim that emotional intelligence can be equally, if not more, powerful than IQ (Matthews et al., 2002). With limited access to the ECI database for public scrutiny, scholars were concerned with issues regarding the data for this claim. The data collected for the measurement of this model has availability issue for scientific investigations (Landy, 2005; Matthews et al., 2002), which makes it the more difficult to convince other researchers of its psychometric validity. Additionally, the study by Boyatzis et al. (2000) was unable to provide evidence of convergence validity of the four groups of competencies which serves as the theoretical basis of Goleman’s model (cited in Matthews et al., 2002). So, an early claim that emotional intelligence has the power equivalent to IQ before providing empirical evidence for such a claim has incited a strong call for scientific explication of this theoretical conception.
In this model, various personality traits are assumed to cluster in defining the construct, whereas the traits themselves are supposed to be functionally independent variables (Matthews et al., 2002). In other words, at the conceptual level, this model seems to be a piecemeal collection of the established areas of psychology (Matthews et al., 2002). The claim that emotional intelligence encompasses all positive life qualities that are “not” IQ (Matthews et al., 2002) raises the concern that emotional intelligence is everything else other than IQ – too broad to be a concept and a difficult one to support.

Despite criticisms, there has also been support for this model. According to Emmerling and Goleman (2003), even though IQ still remains an important predictor in certain types of vocation, its predictive strength diminishes when an individual is in the vocation. That is, at a level where everyone else is almost at par in their cognitive ability, individual differences may not be so much in their IQ, but somewhat in their personality and level of emotional intelligence.

Finally, this model offers a framework of emotional and social competencies based on the emotional intelligence domains suggested in the theoretical model (Emmerling & Goleman, 2003). The emphasis on competencies (Caruso, 2004) rather than intelligence makes this model more suited to be classified a motivational construct. Because of the conceptual issues and unavailability of its measurement for validity tests, this model is not chosen for this study.

(b) Bar-on (2000)

Bar-On’s model is said to have some similar characteristics with Goleman’s model of emotional intelligence in that various personality traits appear to exist in the
model (Matthews et al., 2002), which is why researchers also name it the “mixed” or “trait” model (Caruso, 2004; Mayer et al., 2000a). Different from Goleman’s model, which has very limited public access to the data set, the measurement for this model has been tested rigorously. Bar-On model provides a series of validation studies of its measurement, the EQ-i, and findings suggest that the model is statistically reliable (Bar-on, 2000). Some researchers also claim that the model has predictive validity such as academic success and clinical disorders, but other researchers found that EQ-i lacks support for academic achievement prediction (Newsome et al., 2000; O’Connor & Little, 2003). Yet still, there are uncertainties of whether or not the measurement taps into other constructs not in the personality domain (Matthews et al., 2002). This shows that more studies are needed to examine the predictive validity of the model.

In the earlier conception of this model, Bar-On (1997) stated that emotional intelligence is “an array of non-cognitive capabilities, competencies, and skills that influences one’s ability to succeed in coping with environmental demands and pressures” (cited in Matthews et al., 2002, p.15). However, after several revisions of the measurement, Bar-On (2005) discovered that many of the domains in the concept overlap with personality and social adaptation variables and so he now refers to this model as the Emotional-Social Intelligence theory.

With a multi-composite array of emotional, social, and personal ability factors in one model, the development of a specifically defined emotional intelligence concept seems to lose its focus. Here, the broad definition and lack of focus on defining the intelligence aspect of the construct makes this model unsuitable for the present study.
Mayer and Salovey (and colleagues) appear to be the “most prolific protagonists of EI in the scientific literature” (Matthews et al., 2002). After the publication of Goleman’s book in 1995, these proponents of emotional intelligence construct have published many articles and book chapters to rebut the claims made by Goleman and to provide evidence for the “intelligence” component of their model (e.g. Mayer et al., 2000a, Mayer et al., 2004), notwithstanding empirical validations of their measurement, the MSCEIT V.2. As proponents of the ability model, Mayer and colleagues have made strong cases as to why their model is appropriately the emotional intelligence construct (Mayer et al., 1999; Mayer et al., 2001). Brackett and Mayer (2003) agree with Mayer et al. on this claim. Also, Matthews et al. (2002), who have raised several issues with the “mixed” and “ability” models however, are more optimistic with Mayer and colleague’s model and measurement. Matthews et al. commented that the “MSCEIT deserve a special status as the most original and intriguing tests of emotional intelligence yet devised” but with some reservations (p. 20).

Many scholars share the concern that the mixed model concept of emotional intelligence lacks adequate discriminant validity to be a construct different from the personality-based theories (Matthews et al., 2002; Sternberg, 2002a). In contrast, a number of researchers express confidence with the ability model (Daus & Ashkanasy, 2005; Jordan, Ashkanasy & Härtel, 2003) but suggest more studies should be conducted on its discriminant and predictive validity. Daus and Ashkanasy (2005) firmly contend that the ability model is the model of emotional intelligence.
Just like other models and measurements, this model also receives its share of criticism. Besides its construct validity, which shows some less defined factor structure (Petrides & Furnham, 2000), questions also revolve around the two scoring methods of the measurement items and its predictive validity (Matthews et al., 2002). Even though now the scoring method has shown to have convergent validity, concerns about its factor structure still exist.

Unlike the mixed models which apparently measure variables other than cognitive ability (Hedlund & Sternberg, 2000) and obtain weaker correlations with cognitive tests (for a review, see Van Rooy et al., 2005), the ability model shows stronger relationships with cognitive tests (Mayer et al., 1999). In a study conducted by Ciarrochi et al. (2000) however, the ability-based measurement was found to be unrelated to IQ, an inconsistency with positive results by other researchers. Ciarrochi et al. suggested that the discrepancy could be due to the different measures of IQ used by the two groups of researchers; Ciarrochi et al. employed the performance IQ while Mayer et al. used the verbal IQ.

Up to this point, the discontent among scholars of emotional intelligence lies in the vagueness of the underlying theoretical conceptualization of the construct and the discrepancies in the psychometric analysis with that claimed by the proponents of each model (except probably for Mayer and colleague’s model which appears to have more consistent results). Also, the predictive validity of the construct shows mixed results thus warranting further explication of both their construct and predictive validities.
Model for the Study

Among the three most debated models of emotional intelligence, this study employs the framework proposed by Mayer and colleagues (1997; 2004). Even though a few researchers have raised concerns on the predictive and measurement validities of the ability model (e.g. Locke, 2005; Matthews et al., 2002), others (e.g. Daus and Ashkanasy, 2005; Jordan, Ashkanasy & Härtel, 2003; Landy, 2005; Sternberg, 2002a) do acknowledge and express their optimism on the potential of the model. Also, the cognitive element present in the conceptualization of this model coincides with the conceptualization of the communication competence construct provided earlier in the chapter. The common element, cognition, present in both constructs makes the ability model better suited for this study. Table 2.2 below shows a comparison between the three models.
<table>
<thead>
<tr>
<th>Definition</th>
<th>Bar-On</th>
<th>Goleman</th>
<th>Mayer et al.</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills, and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands [italics in original]”</td>
<td>“Focusing on emotional intelligence as a theory of performance, ... emotional competence is a ‘learned capability based on emotional intelligence that results in outstanding performance at work’” (Goleman, 2001, p. 27)</td>
<td>“the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth” (Mayer et al., 2004, p. 197)</td>
<td></td>
</tr>
</tbody>
</table>

**Theoretical Framework:**

<table>
<thead>
<tr>
<th>Basic concept</th>
<th>Demonstration of emotional and social competencies</th>
<th>Demonstration of emotional competencies</th>
<th>Integration of emotion and intelligence</th>
</tr>
</thead>
</table>
| Key concepts  | a) Recognizing, understanding and expressing emotions and feelings  
               b) Understand how others feel and relating with them  
               c) Managing and controlling emotions  
               d) Changing, adapting and solving problems of a personal and interpersonal nature  
               e) Generating positive affect and be self-motivated | a) Self-awareness  
               b) Social awareness  
               c) Self-management  
               d) Relationship management | (a) Perceiving Emotions  
               (b) Facilitating Thought  
               (c) Understanding Emotions  
               (d) Managing Emotions |
Table 2.2  Continued

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instrument</strong></td>
<td>Emotional Quotient Inventory (EQ-i)</td>
<td>Emotional Competency Inventory (ECI)</td>
<td>Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT)</td>
</tr>
<tr>
<td><strong>Type of test</strong></td>
<td>Self-report</td>
<td>360 assessment tool; self/other-report</td>
<td>Performance/ability</td>
</tr>
<tr>
<td><strong>Number of items</strong></td>
<td>133</td>
<td>110</td>
<td>141</td>
</tr>
<tr>
<td><strong>Subscales/clusters/branches</strong>*</td>
<td>Intrapersonal</td>
<td>Self-Awareness</td>
<td>Perceiving Emotions</td>
</tr>
<tr>
<td></td>
<td>Interpersonal</td>
<td>Self-Management</td>
<td>Facilitating Thought</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
<td>Social Awareness</td>
<td>Understanding Emotions</td>
</tr>
<tr>
<td></td>
<td>Stress Management</td>
<td>Relationship Management.</td>
<td>Managing Emotions</td>
</tr>
<tr>
<td></td>
<td>General Mood</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>Measures emotional and social intelligent behavior</td>
<td>Assesses emotional and social competencies</td>
<td>Measures ability to perform tasks and solve emotional problems</td>
</tr>
<tr>
<td></td>
<td>(Note: The ECI has recently been updated to ECI-2.0 – Wolff, 2006)</td>
<td>(Note: The ECI has recently been updated to ECI-2.0 – Wolff, 2006)</td>
<td></td>
</tr>
<tr>
<td><strong>Suggested Purpose of Use by theorists</strong></td>
<td>Education, healthcare and organizational development*</td>
<td>Development*</td>
<td>Employee recruitment, training and development, educational and clinical settings, correctional facilities</td>
</tr>
</tbody>
</table>

Different Names for Different Models

At this point, no one model can claim to be the sole model of emotional intelligence. Until validation and verification of the psychometric properties and predictive validity issues have been resolved, this construct has no single owner. Here, Caruso (2004) offers a suggestion in naming the three models in that the emotional intelligence models be termed according to the approach taken by each proponent: emotional intelligence trait model (Bar-On), emotional intelligence competency model (Goleman) and the emotional intelligence model (Mayer et al.). In relation to categorizing the Bar-On and Goleman’s models as the mixed or trait model, other researchers reflect on the possibility that the two models may be distinct constructs even though the measurements of the models have a high correlation between them (Van Rooy et al., 2005).

The next section describes the relationship between emotional intelligence and communication competence as found in the literature.

Emotional Intelligence and Communication Competence

As the theoretical concept for a construct does not necessarily emerge out of one source, all the three emotional intelligence models can possibly contribute to the conceptualization of emotional intelligence (Emmerling & Goleman, 2003). And, beyond these psychological framings of the conceptual foundation of emotional intelligence, there could also be other related variables that may have potential input into the theoretical conceptualization of emotional intelligence. One possible candidate is
communication competence, a widely-used cognitive-related variable in communication research and one often implicitly buried in emotional intelligence application research.

Major proponents of emotional intelligence theory assert that emotional intelligence contributes to the ability to communicate effective messages (Goleman, 1998b; Mayer et al., 2004; Weisinger, 1998). For example, Deeter-Schmelz and Sojka (2003) found that successful salespersons relied upon some dimensions of emotional intelligence, either consciously or unconsciously. That is, in doing sales, the salesperson has to accurately perceive, understand, and respond appropriately to customers’ verbal and nonverbal cues. These capabilities require that person to have a high degree of emotional intelligence. In another instance, Ikemi and Kubota (1996) report that workers who have a manager trained in emotional intelligence remark, “stormy interactions had diminished, and, in general, they found the manager to be a ‘nicer’ person” (p. 116).

A recap of the theories of emotional intelligence might lead us to see the underlying elements which might enhance this capability.

Bar-On (2005) “to be emotionally and socially intelligent is to effectively understand and express oneself, to understand and relate well with others, and to successfully cope with daily demands, challenges, and pressures.” (p. 3)

Goleman (2001) the social awareness cluster deals with reading people and groups accurately such as “the empathic individual can read emotional currents, picking up on nonverbal cues such as tone or facial expression” (p. 35-36), while the relationship management cluster focus on inducing desirable responses in others for example “fine
tune their own responses to move interaction in the best direction
… effective in give-and-take of emotional information … skills at
handling difficult people…” (p. 37).

Mayer et al. (2004) “the high EI individual, most centrally, can better perceive
emotions, use them in thought, understand their meanings, and
manage emotions better than others … tends to be more open and
agreeable …” (p. 210).

As shown, these theories emphasize the importance of understanding and relating with
others which is similar as in the case of communication competence where adaptation
and appropriate use of knowledge and skills are crucial when interacting with other
people. Therefore, there could be a common underlying element which seems to connect
emotional intelligence with communication competence. A particular construct which is
likely to fit this function is cognitive complexity.

Results of studies indicate that cognitive complexity contributes to
communication effectiveness (Hale, 1980) and competence (Duran & Kelly, 1985),
conversational topic selection (Chen, 1996), information transmission (Saine, 1976) and
problem-solving effectiveness in groups (Watson & Behnke, 1994). With research
showing that the ability model of emotional intelligence has a high correlation with
intelligence measures, it would then be appropriate to examine this construct for its
conceptual redundancy with this other cognitive-related variable, cognitive complexity.

To the extent that cognitive complexity involves the ability to accurately identify
others’ emotional state and to use situational information to produce messages (Burleson
& Caplan, 1998), it may be redundant with the concept of emotional intelligence.
As much as the external processing of emotional messages is important in human interactions, the salience of the internal processes cannot be overlooked. In this regard, Oatley (2004) suggests that reliance on one approach to a study is incomplete without taking the related aspects in perspective: “If we see only people’s behavior, we are compelled by the habitual to see everything as it seems and know nothing much about what generated the behavior” (p. 218). That is to say, to understand a person’s behavior, we also have to understand the underlying thinking processes of that person.

In most conscious acts, an individual’s behavior (and obviously communication) is a manifestation and a product of the thought processes that occur in the mind of that individual. A person’s behavior reflects the information-processing activities that take place in the brain. Studying and understanding the underlying cognitive make-up of that individual might reveal some aspects of the individual’s behavior and the communication processes that are attached to it.

Attributes are the qualities or characteristics that an individual assigns to objects or events which make up the cognitive structures (Zajonc, 1960). Zajonc adds that the process of identifying, discriminating and sorting out the multitude of information (be it object or event) and placing them in organized groups and subgroups depends on the capacity of an individual’s cognitive structure – the higher the degree of differentiation, complexity, unity, and organization of the structure, the larger the number of disposal concepts or attributes that individual possesses. Individuals with high cognitive complexity possess well-developed cognitive structures with which they are able to “predict others behavior, form more elaborate interpersonal impressions, and require
fewer trials on learning unbalance social structures” (Saine, 1976, p. 281). Intelligence, as can be defined by adaptation to the environment (Sternberg, 2002b), can be evaluated by determining the maximal usage of available information, achievement of goals, and meeting of the demands of a changing environment. With the amount of available means of information processing capabilities, a cognitively complex individual would have better adaptive ability than one who has lesser cognitive complexity.

Traditionally, psychologists study intelligence as adaptive behaviors in academic areas, but now with the increasing interest in adaptation in nonacademic or social contexts, they found that intelligence “is not the factual knowledge needed in answering IQ test questions, but rather practical knowledge” about self-regulation and getting work done with and through others (Chiu, Hong & Dweck, 1994, p. 107). In the social context, intelligence generally refers to an individual’s ability to adapt to the environment (Sternberg & Detterman, 1986) and with successful intelligence, the adaptation goes beyond shaping and selecting that environment (Sternberg, 2002b).

As leadership is “largely a shaping function” (Sternberg, 2002b), then applied in an organizational context, successful intelligence leadership is about shaping the organization. With a high level of cognitive complexity, individuals would have a more differentiated system of dimensions. This would enable them to better integrate the nonverbal cues conveyed by the other person and to arrive at a more accurate perception of the affective state of that person (Rosenthal, Hall, Dimatteo, Rogers, & Archer, 1979).

In everyday interactions, what individuals say or do generally is spontaneous, unprepared, and unguarded. When this occurs, individuals tend to rely on the stored information in their memory to create a response due to the limited time to generate
coherent and organized cognitive structures. In such situations, those who have a well-developed interpersonal cognitive construct system will find the communication process less tenuous than those who have a less developed interpersonal cognitive construct system. In this instance, the quality of constructs makes a difference in our ability to persuade, comfort, and instruct other people (Sypher & Applegate, 1984). But still, despite these repertoire of alternatives, “we can remain unconscious of a structure though we be[sic] capable of following it faithfully” (Leeds-Hurwitz, 1989, p. 20).

Cognitive Complexity and Communication Competence

Cognitive complexity is an important determinant of an individual’s communication competence. Almost, if not all, communication scholars and researchers agree that there is a cognitive component in communication competence (Duran & Kelly, 1985). In the 1970s, communication and psychology researchers seemed to move together in their understanding of the mechanisms individuals employ to make sense of reality and one aspect of these cognitive studies is information-processing in social interactions with a focus on the implications of social cognition on communication behavior (Sypher & Applegate, 1984). In line with this claim, other researchers found that communication competence has a cognitive as well as behavioral component (McCroskey & Beatty, 1998; Metts et al., 2005). Jablin and Sias (2001) note a similar pattern in their organizational communication competence research findings in which they classify their findings into two main categories: basic conceptual orientation (behavioral or cognitive) and level of analysis.
Cognitively complex individuals have been found to be more competent communicators than less complex individuals (Duran & Kelly, 1985; Hale, 1980). A study by Duran and Kelly (1985) showed that high cognitively complex individuals demonstrate greater social experience where these individuals were more able to accurately form impressions of others and perceive their behavioral motives than low cognitively complex individuals. Additionally, Duran and Kelly found that high cognitively complex individuals had better role-taking ability and formed more differentiated impressions of others, concluding support for cognitive complexity to be a measure of communication competence. In another study, Duran and Kelly (1985) maintain that communication competence not only involves the ability to evaluate another’s motives and behaviors, but also ability to perceive contextual cues apart from just another individual’s behavior.

In a study on the cognitive domain of communication competence, Duran and Kelly (1988) conducted canonical correlation analysis between communicative adaptability (a suggested cognitive and behavioral construct) and interaction involvement (a cognitive dimension of communication competence). The researchers found significant correlation between the two variables which indicates that to be communicatively adaptable, one needs to possess some degree of cognitive complexity.

Students also perceive cognitive ability as an important contribution to an individual’s communication competence. University students in a geographically diverse region in the U.S. regard competence in communication in terms of quality of performance, physical and intellectual capability, and as a form of social bonding (Almeida, 2004). Even though the view on quality of performance and sociality of
competence are similar to what scholars have suggested, the physical and intellectual
element may signal potential educational problems. Ameida adds that students who view
these elements as traits (which are innate qualities) of communication competence, would
perceive themselves less competent if they lack these traits. This might lead to lower
self-confidence with a probability of increased communication apprehension—a concern
for those in education in developing future leaders.

Cognitive Complexity and Emotional Intelligence

Emotional intelligence intrigues researchers as well as lay persons for its
allegedly promising potential in enhancing the quality of life. At the individual level,
emotionally intelligent individuals would be poised for their ability to handle personal
and others’ emotions (Brackett et al., 2004) (particularly negative ones) while in
organizations, individuals with high emotional intelligence tend to exhibit citizenship
behavior (Day & Carroll, 2004) and demonstrate involved participation in decision
making processes (Scott-Ladd & Chan, 2004). A leader with high emotional intelligence
is said to exhibit warmth and care (Goleman, 1998b). Findings also suggest that
emotionally intelligent managers are emotionally attached to the organization as well as
sensitive to self or employee work-family commitment (Carmeli, 2003). All these
behaviors require well-defined cognitive ability to perceive, manage, and express
e emotions.

Cognitive complexity, an individual difference variable, is domain specific
(Burleson & Caplan, 1998). For example, an individual with a high level of emotional
management cognitive complexity would be expected to demonstrate greater emotional
information processing capability than one who is less cognitively complex in that domain. This individual, however, may not be adept in another domain such as problem solving. So for practical reasons, an individual who has high cognitive complexity in a particular domain should be retained in the same job position and preferably not transferred to another job domain not in his or her area of expertise.

As adaptation is a cognitive function, what is important in the theoretical development of this alternative emotional intelligence explanation then, is to unpack the cognitive and biological processes that underlie these adaptive operations (Matthews et al., 2002). The point for now is a bit simpler. If cognitive complexity and emotional intelligence operate as described above, they are not one in the same construct.

The Nexus of the Constructs

*Relationship between Communication Competence, Emotional Intelligence and Cognitive Complexity*

So far, communication competence, emotional intelligence, and cognitive complexity are described either individually or in relation with another construct. This section brings all three constructs together to illustrate the interrelationships between them.

The discussion and review of literature in the preceding sections indicate that there is a high possibility that communication competence, emotional intelligence, and cognitive complexity are interrelated. Below is a description of the possible activities which occur between the reception and production of emotional messages.
The base of these cognitive processes is the cognitive structure which, if highly
differentiated, hierarchically ordered, and organized, provides the emotional intelligence
with a wide range and variety of information to choose from when processing incoming
emotional messages. Emotional intelligence analyzes, interprets, and synthesizes the new
and stored information in facilitating the thinking process and managing the outgoing
messages. Once complete, the message responses from emotional intelligence will be
demonstrated as observable communication deliverables, perceived as either competent
or incompetent communication depending on the cognitive structure, level of cognitive-
emotive functioning, and skill of the individual. To better understand the above
description, an explanation of the characteristics of emotional intelligence, cognitive
complexity, and communication competence follows (see Table 2.3).

At the fundamental level, the basic feature of these constructs is that all three are
cognitively-based. To be highly emotionally intelligent, cognitively complex, and
communicatively competent, an individual would require, at a minimum, a threshold
level of cognition in each of these capabilities –lacking in one might affect the capability
of the others to function at their best. For instance, a person who lacks the cognitive
structure (low cognitive complexity) for empathy might have a lower capability (low
emotional intelligence) to perceive emotional cues which in turn inadequately processes
those cues into messages which would be considered to be communicatively desirable
(communication competence).

The next feature is the input and the output process. For the input, all the
constructs require information (depending on their respective function) from the internal
as well as external stimuli. Emotional intelligence basically involves the cognitive
processing of emotional information to produce cognitive structures. During these processes, emotional information is differentiated, ordered, and organized into meaningful and relevant messages that could assist in the understanding and managing of emotions. As emotional intelligence and cognitive complexity are internal dimensions of the cognitive process, output for these two constructs which is produced in the form of messages can only be useful if they are transformed into action. Therefore, the processed information (knowledge) is made evident through the external form which is the behavioral dimension seen as a communication speech or behavior.

Each of these constructs has different functions. Cognitive complexity, which depends on the cognitive structures of communication and emotional information, differentiates the information, arranges it into hierarchies and organizes this information into knowledge that will be used in communicative responses. Emotional intelligence, on the other hand, focuses on the reception of emotional messages and processes those messages (described earlier) into “socially desirable” message responses. Communication competence is the observable manifestation of the internal processing of the cognitive elements in the form of knowledge products through the use of communication skills.

The special features show the distinguishing characteristics of each construct. Although these features may be present in the other constructs, they are most prominent in the respective constructs. To be considered highly emotionally intelligent, an individual would need to be able to accurately perceive and discern the emotional expressions “given” and “given off [unintentional cues]” (Goffman, 1959) by the other person. These cues (emotional information) are then processed by the cognitive machineries (this is where the functional overlap between both intelligence constructs,
emotional intelligence and cognitive complexity, occurs) to produce cognitive structures for emotional intelligence to use in processing message responses. For an emotionally intelligent individual, these processes are controlled and managed so that messages produced are adapted and appropriate. The difference between competent and incompetent individuals is thus dependent on the level of their cognitive complexity and emotional intelligence.

For that matter, every person has a different level of emotional intelligence, cognitive complexity, and communication competence. Each trait differs according to the degree of its processing capabilities and functions. Highly cognitively complex individuals have a large number of differentiated cognitive structures which provides them more choices of communicative behaviors to select and utilize. Similarly, highly emotionally intelligent individuals are able to perceive emotions accurately and have the ability to use their cognitive capability to process this information. And finally, communicatively competent individuals are able to adapt and to use appropriate communication messages which distinguishes them from an incompetent communicator.

One of the bases of social interaction is to subsume other’s construing efforts (Kelly, 1955). In this respect, Kelly adds that it does not necessitate us to understand or construe every aspect of the other persons’ construction system, but enough to manage and handle the interaction. When in groups where individuals have similar ways of looking at things, the person who presumably understands more of all the other person’s perspective would have a better opportunity of assuming a leadership role in that group (Kelly, 1955).
Table 2.3 Characteristics of Emotional Intelligence, Cognitive Complexity, and Communication Competence

<table>
<thead>
<tr>
<th>Characteristics:</th>
<th>Emotional Intelligence</th>
<th>Cognitive Complexity</th>
<th>Communication Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic feature</td>
<td>Cognition and emotion</td>
<td>Cognitive structure</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Process: input</td>
<td>Information (emotion)</td>
<td>Information (all)</td>
<td>Information (verbal &amp; nonverbal)</td>
</tr>
<tr>
<td>: output</td>
<td>Messages</td>
<td>Messages</td>
<td>Speech and behavior</td>
</tr>
<tr>
<td>Functions</td>
<td>Perceive emotion</td>
<td>Differentiate (information)</td>
<td>Use knowledge</td>
</tr>
<tr>
<td></td>
<td>Facilitate thought</td>
<td>Integrate (into hierarchical structures)</td>
<td>Demonstrate skills</td>
</tr>
<tr>
<td></td>
<td>Understand emotion</td>
<td>Organize (into responses)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manage emotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special features</td>
<td>Internal processing:</td>
<td>Internal processing:</td>
<td>External manifestation:</td>
</tr>
<tr>
<td></td>
<td>- accurate perception</td>
<td>- cognitive structural formation</td>
<td>- Adaptability</td>
</tr>
<tr>
<td></td>
<td>- specialized target (emotion)</td>
<td>- general information</td>
<td>- Appropriateness</td>
</tr>
</tbody>
</table>
Leaders’ Cognitive Complexity, Communication Competence, and Emotional Intelligence

In a review of literature on organizational communication competence, Jablin and Sias (2001) found that the basic conceptual definition of communication competence was explained either in a behavioral or cognitive orientation. As noted earlier, this finding indicates that cognition is an important component in communication competence and appropriate utilization of emotive as well as cognitive information is vital in expressing acceptable and desirable behaviors.

Leaders, particularly organizational leaders, are in one way or another expected to be competent communicators. Even if their job function entails more interpersonal interactions, they are expected to demonstrate communication competence in both interpersonal as well as in larger group settings. Moreover, the impact of leadership communication competence goes a long way from employee motivation (Bass, 1990) to organizational success (Cushman & King, 2003). Embedded in these outcomes is the ability to use cognition and emotion to generate messages relevant and appropriate to the situation.

Cognition and cognitive analyses have been found to precede emergent leaders’ choices of behavioral strategies and skills (Wolff et al., 2002). An instance which exemplifies the outcome of leadership cognitive complexity is a study conducted by Sypher (1984) who found that organizational leaders demonstrate a high level of social cognitive functioning through their communication competence such as display of empathy and behavioral flexibility.

To acknowledge a person as someone competent is to say that the person is adequately qualified or capable of executing some particular skills or knowledge
effectively. So a competent communicator would be one who can demonstrate appropriate and relevant choices of communication knowledge through both verbal and nonverbal speech and behavior. In the organizational context, effective leaders would presumably possess “a cognitive repertoire of organizational [communication] scripts” (Jablin et al., 1994, p. 123) with which they can utilize in developing “strategic and mindful rather than routine and scripted” (Heath & Bryant, 1992) messages.

Finally, now that communication competence is generally conceptualized as the display of appropriate communication behaviors and “the understanding of those behaviors and the cognitive ability to make choices among behaviors” (McCroskey, 1984, p. 264), incorporating the emotional component of the human mind seems can bear fruitful results. What might transpire out of the integration of these three elements: cognition, emotion, and communication, is leadership which has the ability and willingness to address employee concerns and organizational issues.

Context of the Study

The literature review thus far describes the variables used in this study and the claimed possible relationships among them. These variable concepts and measurements were developed mainly in the western context while study participants were easterners and so study participants ought to be placed in perspective to understand and explain any different results or discrepancies that might arise or revealed in the findings.

Study participants are Malaysian employees in a public organization. Malaysia, which is situated on the eastern side of the globe, comprises of three races, uses Bahasa
Malaysia as the formal language, eats rice as their staple food, and generally a high-context culture.

**Contextualizing Malaysia**

Gesteland (2002) categorizes Malaysians as relation-focused, formal, polychronic, and reserved. In so doing, he observes that traditional Malaysian culture “accords high status to older people, people of high rank in organizations and to the Malay nobility” (p. 148) and that they “are sensitive to perceived slights” (p. 148). Other cultural practices include refraining from hurting others feelings and making no offense. For example, to avoid saying “no” (which is considered rude), Malaysians use indirect ways of conveying the message such as hesitations, silence, and roundabout responses (Gesteland, 2002). Cross-cultural researchers (Asma, 1996; Hofstede, 1991) regard Malaysians as a high-context culture.

In a study on Malaysian Malay communication, Lailawati (2006) observes that the Malays are indirect, more analogous than digital, engage feelings in a relationship and display more nonverbals. The national language, Bahasa Malaysia, is used both in everyday as well as formal communication. Apart from the Malays whose native language is Bahasa Malaysia, the Chinese and Indians also speak Bahasa Malaysia in the workplace and business interactions. However, when the Chinese and Indians are in their circle of Chinese and Indians friends they either speak their respective mother tongue languages or English.
Research Questions and Hypotheses

Emotional intelligence and cognitive complexity both involve cognitive processes as well as the perception and processing of emotional information. Based on previous conceptions, both constructs seem to focus on similar functional application of their cognitive structures that is to identify others’ emotional state and to adapt the perceived information to generate a favorable behavioral outcome (Burleson & Caplan, 1998; Mayer et al., 2004). Yet emotional intelligence theorists suggest that this construct is somehow distinctive from other existing constructs. Given the contrasting conceptions of domain specificity in cognitive complexity and general adaptiveness in emotional intelligence, the constructs do not seem to be one of the same kind. So, the first research question is:

RQ 1 Is the construct of emotional intelligence conceptually redundant with cognitive complexity? If yes, to what extent are they redundant?

As of today, no study has been conducted to examine the relationship between emotional intelligence and cognitive complexity. Literature on emotional intelligence and cognitive complexity, however, provides some indication that a possible inference can be made to show that there is a correlation between emotional intelligence and cognitive complexity. The matter is, what is the extent of this relationship? If the relationship is small, then, these two constructs are likely to be discriminantly different from each other. But if the two variables are, in fact, highly correlated, additional analysis pertaining to this research question will be warranted. There is also a possibility that the two
constructs are not correlated. To answer this research question, a correlation analysis is conducted.

Related to emotional intelligence is the ability to communicate competently. Several researchers and theorists of emotional intelligence indicate that emotional intelligence contributes to communication competence but so far no empirical evidence have shown this relationship. In order to fill this gap, my next research question is:

RQ 2 Does emotional intelligence predict leadership communication competence?

Based on the various studies described earlier, emotionally intelligent leaders are described to be more adept in their communication skills than leaders who are less emotionally intelligent. They are likely to have better perception skills, able to understand their own and others emotion, and able to manage emotions. So, this leads to the first research hypothesis:

\[ \text{H}_1: \text{Emotionally intelligent leaders have a higher level of communication competence than less emotionally intelligent leaders.} \]

Previous research also indicates that cognitive complexity contributes to the accurate perception of others’ behavior and the ability to adapt to the situation. Cognitively complex individuals demonstrate skills in interpersonal interactions, perspective-taking, and understanding contextual cues. Therefore, it is expected that cognitive complexity contributes to leadership communication competence. So, the next research hypothesis is:
H2: Cognitively complex leaders have a higher degree of communication competence than less cognitively complex leaders.

RQ 3 Which is a better predictor of leadership communication competence; emotional intelligence or cognitive complexity?

Individuals with high cognitive complexity are generally adept at perceiving messages and adapting communication scripts to those messages. So are individuals with high emotional intelligence, who are also conceived to be competent at perceiving emotional information and utilizing cognition to facilitate information processing. Since cognitive complexity is domain specific, individuals with high cognitive complexity may or may not possess well-developed and differentiated structures for handling emotional information. In contrast, emotionally intelligent individuals presumably should have such structures. With the additional capability of emotional-cognitive processing and managing emotional information output, emotional intelligence is likely to be superior to cognitive complexity in predicting leadership communication competence. So the final hypothesis is,

H3: Emotional intelligence is a better predictor than cognitive complexity for leadership communication competence.
RESEARCH METHODS AND PROCEDURES

The content of this chapter describes the methods and procedures used to examine the relationships between leadership communication competence, emotional intelligence and, cognitive complexity. Three sets of instruments: Communication Competence Questionnaire (CCQ), Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT) and, Role Category Questionnaire (RCQ) were used to collect data. Correlational and t-tests were run to analyze the data. Some qualitative data were also collected through interviews and an open-ended question. The chapter is organized in the following manner:

1. Study participants
2. Instruments
3. Data collection and preparation procedures
4. Statistical analysis procedures
5. Ancillary qualitative data collection and data analysis

Study Participants

Organization

The chosen organization for the study was an institution of higher learning in Malaysia known here as SSM. This institution is staffed by 4,494 employees in the various academic as well as administrative units with 284 (6.32%) in upper and middle-level managerial positions. Some units have lower level managers but this level was not
included in the study to increase the manager-subordinate ratio particularly for the smaller units which have less than 5 staff members. The study involved 184 managerial level participants and 1114 subordinates.

There are seven administrative units, 16 academic units and 28 other units which either support the administrative or academic units. To reduce error limit so that the researcher can be confident that the sample respondents are representative of the population (Wunsch, 1986), a ratio of 1:5 for manager to subordinates was sampled.

**Participants**

Participants were leaders and subordinates of SSM. The unit of analysis is the managers, who will be referred to as leaders throughout this study. At the time the study was conducted, SSM had 284 leaders in the various organizational positions with some of them stationed at facilities away from the main campus, were unavailable or unwilling to participate leaving 184 leaders available for this study. There were 4494 non-managerial employees.

Leaders were asked to respond to three sets of questionnaires: Role Category Questionnaire (RCQ), Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT), and Communication Competence Questionnaire (CCQ). The RCQ and MSCEIT specifically measure each leader’s cognitive complexity and emotional intelligence respectively, the CCQ measures the communication competence of the leaders’ superior – since these leaders are themselves subordinates to their superiors (except for the most top official). One hundred and eighty-four sets of instruments were distributed to the leaders where 123 responded to the RCQ and CCQ while 101 responded to the MSCEIT.
The CCQ and RCQ had a response rate of 66.8% and the MSCEIT, 54.9%. For the MSCEIT, there were three responses which were not so scored due to many unresponded items so usable data returned to the researcher was 98 (53.3%). Five returned questionnaire from leaders were not matched with subordinates’ responses of the CCQ leaving 118 (64.1%) matched data for leaders’ CCQ and RCQ.

Subordinates were asked to evaluate their superiors’ (leaders) communication competence using the Communication Competence Questionnaire (CCQ). Out of 4494 employees, 1114 were selected considering the dispersed location of the units and time frame for the data collection (follow-up on the data collection took up a considerable amount of time). If a unit has less than five employees, all the subordinates were asked to participate. But where there were more than five subordinates in a unit, a systematic random sampling was done. A total of 452 questionnaires were returned but 130 of the responses were not usable either because the leaders whom the subordinates evaluated were not those selected for the study or that the subordinates’ responses were incomplete. The survey yielded a response rate of 40.5% which can be considered good since the common response rate for a workplace survey in Malaysia is between 10-20%. However, usable data was 28.9%. Since leaders also evaluated their superior’s communication competence, their responses were combined with responses from the non-managerial subordinates. In total, the survey yielded 575 responses, which is a 44.3% response rate with 34.7% usable data. The mean for leadership communication competence was 5.59 with a standard deviation of 0.65. Table 3.1 shows a summary of the number of participants for the study.
Table 3.1  Distribution of Survey Instruments

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Participants</th>
<th>Number of returned questionnaires</th>
<th>Number of usable &amp; matched questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQ (subordinates)</td>
<td>non-managers</td>
<td>452 (40.5%)</td>
<td>332 (28.9%)</td>
</tr>
<tr>
<td></td>
<td>managers</td>
<td>123 (66.7%)</td>
<td>118 (64.1%)</td>
</tr>
<tr>
<td>Total subordinates</td>
<td></td>
<td>575 (44.3%)</td>
<td>450 (34.7%)</td>
</tr>
<tr>
<td>RCQ</td>
<td>managers</td>
<td>123 (66.7%)</td>
<td>118 (64.1%)</td>
</tr>
<tr>
<td>MSCEIT</td>
<td>managers</td>
<td>101 (54.9%)</td>
<td>98 (53.3%)</td>
</tr>
</tbody>
</table>

*Descriptive Statistics*

Leaders’ demographic profile can be seen in Table 3.2. There were 84 males (74%) and 30 females (26%) between the ages of 35 and 59 with $M = 49.42$ and $SD = 5.21$. (see subsection “preparation procedures” for change in $n$ from 118 to 114).

Seventeen participants did not report their ages. About 90% of the participants have postgraduate education while the remaining 10% have either a bachelor degree or a college diploma degree.
Table 3.2 Demographic Profile of Participants

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>76</td>
<td>26</td>
</tr>
<tr>
<td>Bachelor or college diploma</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>30</td>
</tr>
<tr>
<td><strong>Age:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 – 39 years old</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>40 – 49 years old</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>50 – 59 years old</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>27</td>
</tr>
</tbody>
</table>

Instruments

(i) **Role Category Questionnaire (RCQ)**

The instrument often used by communication researchers in measuring cognitive complexity is the Role Category Questionnaire (RCQ) developed by Walter H. Crockett (1965). In cognitive complexity research, constructivist researchers often construe differentiation as the main criterion for coding (Gastil, 1995). The coding impression for differentiation refers to “any characteristic, quality, trait, motivation, belief, habit, mannerism, or behavior attributed by the subject to the described person” and not “physical characteristic, appearance, demographic characteristic, and social role” (Burleson & Waltman, 1988, p.8), and the most employed measurement for cognitive complexity in communication studies appears to be the RCQ. Since cognitive complexity has mainly been measured for its differentiation and due to the lack of measures for the other dimensions (integration and organization) in cognitive complexity, this study will measure individual differentiation in cognitive complexity.
Crockett (1965) reports a test-retest reliability of .95 and O’Keefe et al. (1982) obtain reliabilities of .84 and .86 for two different versions of the measurement (cited in Burleson & Waltman, 1988). Burleson and Waltman further claim that the RCQ has construct and predictive validity such as perceiving inconsistent information about others. On the other hand, there are researchers who raise the issue of loquacity in RCQ (Powers, Jordan & Street, 1979). To this end, Burleson, Waltman, and Samter (1987) could find none and Allen, Mabry, and Preiss (1997) discovered a very small variance (2%) in their studies. Later, Angell (2000) found that loquacity and differentiation were unrelated.

The RCQ required participants to describe in writing, two persons; one whom they like and the other whom they dislike, in ten minutes for each person. Some participants took longer than ten minutes while a few others were done in a much lesser time. A few participants said that they know of no one whom they dislike and were then asked to describe characteristics of people they dislike. This slight change in instruction was to ensure that the section on “describes a person whom you dislike” was also filled in.

The researcher trained two graduate students to independently score the RCQ following the six rules for scoring outlined by Burleson and Waltman (1988). The total score was determined by counting the number of “descriptors” or constructs identified by participants for both persons described, higher total scores indicate higher level of cognitive complexity. Table 3.3 shows the range of scores for different levels of cognitive complexity. Interrater reliability between the two coders was .95 with scores ranging from 4 to 28 and $M = 13.47$, $SD = 4.49$. 
Table 3.3  Range of Scores for Cognitive Complexity

<table>
<thead>
<tr>
<th>Score</th>
<th>Total (N)</th>
<th>Male (N)</th>
<th>Female (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 10</td>
<td>33</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>11-20</td>
<td>73</td>
<td>55</td>
<td>18</td>
</tr>
<tr>
<td>21-30</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31-40</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total (N)</td>
<td>114</td>
<td>84</td>
<td>30</td>
</tr>
<tr>
<td>Mean</td>
<td>13.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard deviation</td>
<td>5.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(ii)  Communication Competence Questionnaire (CCQ)

The Communication Competence Questionnaire (CCQ) was developed by Monge et al. (1982). This questionnaire is for assessing individuals who have specific roles in the organization and was the first measurement to examine competence from an organizational perspective (DeWine, 1994). It can be used to evaluate superiors or subordinates and generally takes about five minutes to complete.

Items in the CCQ measure leaders’ organizational communication competence. The instrument has 12 items with two subscales, one on encoding skills and the other, decoding skills. The encoding skills subscale consists of seven items such as ‘gets right to the point’ and the decoding skills subscale has five items for example, “easy to talk to.” After testing for face validity, the response which was a seven-point scale varying from a strong Yes (YES!) to a strong No (NO!) was changed to numerical figures of 1 (strongly disagree) to 7 (strongly agree). The item details can be seen in Table 3.4.
Table 3.4 Item Details for the CCQ and MSCEIT Instruments

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Number of items</th>
<th>Items numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication Competence Questionnaire</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encoding skills</td>
<td>7</td>
<td>1, 3, 5, 7, 8, 9, 10</td>
</tr>
<tr>
<td>Decoding skills</td>
<td>5</td>
<td>2, 4, 6, 11, 12</td>
</tr>
<tr>
<td><strong>Mayer-Salovey-Caruso Emotional Intelligence Test</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branches:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceiving skills</td>
<td>50</td>
<td>Sections A &amp; E</td>
</tr>
<tr>
<td>Facilitating skills</td>
<td>30</td>
<td>Sections B &amp; F</td>
</tr>
<tr>
<td>Understanding skills</td>
<td>32</td>
<td>Sections C &amp; G</td>
</tr>
<tr>
<td>Managing skills</td>
<td>29</td>
<td>Sections D &amp; H</td>
</tr>
</tbody>
</table>

According the Monge et al. (1982), the CCQ has an internal reliability with an average of .85 for both superior and subordinates. Smith and DeWine’s (1989) study of a repeated measures test obtained reliabilities of .93, .91, .93, and .89 (cited in De Wine, 1994). Papa and Tracy (1988) reported that the encoding and decoding sub-scale correlated highly (.95), and collapsed both factors into a single competence factor. They also found that reliability was .98. In terms of validity, Monge et al. (1982) and Smith and DeWine claimed that the measurement has convergent validity (cited in DeWine, 1994).
Reliability

The CCQ for the study has an overall reliability of .86. To determine internal consistency of items, this scale was evaluated further by the split-half reliability procedure (e.g. see Aron & Aron, 1997; Garson, 2006) where the scale was split between the encoding and decoding items (the encoding sub-scale has two items more so item number 10 was placed in the decoding subscale group). Guttman split-half coefficient shows a moderately high reliability of .811.

Scale intercorrelations.

The correlations range from .76 to .92. All inter-items intercorrelations are highly significant (p < .001) except for the intercorrelation of items 1 and 7 which is at p = .05. The high positive intercorrelations also suggest that all the items in this scale do what they are intended to do, that is to measure organizational communication competence consistently.

(iii) Mayer-Salovey-Caruso-Emotional-Intelligence Test (MSCEIT)

Emotional intelligence was measured employing the MSCEIT and scored using the general consensus method as suggested by the test developers (Mayer et al., 2002). Consensus scoring identifies a “correct answer” through consensus of the majority of people in the research. Expert consensus, on the other hand, is the averaged responses from emotion judges on which would be the “correct” answer to the test question. The MSCEIT consists of 141 items for all the four branches. Each branch has about 30 items except for the perceiving branch which has 50 items with the items for each branch split
into two sections (see Table 3.4). The items were organized into two complete sets as though there were two sets of the MSCEIT: sections A to D as one set and sections E to H, the other set.

Reliability.

Total score on all the branches produced a mean of 83.39 and a standard deviation of 13.78, lower than the normed standard score $M = 100$ and $SD = 15$ provided in the test manual. The reliability for the MSCEIT total score and branch scores reflect similar results as in the test manual. The total score reliability in this study, $r = .92$, is almost the same as the total score reliability reported in the test manual which is .91. Also, the branch score reliabilities in the study are close to that provided by the test developers (see Table 3.5). The emotional intelligence items were analyzed further using the split-half reliability method for all the items combined and then with the branches analyzed separately. A split-half reliability is one of the tests for internal consistency of test items in this case used to reaffirm the reliability obtained with Cronbach’s $\alpha$. If both Cronbach’s $\alpha$ and a split-half reliabilities produce similar results, researchers can be confident that the test items they are using are very reliable. Guttman split-half was employed in the study. For the overall split-half reliability, the items were split between sets A to D in one group and sets E to H in another group. The branch reliabilities were obtained by combining the two sections of the branch items and run in SPSS. For example, the two sections of Branch 1 (sections A and E) which are on perceiving emotions are grouped and run in SPSS under the Guttman split-half test. The other branch split-half reliabilities followed the same procedure. Results of the split-half reliability ranges from a moderate .71 (understanding emotion) to a low .61 (facilitating
thought and emotion). These split-half results are much lower than the Cronbach $\alpha$ reliabilities reported in the test manual which show a high of .93 (overall emotional intelligence) to a moderate reliability of .79 (facilitating thought and emotion). The discrepancy between the two reliability test results indicates that there is still room for improvement in the MSCEIT items.

Table 3.5  Descriptive Statistics for the Emotional Intelligence Scale, MSCEIT

<table>
<thead>
<tr>
<th>Emotional Intelligence:</th>
<th>N*</th>
<th>M</th>
<th>SD</th>
<th>Cronbach’s $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Total</td>
<td>88</td>
<td>83.39</td>
<td>13.78</td>
<td>.92</td>
</tr>
<tr>
<td>(b) Branches:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Perceiving emotion</td>
<td>91</td>
<td>81.95</td>
<td>18.21</td>
<td>.91</td>
</tr>
<tr>
<td>(ii) Facilitating thought and emotion</td>
<td>94</td>
<td>91.42</td>
<td>18.09</td>
<td>.81</td>
</tr>
<tr>
<td>(iii) Understanding emotion</td>
<td>93</td>
<td>92.04</td>
<td>12.26</td>
<td>.72</td>
</tr>
<tr>
<td>(iv) Managing emotion</td>
<td>91</td>
<td>88.83</td>
<td>13.15</td>
<td>.76</td>
</tr>
</tbody>
</table>

* Note: The N for each variable is different due to incomplete responses for some items in that particular variable.

Scale intercorrelations.

As specified by the test developers, the MSCEIT is intended to measure emotional intelligence as a “unified area of ability” through the various areas of emotional skills and the unification of these areas can be determined if there are positive correlations between the branches of the MSCEIT scores (Mayer et al., 2002). Intercorrelation tests were run between all the branches and the results are shown in Table 3.6.
Table 3.6  Intercorrelations Among the MSCEIT Branch Scores

<table>
<thead>
<tr>
<th></th>
<th>Branch 1</th>
<th>Branch 2</th>
<th>Branch 3</th>
<th>Branch 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch 1:</td>
<td>1.0</td>
<td>.35**</td>
<td>.23**</td>
<td>.22**</td>
</tr>
<tr>
<td>- perceiving emotion</td>
<td>(.54)</td>
<td>(.30)</td>
<td>(.35)</td>
<td></td>
</tr>
<tr>
<td>Branch 2:</td>
<td>1.0</td>
<td>.43**</td>
<td>.58**</td>
<td></td>
</tr>
<tr>
<td>- facilitating thought &amp; emotion</td>
<td>(.43)</td>
<td>(.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch 3:</td>
<td>1.0</td>
<td></td>
<td>.48**</td>
<td></td>
</tr>
<tr>
<td>- understanding emotion</td>
<td></td>
<td>(.51)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch 4:</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- managing emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed).
Correlations reported in the test manual are in parentheses.

Except for the facilitating thought and emotion and managing emotion branches intercorrelation which shows a higher alpha ($\alpha = .58$), results for this study show that the intercorrelations for all branches were lower, with one similar result, than those reported in the test manual.

Data Collection and Preparation Procedures

(i)  Data Collection

An initial consent request to collect data was made through a telephone call to a senior leader at the institution. After verbal agreement was obtained, an application to conduct research was submitted to the Institution Review Board (IRB) at Ohio University and the research was approved with an exempt.

Participants were divided into two groups: managers and non-managers. The researcher outlined the criteria for selection and selected the participants by stratified random sampling. Selected participants were informed of the IRB approval for the study
and given a copy of the consent form to complete. Participants in the managerial category (the leaders) were asked to respond to the MSCEIT (emotional intelligence test) via online and complete the paper-based RCQ to determine their level of cognitive complexity. These managers also were asked to complete the CCQ since many of them were also in subordinate positions with respect to the others who are higher in the hierarchy. When administrating the RCQ and CCQ, leaders were asked to meet on a day they chose from the schedule provided to them by the researcher. The RCQ responses were coded with the assistance of two other coders to ensure inter-coder reliability. The researcher administered the MSCEIT online and the responses were processed by the testing agent, Multi-Health System Ins. (MHS).

The non-managerial subordinates were asked to complete the CCQ. The paper-and-pencil CCQ questionnaire were distributed to the participants by the researcher personally (unless requested otherwise) and collected the next working day. Where participants failed to complete the questionnaires, the researcher made repeat visits as long as the process did not irritate the participants. Since many of the non-managerial employees in SSM were schooled in the Malay medium (the Malaysian national language), a translated Malay Language CCQ was administered to them. Both the English and Malay versions of the questionnaires were given to the participants so that participants could choose the language they would be comfortable with when responding to the questionnaires. The Malay Language was translated using the back translation. Back translation is a procedure used by cross-cultural researchers to translate test items or questionnaires from one language into another. This is done by two bilinguals, one who translates the source to the target language while to other blindly translates back the
target to the source language (Brislin, 1970). For this study, two Malay researchers whose academic trainings were in the English Language were asked to do the translations.

At the time the survey was conducted, the Malay version of the MSCEIT was in the process of translation by MHS leaving the researcher no choice but to administer survey in English. Because the MSCEIT was not available in the native language of the participants, some issues with language may arise. For instance, words may be interpreted differently by different individuals like the word attractive can be *cantik*, *lawa*, *menawan* and *memikat hati*.

Another situation where language can be a cause for concern is the context in which words are used. In the western tradition, when a child graduates from college, parents would hold a ‘party’ to celebrate, but for the Malays (who are generally Muslims), they would have a *kenduri* to pray and be thankful to God for the success. The *kenduri* is a solemn gathering often among family members who would all sit on a mat with one of the family members reciting the pray of thankfulness followed by several amens in between the recitation. Then, they would form a circle to eat where food would be brought to them without them having to stand to get the food.

Also, there are words in English which do not have the exact meaning in the Malay language such as the word hegemony. So, due to these differences and unless participants have a good command of the English language, language can be an issue when responding to the test items. However, since most of the participants (90%) in the study have post graduate degrees and many of them were educated in countries where English is the first language, language is presumed not to have much affect on the
leaders’ ability to comprehend the test items. This presumption, though, is made with a reservation for leaders who may not have mastered the language.

One hundred and eighty-four sets of the MSCEIT, RCQ, and CCQ questionnaires were given to top and middle-level management of SSM. The MSCEIT measures leaders’ emotional intelligence, the RCQ measures cognitive complexity and the CCQ, communication competence. The RCQ and CCQ were paper-based and distributed to the leaders either personally or through their personal secretary. The MSCEIT was administered online due to the difficulties in getting all the leaders to commit to a common time. To ensure that all the leaders understood the procedure for online MSCEIT responses, the researcher met with each leader to explain and provide written information to ease the process. Feedback from some of the leaders indicate that the MSCEIT was too long, inconvenient in that it had to be done in one sitting, and some of the context were not familiar to them. 101 responses were returned for the MSCEIT and 123 for both the RCQ and the CCQ. Except for the CCQ and the RCQ where the data were complete for all 123 participants, some of the responses for the MSCEIT were incomplete leaving usable data to be 98 for emotional intelligence. All the MSCEIT responses had at least one subordinate to evaluate the leader’s communication competence. When the RCQ was matched with subordinates’ responses for CCQ, five leaders did not receive evaluation for their communication competence. So, the final number of leaders who were considered in the analysis of this study were 98 for their emotional intelligence and 118 for cognitive complexity and communication competence.

Each manager was identified using a code assigned to them. While distributing the instruments, managers were informed that the information obtained in the survey will
be kept confidential and that only the researcher knew the number assigned to them. The non-managerial subordinates were also assured of confidentiality in that responses will be aggregated and reported as a mean for the particular manager they evaluate. When some managers and subordinates were reluctant to participate, the researcher made personal requests from the participants. In many occasions the personal requests did get positive feedback. The score of all the subordinates in a particular unit/department were aggregated and the mean calculated as the final score of subordinates’ perception of a manager’s communication competence of each unit.

Different follow-up strategies were used to obtain a higher response rate. For the managerial level participants, personalized emails were sent to each leader reminding them of the importance of the study and about the researchers’ time limit to conduct the study. Some visits were made either to personally requests participants to complete the questionnaires or to attend to requests made by managers that the researcher complete the questionnaire with them. For the non-managerial subordinates, the researcher initially assigned a representative to collect the sealed completed questionnaires. When responses were slow, the researcher personally talked with all those who have not returned their responses. This strategy worked very well but it was very time consuming.

The data collection took about 100 days to complete which includes a month period for the researcher to obtain a written consent, list of employees and time to identify participants for the study. The locations of the units were dispersed and it took a few days before the researcher was familiar with the location of the units.
(ii) Preparation Procedures

Data collected from the surveys were examined for potential outliers. Outliers, which can either be beneficial or problematic, should be handled with due consideration for they may give varying impact on the data depending on the context of the analysis and type of information we may get from them (Hair, Black, Babin, Anderson & Tatham, 2006). Inspecting the data for potential outliers, four cases were identified as potential problematic outliers and deleted since they could possibly violate the assumptions of normality and homogeneity if retained. Even though it can be argued that these cases may produce a larger effect size if retained, the cost outweighs the benefit of retaining these cases since homogeneity and normality of data were not obtained when these data were in the dataset.

Of the four cases removed, two cases from the emotional intelligence dataset were identified as extraordinary observation outliers, and one case each from the communication competence data set and the cognitive complexity dataset identified as extraordinary event outliers (for classification of outliers see Hair et al., 2006). All these data were at least three standard deviations away from the mean. The remaining data have a Cook’s distance well below 1 which means that none of the remaining data have “undue influence on the model” if a regression analysis is run to test the model (Field, 2000). After removing these cases, the data now met the requirement of assumption of homogeneity and normality of data. The final numbers of leaders were 114 for organizational communication competence (CCQ) and cognitive complexity (RCQ) and 94 for emotional intelligence (MSCEIT).
Statistical Analysis Procedures

In order to address RQ1, a correlation analysis was conducted. The MSCEIT Total EI score were correlated with the score from RCQ. Since there was no significant correlation between emotional intelligence and cognitive complexity, the MSCEIT four Branch scores were not regressed on the RCQ scores.

Both $H_1$ and $H_2$ were tested by simple independent samples t-tests. For this the emotional intelligence and cognitive complexity variables were split at each respective median. Assumptions of homogeneity and normality were ascertained using Levene’s and Kolmogorov-Smirnov tests. Due to unusable responses and non-matched leaders responses, sample size was less than anticipated ($n=94$ for emotional intelligence, $n = 114$ for cognitive complexity).

To address $H_3$, a stepwise multiple regression analysis was conducted. The statistical analysis test results are reported.

Additional Analyses

Results of the analyses for all research questions did not reflect the literature discussed in the study in that all the hypotheses were not supported. After taking into consideration the strong theoretical claim in both the emotional intelligence and cognitive complexity literature on the existence of their relationships with communication competence, the researcher decided to conduct further analyses.

Initially, all the three variables were correlated with participants’ demographic variables. A significant correlation was found between gender and communication competence resulting in additional tests between gender and the two sub-scales of
communication competence (encoding and decoding) and the four branches of emotional intelligence (perceiving, understanding, facilitating, and managing emotion). Gender was found to correlate with both components of communication competence and two branches of emotional intelligence. These results prompted an explication of the gender variable to see if male and female participants would have different levels of communication competence, emotional intelligence and cognitive complexity.

T-tests were performed to detect possibility of mean differences between the male and female participants in their communication competence, emotional intelligence and cognitive complexity. A mean difference was found for communication competence and so a correlational analysis was conducted to identify any significant relationships between both the gender groups and the sub-scales and branches of the predictor variables. Male cognitive complexity was found to have significant correlations with the encoding and decoding components of communication competence and, the understanding emotion (B2) and the facilitating thought and emotion (B3) branches of emotional intelligence. Based on these results a bivariate linear regression was conducted and results of the correlation, probability and, correlation coefficient and were reported.

Ancillary Data Collection and Analysis

In order to understand and possibly explain results from the survey instruments, qualitative data were also collected to obtain information which might not have been captured in the instruments that were administered. For example, an emotional intelligence scale which was developed by Noriah (2002) for the Malaysian workforce, another domain, religion, was prominent during the interviews that were conducted. So,
in a similar way, interviews with participants, both leaders and subordinates, on their perception of what entails emotional intelligence and communication competence would provide more insight into the underlying concepts of these constructs. The interviews were semi-structured and tape recorded. Participants were first asked their consent to participate and each interview lasted between 30-60 minutes. The interviews were transcribed and thematically coded while the open-ended questionnaires were content analyzed thematically.

Data Collection Procedures

Data were obtained from (i) open-ended question in the questionnaire set for CCQ given to 452 participants and (ii) interviews conducted with seven participants.

The open-ended question was placed at the end of the first section of the survey instrument. Participants were made up of two groups: leaders and non-leaders. Both groups were asked to write characteristics of a leader whom they perceive to be communicatively competent. Responses from each group were separately analyzed to identify differences of perceptions between them.

The second method of collecting qualitative in the study is by conducting interviews. Interviewing is used because it is one of the most powerful forms of qualitative data collection. It allows researchers to gather information about the hows of people’s lives and the what of their activities (Fontana & Frey, 2000) and so the choice for the study.

Seven participants, five males and two females, were asked about their understanding of emotional intelligence, communication competence, and their thought
on the relationship between emotional intelligence and communication competence. All the participants showed interest in the discussion.

Participation for the interview was voluntary and the selection processes were varied. Two participants were from the researcher attending a managers’ group meeting, one was introduced by one of the managers who did not volunteer, three were friends of the researcher and another two were connected through a family member.

This study employs a semi-structured interview. The researcher had a list of questions to guide the interview and explicate concepts and issues related to the research question. At the same time, interviewees were given space to talk about their personal stories and to express related incidents from their experiences. By allowing time for interviewees to say things they wanted to say, the interview environment became more conducive and relaxed.

Data analysis

For analyzing these data, a content analysis was employed. The term content analysis belongs to “a family of procedures for studying the contents and themes of written or transcribed text” (Insch, More, & Murphy, 1997, p. 2). Even though, content analysis has been around for the past 70 years (Insch et al. 1997) this method is seldom used by organizational researchers (Insch et al., 1997; Conger, 1998). A review of the procedures in the conduct of this method of analysis shows that this method is suitable for the kinds of data collected in the study. Also, as the qualitative data in the study serve as a supplement to the main research method, content analysis which categorizes words, phrases and themes to support the discussions made by the researcher would suffice in
the context of this study. On this account Silverman (2000) states, “By contrast, in some qualitative research, small numbers of texts and documents may be analyzed for a very different purpose. The aim is to understand the participants’ categories and to see how these are used in concrete activities …” (p. 826).

When analyzing the text, the text can be divided into either words or blocks of text (Ryan & Bernard, 2000). As there were more than 150 “meaningful words” obtained from the open-ended question, participants responses were then coded into themes. Each word, phrase or theme in the response was categorized by two coders (the researcher and another bilingual coder). These categories were earlier identified by the researcher when she was analyzing the data. Where discrepancies in the coded phrases or themes exist, both coders met to come to a mutual agreement for the selection of the category.

The interview data were also content-analyzed not by words or phrases but by themes to capture the context of the conversation. Some of the interview data were used verbatim to highlight or show what were actually verbalized by interviewees on the issues discussed.
Chapter 4

RESULTS

This chapter presents the analysis of the survey results conducted on leaders and subordinates of SSM in Malaysia. The quantitative data were analyzed using SPSS and the quantitative data were content-analyzed. The chapter is organized in the following manner:

1. Results of the data analysis.
2. Additional findings.
3. Open-ended questions and interview data.

Results of the Data Analysis

The first research question asked was:

RQ 1 Is the construct of emotional intelligence conceptually redundant with cognitive complexity? If yes, to what extent are they redundant?

To answer RQ1, a correlation analysis was conducted. Results of the analysis (see Table 4.1) indicated no significant correlation between emotional intelligence and cognitive complexity ($r = .18, p > .05$). This finding provides no evidence of redundancy between emotional intelligence and cognitive complexity.
Table 4.1 Correlations between Communication Competence, Emotional Intelligence, and Cognitive Complexity

<table>
<thead>
<tr>
<th></th>
<th>Communication Competence</th>
<th>Emotional Intelligence</th>
<th>Cognitive Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Competence</td>
<td>1.0</td>
<td>-.007</td>
<td>.168</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>1.0</td>
<td>1.0</td>
<td>.176</td>
</tr>
<tr>
<td>Cognitive Complexity</td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>

The next research question was:

RQ 2 Does emotional intelligence predict leadership communication competence?

The hypothesis generated to answer this research question was:

H₁: Emotionally intelligent leaders have a higher level of communication competence than less emotionally intelligent leaders.

A construct which is also said to relate to communication competence is cognitive complexity. So another hypothesis to test this relationship is

H₂: Cognitively complex leaders have a higher degree of communication competence than less cognitively complex leaders.

H₁ and H₂ were tested by simple independent t-tests. The grouping variables were categorized as high and low by a median split. Homogeneity of variance was determined by Levene’s test which showed that the variance differences for both the variables were
non-significant; $p = .89$ (emotional intelligence) and $p = .76$ (cognitive complexity). The assumption of homogeneity of variance is tenable.

For $H_1$, there was no significant difference, $t(92) = -.87, p > .05$ in communication competence between leaders who have high emotional intelligence ($M = 5.51, SD = .64$) and low emotional intelligence ($M = 5.63, SD = .68$). Thus $H_1$ is not supported.

For $H_2$, there was no significant difference, $t (92) = 1.58, p > .05$ in communication competence between leaders who have high cognitive complexity ($M = 5.69, SD = .54$) and low cognitive complexity ($M = 5.49, SD = .73$). $H_2$ was not supported.

Since both hypotheses were not supported, power was calculated to provide an estimate of the probability that the statistical test could detect the difference between the group means. Effect sizes in hypothesis 1 and 2 are .18 and .35 respectively and GPOWER (Faul & Erdfelder, 1992) was used to calculate post-hoc power. For hypothesis 1, power was found to be .18 and hypothesis 2, power was .36. These low powers were expected given the small group mean differences. Also, with a sample size of $n < 100$, observed power can be reduced.

The final research question RQ 3 now has given way to a third hypothesis, $H_3$:

$H_3$: Emotional intelligence is a better predictor than cognitive complexity for leadership communication competence.
A stepwise multiple regression analysis was run to address H₃. Levene’s test and the Kolmogorov-Smirnov test produced non-significant results which indicate that assumption of homogeneity of variance and normality of data set were met. Pearson correlation coefficient showed no significant correlation between communication competence and cognitive complexity, $r = .18$, $p > .05$ and no significant correlation between communication competence and emotional intelligence, $r = -.007$, $p > .05$.

At this point, findings in this study lack support for the existing literature which suggests that there is a relationship between emotional intelligence and communication competence. Also, these results do not provide an indication that emotional intelligence and cognitive complexity are correlated.

Additional Analyses

In order to explicate more information from the data, additional correlational analyses were conducted. Demographic variables such as gender, age, education, and rank were examined to see if they contribute to the leaders’ organizational communication competence, emotional intelligence, and cognitive complexity. Table 4.2 shows that gender has a significant correlation with communication competence ($r = -.28$, $p < .01$) and not with cognitive complexity ($r = .18$, $p > .05$) and emotional intelligence ($r = -.07$, $p > .05$). All other demographic variables have no significant correlation with the variables used in the study. This result provides a warrant to further examine gender as a possible intervening variable in the study.
Table 4.2 Correlations between Selected Demographic Variables and Communication Competence, Emotional Intelligence, and Cognitive Complexity

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Rank</th>
<th>Cognitive Complexity</th>
<th>Communication Competence</th>
<th>Emotional Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.0</td>
<td>-.25*</td>
<td>.05</td>
<td>.17</td>
<td>.18</td>
<td>-.28**</td>
<td>-.07</td>
</tr>
<tr>
<td>Age</td>
<td>1.0</td>
<td>-.06</td>
<td>-.27</td>
<td>-.01</td>
<td>-.01</td>
<td>.14</td>
<td>.04</td>
</tr>
<tr>
<td>Education</td>
<td>1.0</td>
<td>.01</td>
<td>.07</td>
<td>-.01</td>
<td>-.04</td>
<td>.18</td>
<td>.18</td>
</tr>
<tr>
<td>Rank</td>
<td>1.0</td>
<td>.05</td>
<td></td>
<td></td>
<td>.04</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Cognitive Complexity</td>
<td>1.0</td>
<td></td>
<td>.17</td>
<td></td>
<td>.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication competence</td>
<td></td>
<td></td>
<td>1.0</td>
<td></td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at p < .01 level (2-tailed).
* Correlation is significant at p < .05 level (2-tailed).
Table 4.3 shows that gender is significantly correlated with organizational communication competence and two of the four branches of emotional intelligence, which are facilitation of thought and emotion (B3), $r = -.28, p < .01$ and managing emotion (B4) $r = -.22, p < .05$. Additionally, even though earlier examinations showed that no correlation exists between the total scores for all three variables (communication competence, emotional intelligence, and cognitive complexity) the findings here indicate that there are positive correlations between cognitive complexity and the decoding element in communication competence, $r = .23, p < .05$, and understanding emotion (B2), $r = .25, p < .05$ and facilitation of thought and emotion (B3), $r = .21, p < .05$ of emotional intelligence. Both these observations prompted more explication of the gender variable.

T-tests were run to determine if there were significant mean differences between male and female organizational communication competence, emotional intelligence and cognitive complexity. Results showed that the means for gender are significantly different for organizational communication competence, $t (111) = 3.07, p = .003$ and not significant for emotional intelligence and cognitive complexity. In this study, the males ($M = 5.69, SD = .59$) seem to demonstrate a higher level of organizational communication competence as compared to the females ($M = 5.28, SD = .72$). Even though relatively both male and female communication competence are rather high, this result suggested that gender was an intervening variable for communication competence. Thus, more tests were conducted to determine if there were any relationships between gender groups and cognitive complexity, the sub-areas of organizational communication competence, and branches of emotional intelligence (Table 4.4).
Table 4.3 Correlation between Gender, Cognitive Complexity, the Sub-scales of Communication Competence Questionnaire (CCQ) and branches of the Mayer-Salovey-Caruso-Emotional-Intelligence-Test (MSCEIT)

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Cognitive Complexity</th>
<th>Communication Competence</th>
<th>Emotional Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Encoding</td>
<td>Decoding</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cognitive Complexity</strong></td>
<td>1.0</td>
<td>.18</td>
<td>-.26**</td>
<td>-.21*</td>
</tr>
<tr>
<td><strong>Communication Competence</strong></td>
<td>1.0</td>
<td>.14</td>
<td>.23*</td>
<td>.17</td>
</tr>
<tr>
<td>Encoding</td>
<td>1.0</td>
<td>.79**</td>
<td>.94**</td>
<td>.03</td>
</tr>
<tr>
<td>Decoding</td>
<td>1.0</td>
<td>.93**</td>
<td>.02</td>
<td>-.00</td>
</tr>
<tr>
<td>Total</td>
<td>1.0</td>
<td>.06</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Emotional Intelligence</strong></td>
<td>1.0</td>
<td>.35**</td>
<td>.23*</td>
<td>.22*</td>
</tr>
<tr>
<td>Branch 1 (B1) – perceiving emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch 2 (B2) – understanding emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch 3 (B3) – facilitating thought &amp; emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch 4 (B4) – managing emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at p < .01 level (2-tailed).
* Correlation is significant at p < .05 level (2-tailed).
An earlier examination of the relationship between gender and the three variables shows a significant result for organizational communication competence, but not cognitive complexity nor emotional intelligence (Table 4.2). Then, the correlational analysis of gender with the sub-areas of all the variables produced some significant results (Table 4.3). These findings led the researcher to believe that the research questions and hypotheses should be addressed within male and female groups.

As can be seen in Table 4.4, there is a positive correlation between cognitive complexity and the decoding element in communication competence ($r = .26, p < .01$) for the males. Additionally, male cognitive complexity is also correlated with two branches of emotional intelligence which are understanding emotion ($r = .28, p < .05$) and facilitating thought and emotion ($r = .25, p < .05$). However, there is no significant correlation between any of the sub-areas of communication competence with the branches of emotional intelligence.

For the females, no significant correlations were found between cognitive complexity and the sub-areas of communication competence and emotional intelligence.
### Table 4.4: Correlation between Gender Groups, Communication Competence, Cognitive Complexity, and Emotional Intelligence

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Cognitive Complexity</th>
<th>Communication Competence</th>
<th>Emotional Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Encoding</td>
<td>Decoding</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Complexity</td>
<td>83</td>
<td>12.93</td>
<td>4.67</td>
<td>1.0</td>
<td>.19</td>
<td>.26**</td>
</tr>
<tr>
<td>Communication Competence:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encoding</td>
<td>84</td>
<td>5.64</td>
<td>.58</td>
<td>1.0</td>
<td>.75**</td>
<td>.94**</td>
</tr>
<tr>
<td>Decoding</td>
<td>84</td>
<td>5.76</td>
<td>.69</td>
<td>1.0</td>
<td>.92**</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>5.69</td>
<td>.59</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Intelligence:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1 – perceiving emotion</td>
<td>70</td>
<td>81.62</td>
<td>19.26</td>
<td>1.0</td>
<td>.31**</td>
<td>.24*</td>
</tr>
<tr>
<td>B2 – understanding emotion</td>
<td>68</td>
<td>91.98</td>
<td>18.87</td>
<td>1.0</td>
<td>.47**</td>
<td>.62**</td>
</tr>
<tr>
<td>B3 – facilitating thought &amp; emotion</td>
<td>69</td>
<td>94.18</td>
<td>12.08</td>
<td>1.0</td>
<td>.53**</td>
<td>.68**</td>
</tr>
<tr>
<td>B4 – managing emotion</td>
<td>69</td>
<td>90.65</td>
<td>13.65</td>
<td>1.0</td>
<td></td>
<td>.78**</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>84.03</td>
<td>14.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Complexity</td>
<td>30</td>
<td>14.97</td>
<td>5.60</td>
<td>1.0</td>
<td>.21</td>
<td>.32</td>
</tr>
<tr>
<td>Communication Competence:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encoding</td>
<td>29</td>
<td>5.26</td>
<td>.72</td>
<td>1.0</td>
<td>.85**</td>
<td>.92**</td>
</tr>
<tr>
<td>Decoding</td>
<td>29</td>
<td>5.40</td>
<td>.82</td>
<td>1.0</td>
<td>.93**</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>5.28</td>
<td>.72</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Intelligence:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1 – perceiving emotion</td>
<td>27</td>
<td>82.81</td>
<td>15.43</td>
<td>1.0</td>
<td>.50**</td>
<td>.24</td>
</tr>
<tr>
<td>B2 – understanding emotion</td>
<td>27</td>
<td>90.01</td>
<td>16.21</td>
<td>1.0</td>
<td>.28</td>
<td>.42*</td>
</tr>
<tr>
<td>B3 – facilitating thought &amp; emotion</td>
<td>27</td>
<td>86.59</td>
<td>11.14</td>
<td>1.0</td>
<td>.13</td>
<td>.55**</td>
</tr>
<tr>
<td>B4 – managing emotion</td>
<td>27</td>
<td>84.19</td>
<td>10.66</td>
<td>1.0</td>
<td></td>
<td>.60**</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>81.81</td>
<td>12.06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at p < .01 level (2-tailed), * Correlation is significant at p < .05 level (2-tailed).
(i) Open-ended Question

Part of the survey questions consisted of an open-ended question which asked for participants’ opinion on “What good communication characteristics should a leader have?” Responses to this question were varied. Some characteristics were just mentioned once while other characteristics emerged repeatedly. Subordinates feedback can basically be divided into three broad categories: encoding skills, decoding skills, and personality qualities. Skills which have more than four responses were counted as the skills that subordinates perceived leaders should have.

For the encoding skills, subordinates perceive that leaders should be able to:

1. express messages clearly
2. construct messages in a way that they are easy to understand
3. provide a clear direction for goal attainment
4. use simple and accurate language
5. convey effective messages
6. demonstrate firmness in their views and decisions
7. give accurate and clear direction
8. utilize knowledge of good vocal variety and paralanguage
9. argue effectively.
Other skills which received moderate responses included the ability to provide intellectually-stimulated ideas, communicate with all levels of employees, demonstrate a calm demeanor, friendly, and not intimidating. From this list, what appears to be prominent in conveying organizational messages is the efficiency and effectiveness of the messages in relation to the task. Subordinates in this organization seem to suggest that leaders should have more task-related communication skills when conveying messages to subordinates in the organization.

About 15% of the communication skills suggested were related to decoding. Even though not many skills were listed, each decoding skill received more responses than the encoding skills. “A good listener” tops the list with far more responses than the rest of the skills. Below are the decoding skills that subordinates noted to be important for leaders to possess in terms of their organizational communication competency.

1. a good listener
2. willing to accept others’ views, ideas, and criticisms
3. understand staff members and their problems
4. open-minded
5. discussion with subordinates
6. two way communication

Based on the list above, subordinates seem to want leaders to know that subordinates would like to contribute their ideas and opinions to the organization. Subordinates would also wish to see leaders to open up doors for discussion.
On the most part, the personality category produces a wide range of attributes from “always smiling” to “charismatic” and “sensitive to the environment.” Personal qualities which appear to be often mentioned in the subordinate responses include:

1. being respectful
2. has intellectual capability
3. willing to give and take
4. always smiling and friendly
5. easy to joke with
6. caring
7. gentle
8. honest
9. polite
10. has control of emotions
11. sociable
12. just
13. quick to take action
14. a role model

Leaders were also subordinates to their supervisors. Their responses to the question produced these encoding skills:

1. clear messages
2. good command of language
3. clear articulation
4. concise and precise messages
5. easily understood
6. skilful use of paralanguage
7. use simple language
8. persuasive
9. convincing
10. direct to the point
11. motivate and inspire

Similar to the responses of the non-leader subordinates, the list for decoding skills from these leaders was short. These leaders perceive that a leader should be:

1. a good listener
2. sensitive to subordinates’ non-verbal and emotions
3. easy to talk with

Leaders’ perception of the desired personality traits and characteristics include:

1. confident
2. sincere
3. intellectually capable
4. expert in job function
5. honest
6. empathic
7. knowledgeable
8. positive attitude
9. able to facilitate discussion and solve problems
10. polite and courteous
11. respectful
12. walk the talk
13. good appearance
14. a role model

Both groups of subordinates have similar views about leaders encoding skills in that leaders should be able to convey clear and accurate messages, use language which is easy to understand, and employ appropriate paralanguage skills in their communication. As for decoding skills, subordinates perceive good listening skill and sensitive to the other as important. Personality traits has a wide ranging list which can be collapsed to level of intellectual capability, interpersonal skills, and elements which deal with the heart like sincerity, empathy and honesty.

(ii) Interviews

The interview has three basic questions: what is emotional intelligence, what are the characteristics of a communicatively competent person, and is there a relationship between emotional intelligence and communication competence. Responses for questions 1 and 2 had more than one interviewee stating a similar theme but responses for question 3 had a variety of themes. Data from the interview were content analyzed by themes and
presented to show a holistic picture of the responses rather than the frequency of a particular theme.

During the interviews, the researcher felt that there was a sense of intimacy with the interviewees. Even though the researcher met with the interviewee for the first or third time, the researcher felt that she has known the interviewees for a long time. In most occasions, the environment was friendly, light, and invigorating. All interviewees were earnest in providing their points of view on the concept of communication competence and particularly, emotional intelligence which some have only heard as a mention in a meeting or group gathering they attended.

**Question 1 What is emotional intelligence?**

All of the interviewees had no previous training in emotional intelligence. Their encounter of the word was either during a meeting, attending another course, watching television, or during a group gathering. In fact, all of them who have heard or have some knowledge of the construct used emotional quotient or EQ rather than emotional intelligence during the interview. Only after emphasizing that the interview was about emotional intelligence that the interviewees started using the terminology. Three interviewees who already had some knowledge of the construct learned more about it through reading and watching specific television programs on emotional intelligence.

Interviewees gave a series of responses relating to their perceptions of the construct (see Appendix 1 for excerpts of interviews). Each item below was at least mentioned by two interviewees:

1. related to intelligence
2. control of emotion
3. accurate perception of emotion
4. deals with people
5. related to spirituality
6. measures emotional knowledge
7. considerate
8. understands others’ (needs)

The next question was about communication competence.

Question 2 What are the characteristics of a communicatively competent person (leader)?

1. has a clear mind
2. achieves goals
3. no one person is competent at all times, situations.
4. knows when not to talk
5. considers others’ emotion
6. knowledgeable (on issues being discussed)
7. uses emotion
8. be at the same level with the person he or she is talking with
9. sincere
10. good command of the language
11. listens to others
The next question was to relate emotional intelligence with communication competence. For this question, only five interviewees had the time to continue the conversation.

**Question 3** Is there a relationship between emotional intelligence and communication competence?

All of the interviewees agreed that there is a relationship between emotional intelligent and communication competence. For this part of the interview, several of the interviewees gave examples to illustrate the connection between the two variables. One interviewee talked about relationship building which he believes is the manifestation of emotional intelligence through communication. Another interviewee persistently emphasized sincerity in winning people’s heart.

While discussing the topic on emotional intelligence with one of the interviewees, the researcher felt a sense of closeness and warmth exuding from the interviewee. Before
meeting this person, the researcher had heard from employees in the organization about this likable personality and the interview experience confirmed their feelings. Based on the content of the interview and the environment created by this interviewee, one could feel that, “aha”, this is emotional intelligence. There was sincerity in the words spoken, the gestures and facial expressions, and the tone of voice. This person was careful with the choice of words, using those that avoid uncomfortable feelings and uneasiness for the interviewer. There were times when word tags like “kot” (which means probably) were used. Much of what were said revolved around not hurting peoples’ feelings, responding to unfilled requests with respect, and having a good heart. The researcher left the interview with a sense of fulfillment and gratification.
Chapter 5

CONCLUSION

This chapter presents the summary, discussion, limitations of the study, conclusions, and implications and suggestions for future research. The first section summarizes the literature and study research questions and hypotheses followed by a discussion of the statistical and content analysis of the data. This then leads into limitations of the study which highlight some cultural barriers and participant-related constraints. The chapter concludes with a proposed theoretical framework which links communication competence, emotional intelligence, and cognitive complexity ending with a list of implications of the study and suggestions for future research.

Summary

The purpose of this study was to examine the emotional intelligence construct and to determine the relationships among leadership communication competence, emotional intelligence, and cognitive complexity. Two research questions and three hypotheses guide the research activities:

RQ1: Is the construct of emotional intelligence conceptually redundant with cognitive complexity? If yes, to what extent are they redundant?

RQ 2 Does emotional intelligence predict leadership communication competence?

H1: Emotionally intelligent leaders have a higher degree of communication competence than less emotionally intelligent leaders.
H2: Cognitively complex leaders have a higher degree of communication competence than less cognitively complex leaders.

H3: Emotional intelligence is a better predictor than cognitive complexity for leadership communication competence.

Emotional intelligence and communication competence are said to be attributes of great leaders. Goleman (1998b), who popularized the construct, said that, “the most effective leaders are alike in one crucial way: they all have a high degree of what has come to be known as emotional intelligence [emphasis in original]” (p.94). Although there are some studies which have shown that there is a relationship between leadership effectiveness and emotional intelligence (e.g. Kerr, Garvin, Heaton & Boyle, 2006) there are also studies which show otherwise (e.g. Weinberger, 2003). Additionally, there are emotional intelligence researchers who are still skeptical about the conceptual and incremental validity of the construct (e.g. Amelang, & Steinmayr, 2006; Waterhouse, 2006).

Theorists of emotional intelligence such as Mayer et al. (2004), Bar-On (2005) and Goleman et al. (2002) claim that leaders who are emotionally intelligent are also good communicators. To date, there is no known systematic study which supports this claim. Reports of salespersons with high emotional intelligence working effectively with customers and of managers trained in emotional intelligence being perceived by employees as nicer imply that these individuals were good communicators. The purpose of this study was to examine specifically the relationship between emotional intelligence and communication competence.
Some researchers argue that emotional intelligence possibly could have been a construct which has been studied under a different name such as empathy. Another possible construct is cognitive complexity. Communication scholars argue that cognitive complexity contributes to an individual’s social information-processing capability (Burleson & Caplan, 1998) and communication in particular. Individuals who are cognitively complex have greater listening comprehension (Beatty & Payne, 1984), able to display more effective communication instructions (Hale, 1980) and demonstrate emotional sensitivity (Burleson & Samter, 1990). Given that there is an element of emotional sensitivity in cognitive complexity, it can be possible that cognitive complexity and emotional intelligence are related or even redundant concepts. So, in order to ascertain this possibility, the study also examined the relationship between emotional intelligence and cognitive complexity. With cognitive complexity added as another variable in the study, a regression analysis was conducted to determine which of the two variables better predicts communication competence.

Discussion

*Emotional Intelligence and Cognitive Complexity*

Research question 1 asked whether there is conceptual redundancy between emotional intelligence and cognitive complexity. Overall, emotional intelligence was not correlated with cognitive complexity, and there is no indication that the two constructs are redundant. However, there were small, positive correlations between cognitive complexity and two branches of emotional intelligence in male leaders. Cognitive complexity was correlated with understanding emotion and, facilitating thought and
emotion of emotional intelligence. Given the absence of an overall correlation between emotional intelligence and cognitive complexity and the small correlations between cognitive complexity and specific emotional intelligence branches, there is no evidence of construct redundancy between emotional intelligence and cognitive complexity.

The presence of the small correlations between cognitive complexity and some branches of emotional intelligence, however, demonstrates that emotional intelligence has some convergent validity with an intelligence construct.

**Communication Competence and Emotional Intelligence**

For research question 2, hypothesis 1 states that emotionally intelligent leaders have a higher degree of communication competence than less emotionally intelligent leaders. This hypothesis was not supported. Leadership communication competence was examined with emotional intelligence but no significant relationship was found. The result showed no correlation between leaders’ communication competence and emotional intelligence. This finding is contrary to existing literature which suggests that there is a relationship. Two reasons might account for this contradiction. One, the CCQ measures organizational communication competence while the MSCEIT is generally associated with relationship building. Items in the CCQ tap into the encoding and decoding dimensions of workplace communication and, for most part, these are generally task-related communication with some relational (interpersonal) elements. Even though the relational elements in the CCQ might possibly correlate with the MSCEIT, these items may not be adequate enough to generate a relationship between overall communication competence and emotional intelligence.
As shown in the open-ended question data, Malaysian employees desire that their leaders demonstrate both task-related as well as relational communication skills. In describing encoding skills, subordinates would like messages to be clear, accurate, and direct to the point. While doing so, subordinates would also like their leader to be polite, gentle, friendly, and show concern for them. Leaders who often listen and advise their subordinates are also included in this list of preferred leadership communication skills.

Data from the open-ended questions and interviews illustrate the different perceptions of the two constructs. On communication competence, subordinates perceive organizational communication competence in task-related terms (even though they do desire leaders who build relationships) emphasizing more on task-related communication skills such as desiring to have leaders who are effective in encoding messages, able to provide directions and, have a good command of the language. Subordinates’ emphasis on leaders’ ability to communicate task differs from their concept of emotional intelligence which mainly deals with emotion and ways of dealing with people. Some of the excerpts illustrates this:

“not easily angered”

“putting self in other’s position”

“how you handle people”

The difference between focusing on task for organizational communication competence (CCQ) and emotions for emotional intelligence (MSCEIT) could have led to the absence of a correlation between the two variables. Relational communication competence rather than organizational communication competence in the more general sense might be a more appropriate outcome variable since emotional intelligence has
often been associated with employee motivation and positive work performance of high emotionally intelligent managers.

The other possibility could be related to the MSCEIT testing. Fatigue, length of time to respond to the questions, and tested in another language might have affected leaders’ responses and hence produced scores which may not be a true reflection of their emotional intelligence. Cultural differences and time constraint may also affect the reliability of the responses, which in this study (split-half reliability) was found to be lower than that provided in the test manual. Interestingly, Weinberger (2003), too, obtained lower reliability estimates and intercorrelations between the branches than those reported by Mayer et al. (2002).

During the interviews, participants were asked their opinion of the relationship between emotional intelligence and communication competence. All five interviewees readily agreed that the two constructs are related. One of the interviewees said, “communication (competence) is the subset of the whole thing (emotional intelligence) … because the tool and the mechanism is the communication. You have to use your good communication skills but without the intelligence, you can’t use your tools, ok?” Another interviewee remarks, “if there is high EI (emotional intelligence), the communication is strong.” These statements of agreement suggest that the public believe that emotional intelligence do contribute to communication competence. However, “public opinion” requires scientific validation and hence the conduct of systematic inquiries should be in place to determine whether or not there is a relationship between emotional intelligence and communication competence.
The experience of the researcher during this part of the interview is worth noting. The researcher felt that the environment during the interview process was casual and friendly. The interviewees seemed to understand the requests and needs of the researcher as questions were answered with tact and humility. Emotional intelligence was demonstrated through the behavior and mannerisms displayed. Religious values and sincerity were mentioned in a number of occasions.

*Communication Competence and Cognitive Complexity*

Hypothesis 2 which posits that leaders who are cognitively more complex have a higher level of communication competence was partially supported. While there was no overall relationship, the results do indicate a small correlation between communication competence and cognitive complexity for male leaders. Additional analysis showed that the decoding component of communication competence for males had a small, positive correlation with cognitive complexity.

Similar to previous studies, this finding suggests that cognitive complexity does explain some variance in predicting communication competence. Even though the study was conducted in another culture, the instrument used to measure cognitive complexity, RCQ, demonstrates that it can be employed in a different cultural setting. The high inter-coder reliability also indicates that the RCQ is a reliable instrument for measuring cognitive complexity.
Communication competence, emotional intelligence, and cognitive complexity.

Hypothesis 3 seeks to determine which of the two variables; emotional intelligence and cognitive complexity, better predicts communication competence.

The overall findings of this study indicate that communication competence does not have any relationship with either emotional intelligence or cognitive complexity. The multiple regression analysis showed no significant correlations among all three variables. However, when additional analyses were conducted between gender groups and the three variables, cognitive complexity for male leaders showed significant correlations with communication competence and emotional intelligence. This additional finding supports an earlier proposition that cognitive complexity could be the link between emotional intelligence and communication competence (see pg. 27).

Emotional Intelligence and the MSCEIT

The participants’ MSCEIT total score mean ($M = 84.59$ and $SD = 15.67$) was found to be lower than the normed standard score ($M = 100$ and $SD = 15$) provided in the test manual. Unexpected as it is, several factors may contribute to this discrepancy. First, demographic profile of both groups shows different compositions in age groups, education level, geographic location, and gender (see Table 5.1). Comparing the two groups, 81.6% of study participants were between the ages of 40 to 50+ while a large number of participants in the normative group were less than 30 years old (72%). The positive correlations between cognitive complexity and communication competence and emotional intelligence were found in the larger group, the males (73.7%), and not for female participants. In the normative group, there were slightly more females (52%) than
males. Education level was also a contrast. Almost 90% of the study participants have a postgraduate degree while the normative group mainly possessed a bachelor degree (83.3%). Finally, in terms of ethnicity, all study participants were Asian (Malays) and the normative group comprised of only 26.4% Asians (which probably had very few or no Malay participants).

Given the differences in composition of the demographic variables, there are bound to exist variations and dissimilarities in how study participants respond to test measurements. For example, according to Thorndike (1920) intelligence grows with age. Since emotional intelligence is considered an intelligence construct in this study, this means that someone who is at the age of 20 would develop a certain level of emotional intelligence at the age of 50. On the other hand, other studies show that age has a reverse effect on an individual’s emotional processing ability. In a study with elderly (ages 59-74) and younger (ages 30-40) participants on the affect of age on emotion processing, Wieser, Mühlberger, Kenntner-Mabilia and Pauli (2006) found evidence that delay of emotion discrimination process is related to age – the older someone gets the longer the delay. Based on these accounts, the difference in age group can possibly be a factor for the lower observed mean on the MSCEIT for the study participants.
Another interesting factor is the cultural difference between these two groups. Study participants were Malaysians who are all Malays while the normative group included 63.6% non-Asians. As in most cultural studies, cultural differences generally account for unique or unexpected findings. In a study on emotion recognition by facial expressions, Schimmack (1996) found that Japanese judges had lower accuracy scores on negative emotion recognition compared to American judges. Schimmack argued that exclusive use of Caucasian posers could have contributed to the difference.

### Table 5.1 A Comparison on Demographic Profiles of Participants and Normative Sample

<table>
<thead>
<tr>
<th></th>
<th>This study %</th>
<th>Normative Sample (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 30</td>
<td>0.0</td>
<td>72.0</td>
</tr>
<tr>
<td>30-39</td>
<td>6.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Between 40-49</td>
<td>51.5</td>
<td>5.5</td>
</tr>
<tr>
<td>50+</td>
<td>42.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Unreported</td>
<td>17.5</td>
<td>12.7</td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>73.7</td>
<td>37.3</td>
</tr>
<tr>
<td>Female</td>
<td>26.3</td>
<td>52.0</td>
</tr>
<tr>
<td>Unreported</td>
<td>0.0</td>
<td>10.7</td>
</tr>
<tr>
<td><strong>Education:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or below</td>
<td>10.5</td>
<td>83.3</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>89.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Unreported</td>
<td>0.0</td>
<td>11.2</td>
</tr>
<tr>
<td><strong>Ethnicity:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>100.0</td>
<td>26.4</td>
</tr>
<tr>
<td>Non-Asian</td>
<td>0.0</td>
<td>63.6</td>
</tr>
</tbody>
</table>
Additionally, most of the test items in the MSCEIT were developed within a western social context with few international images. According to Ardila (2005), cognitive tests developed have implicit presumptions that testees have some background knowledge about psychometric properties and the culture where the instruments were developed. The physical elements, environment and emotional attachment of a culture may be alien to the testee and therefore difficult to share the “feelings” that are attached to the different culture. On this, Ardila adds, “it is not surprising that the members of the culture where the test was developed usually obtain the highest score” (p. 190). So when test items are removed from respondents’ cultural context, difficulties in understanding and situating a particular “emotional problem” may result in the lower mean scores on the MSCEIT. This same phenomenon might have occurred for the Malaysian leaders.

Second, the two groups were in different levels of their career. While participants in the normed group were a mix of all levels of employees in an organization (considering the ages range from 17 to 50+), a majority of them were less than 30 years old (72%). This group of participants who presumably were either college students, entry-level employees or young executives have not much experience in the workplace as compared to the study participants who were all leaders in the mid- and upper managerial levels of the organization. Job responsibilities and time constraint due to their leadership positions could affect their focus and attention span to deal with 141 “emotional questions” (whereas students and individuals who were developing a career would pay more attention to such details) resulting in poor scores on the MSCEIT.

And finally, on the issue of scoring the MSCEIT responses, this study used the general consensus scoring method. General consensus criterion which identifies the
“correct answer” by responses of the majority of people in the research might have not
been the better scoring method in this case. Since participants were from a different
cultural background, their “correct” answer may not be the one chosen by the
international emotion experts if an expert consensus criterion were used. This misleading
“correct” answer might result in the poor score for individuals with high emotional
intelligence who could have obtained a higher score if their responses were scored using
the expert consensus criterion method. Here, expert consensus scoring would have been a
more valid scoring method to use in which Roberts et al. (2001) suggest is the
theoretically-sound scoring criterion.

About the expert consensus scoring, still, one may question an expert definition of
a perfect score on the perception of emotion. Can an expert objectively determine the
score on the facial expression of a happy or disgusted person? Or what would be the
correct answer to an emotional problem? What if one fakes an emotional expression?
How, then, can one tell (with confidence) that a facial expression denotes a certain kind
of emotion (and has a certain score)? Many factors need to be considered when
“reading”, understanding and interpreting these emotions. Demographic variables,
contextual situations, and cultural differences are elements which influence individual
differences.

The MSCEIT, as a measurement of emotional intelligence, would require further
development taking into consideration the issues of scoring, suitability for a more varied
demographic group, time to complete the test and number of items. As is now, the
MSCEIT has been refined to better suit different groups of people and with a bit more
fine tuning; the test would be one which appeals to researchers and practitioners interested in the study of emotional intelligence.

As for the conceptualization of emotional intelligence, findings in this study suggest that participants’ concept of emotional intelligence is similar to the concept proposed by Mayer et al. (1997; 2004). Mayer and colleague’s model of emotional intelligence emphasizes the integration of thought and emotions through the activities of perceiving, understanding, facilitating thought and managing emotion. Participants interviewed in this study linked emotional intelligence to intelligence, understanding others, controlling emotions and accurately perceiving others’ emotions’. Some responses include, “knows when someone is happy,” “emotion actually influence [sic] us to make intellectual decisions” and, it has to do with intelligence on emotions.” One interviewee believes that emotional intelligence is related to religion: “EQ (she meant emotional intelligence) is more towards believing your inner spirits… To me it more or less your iman (faith). … To me, those who have a strong iman will have a very good EQ. … I also believe in this EQ to lead you [sic] life into happiness.” Related to this comment, Noriah (2002) made a similar observation in her study on the Malaysian workplace. Noriah found that religion emerged in subordinates’ conception of emotional intelligence. The limited data obtained in the study, however, may not be sufficient to conclude that the conception of emotional intelligence suggested by Mayer et al. (2004) holds. Theorists of emotional intelligence are recommended to further probe implicit characteristics such as religion that may contribute to the conceptualization of emotional intelligence which can be accepted as a universally accepted life quality.
Communication competence, emotional intelligence and gender.

Gender seems to play a role in the findings of this study. It then makes sense to take a closer look at this variable to understand what might have occurred to get the results that the study got.

Interestingly, even though the overall results of the study did not support all the hypotheses, some correlations were obtained when the data set used gender as one of the variables. Upon further testing, it turned out that the variable scores for male participants showed significant correlations between the decoding element of communication competence and cognitive complexity and, cognitive complexity and two branches of emotional intelligence. The lack of significant findings for the female participants could be due to the small number of female participants which was less than 30. This small sample size might result in less power to reject the null hypothesis.

As many studies have shown (and in this study), women leaders are often perceived to be less competent (e.g. Lamude & Daniels, 1990). Male leaders in this study were perceived to be better communicators specifically their decoding skills and fare better in both encoding and decoding skills when compared to the females. This pro-male bias could as well be occurring in many Malaysian workplaces but no empirical evidence has yet been found to validate this assumption. If this were true for Malaysian employees, then male superiority in terms of leadership competence (including communication competence) seems to be a universal perception (or trait?).

Finally, in their study on emotional intelligence and social competence, Brackett, Rivers, Shiffman, Lerner and Salovey (2006) report that scores on the ability emotional intelligence measure (MSCEIT) for men were related to the quality of social interaction.
The men who scored higher on the MSCEIT were found to be using less destructive strategies in emotional situations with friends and were more socially competent with strangers (implying communication competence). These researchers emphasize a lack of similar finding for women suggesting that the MSCEIT might not have tapped into the same emotional intelligence ability for women as with men. This might account for the lower MSCEIT scores for the females than for the males.

Limitations of the Study

1. Response bias in survey questionnaires is unavoidable. Respondents can possibly choose a response which they believe would give them a high score and not choose a response which reflects their actual choice. Also as someone in a leadership position, some leaders would uphold the integrity of their office position and provide responses parallel to that position. For these reasons that when constructing items for a questionnaire, the items should avoid “obvious” favorable or unfavorable responses and provide options which are neutral.

2. Participants in this study were from a single higher education institution. Findings in the study may not be true in other organizations such as private organizations or other educational institutions with a different mix of employee demographic background.

3. Subordinates selected were those who were in direct contact with their respective superior. Some of the subordinates were not willing to participate which left the researcher to choose another employee who at least have worked with the
supervisor and thus unable to evaluate more accurately the leaders’
communication based on his or her lesser working experience with the leader.

4. At the time the study was conducted, the organization was undergoing a big
change in leadership. It was for this reason that leaders were often not available
when contacted or that their time was very limited that might affect their
responses to the questionnaires.

5. Development of the concepts in these variables and their respective instruments
are basically western-oriented and mainly tested with western subjects.
Unfamiliarity of context (physical and emotional) and language barrier might
cause some difficulties in answering the test items.

6. One possible reason for the non-significant results for the overall findings was
low power. With small effect sizes and hence low power to reject the null
hypotheses, it was not possible to argue that there was a difference in
communication competence between leaders with high and low cognitive
complexity and emotional intelligence.
Leadership studies have always been a special interest to many researchers for the fact that leaders affect our lives in many ways - even without us realizing it. So, when emotional intelligence, a quality of life, which is claimed to supposedly contribute to better interpersonal relationship was made known to the public, this construct naturally gets attention as one of the qualities of effective leaders. What is more interesting is that leaders who are emotionally intelligent are also said to be communicatively competent. This study then looks at this possible relationship while attempting to ascertain the possibility of the conflation of cognitive complexity, a communication-related variable, with emotional intelligence which might have been studied under a different name.

Communication competence was found to have no relationship with emotional intelligence and cognitive complexity. Upon further analysis, it was found that male leaders’ communication competence is correlated with cognitive complexity and their cognitive complexity with emotional intelligence. This finding now reflects the literature reviewed that there is a relationship between (male) cognitive complexity and the two variables; emotional intelligence and communication competence separately. The link between emotional intelligence and cognitive complexity, and cognitive complexity and communication competence provides an indication that cognitive complexity is a mediating variable between emotional intelligence and communication competence (Fig. 6.1). The capability of emotional intelligence, a latent variable, is probably augmented by the degree of a person’s cognitive complexity (mediator) which in turn increases the level of communication competence. This study suggests that cognitive complexity is a complete mediator (a) for the leaders but that could possibly not be the case if the study
were conducted elsewhere where there is a possibility for a partial mediation (b). This suggested framework can be verified with more research.

Fig. 6.1 A Suggested Relationship between Communication Competence, Emotional Intelligence, and Cognitive Complexity

Another interesting finding to note is the lower MSCEIT score for female participants compared to the males. Unlike previous studies which claim that females have higher emotional intelligence than males (e.g. Palmer, Gignac, Manocha, & Stough, 2005), this study found otherwise. The small number of female participants may have contributed to the non-significant result, but still, this finding could be true to a certain extent if a larger sample size were used. This, then, will be an exciting research agenda for those who long believe that females are “better” than males in issues relating to emotions.
The study just scratched the surface of the intended goals of the research. More in-depth studies are needed to truly understand the implicit qualities that would make one emotionally intelligent and communicatively competent.

*Implications of the Study*

1. Findings here do not support all the hypotheses. More studies need to be conducted in other populations to see if similar or other results are obtained. As found in most studies which involve culture, intercultural differences generally require a reexamination of the conceptualization of the constructs under study in order to capture the essence of the substance of inquiry in that particular culture. For example, in this study (and by Noriah., 2002), religion was one of the factors perceived to contribute to emotional intelligence. Theorists of emotional intelligence, then, ought to consider how religion or spirituality might factor into their conceptualization of emotional intelligence.

2. As this study is one case in Malaysia, it therefore limits the generalizability of the results. More similar research ought to be conducted in Malaysia and elsewhere to show similar or alternate findings that can verify, add or modify the existing conceptualizations of emotional intelligence and communication competence.

3. Shown in the ancillary data section, sincerity appeared in both the open-ended question and interview responses. This indicates that employees in SSM appreciate leaders who are sincere. Therefore considering sincerity as an important element in communication competence (especially where the
workplace has a high regard for religion) would allow leaders to gain a higher level of employee trust and confidence.

4. The emotional intelligence model proposed by Mayer et al., as it is now conceptualized, emphasizes the integration of emotion and cognition. Mayer et al., in many instances, have explained why their model is an “intelligence” concept by describing how cognition functions to process emotion in perceiving, understanding, facilitating, and managing emotions. What might be missing in this conceptualization is the local content of the test items in that the pictures and scenarios depicted in the test items were unfamiliar to respondents. Respondents might feel detached from the hypothesized emotional situation and hence unable to engage their emotions to the particular task. Victor Serebriakoff (1988), an Honorary International President of Mensa, in his book, *A Guide to Intelligence and Personality Testing*, provides some guidelines as how to design an intelligence test. He said,

> A well-designed intelligence test should not, of course, test the educational background of the subject. Even the verbal test items are usually chosen to avoid those items (questions) where the answers would more likely to be known to well-educated person.... Each of us can judge people within our cultural group and rank them fairly well of the scale of ‘braininess’ or intelligence. ... I said ‘within our group’ so there is one important condition. Those who take the tests must be familiar with the language and the symbolism of the test. (p.24)
Here, Serebriakoff emphasizes the importance of an appropriate test measurement for a particular group so that respondents understand and be able to relate the test items to their own cultural context.

5. In this study, the CCQ was used to evaluate leadership organizational communication competence. The non-significant result obtained may signal that the instrument, MSCEIT, used to relate organizational communication competence with emotional intelligence may not be appropriate. The MSCEIT which seem to deal mainly with relational issues does not seem to tap into the CCQ, which has a mix of task and relational items.

6. This study which aims to contribute knowledge to the incremental potential of emotional intelligence using the MSCEIT may serve as an additional finding to some of the research which found that emotional intelligence contributes nothing more to the existing repertoire of personality traits and intelligence measures. Unless tested with interpersonal communication competency measurements, which has far more relational elements than organizational communication (without denying that relationship is important in the workplace), emotional intelligence, thus far, does not predict leaders’ organizational communication competence.
Suggestions for Future Research

1. This study is limited to a quantitative approach with ancillary qualitative data to supplement or explain issues and concerns obtained from the quantitative data. Having experienced the research process and thus analyzed and interpreted the data, the researcher believes that both quantitative as well as qualitative data are equally pertinent in the conduct of a research. A survey can confirm or disconfirm a predetermined set of theoretical concepts but an ethnography or narrative may provide insights into the underlying subtleties that go beyond the surface of the survey questionnaires. The suggestion then is to consider the various method options available to get into the heart of the research question(s). On this, Kaplan (1964) gave an analogy of a methodologist as a baseball coach, “the merit of his recommendations rests entirely on what the play of the game show to be effective” (p. 25).

To capture the richness of the communication processes and the complexity of the organizational interactions, an indepth understanding of the phenomenon under study requires the researcher to be in the field. A distant, survey-based research can only touch the surface of the intricate and unlimited possibilities of communication that go on in the organization. In a study on the impact of training on individuals, Conger (1998) demonstrates the necessity of being in the field to capture the “multitude contextual factors influencing participants …” (p. 118).

2. A few elements emerge from the qualitative data. Malaysian subordinates seem to put forth certain values such as religion and sincerity in their
perceptions of communication competence. This suggests that researchers who intend to study communication competence look into the various cultural values of the group.

3. As previously discussed, using a larger sample size for future studies particularly for the female group might shed a different light on the outcome of the analyses.

4. In this study the overall result shows that cognitive complexity has no relationship with emotional intelligence (although later analyses do indicate a small correlation with the male participants). This suggests that the emotional intelligence construct is not redundant with existing cognitive-related constructs used in communication studies. Future research might want to find out if there are still possibilities that some other communication constructs which resemble emotional intelligence.

5. Mixed method approach is still a less utilized research design in many areas of study. This research design has been employed in primary care for more than two decades (Creswell, Fetters, & Ivarkova, 2004) now and other disciplines are picking up on the utility of a mixed method approach for their research. This seemingly powerful research approach, even though requires more effort and resources than a single approach, promises a more comprehensive and holistic view of understanding the nature of the issues or problems under investigation.

With the rapid and diverse accumulation of knowledge today, a mixed method study allows for interdisciplinary collaboration of researchers.
Researchers are able to join forces to capitalize on each others’ strengths to conduct more sophisticated and complex research which would not otherwise be possible if the research were done by one person or research method.

6. Research of this nature which crosses disciplines would benefit better when experts from the disciplines collaborate. It is suggested that communication scholars work together with psychology scholars to explicate the underlying elements which makes one to be emotionally intelligent.

End notes

1 Big Five are personality traits which consists of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness

2 The leadership literature distinguishes leaders from managers but the discussion for this distinction would take away the focus of the study. Briefly, leaders can be classified as educational and student leaders, public leaders, and organizational and institutional leaders (Bass, 1990). In the case of this study then, the managers are classified as organizational leaders.

3 These characteristics of emotional communication skills are adopted from the emotional intelligence model proposed by Mayer, Salovey and Caruso.

4 Several leaders did not respond completely to all the items in the MSCEIT. The N shown here are the MSCEIT scores provided by MHS considered be eligible to be given a value.
References


*Personality and interpersonal communication* (pp. 305-349). Newbury Park, CA: 
Sage.

Daly, M. M. Martin, & M. J. Beatty, *Communication and personality trait 

importance of communication skills in friends. *Communication Research, 17*(2), 
16-182.

questionnaire measure. In C. H. Tardy (Ed.), *A handbook for the study of human 
communication: Methods and instruments for observing, measuring, and 

complexity is not loquacity: A reply to Beatty and Payne. *Communication 
Quarterly, 35*, 317-328.


Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, 
behavior and outcomes: An examination among senior managers. *Journal of 
Managerial Psychology, 18*(8), 788-813.

Research on Emotional Intelligence in Organizations. Retrieved February 27, 


*Competence in communication: A multidisciplinary approach* (pp. 11-32).


(Ed.), *Progress in experimental personality research* (Vol. 2, pp. 47-90). New


Electric, Microsoft, and Monsanto*. Albany, New York: State University of New

York Press.

Daly, J. (2002). Personality and interpersonal communication. In M. L. Knapp & J. Daly,

*Handbook of interpersonal communication* (3rd ed.) (pp. 133-180). Thousand


Daus, C. S. & Ashkanasy, N. M. (2005). The case for the ability-based model of

emotional intelligence in organizational behavior. *Journal of Organizational

Behavior*, 26, 453-466.


intelligence to predict individual performance, group performance, and group


improve emotional intelligence in individuals, groups, and organizations (pp. 27-44). San Francisco, CA: Jossey-Bass.


Walmsley, S. (2003). Leadership with a human face; let employees know who you are and they will react positively. *CMA Management, 77*(8), Online ISSN 1207-5183.


Appendixes

Appendix I

1. Gender
   a. Male   b. Female

2. Race/ethnicity
   a. Malay   b. Chinese
c. Indian   d. Other (please specify).............

3. Appointment
   (i) Academic administrative position
   a. Dean/Director (please specify faculty/institute/school/others)....................
b. Deputy Dean (please specify faculty/institute/school/others)....................
c. Head of Department (please specify department).................................
d. Head of Unit (please specify unit).................................................

   (ii) Organizational administrative position
   a. Vice Chancellor
   b. Deputy Vice Chancellor (please specify)........................................
c. Registrar
   d. Head of Division/others (please specify division/other).....................
e. Deputy Head of Division/other (please specify division/other)................
f. Head of Unit (please specify unit).................................................

   (iii) Other (please fill in this section if you do not belong to any of the above)
   a. Position .................................................................
b. Please specify department/unit..................................................

4. Please indicate your immediate superior (please choose one)
   a. Vice Chancellor
   b. Deputy Vice Chancellor (please specify)........................................
c. Registrar/Dean/Head (please specify).............................................
d. Deputy Dean/Deputy Head of Division/other (please specify)................
e. Head of Unit/Department (please specify)........................................
f. Other (please specify)............................................................

Please complete each of the following items by filling in the blank spaces and circling the items that best describe you.
5. **Length of employment at this institution**
   a. less than two years
   b. between two to four years
   c. more than four years but less than six years
   d. between six to eight years
   e. more than eight years but less than ten years
   f. more than ten years.

6. **Level of highest education**
   a. Doctorate degree or equivalent
   b. Masters degree or equivalent
   c. Bachelor degree or equivalent
   d. Diploma or equivalent
   e. Other: _____________________________

7. **Have you had any previous communication skill training?**
   a. Yes (please indicate type of program or name of course):
      1. ………………………………………………………………………………
      2. ………………………………………………………………………………
      3. ………………………………………………………………………………
      4. ………………………………………………………………………………
   b. No.

8. **Please indicate a communication course or program (or any communication skills training) which you believe would assist you in your job function.**
   1. ………………………………………………………………………………
   2. ………………………………………………………………………………

9. **Please briefly describe the communicative characteristics of a leader whom you perceive to be a component communicator.**
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
   ………………………………………………………………………………
The interest in this questionnaire is to learn how people describe others whom they know. The concern here is with habits, mannerisms—in general, with the personal characteristics, rather than the physical traits—which characterize a number of different people.

(a) Describe a person your age whom you like. Please write down as many defining characteristics as you can (in one or two words). Do not simply put down those characteristics that distinguish him/her from others, but include any characteristics that he/she shares with others as well as characteristics that are unique to him/her. Please pay particular attention to his/her habits, beliefs, ways of treating others, mannerisms, and similar attributes. Finally, please remember to describe him/her as completely as you can, so that a stranger might be able to determine the kind of person he/she is from your description.

Please spend only ten (10) minutes describing him/her.
(b) Describe a person your age *whom you dislike*. Please write down as many defining characteristics as you can (in one or two words). Do not simply put down those characteristics that distinguish him/her from others on your list, but include any characteristics that he/she shares with others as well as characteristics that are unique to him/her. Please pay particular attention to his/her habits, beliefs, ways of treating others, mannerisms, and similar attributes. Finally, please remember to describe him/her as completely as you can, so that a stranger might be able to determine the kind of person he/she is from you description.

*Please spend only ten (10) minutes describing him/her.*
Instructions:
In this series of questions we would like you to describe how your superior communicates. Think about his/her behavior in general, rather than about specific situations. If you strongly disagree please choose “1”, and if you strongly agree please choose “7.”

Please circle your responses.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My superior has a good command of the language.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior is sensitive to others’ needs of the moment.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior typically gets right to the point.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior pays attention to what other people say to him or her.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior can deal with others effectively.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior is a good listener.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior’s writing is difficult to understand.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior expresses his or her ideas clearly.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior is difficult to understand when he or she speaks.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior generally says the right thing at the right time.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior is easy to talk to.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>My superior usually responds to messages (memos, phone calls, reports, etc.) quickly.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

***** Thank you for completing this survey *****
Appendix II

Interview Questions

These are semi-structured interview questions. Some questions were prompted by the responses from participants.

Emotional Intelligence

1. Have you heard of emotional intelligence? When did you hear it and what was the occasion?
2. What is emotional intelligence to you?
3. Among our leaders, who would you consider to be emotionally intelligent? Why do you say so?
4. What are the characteristics of an emotionally intelligent person?
5. Do you think that a leader should be emotionally intelligent? Why?

Communication Competence

1. How would you describe a person who is communicatively competent?
2. Who do you see as communicatively competent? Please describe his/her characteristics.
3. What are the characteristics of a communicatively competent leader?
4. Do you think that leaders who are emotionally intelligent are also communicatively competent?
5. Do you think there is a relationship between emotional intelligence and communication competence? Please explain.
Appendix III

Excerpts of interview

Some parts of the interview were in Malay (the native language of the speaker) so they were translated by the researcher. The translation was then read by another bilingual speaker (Malay-English) to cross-check for accuracy of translation. Discrepancies in meanings were resolved by both persons agreeing on the same semantic.

*Question 1*

Interviewee 1: “emotion plays a very big role in the human mind.”
“emotion actually influence[s] us to make intellectual decision.”

Interviewee 2: “emotional intelligence is to test someone his or her emotional knowledge on skills and effectiveness in communication … also on his or her thoughts, embodiment and behavior.”

Interviewee 3: “emotional intelligence is dealing with people, basically, because I think it is part of communication, how you handle people, how they react to your word[s].”
“how you intelligently handle [problems on a] case by case basis”, “I have to use judgment to tackle them.”

Interviewee 4: “not easily angered,” “putting self in other’s position”
“move down to the level of the person whom you would like to understand.”
“knows when someone is unhappy.”
Interviewee 5: EQ is more towards believing your inner spirits… To me, it more or less your “iman” (faith). … To me, those who have a strong “iman” will have a very good EQ. … I also believe this EQ to lead you life into happiness.”

“those who [have] a positive mind or positive thinking are very good in EQ.”

Interviewee 6: “when you look at something, how do you feel about that uuhh that incident or that symbol, my ability to attach to that event or that particular thing. For example I look at [a] glass, you know, uh, I have [a] different emotion toward my glass, for example, this is romantic, you, know, this is very useful, I should care about this glass. Like that.”

“he has EQ, you know, … even though he is upset, he try[ies] to control and then make it, you know, harmonize the situation.”

“always related to context.”

“never conflict [but] create harmony in the organization.”

“feel something but they keep inside.”

“culture is important in the context of EQ because emotion is sometimes linked to other people … we always consider apa orang lain kata (what other people say).

Interviewee 7: “try to measure emotion … It is to do with intelligence on emotion.”

“How you manage your emotion.”

“Able to read people’s mind. … read emotion.”

“really understand the thinking and of what these people want.”

“That’s where the intelligence is so important so that you can read the voice inside. Ok, from the bottom of the heart.”

“influence people’s mind. Winning the heart and winning the heart is an art.”
“You must know what your people want. You must act accordingly, address accordingly, and you must know how to say ‘no’ in such a way that people don’t get hurt. … so it need that intelligence.”

“punya (has) interpersonal communication (skills) … able to offer solution … like a counselor.”

“‘There are also times, ah, you have to say ‘yes’ … not necessarily to say ‘yes’ in [a] direct way. To classify (the ‘yes’) or to give an idea of the priority. It involves intelligence actually.”

“You have to give the right signal.”

“winning somebody’s heart you have to make them to enjoy working with you.”

“not every body can be trained … It is a matter of sensitivity, matter of knowledge. People with more knowledge have more positive attitude and more sensitive towards things. .. It transforms into behavior …”

**Question 2**

Interviewee 1: “somebody who has a clear mind.”

“you achieve your goal of disseminating your information.”

“getting your message across and getting whatever you intend to get.”

“not everybody ahh.. can be competent at all times.”

“Yes,.. with certain topic he may be competent, with certain group he may be competent but he may not be competent with a different group of audience.”

“impossible to get (a) competent communicator who can get any message, any topic, any time to anybody. … I can give you one example. Hmm .. so many of us watch
programs … tv programs from Hollywood. Hmm .. some of the programs we could not understand because it is not meant for us, it is not meant for our culture so they did not get their message across to us… because of the different culture.”

“Besides looking at what has been said or how to say it, psychology of communication focus on why someone say something, all right? So the why also should consider his state of emotion and also the state of emotion of the target.”

“So those who talk a lot they may not be a good communicator because sometimes people they get confused.”

“Because a good communicator, not only he know when to talk he must also know when to “shut up” hmm (small laugh), okay?”

“when you look at some people they may not be talkative but have some ideas, they’re willing to listen, they’re very helpful.”

“There are few things that compose the quality of a good communicator. First and foremost, you must have something to say … content … How are you going to get a good content if you are not knowledgeable of that particular topic. And number two, the way he delivers the content.” “…communication deals with what you say and what you don’t say as well.”

“Some people like talk a lot, but you may have good word choices, you see, ahh .. use bombastic words, terminologies, jargons and things like that but they don’t have any substance. … So these are not competent communicators.”

“we cannot convince people with only statistics, with quotations, with observations, you have to use emotion-laden words once a while.”
Interviewee 2: “One, must have knowledge … for example a mechanic he must know every aspect of the theory .. has higher level of psychomotor skills .. and also thinking skills .. so that he can diagnose the problem … and in future can suggest policies.”

“he must know how to get knowledge.”

“need to decode message at the same wavelength as the person we are communicating with.”

“communication is two-ways, there is feedback”

“when communicating, it should be with sincerity for the good

“message is clear and accurate … the person receiving the information will understand what we said.”

“When we communicate, that person can accept what we say and all of that can bring change to that person for that person.”

Interviewee 3: “He has to be knowledgeable, first thing. … if he is a good communicator, you can blend (him) with whatever event (that is) happening around (him).”

“he can talk (on) whatever topic.”

“Good command of the language.”

“confident.”

“can convince people.”

“can read people’s mind from his sitting position.”

Interviewee 4: “when they say people listen. They say people get influenced.”

“See, Mat Salleh (reference to the westerners) because English is their mother tongue so they speak English well. Because they speak English, they present themselves well because that is their language. So in that sense they have the power of speech
because they can speak well.” (This interviewee compared native speakers with non-native speakers who are intelligent but has to speak in another language. Due to the lack of language skill, the non-native speaker will lose the confidence of others who are listening to him or her).”

“when you speak you must speak with a point.”

“to be a good communicator you must have one important value which is listening.”

Interviewee 5: “To me people who can create harmony and then try to focus on task.”

“If too focussed on task without considering about relationship or harmony then this is not good, I mean communication competence is considered low.”

“there is trust.”

“The most important is always talk in the low tone. Polite and put everyone on the same level. Respect for the elderly.”

“leader who cares.”

“able to read minds. Knows what to the expectation of others.”

Interviewee 6: “Can get message across … quality message … (and) people… respond positively toward the message.”

“actually it is the human touch.”

*This next section is also a translation*

“Whatever we say goes. Not that we just want to say something. People who are sincere, as I always said, what he or she said has *uumph* (impact). Because people will know that this person not only speaks but with sincerity, with commitment, with passion, passionate about the work and sincere to make things happen rather than you know …”
Interviewee 7:

*Question 3*

Some of the interviewees were not asked this question due to the time limit.

Interviewee 1: “a person who is emotionally intelligent should also be communicative competent.”

“competent (competence) is subset of the whole thing (emotional intelligence. …

Because the tools and the mechanism is the communication. You have to use your good communication skill but without the intelligence, you can’t use your tools, ok, you can’t use your tools to get your message across. You can get your message across but if you don’t use your EI you won’t be able to win peoples’ heart again.”

“the use of right wisdom… I think if somebody use the wisdom, it implies that person a high emotional intelligence. Because wisdom comes with that intelligence. The outcome of that intelligence is the wisdom.”

Interviewee 2: “If someone has a hogh EI, that person has the concept of building relationship, yes, build relationship. To build a elationship that perosnhas to have communication competence. Frequently, if there is high EI, the communication is also strong

Interviewee 3: “they (emotional intelligence and communication competence) are related. If a person does not have (high) EI, that person is not mature enough to balance between own emotion and speech.” This interviewee gave an example of a rowdy meeting. One person left the room and said you screwed up. The interview considered this person incompetent in handling the situation.”