EAST MEETS WEST:
THE CULTURAL-RELATIVITY OF EMOTIONAL INTELLIGENCE

By
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Doctor of Philosophy
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University of Toronto

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ABSTRACT

My dissertation examines a fundamental but poorly understood aspect of emotional intelligence: its potential cultural-relativity. Significant differences in emotional intelligence test scores have been found between different cultural groups. To explain these past findings, I develop a theory of how and why different cultural groups—specifically, Westerners and East Asians—hold different conceptions of emotional intelligence. In effect, I argue that what is considered emotionally intelligent behaviour by members of one ethnic group may not be considered emotionally intelligent behaviour by members of another group due to contrasting cultural values and beliefs.

Empirically, I test this theory through a two-part investigation. In Study 1, I measure cultural values and show that they mediate the relation between ethnicity and emotional intelligence test scores. In Study 2, I experimentally manipulate (prime) cultural beliefs to test whether they cause different judgments of what is considered
emotionally intelligent behaviour. Some evidence for the hypothesis that culture helps account for ethnic differences in emotional intelligence was found through Study 1’s measurement-of-mediation design, however, not through Study 2’s experimental-causal-chain design. Theoretically, my dissertation helps challenge the implicit assumption that emotional intelligence is universal by explaining how and why it is culturally-relative. Practically, my dissertation provides some evidence that current tests of emotional intelligence may be culturally-biased and hence adversely impact non-Western candidates when used as part of selection and promotion decisions.
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CHAPTER 1: INTRODUCTION

The funerals of former U.S. President Ronald Reagan and former North Korean President Kim Il Sung both featured thousands of people lining the streets as a motorcade carried the body of their former leader. The way in which emotions were expressed in the two countries, however, were dramatically different. The Americans’ expressions were stoic, but the North Koreans sobbed loudly and wailed dramatically. These events help illustrate the central thesis of the study: Culture plays a powerful role in dictating what is considered emotionally intelligent behaviour.

Emotional intelligence can be defined as “the capacity to process emotional information accurately and efficiently” (Mayer & Salovey, 1995, p. 197). Since Mayer and Salovey defined emotional intelligence (EI) in the 1990s, studies have linked EI to outcomes such as job performance, quality of relationships, and well-being (e.g., Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Côté & Miners, 2006; Lopes, Brackett, Nezlek, Shütz, Sellin, & Salovey, 2004). Underlying these studies, however, is the implicit assumption that EI is universal rather than culturally-relative. For example, EI measures have been translated into various languages without adapting their item content or scoring algorithms. Even when EI measures are administered in their original language (usually English), it is assumed that EI exists in the same form among members of different cultural groups. Evidence revealing cultural variability in emotional and intellectual processes, however, suggests that neglecting the variable of culture is imprudent.

Indeed, more than a decade ago, Mayer and Salovey (1997) recognized the need to consider culture:
Examining more complex manifestations of emotional intelligence (beyond that of the simple identification of emotion) often requires understanding the individual’s own cultural framework. Only by knowing the person’s standards can certain ‘emotional reactions and models… be assessed according to their logical consistency, and hence, their intelligence’ (p. 9).

But Grewal and Salovey (2005) admitted that: “The science of emotion thus far has stressed principles of universality… However, in any given culture, people differ from one another in their abilities to interpret and use emotional information” (pp. 7-8). More recently, it was noted that there is a general consensus among emotion researchers on the important role that culture can play when applying EI in practical settings, but there is currently little relevant research and few specific recommendations (Roberts, Zeidner, & Matthews, 2007).

In recent years, the topics of EI and culture have received immense research attention, but the two bodies of research rarely intersect. To address this significant gap in the literature, I will focus on one particular contrast. That is, I will compare North Americans and East Asians because the concept of EI originated in North America and there is considerable evidence that East Asians hold contrasting cultural values and beliefs from North Americans (e.g., Hofstede, 1980; Markus & Kitayama, 1991; Triandis, 1995). Exploring areas of similarities and differences between North Americans and East Asians in EI, therefore, may yield useful insights on the boundary conditions of EI and its potential cultural-relativity. On a practical level, this investigation

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1 The term *North American* is used as shorthand for Canadian and American, and term *East Asian* is used as shorthand for Chinese, Hong Kong Chinese, Taiwanese, Japanese, and Korean (Heine, Lehman, Markus, & Kitayama, 1999; Nisbett, 2003; Oyserman, Coon, & Kemmelmeier, 2002).
may offer culture as an explanation for why East Asians and other ethnic groups may obtain lower EI scores compared to North Americans.

The purpose of this dissertation is to explore the relation between culture and EI. First, I will review relevant research on culture and EI as well as emotion and intelligence. Second, I will integrate past research into a theoretical model on the cultural-relativity of EI. The framework will outline how the dimensions of EI are potentially universal, but some of their content and manifestation are culturally-relative. Third, I will present a two-part empirical investigation to test the hypothesis that EI is culturally-relative. Finally, I will discuss the theoretical and practical implications of the results and offer specific recommendations and directions for future research.
CHAPTER 2: THEORETICAL BACKGROUND

The Asian Paradox: The Meaning of Differences in Abilities

Throughout Western history, emotion has often been regarded as the antithesis of intellect. “Rule your feelings, lest your feelings rule you” (Syrus, c.100 B.C./1961). “Reason above passion” (Trudeau, c. 1970/1984). Salovey and Mayer, however, argued that emotion and intellect often work in concert and can enhance each other. Referring to emotions, Salovey questioned, “Why would we have evolved such a complex and interesting system if it’s not adaptive, if it didn’t help us?” (as cited in Paul, 1999, ¶10). In 1990, Salovey and Mayer’s musing inspired the first academic paper on EI.

The concept was subsequently popularized by Goleman’s (1995) bestselling book, *Emotional Intelligence*. Trumpeted on its cover was the claim “The groundbreaking book that redefines what it means to be smart,” and the promise to reveal, “Why [EI] can matter more than IQ.” In the book, Goleman gave numerous examples of when people of modest IQs do surprising well and those of high IQs flounder, and attributed these incidences to EI (or lack thereof). He suggested that IQ is not destiny, as EI may play an even more important role in success, and may be developed throughout life.

Although Goleman’s (1995) book was pivotal in expanding interest and inquiry on EI from a couple of journal articles to an active field of research, it strayed considerably from the works of Mayer and Salovey (1990; 1997). For example, while Mayer and Salovey conceived EI as related to other intelligences (such as verbal IQ), Goleman positioned EI as something very different from IQ (such as character). The distancing of EI from IQ may have done the construct and its scientific advancement a disservice, as many of the issues that have emerged this past century in IQ research, have
repeated themselves in the recent years of EI research. At the same time, it presents a previously missed opportunity to draw insights from IQ research that may shed light on the current issue of ethnic and cultural differences in EI.

In particular, consistent with the pattern of ethnic differences found for IQ (Neisser et al., 1996), it has been found that African Americans (“Blacks”), aboriginals, and Asians all obtain lower overall EI scores (including understanding and regulation of emotion) than European Americans (“Whites”). For example, in a recent study of 910 job applicants, Whites scored the highest on a self-report EI measure, followed by Hispanics, and then Blacks (Whitman, Van Rooy, Viswesvaran, Burns, & Kraus, 2006). Whitman and his colleagues noted that these ethnic differences in EI are comparable to that found for general intelligence (g). In another study, aboriginal scored lower than non-aboriginals on another self-report EI measure (Parker, Saklofske, Shaughnessy, Huang, Wood, & Eastbrook, 2005). Parker and his colleagues speculated that this ethnic difference in EI may be due to factors such as family neglect, under-education, and unemployment among aboriginals. Finally, Whites scored the highest on an ability measure of EI, followed by Hispanics, then Blacks; Asians, on average, performed significantly worse than the other three groups among a sample of over 3000 people from four broad ethnic groups (Mayer, Salovey, & Caruso, 2002).

The meaning of ethnic differences in abilities has long been the subject of intense interest and debate. As Diamond (2005) discussed, the success of Europeans—from literature to science and technology to conquests—leads to the common belief that people of European descent are genetically superior to other ethnic groups. As he noted, a tremendous effort by cognitive psychologists has gone into the search for differences in
IQ between people of different ethnic origins living in the same country, but their efforts to date have not been successful in establishing their genetic superiority due to differences in their environment. A more common attribution (at least publicly) is the “environmental hypothesis” (Neisser et al.; Steele & Aronson, 1995). That is, ethnic differences in IQ scores are due to socioeconomic factors such as the lower levels of education and employment as well as greater incidences of chronic malnutrition and family neglect. When socioeconomic factors are controlled however, ethnic differences are reduced but not eliminated, which suggests that this theory is only a partial explanation (Neisser et al., 1996). A further attribution for ethnic differences in IQ scores is people’s unconscious tendency to confirm stereotypes regarding their group’s intellectual abilities (Shih, Pittinsky, & Ambady, 1999; Steele & Aronson, 1995). For example, Steele and Aronson (1995) found that Blacks and Whites performed similarly on a set of verbal test items, but Blacks performed significantly worse than Whites when negative stereotypes regarding Blacks’ intellectual abilities were subtly made salient to them.

While unconsciously activated thoughts may have a subtle yet powerful effect on test performance, cultural context may have an obvious and even more powerful effect. As Sternberg (2004) bluntly stated, “Behaviour that in one cultural context is smart may be, in another cultural context, stupid” (p. 325). With respect to the relation between culture and intelligence, scholars have taken everything from a wholly universal to a wholly relativistic view. While some scholars have assumed that everything about intelligence is the same across cultures and can be assessed identically between cultures (e.g., Jensen, 1982; Eysenck, 1986), others have argued that nothing about intelligence is
necessarily the same across cultures and can only be assessed as an indigenous construct within cultures (e.g., Berry, 1972; Sarason & Doris, 1979). Sternberg (2004), who conceptualized intelligence as the knowledge and skills needed for success in life, presented a model of intelligence that accounts for both universality and cultural-relativity.

According to Sternberg (2004), certain aspects or dimensions of intelligence (e.g., the abilities to recognize, understand, and solve problems) are universal, but the content and manifestations of these dimensions are culturally-relative. For example, Sternberg and his colleagues (2001) noted that 95% of children in Kenya suffer from parasitic illnesses and use natural herbal medicines an average of once a week to treat these illnesses. Children therefore need to: recognize the existence of an illness, identify it among the diverse and abundant parasitic illnesses, and treat the illness using appropriate medicine. It was found, however, that the correlation between children’s knowledge of appropriate medicines and results on conventional Western intelligence tests was negative. Sternberg and his colleagues reasoned that this occurs because some families in Kenya emphasize indigenous knowledge for success in their current environment, while others emphasize academic knowledge for entry into a more economically developed environment. As a result, children typically pursue one route or the other, and therefore learning indigenous knowledge typically comes at the expense of learning academic knowledge (or vice-versa). As Sternberg (2004) noted, these results suggests that the abilities to identify, understand, and solve problems may be needed across and within all cultures, but the content of these problems and the manifestation of these abilities may differ based on context.
Attributions for ethnic differences in abilities—whether nature or nurture, stereotypes or culture—are not merely the abstract concerns of scholars; they have far-reaching and fundamental sociopolitical implications. For instance, the genetic hypothesis has been used to imply that certain ethnic groups are deficient in abilities needed for success and to rationalize existing class differences (e.g., Herrstein & Murray, 1994). On the other hand, the environmental hypothesis suggests that extending equal opportunities (e.g., education, employment) to certain groups will help raise their abilities and reduce class differences (e.g., Gould, 1996). Research on the effects of stereotypes indicates that intellectual test performance is malleable and surprisingly susceptible to unconsciously held thoughts. Finally, cultural studies indicate that intelligence cannot be fully or even meaningfully understood without consideration of its context. As Sternberg (2004) stated:

One can pretend to measure intelligence across cultures simply by translating Western tests and giving them to individuals in a variety of cultures. But such measurement is only pretense. Care must be taken even when attempting to measure the intelligence of various cultural groups within a society (p. 336).

As Sternberg suggested, research that attempts to study intelligence without regard to culture may impose an (often Western) investigator’s view of the world, frequently showing that individuals who are more similar to the investigator are “smarter” than those who are less similar.

A reminder of the limitations of this view is the following puzzling finding: In an analysis of more than a dozen studies from the 1960s and 1970s, Chinese and Japanese Americans obtained below average IQ scores (mean of about 97 or 98, none over 100),
yet their professional achievements have far surpassed what might have been expected based on their IQ scores (Flynn, 1991; Lynn, 1993). More recently, Asians performed the worst on an EI test among a large sample of Whites, Hispanics, and Blacks (Mayer, Salovey, & Caruso, 2002). There is little evidence, however, to support genetic or environmental hypotheses for the lower test performance of Asians. For instance, Asians do not tend to suffer from greater levels of under-education, unemployment, or other socioeconomic factors that may stifle mental development. In fact, they tend to be disproportionately represented in higher education as well as technical and professional occupations (Neisser et al., 1996).

Similarly, stereotypes regarding Asians do not appear to threaten their test performance. If anything, they have been found to have the opposite effect of boosting test performance (Shih, Pittinsky, & Ambady, 1999). With respect to EI testing, given that emotions typically occur in the context of relationships (cf. Lazarus, 1991) and Asians are stereotyped to be more relationship-oriented (cf. Hofstede, 1980; Markus & Kitayama, 1991; Triandis, 1995), Asians may be expected to score relatively well. Asians’ relatively poor EI scores, despite both predictors and outcomes that fail to support this, therefore calls for research to help illuminate this “black box.” More generally, this paradoxical set of findings points to a potentially superficial treatment of the meaning of ethnic differences in abilities and the need for deeper understanding.

It is hypothesized that the conceptualization of EI may be biased towards Western cultural values of appropriate emotional thoughts, feelings, and behaviours, and this helps account for the lower EI test scores of Asians and other non-Western ethnic groups. For example, evidence suggests that non-Western cultural values place more emphasis on the
social aspects of intelligence (e.g., Azuma & Kashiwaga, 1987; Lutz, 1985; Grigorenko et al., 2001), and therefore knowledge and skills appropriate to non-Western socio-cultural contexts may go unrecognized on Western-based EI measures. This is especially problematic when 70% of humans live in non-Western contexts (Triandis, 1995). Comparing North Americans versus East Asians allows for a particularly compelling test of this cultural-relativity hypothesis; while there is little evidence for the negative impact of socioeconomic factors or stereotypes on test performance between these groups, there is considerable evidence that they hold contrasting cultural values.

Consistent with Sternberg’s (2004) theoretical model on the relation between culture and intelligence, it is reasoned that while dimensions of EI are potentially universal, aspects of their content and manifestation are culturally-relative. The cultural-relativity of EI may help explain, for instance, why Asians and other ethnic groups score poorly compared to Whites on Western-based EI tests. In the following sections, I will present the building blocks of this theoretical model on the relation between culture and EI as I define relevant concepts on EI and culture.

Conceptualization of Emotional Intelligence

As noted above, emotional intelligence can be defined as “the capacity to process emotional information accurately and efficiently” (Mayer & Salovey, 1995, p. 197). According to Mayer and Salovey (1997), EI consists of four interrelated dimensions: the abilities to regulate, perceive, understand, and use emotions in oneself and others. Since

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2 The four dimensions of EI are, by convention, presented in the following order by Mayer and his colleagues (e.g., Mayer & Salovey, 1997; Mayer, Roberts, & Barsade, 2008): perception, use, understanding, and regulation of emotions. Within the theoretical model on the relation between culture and EI, however, it was necessary to discuss the cross-cultural regulation of emotion before the perception of it as well as the cross-cultural understanding of emotion before the use of it. Throughout this paper,
their conceptualization of EI, other models have been promoted, notably those by Bar-On and Goleman. Bar-On (2002) defines EI as “a mix of traits and abilities related to emotional and social functioning that lead to psychological well-being” (p. 364). These traits and abilities can be grouped into five main areas: intrapersonal skills, interpersonal skills, stress-management, adaptability, and general mood. Boyatzis, Goleman, and Rhee (2002) define EI “as how individuals handle themselves and their relationships” (p. 6). Like Bar-On, they break down EI into a mix of traits and abilities: self-awareness, self-management, social awareness, and relationship management.

A central issue on the debate about the scientific status of EI concerns its conceptualization (cf. Jordan, Ashkanasy, & Härtel, 2003; Joseph & Newman, 2010; Landy, 2005; Matthews, Zeidner, & Roberts, 2007). While Mayer and Salovey (1997) focus on mental abilities related to emotion and their interaction with cognition, Bar-On (2000) and Goleman and his colleagues (2002) cover not only abilities, but also characteristics such as personality and motivation. Hence, Mayer and Salovey’s model is an “ability” model, while Bar-On and Goleman’s model are “mixed” models. The latter conceptualizations are problematic because such models overlaps substantially with existing constructs and thereby call into question whether EI is truly distinct from pre-existing constructs such as personality and motivation and is not merely “old wine in a new bottle” (Matthews, Zeidner, & Roberts, 2004, p. 79). For example, Bar-On’s model of EI overlaps considerably with the Big Five dimensions of personality (Daus & Ashkanasy, 2005).

therefore, the four dimensions are presented in the following order: regulation, perception, understanding, and use of emotions.
Furthermore, leading emotion researchers have recently advanced ability models of EI. Like Salovey and Mayer (1990; 1997), Scherer and Izard and his colleagues conceive emotion as inherently adaptive and related to cognition. Based on his component model of emotions, Scherer (2007) speculated that highly emotionally competent individuals are characterized by optimal functioning of emotion production (which includes emotion regulation) and emotion perception. Based on research in developmental psychology, Izard, Trentacosta, King, Morgan, and Diaz (2007) conceived EI as consisting of emotion regulation, emotion knowledge (which includes the ability to understand and label emotions), and emotion utilization. Consistent with the notion that emotion is adaptive and related to cognition, Barrett, Mesquita, Ochsner, and Gross (2007) envisaged the mental representation of emotion (termed “core affect”) as information about the external world translated into an internal affective code that indicates whether events are helpful or harmful.

Distilling points of convergence among the aforementioned research, EI may be conceptualized as emotion-related abilities that foster adaptive thoughts, feelings, and behaviours in oneself and others. As alluded to above, and based on the theoretical evidence to date, EI includes four inter-related dimensions. First, regulation of emotions involves the ability to control, manage, and modify emotional experiences and expressions (Gross, 1998). Second, perception of emotions involves the ability to recognize emotions in modalities such as facial expressions, tone of voice, and body language (Elfenbein & Ambady, 2002). Third, understanding of emotions involves the ability to identify the eliciting situation of, as well as label and categorize, the feelings experienced by oneself and others (Izard et al., 2007; Mayer, Roberts, & Barsade, 2008).
Finally, *use of emotions* refers to the ability to harness emotions adaptively (Izard et al., 2007). For instance, empathy can be used to inspire helping behaviour; guilt and shame can be used to inspire reparations for a wrong.

It is postulated that while the four dimensions of EI are potentially universal, some of their content and manifestation depend in part on cultural values. In the next section, the concept of culture is defined as well as specific cultural values that help characterize and distinguish North Americans and East Asians.

**Conceptualization of Culture**

Culture reflects a way of living shared by most members of a social group (Kroeber & Kluckhohn, 1952). It is derived from one’s environment and encompasses the unwritten rules of social relations and norms as well as deeply held values and beliefs (Hofstede & Hostede, 2005; Triandis, 1996). Most people belong to a number of different social groups, including gender, social class, and nationality. Within nations, there exist strong forces for integration, such as a national political system, a dominant national language, and a national education system (Hofstede & Hostede, 2005).

**Value Approach to Conceptualizing Culture**

Based on survey data from over 116,000 respondents from 40 countries, Hofstede and his colleague proposed that national cultures vary along five bipolar dimensions (individualism-collectivism, low-high power distance, masculinity-femininity, high-low uncertainty avoidance, & long-short term orientation) (Hofstede, 1980; Hofstede & Bond, 1988). Hofstede (1980) was the first to quantitatively examine cross-cultural similarities and differences in cultural values; by providing scholars with empirically derived independent variables to interpret similarities and differences between cultures in
dependent variables, he helped launch an expanding body of cross-cultural research (Schimmack, Oishi, & Diener, 2005; Silverthorne, 2005; Oyserman, Coon, & Kemmelmeir, 2002).

Among his dimensions, individualism and collectivism has garnered by far the most research attention, followed by power distance (Brewer & Chen, 2007; Matsumoto & Yoo, 2006; Tsui, Nifadkar, & Ou, 2007). Individualism and collectivism pertains to how people view themselves and their relationship with others (Brewer & Chen, 2007; Triandis, 1995). In individualistic cultures, people view themselves as independent from others and value freedom and personal achievement. In collectivistic cultures, people view themselves as interdependent or connected to others and value duty and group interests. Power distance pertains to how people deal with the unequal distribution of power that is inherent in most social groups (Hofstede & Hofstede, 2005). People tend to share their authority and value equality in low power distance cultures, whereas people tend to accept their status and emphasize hierarchy in high power distance cultures.

Based on their meta-analyses of individualism and collectivism research, Oyserman and her colleagues (2002) noted that the great strength of the dimension is its theoretical parsimony. The dimension focuses on clearly contrasting worldviews to provide a powerful explanatory tool for understanding variations between people from different parts of the world and accounts for significant portions of variance. Studies that have used the dimension have produced important insights on psychological theories, and many other identified cultural dimensions can be conceptually and empirically linked to individualism and collectivism (e.g., analytic-holistic thinking, influence-adjustment goals; Oyserman & Lee, 2008). Tsui, Nifadkar, and Ou (2007) noted that while interest in
individualism and collectivism as well as power distance remains strong, there has been a proliferation of the use of other dimensions and corresponding measures in recent years. They asserted that this, ironically, may be a hindrance to progress as it prevents the accumulation of knowledge and perpetuates a lack of a paradigm.

To advance future research, Tsui and her colleagues (2007) suggested a consolidation of cultural dimensions and improvement in their conceptual clarity. Brewer and Chen (2007) echo these sentiments as they criticized the tendency to define and assess individualism and collectivism in overly broad and diffuse ways. Indeed, while few constructs in the history of social thought have attracted as much attention as individualism and collectivism, the dimension has been called conceptually “fuzzy” (Earley & Gibson, 1998), “overfreighted” (Bond, 2002), and in danger of becoming “so content packed as to be theoretically empty” (Oyserman et al., 2003, p. 44). Consistent with these arguments, Triandis’s (1996) envisaged a more sophisticated framework for the classification of people’s values, and likened it to that used for the classification of animal’s species. That is, analogous to how an animal can be classified within the larger category of “bird” based on key attributes (e.g., feathers and wings) and hundreds of species of birds can be further classified by other attributes, he suggested that a human can be classified as “individualistic” based on key attributes (e.g., valuing independence and freedom) and further classified by other attributes. Triandis (1995; 1996) asserted that the most important classification within the general individualism-collectivism framework is horizontal (emphasizing equality) and vertical (emphasizing hierarchy).

People in horizontal cultures tend to believe that everyone is more or less the same and should be equal in status, whereas people in vertical cultures tend to expect and
accept differences in status (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis, 1995). As Shavitt, Lalwani, Zhang, and Torelli (2006) noted, the horizontal and vertical classification adds an important degree of refinement to the broad individualism-collectivism dimension. Theoretically, the horizontal and vertical classification is similar to Hofstede’s (1980) power distance dimension in that it pertains to the extent that people accept inequality within society, but there are important structural differences among these constructs (Shavitt et al., 2006). That is, while Hofstede’s power distance is conceptualized as a single continuum (low to high), Triandis’s horizontal and vertical are conceptualized as four distinct categories. Furthermore, while Hofstede regarded power distance and individualism-collectivism as separate dimensions, Triandis regarded horizontal-vertical and individualism-collectivism as inextricably linked. More specifically, horizontal and vertical are conceptualized as nested within individualism and collectivism to produce four distinct cultural patterns: horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism.

There is evidence that contrasting cultural patterns—that is, horizontal individualism and vertical collectivism—help characterize and distinguish North Americans and East Asians. *Horizontal individualism* is a cultural pattern in which people view themselves as independent and emphasize equality (Triandis, 1995; Triandis & Gelfand, 1998; Singelis, Triandis, Dharm, Bhawuk, & Gelfand, 1995). In such cultures, people value being self-reliant, unique, and free. *Vertical collectivism*, in contrast, is a cultural pattern in which people view themselves as interdependent and emphasize hierarchy. In such cultures, people value social harmony and reciprocal duty. In the current study, I focus on horizontal individualism and vertical collectivism as I
propose that culture may help account for the significant difference in EI test scores between European-North Americans and East Asians in particular.

There is evidence to suggest that student populations in the United States may score the highest in horizontal individualism among the four cultural patterns; and Western European backgrounds were negatively associated with vertical collectivism ($p < .001$), while East Asian backgrounds were positively associated with this dimension ($p < .001$) (Singelis et al., 1995). In a subsequent comparative study, it was found that United States participants were significantly more horizontally individualistic than were the Taiwanese participants ($p < .0001$), while Taiwanese participants were more vertically collectivistic than the US participants at the marginal significance level ($p = .059$). Similarly, Tsai et al. (2006) found that European Americans scored significantly higher than Hong Kong Chinese in horizontal individualism ($p < .001$), while Hong Kong Chinese scored significantly higher in vertical collectivism ($p < .01$). In effect, researchers have consistently found that students in the United States with European backgrounds tend to score higher in horizontal individualism than their East Asian counterparts, while East Asians tend to score higher in vertical collectivism than their European American counterparts. The cultural patterns of horizontal individualism and vertical collectivism are therefore of particular importance as they help link North America, where many psychological theories (including EI) were developed, to East Asia, where a large proportion of the world’s population resides and an area of increasing social, political, and economic importance.

_Roots of Eastern and Western Cultures._ While beyond the scope of this dissertation and therefore only tentatively sketched out, it is speculated that the ultimate
reason for the sophisticated yet contrasting cultures of North America and East Asia is geography. As Diamond (1997) theorized, civilizations along the East-West axis of Eurasia were able to flourish due to the presence of a disproportionate share of edible crops and domestic animals, which freed people from a hunter-gatherer lifestyle and allowed them to specialize and develop sophisticated technologies, literature, culture, etc. While the geography of Western Eurasia (Europe) is characterized by a highly indented coastline with five large peninsulas (i.e., Greece, Italy, Denmark, Scandinavia, & Iberia) and formidable barriers (i.e., the Alps, Pyrenees, Carpathians, and Norwegian border mountains), the geography of Eastern Eurasia (particularly East Asia) is characterized by a relatively smooth coastline with the exception of one peninsula (i.e., Korea) and much less formidable barriers. This made it much easier for the large land mass in Asia (China) to be politically unified, versus the small and many scattered core areas of Europe, none big enough to dominate all the others and thus politically independent. In effect, the geographic disconnectedness of Europe contributed to its chronic disunity, while the geographic connectedness of much of East Asia (i.e., China) contributed to its chronic unity. It is therefore submitted that Asians’ more collectivistic cultural orientation versus Europeans’ more individualistic cultural orientation are rooted in differences in their geography.

During what Jaspers (1953) calls the Axial age (800-200 BC), pivotal developments occurred in the realms of religion and philosophy from Ancient Greece to China, that helped cement their individualistic and collectivistic orientations. Ancient Greece had Aristotle, while China had Confucius. Likely influenced by geography and their surrounding physical environment, Aristotle stressed objects in isolation and
encouraged a spirit of debate and personal agency, while Confucius stressed the interrelatedness of the universe and encouraged social harmony and collective agency. As Europeans came to colonial America during the 17th and 18th century, many carried with them the influence of Aristotle’s logic of personal agency as well as the spirit of the Protestant Reformation (Segal & Oxtoby, 2007). The Reformation was characterized by rejection of external human control as well as freedom of belief and expression. When the United States declared independence from Great Britain in 1776, their “Declaration of Independence” reflected the spirit of these beliefs as it asserted “that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.” From the 17th to the end of the 19th century, scores of Americans moved westbound in search of a better life on the frontier. This brought about a “frontier spirit” and contributed to American values of resilience and independence (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006; Nisbett, 2003). Finally, the tremendous economic growth of America during the 20th century has been linked in part to the Protestant Work Ethic and its emphasis on hard work and self-reliance (Furnham, 1990).

While Protestants remain one of the largest religious groups in North America (The Pew Research Centre, 2002; Statistics Canada, 2001), the influences of Confucianism as well as Buddhism and Taoism are found throughout East Asia (Amore & Ching, 2007). The central teaching of Confucianism is the moral character in human relationships. This includes the idea of hierarchical relationships (e.g., parent-child, leader-subordinate), which carry with them duties and norms associated with reciprocal responsibilities. For example, parents must care for their children, while children must
respect their parents; leaders must take responsibility for their subordinates, while subordinates must follow and obey their leaders. Confucianism therefore emphasizes the importance of balanced and harmonious relationships, as well as the value of order and hierarchy in society. Confucian Work Dynamism, which has been attributed to the rapid economic growth of East Asian countries during the past century, stresses thrift and perseverance as well as reciprocating gestures and respecting status (Chinese Culture Connection, 1987; Eckert, Lee, Lew, Robinson, & Wagner, 1990).

The religious and philosophical roots of North American and East Asian culture pervade modern society. For example, people in North America today are more likely than East Asians to agree with statements such as “I usually struggle through a personal problem by myself” and “I often ‘do my own thing.’” (Chiou, 2001; Singelis et al., 1995; Chiou; Tsai et al., 2006). East Asians, by contrast, are more likely to agree with statements such as “It is important that I respect decisions made by my group” and “Family members should stick together, no matter what sacrifices are required.” For these reasons, Triandis’s horizontal individualism and vertical collectivism and measures of these patterns have been used in numerous studies comparing North Americans and East Asians (e.g., Chan & Drawsgow, 2001; Thomas & Au, 2002). As noted, these cultural patterns are also conceptually and empirically linked to other important and widely-used cultural dimensions (particularly Hofstede’s individualism-collectivism and power distance).

Taken together, horizontal individualism and vertical collectivism allows an initial study on the Eastern applicability of a Western psychological theory to draw from and contribute to an established body of cross-cultural research. To extend on an initial
study using cultural values, implicitly held theories that people of different ethnic groups hold about the nature of the world (knowledge structures) may allow for the delineation of more specific and precise mechanisms through which culture influences EI (Peng, Ames, & Knowles, 2003). As Peng et al. explain, the knowledge structures approach does not attempt to explain culture in its entirety; rather, it attempts to predict and explain judgments by specific culturally-driven beliefs. Stated another way, while values determine what people perceive as good or important, knowledge structures more directly guide what evidence is collected and how this data is used to support judgments. In effect, it is submitted that geography and ethnicity are ultimate factors for individual and group differences in EI; cultural values may be distal factors relative to the more proximal factor of knowledge structures.

Knowledge Structures Approach to Conceptualizing Culture

While the value approach involves conceptualizing culture in terms of core values shared by members of a social group (Hofstede, 1980; Schwartz, 1994; Triandis, 1995), the emerging knowledge structures approach (Nisbett, Peng, Choi, & Norenzayan, 2001; Peng & Nisbett, 1999) involves conceptualizing culture in terms of a constellation of implicit beliefs, or folk theories, about the nature of the world. In turn, these culturally-driven implicit beliefs manifest as different inferences—such as judgments about what constitutes wise emotion regulation—between cultures. Nisbett and colleagues’ theory of analytic and holistic thinking is the preeminent example of this approach. Rather than attempting to contrast cultures in terms of overarching values, the knowledge structures approach involves selecting specific, culturally-driven implicit beliefs and tying them directly to inferences (Peng et al., 2001).
The approaches to conceptualizing culture form part of a larger picture: Values help shape implicit beliefs and, in turn, inferences and behaviours (Nisbett et al., 2001; Peng et al., 2001). For example, if people value autonomy and view themselves as independent, they are more likely to perceive elements in the universe as distinct and disconnected. Alternatively, if people value relationships and view themselves as interdependent, they are more likely to perceive elements in the universe as interrelated and connected. According to Peng and his colleagues (2001), implicit beliefs play a mediating role between values and self-construal on the one hand and inferences on the other. In other words, while values and self-construal have more distal effects on inferences, implicit beliefs have more proximal effects. According to Nisbett and his colleagues (Nisbett, 2003; Nisbett et al., 2001), Westerners tend to engage in analytic thinking, while East Asians tend to engage in holistic thinking. Analytic versus holistic thinking refers to a collection of beliefs about the nature of the world and can be distilled into four key characteristics: (1) attention: parts versus field; (2) causality: dispositionism versus interactionism; (3) change: linear versus cyclic; and (4) contradiction: logical versus dialectical.

More specifically, Westerners tend to pay more attention to parts of a picture, whereas East Asians pay more attention to the relation between parts of a picture and the field to which it belongs (Masuda & Nisbett, 2001). Second, Westerners are more likely to attribute causality to the disposition of a person, whereas East Asians are more likely to attribute causality to the interaction between a person and his or her situation (Morris & Peng, 1994). Third, Westerners tend to maintain a linear perspective and assume relatively simple, cause-and-effect explanations for change, whereas East Asians tend to
maintain a cyclic perspective and assume relatively complex, interrelated explanations for change (Nisbett et al., 2001; Yuki & Maddux, 2006). Finally, Western logical reasoning involves resolving contradiction by choosing between opposite propositions, while East Asians dialectical reasoning involves reconciling contradiction by simultaneously accepting opposite propositions as potentially correct (Choi, Koo, & Choi, 2007; Peng & Nisbett, 1999). In short, analytic thought may be broadly defined as a worldview consisting of discrete and discontinuous objects (e.g., people and events), while holistic thought may be broadly defined as a worldview consisting of interrelated and continuous objects.

_East Meets West: Comparisons between North Americans and East Asians_

In the following chapter, I will present a theoretical model on how and why cultural values and knowledge structures help account for differences in North Americans’ and East Asians’ conception of EI. Before proceeding to the model, however, an important concern needs to be addressed regarding the use of the broad terms (or variations of the terms) North American and East Asian as well as Westerner and Easterner. Consistent with past research, the term North Americans is used as shorthand for Canadians and Americans of European heritage (e.g., Heine, Lehman, Markus, & Kitayama, 1999). As Oyserman et al. (2002) observed, the field has assumed an approximate equivalence between the cultures of Canada and the United States, each of which have been strongly influenced by their European roots. Consistent with Nisbett (2003), the term East Asian (or Easterner or Asian) is used as shorthand for those from China and countries that were heavily influenced by its culture, most notably Japan and Korea. Also consistent with Nisbett, the term Westerner is used as shorthand for
Europeans, Americans, Canadians, and other citizens of the British Commonwealth. These terms do not mean to imply that the many millions of people labeled as North American (or as East Asian) are identical or that the subcultures of the West (or East) do not differ dramatically from each other. Despite the myriad of differences within North America and East Asia, however, it is contended that some high-level generalizations can be made owing to their distinct cultural roots and growth over hundreds of years in geographically distant parts of the world.
Among a large sample of people, it was found that Whites (mostly European-Americans) performed the best on the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) among four broad ethnic groups (i.e., Whites, Hispanics, Blacks, & Asians), while Asians performed significantly worse (Mayer, Salovey, & Caruso, 2002). One interpretation of this White/Asian differential and other observed ethnic differences in EI scores is that they reflect actual differences in EI abilities. Indeed, as conceptualizations and measures of EI are used for research and applied purposes without accounting for the potential role of participants’ culture on EI test responses (cf. Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Christiansen, Janovics, & Siers, 2010; Lopes, Brackett, Nezlek, Schütz, Sellin, & Salovey, 2004), this is the implicit assumption. It is reasoned, however, that EI cannot be fully or even meaningfully understood without consideration of culture.

As Mayer et al. (2001) discussed, emotional knowledge is embedded within an evolved, social context of interaction. In other words, a general consensus about emotion was likely formed as human beings evolved within a given social context. For example, the way anger should—or should not—be expressed in a given social situation. Behaviours that are consistent with the general consensus on what is appropriate or “normal” are more likely to be socially accepted, while behaviours that are inconsistent are more likely to be socially sanctioned. This differential encouraging and discouraging of emotional behaviours acts to, in turn, further reinforce the dominant way of thinking about emotion. Emotion information, then, operates within self-reinforcing homeostatic systems. Members of distinct social groups are likely to have a shared understanding of
what constitutes “emotional intelligence,” which is likely to be inextricably linked to their shared values and beliefs—that is, their culture.

To describe this relation between culture and EI, classic and current research is integrated into a theoretical model. As illustrated in Figure 1, it is hypothesized that while there are areas of overlap between what constitutes EI according to North Americans and East Asians, there are also areas of divergence due to contrasting cultural values and beliefs.

Specifically, while the dimensions of EI are potentially universal, some of their content and manifestations are culturally-relative. In other words, the abilities to appropriately regulate, perceive, understand, and use emotion may be important in all cultures, but precisely what constitutes “appropriate” emotional behaviour (e.g., whether one should inhibit versus exaggerate grief at a funeral) will depend in part on people’s shared values and beliefs. I will describe the relation between cultural values and EI in Part 1 of this chapter, and describe the relation between cultural beliefs and wise emotion regulation in Part 2 of this chapter.

Part 1: The Relation between Cultural Values and Emotional Intelligence

It is hypothesized that cultural values—specifically, horizontal individualism and vertical collectivism—help account for differences between North Americans and East Asians in what is considered appropriate regulation, perception, understanding, and use of emotion. Drawing from multiple literatures, most of which have not previously been
applied to exploring the relation between culture and EI, evidence is presented to support
the cultural-relativity for each of the dimensions of EI. These propositions are
summarized within Figure 2.

As such, East Asians may have a conception of EI that places greater values on
behaviours that promote social harmony versus personal fulfillment, which results in
knowledge and behaviours that go unvalued within current North American conceptions
and measures of EI.

Dimension I: Regulation of Emotions

The regulation of emotions involves the ability to control, manage, and modify
the emotional experiences and expressions of emotions in oneself and others (Gross,
1998). Scholars have long recognized the potential universality and cultural relativity of
this ability. For example, in 1872 Darwin observed that, “the young and the old of widely
different races, both with man and animals, express the same state of mind by the same
movements” (p. 348). At the same time, he acknowledged that with advancing age and
culture, people learn to regulate their emotions. For instance, while a baby may wail
loudly when hungry, a grown person will likely suppress such behaviour.

In a classic study conducted a century later, Friesen (1972) found that when
watching a stressful film (i.e., of someone undergoing surgery) alone, both Americans
and Japanese displayed common expressions of disgust and distress. When watching the
same film with the presence of an older, male experimenter, however, Americans
continued to display their negative feelings, but the Japanese masked their negative feelings with a smile. As Ekman (1972) speculated, in the first condition, there was no reason to regulate emotions because participants were alone. In the second condition, however, cultural display rules dictated that Japanese should regulate their negative feelings because of the presence of authority.

To address the biological and cultural determinants of emotional expressions, Ekman (1972) proposed the neuro-cultural theory of facial expression of emotions. Neuro refers to the innate relationship between certain basic emotions and the firing of a specific pattern of facial muscles. Cultural refers to learned determinants, such as display rules, which specify the extent to which certain emotions should be regulated and displayed when interacting with certain people or in certain situations. Ekman and Friesen (1975) noted six ways in which emotions may be regulated: (1) Express the feeling as is (*express as is*), (2) express the feeling, but with less intensity (*deamplify*), (3) express the feeling, but with more intensity (*amplify*), (4) express nothing (*neutralize*), (5) express the feeling, but qualify it with a smile (*qualify*), and (6) smile to hide one’s true feelings (*mask*).

To examine display rules across cultures, Matsumoto (1990) asked American and Japanese respondents to rate the appropriateness of displaying six basic emotions (i.e., anger, disgust, fear, happiness, sadness, and surprise) in various social settings (e.g., in the presence of higher vs. lower status people, with in- vs. out-group members). Based on Americans being relatively horizontal (low in power distance) and individualistic and Japanese being vertical (high in power distance) and collectivistic, he theorized the existence of divergent display rules. In particular, Matsumoto (1990) reasoned that
Americans would display more positive emotions to lower status individuals because horizontal cultures emphasize equality and reducing status differences. Japanese, in contrast, would display more negative emotions to lower status members because vertical cultures emphasize hierarchy and maintaining social order. Additionally, he theorized that Japanese would display less negative emotions with family and friends than Americans, as they are more concerned than individualists about maintaining harmony and cohesion within in-groups.

Matsumoto’s (1990) findings were generally supportive of his theory: Japanese, for example, rated anger as more appropriate with lower status people than did Americans. Japanese also rated the display of sadness as less appropriate with family and friends than did Americans. Consistent with Friesen’s (1972) classic study, Matsumoto found no differences between American and Japanese in ratings of the appropriateness of displaying negative feelings when alone, which reinforces the notion of display rules as largely social and cultural phenomena.

In a subsequent study by Matsumoto, Takeuchi, Andayani, Kouznetsova, and Krupp (1998), it was found that Japanese and Koreans exert more control over emotional expressions than Americans do. In a study that examined the specific way in which Americans and Japanese regulate emotions, it was found that Americans are more likely to express emotions as is or amplify them (Matsumoto, Yoo, Hirayama, & Petrova, 2005). Conversely, Japanese are more likely to deamplify or qualify emotions. Matsumoto and his colleagues (2005) also found that, across all cultures, happiness is the most amplified emotion, while anger is the most deamplified emotion. Most recently, it
was found that North Americans are more emotionally expressive (vs. suppressive) than East Asians (Matsumoto et al., 2008).

These results can be explained by the difference between North Americans and East Asians in cultural values and particularly the horizontal individualism of the former and the vertical collectivism of the latter. As horizontal individualists, North Americans are more likely to express emotions as is or amplify them because they value being unique and influencing others. As vertical collectivists, in contrast, East Asians are more likely to suppress emotions because they value fitting-in and adjusting to others. Evidently, North Americans and East Asians differ significantly in their regulation of emotions, and it is reasoned that these differences stem from their contrasting cultural values. North American research, however, has shown that suppressing emotions is related to a myriad of negative social outcomes, including reduced sharing of emotions, lower likeability, and reduced relationship closeness (Gross, 2002; Gross & John, 2003; John & Gross, 2004). This occurs as suppressing emotions signals to others a lack of interest in or desire to withdraw from them. It may also interfere with social interactions because of the cognitive demands of active inhibition and self-monitoring.

Butler, Lee, and Gross (2007), however, recently demonstrated that the effects of suppressing emotions vary according to cultural values. While the habitual suppression of emotions may indeed be related negative emotions among European Americans, it was found to be unrelated to negative emotions among Asian Americans. This may occur as European Americans subscribe to values that encourage asserting oneself and expressing emotions in most social interactions, but suppressing emotions in the face of social threats. Conversely, Asians subscribe to values that encourage adjusting to others, and
therefore suppress emotions in not only negative social interactions, but also positive ones. Hence, while suppressing emotions and negative emotions may be related according to the European American mindset, they are unrelated according to the Asian mindset.

Butler and her colleagues (2007) theorized that because those with Asian values suppress emotions more frequently and in more situations, such behaviour may be more automatic and require fewer cognitive resources among Asians. As a result, the negative effects of suppressing emotions on social interactions will be weak or absent among those with Asian values. In an experiment where participants were randomly assigned to either a control (express emotion as is) or an emotional suppression condition, they found evidence to support their prediction as suppressing emotions led to negative social outcomes among participants with European American values, but less so among participants with Asian values. Extending this logic, it is possible that amplifying emotions will be positively related to valued outcomes among North Americans and thereby considered emotionally intelligent, but this relation will be weak or absent among East Asians. This may occur because amplifying emotions is consistent with horizontal individualistic values of being expressive and unique, but inconsistent with vertical collectivistic of sacrifice and conformity (Singelis et al., 1995; Triandis & Gelfand, 1998). It is further reasoned that amplifying emotions may be more weakly related to horizontal collectivism than horizontal individualism because collectivism entails subordinating self- to group-interests and desires. In a similar vein, amplifying emotions is expected to be more weakly related to vertical individualism than horizontal individualism, particularly to the extent that one is low in power. In the context of
hierarchy and inequality, low power individuals by definition have less influence and
latitude, and therefore may be more emotionally inhibited (Berdahl, & Martorana, 2006).

More generally, it is contended that cultural values and EI abilities such as
emotion regulation are parts of a self-reinforcing homeostatic system (Nisbett, 2003):
Cultural values (e.g., horizontal individualism versus vertical collectivism) and
corresponding social goals (e.g., being unique versus maintaining harmony) promote
certain forms of emotion regulation (e.g., amplifying versus suppressing emotion); forms
of emotion regulation, in turn, promote certain social goals and corresponding cultural
values.

Summary

In short, there are similarities and differences in the regulation of emotion among
North Americans and East Asians. It appears that across all cultures, certain emotions are
expressed using similar movements and certain emotions (e.g., happiness) tend to be
more freely expressed (versus regulated) than others. At the same time, however, there is
consistent evidence that cultural values differentially stimulate and reinforce specific
ways of regulating emotions. As horizontal individualists, North Americans are more
likely to amplify emotion because they value being unique and standing-out. As vertical
collectivists, East Asians are more likely to suppress emotion because they value
maintaining harmony and fitting-in. While suppressing emotions has been linked to
negative social outcomes in North American contexts, it was found not to be less the case
among those with Asian values, perhaps because suppressing emotions is consistent with
their vertical collectivistic values. Similarly, because amplifying emotions is consistent
with horizontal individualistic values, it is reasoned that amplifying emotions may be
linked to positive outcomes among North Americans but not among East Asians. Overall, research suggests that what constitutes adaptive regulation of emotion among North Americans and East Asians is influenced by horizontal individualism and vertical collectivism.

**Dimension II: Perception of Emotions**

The perception of emotions involves the ability to recognize emotions in modalities such as facial expression, tone of voice, and body language (Elfenbein & Ambady, 2002). In a series of classic studies, Ekman (1972) sought to demonstrate the existence of universals in this ability. In a study on isolated, pre-literate cultures in New Guinea, for example, Ekman, Sorenson, and Friesen (1969) found that observers in these cultures were able to recognize photographs of Americans displaying anger, happiness, and sadness at above chance (50 percent) levels. Such findings led to the conclusion that there are universals in the expression and perception of emotional expressions.

As Ekman (1972) acknowledged, however, his Neuro-cultural theory of facial expression of emotion went far beyond the studies he conducted. That is, while his theory recognized both biological and cultural determinants of emotional expressions, his studies favored findings of universality versus cultural-relativity. For instance, for Ekman et al.’s (1969) study in New Guinea, they selected 24 out of over 3000 photographs based on whether they showed the pure display of a basic emotion and the absence of cultural display rules. Nonetheless, they found that people within cultures were better at recognizing photographs of emotional expression than people between cultures. Specifically, Americans were significantly more accurate at judging Americans’ expressions of emotions than were New Guineans. For example, while 91 percent of
Americans correctly judged Americans’ expression of surprise, less than 50 percent of New Guineans were able to do so (as many New Guineans confused surprise with fear).

To systematically investigate the potential universality and cultural-relativity of emotion recognition, Elfenbein and Ambady (2002) conducted a comprehensive meta-analysis. In 97 percent of the samples (157 out of 162 containing sufficient information), facial expressions of basic emotions were recognized between cultures at above chance levels (58 percent). Judgments of emotional expressions within culture, however, were an average of 9 percent more accurate than judgments of emotional expressions between cultures. They speculated that this “in-group advantage” exists for at least two reasons. For one, the observer and target may have congruent display and decoding rules stemming from their common social environment (Ekman, 1972). For another, there may be subtle stylistic differences between cultures in expressions of emotions (Elfenbein & Ambady, 2002).

Based on their meta-analysis, Elfenbein and Ambady (2002) concluded that certain core components of emotions are universal and likely biological, but expressions of emotions lose some of their meaning across cultures. To explain their finding, Elfenbein and her colleagues proposed the Dialect theory of communicating emotion (Elfenbein & Ambady, 2002; Elfenbein & Ambady, 2003; Elfenbein, Beaupré, Levesque, & Hess, 2007). As they discussed, in linguistics, dialects are the variants of a language by speakers who are separated by geographical and social boundaries. According to the theory, the expression of emotion constitutes a common language that allows people to communicate emotion across cultures. Different cultures, however, have different
“dialects” or “accents” that can make the communication of emotion more accurate within cultures.

Cross-cultural research on the regulation of emotion points to a particular accent: As discussed above, research has consistently demonstrated that North Americans tend to freely express or amplify their emotions, whereas East Asians tend to suppress their emotions. As Yuki, Maddux, and Masuda (2007) stated, it therefore stands to reason that while Americans will focus on the most expressive part of the face (mouth) to perceive emotions, Japanese will focus on the more difficult to control parts of the face (eyes). Using edited pictures in which eyes and mouths were independently manipulated, they confirmed that Americans do in fact focus more on the mouth, while Japanese focus more on the eyes to perceive emotions.

Yuki et al.’s (2007) study therefore lends empirical support to Elfenbein and Ambady’s (2002) Dialect theory of communicating emotions as they showed that stylistic differences in how people code (display) emotions, leads to subtle differences in how people decode (perceive) emotions. Congruent coding and decoding rules, in turn, help explain the in-group advantage in emotional perception within cultures. In another recent study, Masuda et al. (2008) demonstrated that Japanese are more likely than Americans to look at not only the facial expression of the target, but also the people surrounding the target to decipher the target’s emotions.

Extending Yuki et al.’s (2007) and Masuda et al.’s (2008) findings, it also stands to reason that people in vertical collectivistic cultures may focus more on the situation, because targets’ emotional expressions are often indistinct sources of information. Matsumoto and Ekman (1989), for instance, found that Japanese rated expressions of
emotions as less intense than Americans did and attributed this to the influence of
Japanese display rules that prescribe the suppression of emotions in certain situations. As
Markus and Kitayama (1991) asserted, Japanese’s emotional expressions are more often
public instrumental action that may or may not be directly related to inner feelings. Since
emotional expressions are less reliable sources of information among Japanese and other
vertical collectivists, it is reasoned that they may focus more on aspects of emotional
encounters that are relatively difficult to regulate, such as targets’ eyes and the
surrounding people and situation. Conversely, horizontal individualists may focus more
on aspects of emotional encounters that provide the most explicit information, such as
targets’ mouths and other non-verbal as well as verbal cues from targets themselves.

Summary

In short, while certain components of the perception of emotion are potentially
universal, observers and targets within cultures may have matching coding (displaying)
and decoding (perceiving) rules. Since North Americans are more likely to freely display
their emotions, they may place more weight on aspects of emotional encounters that
provide the most direct information (e.g., mouth and verbal emotional expressions) to
decode others’ emotions. In contrast, because East Asians are more likely to suppress
their display of emotions, they may place more weight on aspects of emotional
encounters that are relatively difficult to control (e.g., eyes and surrounding people and
situation) to decode others’ emotions. In effect, to accurately perceive emotional
expressions, North Americans and East Asians place emphasis on different emotional
cues.
Dimension III: Understanding of Emotions

The understanding of emotions involves the ability to label and categorize feelings, as well as the ability to identify the eliciting situation of feelings (Izard et al., 2007; Mayer, Roberts, & Barsade, 2008). According to Russell (1980), two major bipolar dimensions are used to categorize emotions: valence (positive-negative) and arousal (low-high). Russell arrived at this conclusion after having participants sort 28 English emotion-related words (e.g., happy, excited, angry, bored) according to their similarities and differences and finding that participants conceptualized emotions according to valence and arousal. For instance, excited is conceptualized as a positive valence, high arousal emotion, whereas bored is conceptualized as a negative valence, low arousal emotion. To investigate the universality of these two dimensions, Russell, Lewicka, and Niit (1989) followed up this study by translating the 28 English emotion-related words into the native language of Chinese, Estonian, Greek, and Polish participants. Their results confirmed that all of these cultures categorize emotions according to valence and intensity.

In a subsequent study, Russell (1991) reviewed evidence for quantitative and qualitative differences in emotion-related words among languages. For instance, Wallace and Carson (1973) found over 2000 words for emotions in English, Boucher (1979) found 750 words in Taiwanese Chinese, and Howell (1981) found only seven words in Chewong. In spite of the large number of English emotion-related words, there are words for emotions in other languages for which no English translation exists. For example, the German word *schadenfreude* means “pleasure derived from another’s displeasure,” and the Japanese word *itoshii* means “longing for an absent loved one.” Likewise, there are
English words for “basic” emotions for which no translation exists in certain other languages. For example, there is no word for *sadness* in Tahitian nor *disgust* in Polish. As Russell reasoned, differences in how people label emotional states may be related to how people reason about and categorize emotions.

In the same vein, Markus and Kitayama (1991) pointed out that Russell and his colleagues (1989) translated only English emotion words. They asserted that once culture-specific emotion words were included, new dimension(s) might emerge. To test this, Kitayama and Markus (1990) sampled 20 Japanese emotion words—half of the words had direct English translations and the other half was indigenous to Japanese culture. For instance, *fureai* refers to “the feeling of close connection with others;” *oime* refers to “the feeling of indebtedness.” They then asked Japanese participants to assess the degree of similarity and difference between each possible pair of words and, through multidimensional scaling, found that a new dimension emerged: interpersonal orientation.

That is, Japanese conceptualize emotions not only with respect to valence (positive versus negative) and arousal (high versus low), but also with respect to interpersonal orientation and, specifically, whether it is ego- versus other-focused. Ego-focused emotions refer to feelings that have people’s internal attributes (their own needs, goals, abilities, etc.) as the primary referent (Markus & Kitayama, 1991). For example, pride and elation are identical in terms of valence and arousal, but pride is much more ego-focused than elation (as pride refers to having a high opinion of oneself). Other-focused emotions, in contrast, refer to feelings that have another person as the primary referent. For example, shame and anger are similar in valence and arousal, but shame is
much more other-focused than anger (as shame refers to distress caused by losing others’ respect).

As Markus and Kitayama (1991) discussed, the fact that Japanese clearly and reliably discriminated between ego- and other-focused emotions, suggests the importance of the interpersonal orientation dimension for understanding emotions in Japanese culture and likely among other cultures. Vertical collectivists, such as the Japanese, may have a heightened capacity for feeling and labeling other-focused emotions (such as furai and oime) because these emotions are consistent with cultural values such as taking one’s proper place in society and maintaining harmonious relations with others. Consistent with this reasoning, in a recent experience sampling study, it was found that Japanese’s subjective well-being was more closely tied to the experience of other-focused positive emotions than with ego-focused positive emotions while Americans showed the reverse pattern (Kitayama, Mesquita, & Karasawa, 2006). Relatedly, scholars have noted the “problem of pride” (Scollon, Diener, Oishi, & Biswas-Diener, 2005). That is, although Americans often appraise pride as positive and desirable, Asians often appraise this ego-focused positive emotion as undesirable (Eid & Diener, 2001; Scollon et al., 2005). The problem of pride supports the notion that the dimension of interpersonal orientation may be even more important than valence for understanding emotions in other cultures.

In a large scale study in which 2921 respondents from 37 countries were asked to recount situations that elicited certain “basic” emotions (anger, disgust, fear, guilt, joy, sadness, and shame), considerable consistency in the appraisal of these antecedent situations were found (Scherer, 1997). Across all six cultural regions, for example, anger is provoked by situations that are appraised as unfair and joy is induced by situations that
are appraised as consistent with one’s goals. In addition to commonalities, however, there are also points of divergence. For instance, respondents in both New World countries (e.g., U.S.) and Asian countries (e.g., China and Japan) appraised shame as related to one’s own actions; actions that are inconsistent with one’s internal standards. But while New World respondents appraised shame-inducing situations as somewhat improper or immoral, Asian respondents appraised them as somewhat proper and moral. This difference may exist because shame may be elicited among horizontal individualists after a moral transgression, whereas shame may be elicited among more prevention-focused vertical collectivists before a moral transgression.

In another study, Schimmack, Oishi, and Diener (2002) found that the correlation between the frequency of positive and negative feelings was strongly negative among Americans, but slightly positive among Japanese and Chinese. Likewise, Bagozzi, Wong, and Yi (1999) found that the correlation between love and sadness was -.24 among American women, yet .63 among Chinese women. These studies suggest that while Western cultures may understand positive and negative feelings as acting in conflict, Eastern cultures may understand them as being compatible or co-existing. This variation may be related to the different philosophies of Western and Eastern cultures. For instance, Western Aristotelian logic asserts that no statement can be both true and false, while Eastern holistic thinking rests on the assumption that everything exists in the harmonious integration of yin and yang (Peng & Nisbett, 1999). This dialectical way of understanding emotion is poetically expressed in the classic Chinese text I Ching, “For misery, happiness is leaning against it; for happiness, misery is hiding in it.”
The different conceptualizations of the relation between positive and negative emotions may also be related to Kitayama et al.’s (2006) findings North Americans tend to favour positive over negative emotions, regardless of whether they are ego- or other-focused. East Asians, in contrast, tend to favour other-focused emotions, and are less concerned about whether they are positive or negative. Given the greater importance that North Americans place on positive over negative emotions, it is reasoned that they will be able to better understand the nuances and complexities of these emotions. Similarly, given the greater importance that East Asians place on other-focused emotions, it is reasoned that they will be better able to understand the nuances and complexities of such emotions.

Summary

In short, research supports Lutz’s (1988) assertions that emotions “can be viewed as cultural and interpersonal products of naming, justifying, and persuading by people in relationship to each other. Emotional meaning is then a social rather than an individual achievement—an emergent product of social life” (p. 5). For example, there are quantitative and qualitative differences among languages in the words available to label emotional states. As a result, people using different languages and from different cultures may reason about and categorize emotions differently. Research suggests that people categorize emotions according to valence, intensity, and/or interpersonal orientation. The relative importance of these dimensions, however, differs between cultures. That is, a dominant concern among North Americans is the extent to which emotions are positive, while a dominant concern among East Asians is the extent to which emotions are other-focused.
Dimension IV: Use of Emotions

In the wake of U.S. President Clinton’s confession of an affair, Ms. Clinton recalled, “I had to be open to my feelings so that I could act on them and determine what was right for me, no matter what anyone else thought or said” (Clinton, 2003, p. 443). Her remark underscores two points with respect to EI and culture. First, feelings can be used to facilitate thoughts and actions. Second, the individualistic desire to consider oneself first to make a decision that is best for her or him. The use of emotions involves the ability to adaptively harness emotions (Izard et al., 2007). Guilt and shame, for example, can be used to make reparations for a wrong; empathy can be used to feel sympathy and help others. Ultimately, President Clinton’s guilt and shame and Ms. Clinton’s empathy—and perhaps love—would lead them to stay married. President Clinton also effectively used anger (e.g., direct gaze and angrily wagging his finger) in response to those attempting to prosecute him to maintain his position of status and power in the eyes of the American people (Tiedens, 2001).

Cultures, however, can be distinguished by what emotions are valued and used to facilitate goals. For example, while North American research indicates that anger may be useful in certain situations (e.g., Tiedens, 2001; Van Kleef & Côté, 2007), this controversy does not appear to exist in collectivistic cultures as individuals in such cultures restrain inner feelings of anger and especially the overt expression of it (Briggs, 1970; Markus & Kitayama, 1991). Tsai and her colleagues’ (2006; 2007) research offer a possible explanation for this discrepancy as they found differences in preferences for high versus low arousal emotions according to culturally-mediated goals. That is, both European Americans and Asian Americans generally favour positive over negative
valence emotions, but differ in their valuation of high versus low arousal emotions. Specifically, European Americans value *high* arousal emotions (e.g., excitement) more than Asian Americans. Asian Americans, on the other hand, value *low* arousal emotions (e.g., calm) more than European Americans.

Tsai and her colleagues (2007) demonstrated that the underlying reason for this is the different emphasis cultures place on influencing versus adjusting to others. European Americans typically strive to *influence* their social environment (e.g., change others’ behaviours to meet their own needs) (Morling, Kitayama, & Miyamoto, 2002; Zhong, Magee, Maddux, & Galinsky, 2006), and therefore place greater value on high arousal states as they try to assert their needs (Tsai et al., 2007). Asian Americans, by contrast, are more likely to strive to *adjust* to their social environment (e.g., consider how their behaviour affects others and change their behaviours to meet others’ needs) (Morling, et al., 2002; Zhong et al., 2006). They will therefore place greater value on more moderate, low arousal states as they try to restrain their needs and find the “Middle Way” between extremes (Nisbett, 2003; Tsai et al., 2007). Consistent with Tsai et al. (2007), Eid and Diener (2000) found that Chinese tend to feel emotions less intensely than Americans, which they attributed to the value Chinese place on the moderation and suppression (vs. expression and enhancement) of emotions.

Furthermore, Tsai and her colleagues (2006; 2007) found that there is a relation between what emotions people would ideally like to feel and how much they actually feel those emotions. This is because people may seek and respond to situations according to socially desirable emotions—from the seemingly profane (e.g., a leader answering to accusations of sexual misconduct), to the mundane. To use an everyday example,
divergent preferences may help explain why higher caffeine beverages such as coffee are more popular in relatively horizontal individualistic contexts (e.g., U.S.), while lower caffeine beverages such as tea are more popular in vertical collectivistic contexts (e.g., China) (Bhatnagar, 2004). As people approve others with socially desirable emotions, as well as seek situations and activities that elicit desirable emotions, they create social and cultural environments that further reinforce these emotions (Nisbett, 2003).

While Tsai and her colleagues (2006; 2007) focused on intensity to predict group differences in the use of emotions, it is reasoned that there will also be cross-cultural differences along the other two dimensions (interpersonal orientation and valence). More specifically, vertical collectivists may have a heightened capacity for adaptively harnessing other-focused emotions (such as empathy and shame), while horizontal individualists will have a heightened capacity for positive emotions (particularly happiness) as they facilitate important goals in their respective cultures. For example, Bagozzi, Verbeke, and Gavino (2003) found that vertical collectivists (Filipino) used shame to help others and to repair relationships, whereas horizontal individualists (Dutch) reacted to shame by withdrawing inwards to repair their ego. It is further reasoned that with greater use and practice of certain emotions, people become more skilled at using them adaptively.

Summary

In short, there are similarities and differences in what emotions are valued and used to realize goals. While all people appear to value positive over negative emotions, they differ in their valuation of high versus low arousal states. Specifically, North Americans are more likely to harness high arousal states, as they facilitate horizontal
individualistic goals (e.g., influence). East Asians, in contrast, are more likely to harness low arousal states, as they facilitate vertical collectivistic goals (e.g., adjustment). It is further theorized that North Americans have a heightened capacity to harness positive emotions to facilitate goals, while East Asians have a heightened capacity to harness other-focused emotions to facilitate goals, because these capacities are consistent with their cultural horizontal individualistic and vertical collectivistic values.

**Integration of Model on the Relation between Culture and Emotional Intelligence**

While the dimensions of EI are potentially universal, some of the content and manifestation of these abilities are culturally-relative. Evidence is integrated within the theoretical model to illustrate how and why North Americans and East Asians are similar and different in each of the EI abilities according to cultural values. For example, classic research by Darwin and Ekman suggest that there are common expressions of emotion, but research by Elfenbein and Ambady (2003) showed that these expressions are not exactly the same. In particular, cultural display rules dictate that North Americans more often freely express or amplify emotions, while East Asians often suppress them. Because North Americans are generally more expressive than East Asians, North Americans will attend to overt emotional cues (e.g., mouth and facial expression more generally) while East Asians will attend to more subtle emotional cues (e.g., eyes and surrounding context) to perceive emotions.

People in all cultures appear to categorize emotions in terms of valence (positive-negative) and level of arousal (high-low). In spite of the richness of the English language, however, there are many emotions indigenous to East Asian cultures with no direct English translation. These emotions are often other- (versus ego-) focused that emphasize
an *inter*personal (versus *intra*personal) orientation. Research suggests that North Americans are primarily concerned with the valence of emotions (i.e., positive over negative) and are relatively insensitive to the interpersonal orientation of emotions, while East Asians are more concerned about the latter. Additionally, North Americans prefer to use high arousal emotions as they aim to influence their environment, while East Asians prefer to use more moderate, low arousal emotions as they aim to adjust to their environment. Such points of similarities and differences between North Americans and East Asians as a result of their horizontal individualistic and vertical collectivistic cultural values are summarized within Figure 2.

The cultural values of horizontal individualism and vertical collectivism provide a general explanation for differences in conceptions of EI by North Americans and East Asians. To unpack more proximal explanation for ethnic differences in EI, the second part of this chapter will focus on how a particular set of cultural beliefs affect a specific dimension of EI. That is, I will explain how the analytical thinking of North Americans and holistic thinking of East Asians may affect their conception of wise emotion regulation. I focus on this particular set of cultural beliefs and this specific EI dimension in part because of their relative importance and dominance in the culture (cf. Nisbett, Peng, Choi, & Norenzayan, 2001; Peng & Nisbett, 1999) and emotion (cf. Gross, 1999; 2008) literature.

Part 2: The Relation between Knowledge Structures and Wise Emotion Regulation

Emotion regulation can be defined as conscious and unconscious attempts to maintain, increase, or decrease the experience of emotion (Gross, 1998). Emotion regulation consists of “antecedent-focused emotion regulation” (or “deep acting”) and
“response-focused emotion regulation” (or “surface acting”), which respectively refer to attempts to modify emotion before and after they have been generated (Grandey, 2000; Gross, 1998).

According to Gross’s (1999) process model of emotion regulation, antecedent-focused emotion regulation consists of: situation selection, situation modification, attentional deployment, and cognitive change. That is, one can select among situations according to the emotions they are expected to elicit (e.g., go for a walk instead of watch television), then modify the selected situation (e.g., take the scenic instead of the shortest route), deploy attention to different aspects of the situation (e.g., look at the flowers instead of the weeds), and change the cognitive meaning ascribed to the particular aspect of the situation (e.g., flowers are beautiful and life is too instead of flowers are going to die and so am I). Once emotions are generated, they may be freely expressed or amplified or suppressed according to cultural display rules (Ekman, 1972; Matsumoto et al., 2005).

In this section, I will add further detail on a theoretical model of the mechanism through which Westerners’ analytical versus East Asians’ holistic thinking help shape what they evaluate as wise emotion regulation. It is proposed that the current conception of wise emotion regulation rests on Westerners’ analytic assumptions, and that East Asians’ holistic assumptions contribute to an alternative conception of wise emotion regulation. In particular, it is commonly noted that Westerners are more emotionally expressive than their purportedly “hard to read” East Asian counterparts, but it is proposed that these discrepant behaviours are emotionally intelligent within their respective cultures. Applying literature on culture and emotion regulation, I will detail
how the wisdom of emotion regulation is influenced by knowledge structures. The main propositions are summarized in Figure 3.

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Insert Figure 3 about here

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*Antecedent-Focused Emotion Regulation*

*Situation Selection*

According to Gross (2008), situation selection involves approaching situations that are expected to elicit desirable emotions and avoiding situations that are expected to elicit undesirable emotions. This assumes, however, that people are motivated by self-interest as they select situations to maximize their own experience of positive emotions and minimize their own experience of negative emotions (Miller, 1999). It is reasoned that while this behaviour may be consistent with the Western analytic belief that objects—including people—are independent, it is inconsistent with the East Asian holistic belief that people are interdependent (Nisbett et al., 2001). That is, when people believe that they are independent, their primary goal is to attend to themselves and positively distinguish themselves from others (Lee, Aaker, & Gardner, 2000; Markus & Kitayama, 1991). Such people are thus focused on promoting of accomplishment and advancement (Lee et al., 2000). The presence of these positive personal outcomes leads to the experience of happiness-related emotions (e.g., feeling cheerful and proud), while their absence leads to dejection-related emotions (e.g., feeling disappointed and discouraged) (Higgins, Shah, & Friedman, 1997; Lee et al., 2000).
The idea that situation selection is driven by self-interest, however, may be culturally-bound. That is, when people believe they are interdependent, their primary goal is to attend to relationships and maintain harmonious relationships (Markus & Kitayama, 1991). Rather than giving priority to personal goals, they either make no distinction between personal and collective goals or subordinate personal goals to collective goals (Triandis, 1996). Such people are thereby focused on preventing interpersonal conflicts and social mishaps (Higgins et al., 1997; Lee et al., 2000). The absence of these negative social outcomes leads to the experience of relaxation-related emotions (e.g., feeling calm and at peace), while their presence leads to agitation-related emotions (e.g., feeling worried and tense). Hence, Westerners’ focus on promoting positive personal outcomes will lead them to approach situations that are expected to elicit happiness, and avoid situations that will likely elicit dejection. In the meantime, East Asians’ focus on preventing negative social outcomes as well as harmony and balance will lead them to approach situations that are expected to elicit relaxation and avoid situations that will likely elicit agitation.

Indeed, it is frequently noted that Western cultures place high value on happiness (e.g., Eid & Diener, 2001, Mayer & Salovey, 1995). Anthropologist Wierzbicka (1994; 1999) argued, for example, that cheerfulness, fun, and enthusiasm are ubiquitous features of mainstream American culture. Yet the word for happiness did not even appear in the Chinese language until recently (Lu, Gilmour, & Kao, 2001). The closest equivalent to the concept of happiness in ancient Chinese writing is *fu*, which means “anything positive and good in life” and encompasses values such as peace and comfort (Wu, 1991). Furthermore, it has been suggested that strong positive emotions may conflict with the
high value East Asian cultures place on social harmony as it elevates the individual above the group (Mauss, Bunge, & Gross, 2008). Rather than valuing positive emotions over negative ones, East Asians are therefore expected to value more moderate emotions and seek a “Middle Way” between extremes.

Given that Westerners are primarily driven to feel positive over negative emotions, it is not surprising that they tend to easily distinguish between positive and negative valence emotions (e.g., happiness versus sadness). But East Asians, who are primarily driven to feel closely connected with other over positively distinguished from others, have been found to distinguish among emotions based on not only whether they are positive versus negative but also based on whether they are other- versus ego-focused (e.g., empathy versus pride; shame versus anger) (Markus & Kitayama, 1991). As Markus and Kitayama discussed, other-focused emotions have another person as the primary referent and are encouraged in East Asian contexts because they facilitate social harmony, while ego-focused emotions have a person’s internal attributes (e.g., his or her personal goals and achievements) and are discouraged because they may impede social harmony as well as fitting-in.

In a related vein, Bagozzi, Wong, and Yi (1999) found a negative relation between the experience of opposite valence emotions among American women, but a positive relation between opposite valence emotions among Chinese women. For example, while American women experienced anger and joy as negatively related \((r = - .51)\), Chinese women experienced them as positively related \((r = .54)\). It is reasoned that this relates to East Asians’ preference for more moderate emotions—as East Asians view positive and negative emotions as being counterparts rather than in conflict, they are
more open to and accepting of experiencing these emotions simultaneously and thereby counterbalancing and neutralizing each other. Westerners’ and East Asians’ view of contradictory emotions as opposites versus related, respectively, is also associated with their tendencies for logical versus dialectical reasoning. While Western logical reasoning leads to resolving contradiction by choosing between elements, East Asian dialectical reasoning assumes that contradictions between elements can co-exist.

Recent research by Tsai and her colleagues (Tsai, Knutson, & Fung, 2006; Tsai, Miao, Seppala, Fung, & Yeung, 2007) lend converging evidence to these findings as they found that European Americans value relatively intense positive emotions (e.g., feeling cheerful and enthusiastic) more than East Asians do, whereas East Asians value relatively moderate positive emotions (e.g., feeling calm and at peace) more than European Americans do. The contrasting affect valuation of European Americans and East Asians help account for the different situations they select—whether conscious or not—in their daily lives (Tsai, 2007). For instance, it may help explain why North Americans choose to start the day with high caffeine beverages such as coffee more often than East Asians, while East Asians choose to drink lower caffeine beverages such as tea more often than North Americans (Bhatnagar, 2004). It may also help explain why European Americans choose to engage in more “active” and vigorous leisure activities (e.g., running, rollerblading) than Asian Americans, whereas Asians Americans choose to engage in more “passive” and relaxing leisure activities (e.g., sightseeing, picnicking) than European Americans (Gobster & Delgado, 1992). In summary, it is proposed that Westerners’ analytic thinking leads them to select situations that are expected to promote positive, personal outcomes and generate relatively intense, positive emotions (e.g.,
feeling happy, excited). Conversely, East Asians’ holistic thinking leads them to select situations that are expected to generate relatively moderate, positive emotions (e.g., feeling relaxed, calm).

**Situation Modification**

According to Gross (2008), situation modification refers to active efforts to directly modify situations so as to alter their emotional impact. As he acknowledged, the boundary between situation selection and situation modification may be a fuzzy one, as efforts to modify a situation may effectively call forth a new situation. For example, to alter the emotional impact of loud music next door, one may modify the situation by talking to the neighbor and then end up joining the party. Moreover, while Westerners may in fact assume an active orientation as they seek to influence situations and their emotional impact, it is reasoned that East Asians will assume a more passive orientation as they seek to adjust to situations and their emotional impact. As Nisbett et al. (2001) discussed, the Western analytic belief that people are independent is related to a sense of individual freedom and personal agency, while the East Asian holistic belief that people are interdependent is related to a sense of social obligation and collective agency. Westerners are thus apt to believe that they can influence and even control their social environment to fit their needs, while East Asians are apt to believe that they must adjust to their social environment to fit the needs of their in-group (Tsai, 2007; Yamagushi, Gelfand, Miguno, & Zemba, 1997). As Chiu (1972) noted:

Chinese are situation-centered. They are obliged to be sensitive to their environment. Americans are individual-centered. They expect their environment to be sensitive to them. Thus Chinese tend to assume a passive attitude while
Americans tend to possess an active and conquering attitude in dealing with their environment (p. 326).

Consistent with the proposition that Westerners play a more active role in situation modification, Oishi and Diener (2003) found that European Americans chose to perform the same task if they felt they had previously done well on the task, but chose to perform a different task if they felt they had not. The task selection of East Asians for this second task, in contrast, was unrelated to how well they felt they had performed on the first task. As Oishi and Diener discussed, European Americans’ tendency to continue the same task if they had previously performed successfully (but switch to a different task if they had previously performed poorly) was an effective strategy for fostering positive emotions, as successfully performing tasks typically results in greater enjoyment. East Asians, in contrast, appeared to be more motivated to correct their weakness by performing the same task even if they had previously performed poorly.

In effect, while European Americans appeared to be motivated by enjoying themselves in the short-run, East Asians appear to be motivated by improving themselves in the longer-run. This short versus long-term orientation may be related to Westerners’ analytic assumption of the presence of more direct and proximal cause-and-effect relationships versus East Asians’ holistic assumption of the presence of more indirect and distal chain of events (Maddux & Yuki, 2006). In a related vein, Gross (2008) suggested that accurately remembering how past situations made us feel and predicting how future situations will make us feel facilitates effective situation selection and modification, but there are backward- and forward-looking biases. It is reasoned that analytic versus holistic thinking, and in particular short- versus long-term time orientation as well as
simple versus complex conceptions of causality, will contribute to unique backward- and forward-looking biases between Westerners and East Asians. That is, Westerners will consider a narrower yet more proximal range of antecedents and consequences of actions and modify situations accordingly, while East Asians will consider a broader yet more distal range of factors (Maddux & Yuki, 2006). Relatedly, as East Asians have an (albeit vague) awareness of upstream, downstream, and sometimes contradictory “ripple effects” of actions, it is reasoned that they are more likely to be uncertain and thus tentative and passive about situation modification.

Further contributing to East Asians’ more passive orientation to situation modification may be the perception that events are cyclical. Attempts to affect change, therefore, may be regarded as ineffective as it is believed that current situations will inevitably return. Westerners’ linear thinking, on the other hand, may contribute to a more active orientation as they assume that affecting positive change will lead to further change in the same positive direction. Further contributing to Westerners’ active orientation to situation modification is their tendency to experience greater enjoyment on tasks in which they have freely chosen. For example, Iyengar and Lepper (1997) found that European American children performed better and enjoyed tasks more when they were given a free choice, whereas Asian Americans performed better and enjoyed tasks more when the tasks were imposed (i.e., told that the tasks were chosen by their mothers). Finally, it is reasoned that Westerners’ desire to feel positive and distinguish themselves from others in a positive manner lead to their backward-looking bias of overestimating their past performance and using this inaccurate information as a basis for situation modification (Oishi & Diener, 2003). In summary, it is proposed that Western analytic
thinking contributes to a more active orientation to situation modification as well as the consideration of more direct and proximal factors. Conversely, East Asian holistic thinking contributes to a more passive orientation to situation modification as well as the consideration of more indirect and distal factors.

**Attentional Deployment**

As Gross (2008) discussed, situation selection and situation modification involves influencing emotional responding by changing the situation to which the individual is exposed, whereas attentional deployment refers to influencing emotional responding by redirecting attention within a given situation. Indeed, people can only attend to a small number of objects in their complex and dynamic environment, and it is proposed that Westerners and East Asians will deploy this limited attention to different aspects of the environment (Masuda & Nisbett, 2001; Masuda et al., 2008). That is, European-North Americans tend to concentrate their attention on the central object, whereas East Asians tend distribute their attention between the central object and the surrounding situation. For example, Masuda and Nisbett (2001) showed American and Japanese a scene of an underwater world and asked these participants to describe what they had seen. Americans generally focused on the central object (e.g., two fish), whereas Japanese included information about the context and the relationship among the various objects (e.g., green pond with plants and two fish).

More recently, Masuda and his colleagues (2008) demonstrated that while North Americans look to the facial expression of a target person to perceive his or her emotion, Japanese will also consider the facial expression of the people surrounding him or her. For example, Japanese perceived the same smiling person as feeling different emotion
depending on the expressions of the people surrounding him or her. They reasoned that this occurs as Westerners tend to believe that a person’s emotions are mostly independent of those around him or her and thereby focus on “part of the picture” (the target person), whereas East Asians tend to believe that a person’s emotions are related to those around him or her and thereby scan “the whole picture” (the target person and the surrounding situation).

Cognitive Change

While attentional deployment concerns redirecting what aspects of a given situation one pays attention to, cognitive change refers to changing the how one thinks about the situation to alter its emotional significance (Gross, 2008). The divergent attentional deployment of Westerners versus East Asians is proposed to lead to different emotional meaning attached to situations. It is proposed that as Westerners pay more attention to the object (e.g., a person’s facial expression), they should be expected to attribute causality to the object (e.g., the person’s disposition). As East Asians, in contrast, attend to the object’s relation to the field (e.g., a person and surrounding people), they should attribute causality to an interaction between the object and the situation (e.g., being with cheerful friends). Indeed, in an interesting study, Morris and Peng (1994) showed that English-language newspapers are more likely to attribute the cause of murders to people’s dispositional factors (e.g., murderers’ chronic personality problems), while Chinese-language newspapers are more likely to attribute causality to situational factors (e.g., breakdown of society and families). It is therefore reasoned that the meaning and resulting emotion that Westerners attach to situations will be more focused, stronger, and targeted towards the object (e.g., blame and anger against
murderer) as they are more likely to commit the “fundamental attribution bias” (i.e., attribute causality to an actor’s disposition versus the surrounding situation), while the meaning and emotion that East Asians attach to situations will be more diffused, weaker, and dispersed between the object and context (e.g., empathy and sadness about the state of society and family in which the murderer was raised).

Even when Westerners and East Asians are directed to pay attention to the same aspect of a situation, however, the meaning they attribute to it will differ. For example, when Peng, Keltner, and Morikawa (2002) asked Americans to indicate the extent of positive and negative emotions in facial expressions, they found that the more they perceived positive emotions, the less they perceived negative emotions. Japanese, in contrast, were likely to report seeing both positive and negative emotions in the same facial expressions. This can be attributed to Westerners’ logic and their reasoning that a person must be feeling either positive or negative emotions, rather than East Asians’ dialecticism and their reasoning that a person can be feeling both positive and negative emotions. As a result, Westerners’ are more likely to interpret in others and by emotional contagion feel more extreme emotions, while East Asians are more likely to interpret and by contagion feel more balanced emotions (Sy, Côté, & Saavedra, 2005). Furthermore, because Westerners tend to hold underspecified and simplistic models of causality, they are more likely to interpret situations and associated outcomes as unexpected and feel surprise more often (Choi & Nisbett, 2000). In contrast, because East Asians tend to hold overspecified and complex models of causality, they are less likely to interpret outcomes as unexpected and tend to feel surprise less often. It is reasoned then that Westerners’ will experience stronger emotional reactions to situations compared to their East Asian
counterparts because a greater range of situations will be perceived as novel and unexpected.

Integration. To synthesize, it is proposed that Western analytic thinking and East Asian holistic thinking will lead to different approaches to selecting and modifying situations as well as deploying attention and attaching meaning to these situations. For example, Westerners’ analytic thought will lead them to play a more active role in selecting and modifying situations to elicit positive personal outcomes and relatively intense, positive emotions (e.g., feeling cheerful and enthusiastic). East Asians, on the other hand, tend to play a more passive role as they adjust to situations and therefore prefer less intense, positive emotions. Furthermore, as Westerners deploy attention to focal objects (e.g., a person), they are more likely to attribute causality to its disposition, and thus emotions tend to be targeted towards the focal object. In contrast, as East Asians deploy attention to not only the focal object but also the surrounding field, they are more likely to attribute causality to a complex interplay of dispositional and situational factors, and thus emotions tend to be dispersed among a wider range of potential factors.

Relatedly, Westerners tend to feel stronger emotional reactions to situations because their relatively underspecified conceptions of causality will lead them to experience a greater range of outcomes as unexpected. East Asians, in contrast, will tend to experience weaker emotional reactions to situations because their relatively overspecified conceptions of causality will lead them to feel insufficiently surprised at outcomes as they are more likely to engage in “hindsight bias” (i.e., regard even unpredictable outcomes as predictable and expected). Furthermore, Westerners’ tendency to conceive positive and negative emotions as opposites, will lead them to perceive and
experience unambiguously positive or negative emotions. Conversely, East Asians’ tendency to conceive seemingly opposite valence emotions as counterparts, will lead them to perceive and experience more balanced and ambiguous emotions. Taken together, the antecedent-focused emotion regulation of Westerners will contribute to the generation of more extreme (i.e., high valence and intensity) feelings, while it will contribute to the experience of more balanced feelings among East Asians.

Response-Focused Emotion Regulation

Thus far I have presented evidence to suggest that the antecedent-focused emotion regulation of Westerners will lead them to feel stronger emotions towards objects, while that of East Asians will lead them to feel weaker emotions towards objects and their surrounding situations. The more passive and neutral emotional behaviour of East Asians may contribute to why Western observers find East Asians “hard to read.” The evidence, however, provides only a partial explanation as it reveals the processes that are proposed to occur before but not after an emotion has been generated. In particular, it does not explain the consistent finding that East Asians tend to engage in more emotional suppression to hide their feelings (e.g., Matsumoto et al., 2005, 2008)—a behaviour that has been found to be maladaptive for North Americans yet mysteriously more adaptive for East Asians (Butler, Lee, & Gross, 2007).

It is submitted that dialectical versus logical reasoning may provide an explanation for what is happening in the minds of East Asians as they suppress rather than express their emotions as is. As alluded to above, dialectical reasoning may be characterized by three principles: (1) change: reality is fluid and dynamic, and not static; (2) contradiction: old and new, good and bad; contradiction can co-exist and even depend
on one another for their existence; and, (3) relationship: because of constant change and contradiction, nothing is isolated or independent, and instead everything is interrelated (Peng & Nisbett, 1999). Logical reasoning, in contrast, include the following three laws: (1) identity: a thing is identical to itself; (2) non-contradiction: no statement can be both true and false; and, (3) excluded middle: any statement is either true or false.

Logical reasoning involves being internally consistent and avoiding the appearance of contradiction, and therefore it is reasoned that those who engage in this thinking will likely feel emotional dissonance and strain when there is a discrepancy between their outward expression and their inner feelings (Hochschild, 1983; Morris & Feldman, 1996). Indeed, research by Gross and his colleagues (1998; Gross & Levenson, 1993, 1997) on American subjects supports this contention. Relatedly, according to Côté’s (2005) social interaction model of the effects of emotion regulation, people judge surface acting of emotion unfavourably. This occurs as receivers potentially interpret senders’ inauthentic displays as calculated attempts to control them (Rafaeli & Sutton, 1989). Additionally, experimental research has shown that suppression of emotion via surface acting results in receivers’ feeling less rapport with senders and liking them less (Butler, Egloff, Wilhelm, Smith, Erickson, & Gross, 2003). Furthermore, the law of the excluded middle suggests that senders will be motivated to display unambiguous emotion and therefore help explain why Westerners prefer less neutral and more intense emotions (e.g., feeling excitement and enthusiasm) (Tsai et al., 2006, 2007).

Just like how the laws of logical reasoning help make sense of the response-focused emotion regulation of Westerners, it is proposed that the principles of dialectical reasoning may be applied to understanding East Asians’ behaviour. In Japanese, the
concepts of ura-omote as well as honne-tatamae are of paramount importance. Ura refers to inside and omote to outside, honne refers to people’s inner reality or true feelings and tatamae refers to people’s outward appearance or façade. As psychoanalyst Doi (1985) noted, people’s inner reality can become their outward appearance; their outward appearance can become their inner reality. This is consistent with the dialectical principle of change and the notion that the relation between objects is fluid and dynamic rather than static.

Furthermore, consistent with the dialectical principle of contradiction, Doi (1985) explained how the seemingly opposing concepts of omote and ura may co-exist:

… the Japanese actually use—and use frequently—ways of speaking that signify the two aspect of omote and ura in things. And even if these two aspects are contradictory at the level of words, they are both true. This is the result of different points of view. Moreover, Japanese do not make an issue of the fact that there is a lack of logical consistency between the two… most Japanese are not very attentive to using words analytically and neither are they very enthusiastic about relying on logical consistency (p. 29).

As this passage reveals, in contrast to Western logical reasoning that any statement cannot be both true and false and rather is either true or false, Japanese conceive ura and omote as contradictory yet both true. They view these opposing concepts as mutually defining and mutually constituting. The concept of outside, for example, implies the presence of inside—without one, the other cannot exist, and they are in fact closely related and form part of a single entity.
With respect to emotional expression, this implies that there is an acceptance of and even insistence on contradiction between a person’s inner reality and their outward appearance. As Doi (1985) explained, the urge to eliminate ambivalence for a higher integrity is generally weak among Japanese. The motivation to find a compromised middle way between one’s true feeling versus façade, as well as bad versus good feelings and high versus low arousal feelings, stems from the overriding desire to reduce interpersonal friction and achieve social harmony. Indeed, while Westerners disdain inauthenticity, Doi (1985) noted the importance of surface acting for social relations:

The ease with which one shifts from omote to ura and back again without much strain is regarded as a measure of one’s social maturity. In other words, it doesn’t blemish a man’s integrity to take recourse to one or the other depending on the particular situation he finds himself in. Rather his integrity rests upon the complete mastery of omote and ura (p. 159).

Furthermore, consistent with logical reasoning of choosing one element over another, there is the assumption among Westerners that one’s true emotions are superior to one’s façade and therefore they will try to reveal the latter over the former. Consistent with holistic reasoning, however, East Asians do not assume that one’s true emotions are necessarily superior to one’s façade (Doi, 1985). Instead, both seemingly opposite concepts are regarded as important and it is thought that one should switch between the two dynamic and related concepts depending on the social situation.

This regard for surface acting helps explain in turn the finding that Asian Americans report higher levels of habitual suppression as well as masking compared to their Caucasian counterparts (Gross & John, 1998, 2003), yet experience less of the
negative intrapersonal and interpersonal effects of this behaviour (Butler et al., 2007).

With respect to response-focused emotion regulation, I argue that dialectical versus logical reasoning is central to understanding East Asians’ tendency to tolerate emotional contradiction and engage in emotional suppression. That is, East Asians’ dialectical reasoning leads them to feel more comfortable with experiencing one emotion inwardly and expressing another emotion outwardly. Unlike Westerners, who prefer logical consistency, they are less likely to experience emotional dissonance or psychological conflict when suppressing emotions. It is proposed that this occurs because East Asians are more likely to perceive this form of response-focused emotion regulation as consistent with their dialectical notions of change, contradiction, and relationships and a normal and necessary part of interdependent living.

Integration. To synthesize, it is proposed that dialectical versus logical reasoning is central to understanding East Asians’ tendency to tolerate emotional contradiction and moderate emotions. That is, East Asians’ dialectical reasoning leads them to feel more comfortable with experiencing one emotion inwardly and expressing another emotion outwardly. Unlike Westerners, who prefer logical consistency, they are less likely to experience emotional dissonance or psychological conflict when suppressing emotions. It is therefore proposed that East Asians are more likely to perceive response-focused emotion regulation as consistent with their dialectical notions of change, contradiction, and relationships because they are a normal and necessary part of interdependent living.

Relation between Culture and Emotional Intelligence

While the current, North American conception of EI may emphasize knowledge and skills that are consistent with horizontal individualistic values (e.g., personal
achievement and influencing others) and analytical (e.g., logical) thinking, an East Asian’s conception of EI may emphasize knowledge and skills that are consistent with vertical collectivistic values (e.g., social harmony and adjusting to others) and holistic (e.g., dialectical) thinking. Knowledge and skills relevant to East Asians may therefore go unrecognized or even penalized on EI measures developed by North Americans. In other words, current conceptualizations of EI may be indigenous to and biased towards North American cultural contexts. It should not be surprising then—in fact, it should be expected—that Asians will score lower than Whites on a Western-based EI test. The theoretical model therefore provides evidence that EI cannot be meaningfully understood without consideration of culture; attempts to do so lead to deeply flawed conclusions.
CHAPTER 4: EMPIRICAL INVESTIGATION

While Mayer et al. (2001) were not prepared to address this issue, they stated that the most important empirical question concerning EI to many people may be whether EI is universal or culture-bound. The purpose of the theoretical model was to describe how and why culture and EI are related and, in doing so, challenge the implicit assumption that EI is universal. The theoretical model details numerous and specific pieces of evidence that, when taken together, help support a more general and fundamental hypothesis: EI is culturally-relative. This suggests that observed ethnic differences in EI test performance may be due to differences in values and beliefs shared among members of a social group. The goal of this initial empirical investigation is to test whether there is empirical support for this central proposition.

Towards this end, a two-part investigation was carried out. Study 1 consisted of measuring cultural values to determine whether they mediate the relation between ethnicity and EI test performance. Study 2 consisted of experimentally manipulating (priming) logical and dialectical thinking to determine whether it causes differences in judgments of wise emotion regulation. The investigation, therefore, is intended to lend novel and converging evidence for the theory-driven proposition that culture helps account for ethnic differences in EI test performance. Stated in more concrete terms, it sought to test whether cultural-relativity is an underlying reason for why Asians and potentially other ethnic groups perform worse than Whites on a Western-based EI test.

Study 1:

The Relation between Cultural Values and Emotional Intelligence
The goal of Study 1 is to determine whether cultural values help account for ethnic differences in EI test performance and, in particular, the higher EI test performance of European-North Americans compared to East Asians on North American EI measures. Given that the leading conceptualization and measure of EI (the Mayer-Salovey-Caruso Emotional Intelligence Test; MSCEIT) is North American, it is predicted that the measure will be biased in favour of Western horizontal individualistic values, and biased against East Asian vertical collectivistic ones. It therefore stands to reason that European-North Americans will score higher on a North American EI test because their horizontal individualistic cultural values are consistent with the goals and standards embedded in this test. East Asians, on the other hand, are predicted to score lower on a North American EI test because their vertical collectivistic values can conflict with the horizontal individualistic goals and standards embedded in this test. The expected relations are illustrated within Figure 4 and summarized within the hypotheses below.

Hypothesis 1: European-North Americans will score significantly higher than East Asians on a North American EI test.

Hypothesis 2: Horizontal individualism will partially mediate the positive relation between being European-North American (vs. East Asian) and scores on a North American EI test.
Hypothesis 3: Vertical collectivism will partially mediate the negative relation between being East Asian (vs. European North American) and scores on a North American EI test.

Method

Participants

The participants were 144 students at a large North American university. The participants consisted of 70 women, and their mean age was 21 years ($SD = 2.31$, range = 18 to 36). Participants were coded as East Asian if they identified themselves as East Asian (e.g., Chinese, Japanese, Korean), were born and raised in an East Asian country, and their parents were of East Asian descent. Participants were coded as European-North American if they identified themselves as North American (e.g., Canadian, American), were born and raised in a North American country, and their parents or grandparents were of European descent. In addition to asking participants to self-identify their ethnicity, consistent with how race and ethnicity is typically assessed (e.g., Berdahl & Moore, 2006), the above requirements were adapted from Tsai, Miao, Seppala, Fung, and Yeung (2006) as they required Hong Kong Chinese to be (1) born and raised in Hong Kong or China, and (2) have parents who were born and raised in Hong Kong or China. In contrast, they required European-Americans to be (1) born and raised in the United States, (2) have parents who were born and raised in the United States, and (3) be of European ancestry. These additional requirements helped ensure that respondents who self-identified themselves as Canadian were not also second-generation Chinese, for example, and coded as European-North American. Only East Asian and European-North
Americans were included in this study; 122 participants were coded as East Asian, while the remaining 22 participants were coded as European-North American.

**Procedures**

The participants were scheduled for a 105-minute session held in a laboratory room, and received partial course credit for completing the questionnaire. This session involved an online questionnaire including demographic questions, a cultural values measure, and an EI test. The respondents were guaranteed confidentiality.

**Measures**

*Demographics.* Participants indicated their age, gender, and ethnicity. They were also asked what country they were born and raised in, as well as what country their parents and grandparents were born and raised in (see Appendix 1 for specific questions).

*Horizontal Individualism and Vertical Collectivism.* Participants completed a 16-item, 9-point Likert scale measure of horizontal individualism and vertical collectivism by Singelis and his colleagues (1995). Like Singelis et al., this measure was presented to participants as “a new personality test.” The measures of horizontal individualism, vertical collectivism, horizontal collectivism, and vertical individualism were found to have reliabilities of: .67, .68, .74, and .74 respectively (Singelis et al., 1995). (See Appendix 2 for specific questions).

*Emotional Intelligence.* Participants completed the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer, Salovey, & Caruso, 2002). This 141-item test (typically taking 40-45 minutes to complete) computer-based ability test presents respondents with emotional problems and requires them to choose the best answer among a set of five options. The correctness of responses is determined by the degree of
agreement with answers endorsed by a “general” or “expert” sample. For instance, if 80 percent of the general (or expert) sample chose option (a) for a certain question, while 20 percent chose option (b), respondents would receive .80 points for option (a), .20 points for option (b), and zero points for the remaining three options.

The general sample consisted of over 5000 largely White, English speaking students. The expert sample consisted of 21 members of the International Society for Research on Emotions (ISRE) from eight Western countries. The scores that are yielded when the two approaches to scoring used are very similar, $r = .98$ (Mayer, Salovey, Caruso, & Sitarenios, 2003). Both the general and consensus norms are used to score the MSCEIT, but only one of the two approaches is reported because they produce virtually the same results. Raw scores on the MSCEIT are converted into standardized scores with a mean of 100 and a standard deviation of 15. The test-retest reliability of this measure is .86 and its internal reliability is above .90. The MSCEIT has discriminant validity with respect to personality traits (Côté & Miners, 2006; Lopes et al., 2003) and cognitive intelligence (Côté & Miners, 2006; Law et al., 2005). (See Appendix 3 for sample questions).

Results

Descriptive Statistics

The means, standard deviations, and correlation coefficients are shown within Table 1.

Insert Table 1 about here
Furthermore, independent sample t-tests indicated that there were no significant differences between the European-North American and East Asian samples in terms of age ($M = 20.32$ vs. $20.74$, $SD = 2.08$ vs. $2.35$, $t[142] = .78$, $p = .44$) and sex ($t[138] = 1.70$, $p = .10$). On the other hand, consistent with theory and past research (e.g., Tsai, Knutson, & Fung, 2006), European-North Americans reported significantly greater horizontal individualistic values than East Asians ($M = 7.11$ vs. $6.36$, $SD = .69$ vs. $1.09$, $t[45.97] = 4.10$, $p < .001$) as well as lower vertical collectivistic values ($M = 5.31$ vs. $6.08$, $SD = 1.28$ vs. $.99$, $t[124] = -3.17$, $p < .01$). There were no significant differences between European-North Americans and East Asians on horizontal collectivistic values ($M = 6.66$ vs. $6.76$, $SD = .76$ vs. $.79$, $t[124] = .55$, $p = .58$) or vertical individualistic values ($M = 5.92$ vs. $5.49$, $SD = 1.30$ vs. $1.13$, $t[124] = -1.60$, $p = .11$). This may occur as European-North Americans may on average value egalitarianism but also independence relative to East Asians, who may on average value hierarchy but also interdependence, and therefore the cultural patterns of horizontal *collectivism* and vertical *individualism* fail to distinguish between European-North Americans and East Asians. These sets of findings indicate that the two samples—European-North Americans and East Asians—are not significantly different in several important variables (e.g., age, sex, horizontal collectivism, vertical individualism), but are significantly different in terms of the cultural patterns of interest: Horizontal individualism and vertical collectivism.

**Hypothesis Tests**

_Hypothesis 1._ In support of Hypothesis 1, independent sample t-tests revealed that European-North Americans scored significantly higher than East Asians in the use ($M = 100.79$ vs. $90.73$, $SD = 16.38$ vs. $16.36$, $t[140] = 2.62$, $p = .01$), understanding ($M =$
99.84 vs. 84.33, \( SD = 11.46 \) vs. 11.17, \( t[140] = 5.96, p < .001 \), and regulation of emotion \((M = 95.41 \text{ vs. } 84.68, SD = 10.04 \text{ vs. } 12.19, t[140] = 3.89, p < .001)\) as well as total EI \((M = 94.82 \text{ vs. } 82.24, SD = 11.15 \text{ vs. } 13.51, t[140] = 4.11, p < .001)\) on the MSCEIT. No significant difference was found between European North-Americans and East Asians in perception of emotion \((M = 94.35 \text{ vs. } 92.06, SD = 14.58 \text{ vs. } 14.87, t[29.58] = .68, p = .50)\) according to the MSCEIT.

Insert Table 2 about here

Hypothesis 2. I conducted a series of regression analyses to test the four criteria for mediation (Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004). Specifically, I examined whether:

1. The independent variable (ethnic group: East Asian = 0; European-North American = 1) was significantly correlated with the dependent variable (perception, use, understanding, and regulation of emotion as well as total EI).

2. The independent variable (ethnic group) was significantly correlated with the mediator (cultural values: horizontal individualism).

3. The mediator (cultural values) was significantly correlated with the dependent variable (perception, use, understanding, and regulation of emotion as well as total EI), controlling for the independent variable (ethnic group).

4. The meditational effect was significant according to the Sobel test.

The first criterion for mediation was not met for perception of emotion—that is, being European-North American was not significantly related with perception of emotion.
(B = 2.29, SE = 3.43, β = -.05, t[140] = .67, p = .51). The first criterion was met, however, for the use (B = 10.06, SE = 3.85, β = .22, t[140] = 2.62, p = .01), understanding (B = 15.51, SE = 2.60, β = .45, t[140] = 5.96, p < .001), and regulation (B = 10.72, SE = 2.76, β = .31, t[140] = 3.89, p < .001) of emotion as well as total EI (B = 12.58, SE = 3.06, β = .33, t[140] = 4.11, p < .001). The second criterion for mediation was met: European-North American was significantly correlated with horizontal individualism (B = .75, SE = .24, β = .27, t[124] = 3.08, p < .01).

The third criterion for mediation was not met for use of emotion (B = 1.86, SE = 1.45, β = .12, t[121] = 1.28, p = .20) and total EI (B = 1.87, SE = 1.15, β = .14, t[121] = 1.63, p = .11), after controlling for being European-North American. The third criterion was met, however, for the higher level of EI abilities and total EI as horizontal individualism was significantly related with the understanding (B = 2.29, SE = .98, β = .19, t[121] = 2.35, p < .05) and regulation (B = 2.90, SE = 1.02, β = .25, t[121] = 2.84, p < .01) of emotion. The Sobel test revealed that the meditational effect of horizontal individualism was significant for the understanding (Sobel test = 2.18, p < .05) and regulation (Sobel test = 2.56, p = .01) of emotion.

Hypothesis 3. As in testing for Hypothesis 2, I conducted a series of regression analyses to test whether cultural values mediated group differences in EI. Specifically, I examined whether:

1. The independent variable (ethnic group: European-North American = 0; East Asian = 1) was significantly correlated with the dependent variable (perception, use, understanding, and regulation of emotion as well as total EI).
(2) The *independent variable* (ethnic group) was significantly correlated with the *mediator* (cultural values: vertical collectivism).

(3) The *mediator* (cultural values) was significantly correlated with the *dependent variable* (perception, use, understanding, and regulation of emotion as well as total EI).

(4) The meditational effect was significant according to the Sobel test.

The analyses pertaining to Criterion 1 were reported in the previous section. The first criterion for mediation was not met for perception of emotion, but it was met for the other three dimensions and total EI. The second criterion for mediation was also met: East Asian was significantly correlated with vertical collectivism ($B = .78$, $SE = .25$, $\beta = .27$, $t[124] = 3.17$, $p < .01$).

The third criterion for mediation was not met for the four EI abilities and total EI—that is, vertical collectivism was *not* significantly related to the perception ($B = .61$, $SE = 1.25$, $\beta = .05$, $t[121] = .49$, $p = .63$), use ($B = .02$, $SE = 1.45$, $\beta = .001$, $t[121] = -.01$, $p = .99$), understanding ($B = -1.06$, $SE = .98$, $\beta = -.09$, $t[121] = -1.08$, $p = .28$), and regulation ($B = -.67$, $SE = 1.04$, $\beta = -.06$, $t[121] = -.64$, $p = .52$) of emotion as well as total EI ($B = -.44$, $SE = 1.15$, $\beta = -.03$, $t[121] = -.38$, $p = .71$).

**Discussion**

Consistent with past research, support was found for Hypothesis 1, and the prediction that European-North Americans would score significantly higher than East Asians on a North American test of EI. Furthermore, the series of regression analyses provides support for Hypothesis 2, as it revealed that horizontal individualism helps explain why European-North Americans have higher understanding and regulation of emotion.
emotion scores. The analyses, however, does not provide statistically significant evidence for Hypothesis 3. That is, vertical collectivism did not significantly account for the lower EI scores of East Asians. In effect, Study 1 provides some evidence for the potential cultural-relativity of EI.

An interesting and unexpected finding to emerge out of the data analyses, however, was the finding that cultural values appear to be more strongly related to higher level EI abilities (i.e., understanding & regulation of emotion) than to lower level EI abilities (i.e., perception & use of emotion). This may be because understanding and regulating emotion are more conscious and reflective, as well as socially and thereby culturally-learned than perceiving and using emotion. For example, emotion regulation exhibit more variation across time (e.g., lifespan) and space (e.g., geographically) than emotion perception. This may occur as inferences about wise emotion regulation may be more judgmental and subjective (more than one correct way), while accurate emotion perception may be more intellective and objective (often one correct interpretation), and therefore the former may require broader social consensus than the latter (Laughlin & Ellis, 1986). This may suggest that abilities such as emotion regulation are more likely to be influenced by learning and social context; particularly, the shared values and beliefs among members of individuals’ social groups.

Given that emotion regulation may be the subject of greater cultural influence, I focused on identifying more specific mechanisms through which culture may affect the ability to regulate emotion in Study 2. Before moving to Study 2, however, a limitation of Study 1 is English language fluency. That is, those who were born and raised in an East Asian country may have lower English language fluency, which may help account for
their lower EI test results. Due to low statistical power, I could not control for language. Controlling for verbal ability, however, would have contributed to a very conservative test for the hypothesis that cultural values (and not lack of English language fluency) drive the lower EI test performance of East Asians. Verbal ability/language fluency is inextricably and meaningfully linked to both the mediator (culture values) (Ji, Zhang, & Nisbett, 2004) and dependent variable (EI test performance) (Mayer, Salovey, & Caruso, 2000). East Asians who are less fluent in English, are likely to be more fluent in an East Asian language, and language carries with it and reinforces culture-specific values and influences judgments. For example, the Korean language reflects vertical collectivistic values. There are “honorifics” or special endings to verbs for when speaking to elders such as parents and leaders. Korean language also involves referring to each other by family versus given name first (e.g., “Kim Yuna” instead of “Yuna Kim”) and referring to possessions using plural versus singular pronouns (e.g., “our house” instead “my house”). I will help address this limitation, however, in Study 2. That is, Study 2 will involve randomly assigning participants to conditions in which they are primed to think in a way more consistent with Eastern versus North American culture (i.e., dialectically vs. logically, respectively).

Study 2:

The Relation between Knowledge Structures and Wise Emotion Regulation

The goal of Study 1 was to lend empirical support to the theoretical model and, in particular, the proposition that cultural values (horizontal individualism and vertical collectivism) help account for the different EI scores between European-North Americans and East Asians. To pin down more proximal and precise mechanisms, I propose a
relation between analytic versus holistic thinking—particularly, dialectical versus logical thinking—and wise emotion regulation. The goal of Study 2 then is to empirically test this relation. I decided to emphasize dialectical versus logical thinking for theoretical and practical reasons. As discussed in Chapter 3, based on theory, I reason that dialectical versus logical thinking influences the more conscious and reflective response (vs. antecedent) focused emotion regulation that EI tests assess. In effect, it was predicted that engaging in logical thinking will lead to higher EI scores because it is consistent with the logic embedded in a North American tests of wise emotion regulation. Conversely, engaging in more dialectical thinking is expected to lead to lower scores because it is inconsistent with the logic embedded on North American tests of wise emotion regulation. Furthermore, the practical difficulty of activating all four aspects of analytic versus holistic thinking, without activating other cultural beliefs or values, made it necessary to try to identify and isolate the leading aspect of analytic versus holistic thinking that accounts for cultural differences in wise emotion regulation. In effect, it was predicted that those in the logical thinking priming condition will score higher than those in the dialectical thinking priming condition.

_Hypothesis 4._ Participants primed to think logically will obtain higher emotion regulation test scores on a North American EI test than participants who are primed to think dialectically.

**Method**

**Participants**

The participants were 161 students at a large North American university who received course credit. Individuals identified themselves from a variety of ethnic backgrounds, that is: Black ($n = 2$), Caucasian ($n = 35$), East Asian ($n = 95$), Middle
Eastern \((n = 9)\), Southeast Asian \((n = 19)\), and West Indian \((n = 1)\). The sample consisted of 100 females, with a mean age of 21 \((SD = 2.16; \text{range} = 18 \text{ to } 33)\).

*Logical versus Dialectical Thinking Manipulation*

The experiment consisted of a series of exercises and questionnaires. First, half (81) of the participants were randomly assigned to complete a “Conflict Resolution Exercise” (see Appendix 4 for prime), while the other half (80) were randomly assigned to complete a “Conflict Reconciliation Exercise” (see Appendix 5 for prime). The Conflict Resolution Exercise involved participants recalling a time when they got into a serious argument and it was resolved in favour of one party or the other, while the Conflict Reconciliation Exercise involved having participants recall a time when they got into a serious argument and arrived at a solution that reconciled the perspectives of both parties.

The purpose of the Conflict Resolution Exercise is to prime or make salient logical reasoning, which involves resolving contradiction by choosing one side over another. In contrast, the purpose of the Conflict Reconciliation Exercise is to prime dialectical reasoning, which involves resolving contradiction by finding a compromise or “middle ground” between two sides. Recall that logical reasoning is part of the more general tendency of European-North Americans to engage in analytical thinking, which can be broadly defined as a worldview consisting of discrete and discontinuous objects (e.g., people and events). In contrast, dialectical reasoning is part of the more general tendency of East Asians to engage in holistic thinking, which can be broadly defined as a worldview consisting of interrelated and continuous objects. After students completed either the Conflict Resolution Exercise or Conflict Reconciliation
Exercise, they were given the “Emotion Regulation” subset of the MSCEIT (see Appendix 3).

To confirm that the Conflict Resolution Exercise and Conflict Reconciliation Exercise primed the desired constructs, I administered a brief measure of logical and dialectical reasoning (2007) (see Appendix 6), which is part of a larger measure of analytical and holistic thinking. To assess the extent to which the exercises primed related aspects of analytic and holistic thinking, the remaining items of this measure were administered (see Appendix 7). In the same vein, a measure of horizontal and vertical individualism and collectivism (Appendix 2) as well as independent and interdependent self-construal (Appendix 8) were administered to test whether the exercises were inadvertently priming other, related cultural constructs. Finally, participants were asked to complete a series of demographic questions (see Appendix 1).

Measures

Demographics. Participants indicated their age, gender, and ethnicity. They were also asked what country they were born and raised in, what countries they have resided in and for how long, what country their parents were born and raised in, and whether or not they are fluent in English. (See Appendix 1 for specific questions.)

Analysis-Holism Scale. As a manipulation check, participants completed an 8-item, 7-point Likert scale of logical versus dialectical reasoning from Choi et al. (2007) analysis and holism scale. The alpha reliability of this measure is .69. (Choi et al., 2007; see Appendix 6 for specific questions.) To test whether the primes did not inadvertently prime other aspects of analytical and holistic thinking, the remaining items of the analysis
and holism scale were administered. The alpha reliability of the causality, change, and attention measures are .71, .58, and .56, respectively (Choi et al., 2007; see Appendix 7 for specific questions.) As a further manipulation check, measures of horizontal and vertical individualism and collectivism as well as independent and interdependent self-construal were administered to ensure related constructs were not inadvertently being primed.

**Independent and Interdependent Self-Construal.** To assess independent versus collectivistic interdependent self-construal, participants completed the Self-Construal Scale (SCS; Singelis, 1994). The measures of independent and interdependent self-construal were found to have reliabilities of .69 and .73, respectively (Singelis, 1994). (See Appendix 7 for specific questions).

**Horizontal Individualism and Vertical Collectivism.** Participants completed a 16-item, 9-point Likert scale measure of horizontal individualism and vertical collectivism by Singelis and his colleagues (1995). Like Singelis et al., this measure was presented to participants as “a new personality test.” The measures of horizontal individualism and vertical collectivism were found to have reliabilities of .67 and .68, respectively (Singelis et al., 1995). (See Appendix 2 for specific questions).

**Wise Emotion Regulation.** Participants will complete a 29 item, multiple choice test of emotion regulation ability that is part of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002). (See Appendix 3 for sample items.) To compute a score, credit was first assigned according to the percentage of respondents from the normative sample who endorsed a given multiple choice item among the five options, and second summing these values across the 29 items. More
concretely, if 80% of respondents endorsed option A among the choices A to E for Question 1, .80 was credited for Question 1 and then summed with the values credited to the responses for the remaining 28 questions. This subset of the MSCEIT was found to have a reliability of .64 (Mayer, Salovey, Caruso, & Sitarenios, 2003). As a further assessment of the ability to regulate emotion, the Situation Test of Emotion Management (STEM) was also administered (MacCann & Roberts, 2007). Similar to the MSCEIT, the STEM presents respondents with emotional situations and requires that respondents select the most appropriate response among five choices. Respondents’ answers are then scored against the proportion of experts who made a similar choice. MacCann and Roberts found that the STEM has a reliability of .74 with a student sample.

Results

Descriptive Statistics

The means, standard deviations, correlation coefficients, and reliabilities are shown within Table 2.

Manipulation Check

As expected, participants in the Conflict Reconciliation Exercise condition scored significantly higher ($M = 5.25, SD = .86$) in dialectical reasoning compared to those in the Conflict Resolution Exercise condition ($M = 4.96, SD = .94$), $t(159) = 2.06, p < .05$. At the same time, the primes did not lead to significant differences in other aspects of analytic and holistic thinking—specifically, attention to field versus parts ($M = 4.90$ vs. $4.69, SD = .94$ vs. .84, $t[159] = 1.50, p = .14$), attribution of causality to interaction versus disposition ($M = 5.33$ vs. $5.37, SD = .87$ vs. 1.08, $t[152.74] = -.22, p = .83$), and change as cyclical versus linear ($M = 4.71$ vs. $4.98, SD = .93$ vs. 1.00, $t[159] = -1.79, p = .08$).
Likewise, the prime did not lead to significant differences in other culture constructs, namely independent ($M = 4.90$ vs. $4.83$, $SD = .72$ vs. $.76$, $t[159] = .55$, $p = .58$) and interdependent ($M = 5.09$ vs. $5.08$, $SD = .76$ vs. $.72$, $t[158.20] = .08$, $p = .94$) self-construal, or horizontal individualism ($M = 5.38$ vs. $5.27$, $SD = .69$ vs. $.82$, $t[159] = .89$, $p = .38$) and vertical collectivism ($M = 4.83$ vs. $4.66$, $SD = .91$ vs. $.88$, $t[158.75] = 1.25$, $p = .21$).

Test of Hypothesis 4

The prime did not lead to a statistically significant difference in emotion regulation test scores as measured by the MSCEIT ($M = 9.81$ vs. $9.71$, $SD = 1.67$ vs. 2.14, $t[139.35] = .31$, $p = .76$) as well as the Situational Test of Emotion Management (STEM; $M = 15.30$ vs. $14.75$, $SD = 2.63$ vs. $3.42$, $t[131.45] = 1.07$, $p = .29$).

Focus on Bicultural Participants

I also re-tested Hypothesis 4 using a sample of bicultural East Asians (or East Asian-North American). As Hong, Morris, Chiu, and Benet-Martínez (2000) discussed, such individuals have internalized two cultures—East Asian and Western—and therefore may have more ready access to both East Asian and Western ways of thinking. I coded participants as bicultural East Asian according to the following criteria: (1) was born in East Asian country, (2) lived in North America since at least 12 years of age. These requirements were adapted from Hong, Morris, Chiu, and Martínez (2000), who required Chinese-American students to be born in China and having spent at least five years.
before university in America. It is reasoned that these respondents may be able to better access both dialectical and logical thinking because of their relation with East Asian and Western culture, respectively. Based on this set of criteria, 57 East Asian-North American individuals were identified, of which 31 were in the logical thinking condition and the remaining 26 in the dialectical thinking condition.

Among these East Asian-North American participants, the Conflict Reconciliation Exercise did not lead to significantly greater dialectical thinking \((M = 5.22 \text{ vs. } 5.06, SD = .74 \text{ vs. } .83, t[55] = .73, p = .47)\) nor other aspects of analytic-holistic thinking—that is, attention to field versus parts \((M = 4.91 \text{ vs. } 4.69, SD = .90 \text{ vs. } .84, t[55] = .94, p = .35)\), attribution of causality to interaction versus disposition \((M = 5.48 \text{ vs. } 5.38, SD = .72 \text{ vs. } 1.15, t[51.01] = .39, p = .70)\), and change as cyclical versus linear \((M = 4.63 \text{ vs. } 5.03, SD = .85 \text{ vs. } 1.04, t[55] = -.36, p = .13)\). Moreover, the primes did not lead to a statistically significant differences in emotion regulation test scores as measured by the MSCEIT \((M = 9.88 \text{ vs. } 9.86, SD = 1.89 \text{ vs. } 2.21, t[51] = -.05, p = .96)\) as well as the Situational Test of Emotion Management \((M = 14.55 \text{ vs. } 14.48, SD = 2.79 \text{ vs. } 3.73, t[47] = .07, p = .94)\). To test for the possibility that the effect of the prime might have faded, I tested whether there was a relation between the dialectical (vs. logical) thinking prime and answers to the first ten items of the STEM, but did not find a statistically significant difference \((M = 4.93 \text{ vs. } 5.37, SD = 1.33 \text{ vs. } 1.59, t[50] = -1.05, p = .30)\).

**Discussion**

The present study suggests that logical and dialectical reasoning can be primed among participants by having them recall an instance of conflict reconciliation versus conflict resolution, respectively. The dialectical and logical reasoning primes, however,
did not lead to meaningful differences in emotion regulation test scores. The most straightforward interpretation of this finding is that dialectical versus logical reasoning is not significantly related to emotion regulation test scores. In other words, dialectical reasoning is not an aspect of East Asian culture that contributes to their EI test scores. As a result, future research may seek to identify and prime other cultural variables (e.g., low vs. high power distance) to assess whether they lead to significant differences in tests of emotion regulation or other aspects of EI (such as emotion understanding).

Alternatively, however, the prime might have activated other processes that had opposing effects on emotion regulation scores. For instance, while recalling a time when a conflict was reconciled through finding a “middle-way” may lead participants to endorse more dialectical thinking, the prime may have also caused people to endorse a more pro-social orientation or desire to empathize with others. The former may have stimulated participants to think more deeply about the other person’s perspective and focus on areas of overlap/similarity (over difference) to arrive at a compromise or collaborative outcome. In doing so, the former exercise may have stimulated a relatively co-operative, win-win mindset; while the latter a relatively competitive, win-lose mindset. Some evidence for this interpretation is provided by the finding that the dialectical reasoning prime was related to significantly higher scores on a subset of emotion regulation (as measured by Part H of the MSCEIT); specifically, emotion regulation of others.

It is also possible that while the prime elicited aspects of thinking that are associated with East Asians, it simultaneously primed aspects of thinking associated with European-Americans, which may have had a counterbalancing effect on emotion
regulation test scores. Some evidence for this interpretation is provided by the finding that while the prime led to significantly greater dialectical (vs. logical) reasoning, the prime also led to greater linear (vs. circular) conception of change at the marginal significance level—the former of which is more common among East Asians; the latter of which is more common among European-North Americans. I also re-tested the hypothesis on the subset of participants who reported being East Asians-North American because they may have more ready access to both North American and East Asian ways of thinking.

In addition, the concept and measures of EI are relatively new, and therefore may lack the precision for capturing differences resulting from subtle manipulations of culture. For example, it is possible that knowledge structures influences unconscious and automatic emotion regulation processing, which is not captured by current tests of emotion regulation. I tested the possibility, however, that the influence of the prime faded and therefore by using only the first ten items of an emotion regulation test.

Future research may employ an alternative design to capture differences in what constitutes emotional intelligence by culture; or, more specifically, wise emotion regulation by logical versus dialectical reasoning. For example, the emotional intelligence measures used for Study 2 do not directly pertain to the wisdom of authentic and inauthentic emotion regulation. In effect, a possible direction for future research is priming logical versus dialectical reasoning using the primes developed for Study 2 (or alternative primes), and then asking participants to assess the wisdom of various authentic and inauthentic emotion regulation. It is speculated that those in the logical (vs. dialectical) reasoning condition may evaluate more favorably outer emotion displays that
are consistent with inner emotion. At the same time, those in the dialectical (vs. logical reasoning) condition may display less dissonance and discomfort with the co-existence of contradictory (inner and outer) emotion, and therefore may evaluate more favorably outer emotion displays that are inconsistent with inner emotion.

As a further study idea to assess whether cultural beliefs—particularly, dialectical versus logical reasoning—influences what constitutes wise emotion regulation, participants can be asked to evaluate various emotion displays (potentially in video-tape format) in the context of a situation such as an interview or negotiation. It is predicted that those who endorse dialectical reasoning will be more comfortable with and thereby evaluate more favorably contradictory emotion displays such as expressing a negative emotion, but qualifying it with a smile; as well as other ambivalent or neutral emotion displays. In contrast, those who engage in more logical reasoning may evaluate more favorably expressing a feeling as is as well as less ambiguous emotion displays, such as emotion amplification. More general limitations and directions for future research are outlined in the final chapter.

Summary

The purpose of this two-part empirical investigation was to illuminate the “black box” between Westerners and East Asians on the one hand and their significantly different EI test scores on the other. The investigation, which consisted of a measurement-of-mediation design followed by experimental-causal-chain design, was intended to lend novel and converging evidence for the theory-based argument that cultural values and beliefs help account for ethnic differences in emotional intelligence. Through Study 1, it was found that horizontal individualistic values may help account for
the higher EI scores of European-North Americans, but the precise source of the lower EI scores of East Asians remained elusive. Overall, a significant challenge of conducting research and advancing knowledge on the relation between culture and EI is the lack of conceptual clarity of these variables. As the state of knowledge on culture and EI advances—particularly their definition, measurement, and manipulation—the question of whether EI is universal or culturally-relative can be better resolved empirically. It is hoped that the current dissertation will provide insights and analyses that will contribute to future research on this topic.
CHAPTER 5: DISCUSSION

This dissertation provides some support for its central thesis that EI is culturally-relative. As suggested by the theoretical model, aspects of emotion perception, use, understanding, and regulation may be consistent across cultures. Indeed, there is greater than chance perception/recognition of emotion expressions not only within culture, but also between cultures. Furthermore, research suggests that people from all cultures understand emotions according to their valence and intensity and, all things being equal, people favour the use of positive over negative emotions to facilitate goals. It is perhaps not surprising then that there is also evidence to suggest that happiness is the most frequently amplified emotion, while anger is the most frequently suppressed emotion.

While researchers implicitly recognize areas of commonalities between cultures, this study sought to identify areas of divergence. For instance, North Americans tend to freely express or amplify emotions, while East Asians generally tend to remain neutral or suppress emotions. It was also theorized that horizontal individualists are more likely to attend to more overt emotional cues to perceive emotions (e.g., mouth & verbal expressions), whereas vertical collectivists are more likely to attend to more subtle cues (e.g., eyes & context). This may occur as North Americans are more likely to use high arousal emotions, while vertical collectivists are more likely to use low arousal emotions. Furthermore, North Americans understand emotions primarily in terms of valence and intensity, while East Asians also understand emotions in terms of interpersonal orientation. In addition to cultural values (i.e., horizontal individualism and vertical collectivism), it was theorized that knowledge structures (i.e., analytical and holistic thinking) may elucidate more proximal sources of East-West differences in EI.
Theoretical and Practical Implications

The current study has a number of important theoretical implications. It integrates two areas of research—culture and EI—that have received considerable attention in recent years, yet have advanced largely independently. The study suggests not only the existence of cross-cultural differences in EI, but also specific reasons for these differences. This suggests that EI cannot be fully or meaningfully understood without consideration of people’s cultural values and beliefs. The current study also has a number of important practical implications. For example, there have been discussions of using EI for selection purposes (cf. Christiansen, Janovics, & Siers, 2010; Wong & Law, 2002). This study, however, suggests that EI tests may lead to adverse impact. Relatedly, a number of EI training programs have been implemented in schools and businesses (cf. Fox, 2002; Mayer & Salovey, 1997; Slaski & Cartwright, 2003). The current research suggests that there may be no single “right” way of dealing with feelings, and therefore EI training programs may thus undermine and even conflict with individuals’ cultural values and beliefs. Consequently, it is advised that managers consider suspending the use of EI tests for selection purposes, and that teachers and trainers discuss EI’s potential cultural-relativity with students and trainees if using for developmental purposes.

Limitations and Future Directions

To my mind, the most significant barrier to empirical research on the potential cultural-relativity of EI is the “fuzziness” or lack of conceptual clarity of both culture and EI. While people may have an intuitive sense of these constructs (as well as their interaction), their operationalizations remain elusive. To ground this initial exploration on the relation between culture and EI, I chose some of the most widely-cited
operationalizations of culture (e.g., Triandis, 1995; Nisbett et al., 2001) and EI (e.g., Mayer & Salovey, 1993), though they are necessarily incomplete and imperfect.

This initial study provides some empirical support for the cultural-relativity of EI, however, the question may be more fully resolved empirically with advancements in the operationalization as well as measurement of culture and EI. For example, a current limitation of EI measurement is that it only assesses conscious and deliberate versus unconscious and automatic emotion processing, as well as what people think and not what people actually do. Current pencil-and-paper and computer-based tests of EI may not capture what is actually done under emotion provoking situations; nor does it capture behavior during interactions with members of different cultures or cultural contexts. In effect, it may be fruitful to test whether differences in emotion behavior occur when say bicultural East Asians interact with East Asians versus European-North Americans. Persistent and systematic differences may suggest that there are different emotional norms regarding emotion regulation, for example, shared by members of specific social groups.

A further limitation of this research is the fact that it was conducted in a North American (education) context, with all instruction in English. This may have had the effect of restricting potential variation (Ji, Zhang, and Nisbett, 2004; Oyserman & Lee, 2008; Schaffer & Riordan, 2005). As discussed above, language may prime different ways of thinking—for example, the Korean language reflects vertical collectivistic cultural values. To obtain a wider range of psychological differences, future research may use EI measures translated in people’s native language and examine people residing in not only North American countries, but also East Asian countries.
A further limitation of the current study is that while it provides some evidence on whether EI is culturally relative, it provides little empirical evidence on how and why. To provide further support of EI’s cultural relativity as well as more insights on how and why, a further idea is having a group of East Asians and European-North Americans independently develop EI test items (e.g., emotional situations and correct responses), and testing whether East Asians will score higher on a set of EI test items developed by other East Asians versus by European-Americans and vice-versa. This would help with identifying etic (similar) and emic (different) aspects of EI across cultures, and provide confirming or disconfirming evidence for the theoretical model. In addition, scholars may seek to obtain cultural insiders’ perspectives (e.g., via interviews and focus groups) (Farh, Cannella, & Lee, 2006), as well as conduct validation studies to examine how EI tests are related to and predict relevant outcomes.

It should also be acknowledged that there are many distinct cultures within both North America (e.g., Canadian vs. American) and East Asia (e.g., China vs. Japan vs. Korea). That said, European North Americans and East Asians may differ in unique and specific ways, such as their values and beliefs, stemming in part from their rich and sophisticated religious and philosophical history. In spite of important differences, there are similarities between North Americans and East Asians. For instance, they are both relatively masculine cultures in more economically developed parts of the world, and these characteristics may serve as boundary conditions. It may therefore be interesting to examine EI abilities in more simple, less sophisticated cultures. Future research may also be broadened to include areas of the world (such as African and Latin American
countries) that differ in other important ways (e.g., uncertainty avoidance, masculinity vs. femininity).

Finally, a general limitation of the current study is the fact that it is based on a Western paradigm of thinking about emotion. Therefore, it is important for future research to look beyond the specific similarities and differences within the purported four branches of EI. The notion that the concepts of emotion and intelligence may be complementary, rather than antithetical, was considered a novel and controversial idea among many North Americans. But it is possible that East Asians, who tend to engage in more holistic versus analytic thinking, may consider the notion of EI as obvious because consideration of feelings (particularly those of others) is deeply embedded in East Asian teachings. It is also possible that the theory of EI may be overly grounded in the subjectivity of the self versus the self-other relationship and the inner world of the individual versus the outer world of social relations and situations. By considering these potential boundary conditions of EI, and engaging in dialogue and research with people from different parts of the world, we can expand the breadth and depth of the conceptualization of EI to bring nature and theory into closer agreement.
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Figure 1

Theoretical Model of the Culturally-Mediated Relation between Ethnicity and EI

European-North American

Western Cultural Values & Beliefs

East Asian

Eastern Cultural Values & Beliefs

European-North American Conception of Emotional Intelligence

East Asian Conception of Emotional Intelligence
Figure 2

East Meets West: The Relation between Cultural Values and EI

<table>
<thead>
<tr>
<th></th>
<th>European-North American</th>
<th>Potentially Universal</th>
<th>East Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Regulation of Emotion</td>
<td>• HI tend to freely express and amplify emotion</td>
<td>• People tend to amplify happiness and suppress anger</td>
<td>• VC tend to moderate and suppress emotion</td>
</tr>
<tr>
<td>II. Perception of Emotion</td>
<td>• HI tend to attend to overt emotional cues (e.g., mouth) to perceive emotion</td>
<td>• People tend to recognize emotion within and between societies</td>
<td>• VC tend to rely on subtle emotional cues (e.g., eyes &amp; context) to perceive emotion</td>
</tr>
<tr>
<td>III. Understanding of Emotion</td>
<td>• HI tend to understand emotion in terms of valence and arousal</td>
<td>• People tend to understand emotion in terms of valence and arousal</td>
<td>• VC tend to also understand emotion in terms of interpersonal orientation</td>
</tr>
<tr>
<td>IV. Use of Emotion</td>
<td>• HI tend to use high arousal emotion</td>
<td>• People tend to favour the use of positive over negative emotion</td>
<td>• VC tend to use low arousal emotion</td>
</tr>
</tbody>
</table>
Figure 3

East Meets West: The Relation between Cultural Beliefs and EI

<table>
<thead>
<tr>
<th>Wise Emotion Regulation</th>
<th>European-North American</th>
<th>East Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Situation Selection</td>
<td>Select situations that will elicit positive personal outcomes and strong positive emotions.</td>
<td>Select situations that will prevent negative social outcomes and elicit moderate positive emotions.</td>
</tr>
<tr>
<td>II. Situation Modification</td>
<td>Play a more active role in situation selection.</td>
<td>Play a more passive role.</td>
</tr>
<tr>
<td>III. Attentional Deployment</td>
<td>Pay attention to the focal object; more focused emotional reaction.</td>
<td>Pay attention to the interaction between the focal object and the field; more diffused emotional reaction.</td>
</tr>
<tr>
<td>IV. Cognitive Change</td>
<td>Attribute causality to people and therefore stronger and more focused emotion. More likely to be surprised and therefore have stronger emotional reactions.</td>
<td>Attribute causality to the situation and therefore dispersed emotional reaction. Less likely to feel surprised.</td>
</tr>
<tr>
<td>V. Emotion Modulation</td>
<td>Express emotion as is.</td>
<td>Suppress emotions as.</td>
</tr>
</tbody>
</table>
Figure 4
Empirical Model of the Culturally Mediated Relation between Ethnicity and
North American Conception and Measure of EI
<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>Mean</th>
<th>$SD$</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethnicity (0=European-North American; 1=East Asian)</td>
<td>157</td>
<td>.14</td>
<td>.35</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Age</td>
<td>157</td>
<td>20.59</td>
<td>2.25</td>
<td>.05</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sex (0=Male; 1=Female)</td>
<td>152</td>
<td>.50</td>
<td>.50</td>
<td>.13</td>
<td>.03</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4. Horizontal individualism</td>
<td>137</td>
<td>3.25</td>
<td>1.06</td>
<td>-.23**</td>
<td>-.07</td>
<td>-.20*</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Vertical collectivism</td>
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<td>3.00</td>
<td>1.07</td>
<td>.24**</td>
<td>-.07</td>
<td>-.07</td>
<td>-.05</td>
<td>.70</td>
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<tr>
<td>6. Perception of emotion</td>
<td>155</td>
<td>93.38</td>
<td>15.06</td>
<td>-.03</td>
<td>-.19*</td>
<td>.11</td>
<td>.00</td>
<td>.00</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Use of emotion</td>
<td>155</td>
<td>92.56</td>
<td>16.71</td>
<td>-.20*</td>
<td>-.08</td>
<td>.18*</td>
<td>.15</td>
<td>-.05</td>
<td>.48**</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Understanding of emotion</td>
<td>155</td>
<td>87.55</td>
<td>12.61</td>
<td>-.40**</td>
<td>-.25**</td>
<td>.06</td>
<td>.31**</td>
<td>-.21*</td>
<td>.25**</td>
<td>.47**</td>
<td>.67</td>
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<td></td>
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<tr>
<td>9. Regulation of emotion</td>
<td>155</td>
<td>86.60</td>
<td>12.69</td>
<td>-.28**</td>
<td>-.14</td>
<td>-.01</td>
<td>.32**</td>
<td>-.15</td>
<td>.21**</td>
<td>.38**</td>
<td>.49**</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>10. Overall emotional intelligence</td>
<td>155</td>
<td>85.11</td>
<td>14.10</td>
<td>-.28**</td>
<td>-.25**</td>
<td>.13</td>
<td>.22**</td>
<td>-.13</td>
<td>.74**</td>
<td>.77**</td>
<td>.74**</td>
<td>.64**</td>
<td>.89</td>
</tr>
</tbody>
</table>

* $p < .05$. ** $p < .01$. 
Table 2
Means, Standard Deviations, Reliabilities, and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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<th>7</th>
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<th>9</th>
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<tbody>
<tr>
<td>1. Condition (0=Logical Thinking; 1=Dialectical Thinking)</td>
<td>161</td>
<td>.50</td>
<td>.50</td>
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<td>2. Age</td>
<td>157</td>
<td>21.26</td>
<td>2.16</td>
<td>.09</td>
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<td></td>
<td></td>
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<tr>
<td>3. Sex (0=Male; 1=Female)</td>
<td>157</td>
<td>.63</td>
<td>.49</td>
<td>-.04</td>
<td>.08</td>
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<tr>
<td>4. Contradiction</td>
<td>161</td>
<td>5.09</td>
<td>.93</td>
<td>.16*</td>
<td>.01</td>
<td>.05</td>
<td>.65</td>
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<td>5. Causality</td>
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<td>5.33</td>
<td>1.00</td>
<td>-.02</td>
<td>.06</td>
<td>.11</td>
<td>.20</td>
<td>.84</td>
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<td>6. Change</td>
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<td>4.84</td>
<td>.99</td>
<td>-.14</td>
<td>-.04</td>
<td>-.04</td>
<td>.00</td>
<td>.12</td>
<td>.77</td>
<td></td>
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<td>7. Attention</td>
<td>161</td>
<td>4.78</td>
<td>.90</td>
<td>.12</td>
<td>.05</td>
<td>.11</td>
<td>.22*</td>
<td>.09</td>
<td>-.21**</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Emotion Regulation (subset of MSCEIT)</td>
<td>147</td>
<td>9.78</td>
<td>1.92</td>
<td>.03</td>
<td>-.13</td>
<td>-.01</td>
<td>.18*</td>
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<tr>
<td>9. Situational Test of Emotion Management (STEM)</td>
<td>143</td>
<td>15.07</td>
<td>3.07</td>
<td>.09</td>
<td>-.05</td>
<td>.00</td>
<td>.02</td>
<td>.08</td>
<td>.16*</td>
<td>-.03</td>
<td>.43**</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>10. STEM; first 10 items only</td>
<td>152</td>
<td>5.26</td>
<td>1.35</td>
<td>.01</td>
<td>-.08</td>
<td>.04</td>
<td>.09</td>
<td>.14</td>
<td>.16</td>
<td>-.07</td>
<td>.39**</td>
<td>.79**</td>
<td>.42</td>
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</tbody>
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* p < .05. ** p < .01.
Appendix 1

Demographic Questions

The next questions ask for demographic information. The reason why we are asking these questions is because we will discuss gender and cross-cultural differences in behaviour in organizations during class. We will use the aggregate data to demonstrate key points in class, but we will NOT present any single person's information.

Please indicate your gender:

☐ Female
☐ Male

Please indicate how old you are:

[ ]

What is your ethnic background? Please indicate as many ethnic group(s) as applicable (e.g., Canadian, Korean, etc).

[ ]

Overall, which ethnic group do you most strongly identify with?

[ ]

Please indicate the broad ethnic group(s) that best describe(s) you (click more than one if applicable):

☐ 1. Caucasian
☐ 2. East Asian
☐ 3. Southeast Asian
☐ 4. West Indian
☐ 5. Middle Eastern

☐ 6. Black

☐ 7. Hispanic

Other (please specify):

What is your native language (i.e., the language that you first learned at home in childhood)?

What language are you most fluent in?

What language do you use most often?

Are you fluent in English?

☐ Yes

☐ No

What is your country of birth?

In chronological order, what countries have you lived in and how long did you live in each of them? For example:

1. Korea (12 years)

2. Canada (10 years)
3. 

4. 

5. 

6. 

7. 

8. 

9. 

10. 

What is the country of birth of your mother?

What is the country of birth of your father?

What is the country (or countries) of birth of your maternal grandparents?

What is the country (or countries) of birth of your paternal grandparents?
Appendix 2

Horizontal and Vertical Individualism and Collectivism

On 9-point Likert scale where 1 = definitely no to 9 = definitely yes:

1. It is important for me that I do my job better than others
2. I feel good when I cooperate with others
3. If a co-worker gets a prize, I would feel proud
4. I prefer to be direct and forthright when discussing with people
5. I often do “my own thing”
6. Children should feel honored if their parents receive a distinguished award
7. When I succeed, it is usually because of my abilities
8. I am a unique individual
9. Without competition, it is impossible to have a good society
10. I enjoy working in situations involving competition with others
11. To me, pleasure is spending time with others
12. I enjoy being unique and different from others in many ways
13. It is important to maintain harmony within my group
14. I like my privacy
15. When another person does better than I do, I get tense and aroused
16. The well-being of my co-workers is important to me
17. Children should be taught to place duty before pleasure
18. I would sacrifice an activity that I enjoy very much if my family did not approve of it
19. I like sharing little things with my neighbors
20. Before taking a major trip, I consult with most members of my family and many friends
21. My happiness depends very much on the happiness of those around me
22. It annoys me when other people perform better than I do
23. One should live one's life independently of others
24. We should keep our aging parents with us at home
25. What happens to me is my own doing
26. Some people emphasize winning; I am not one of them
27. If a relative were in financial difficulty, I would help within my means
28. Winning is everything
29. Competition is the law of nature
30. I hate to disagree with others in my group
31. I usually sacrifice my self-interest for the benefit of my group
32. I would do what would please my family, even if I detested that activity
Appendix 3

Mayer-Salovey-Caruso Emotional Intelligence Test

(MSCET; Mayer, Salovey, Caruso, 2002)

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<tr>
<th>EI Dimension</th>
<th>Sample Item</th>
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<tbody>
<tr>
<td>Regulation of Emotion</td>
<td>Debbie just came back from vacation. She was feeling peaceful and content. How well would each action preserve her mood?</td>
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<td></td>
<td>Action 1: She started to make a list of things at home that she needed to do.</td>
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<td></td>
<td>Very Ineffective...1.....2.....3.....4.....5..Very Effective</td>
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<td></td>
<td>Action 2: She began thinking about where and when she would go on her next vacation.</td>
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<td></td>
<td>Very Ineffective...1.....2.....3.....4.....5..Very Effective</td>
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<td></td>
<td>Action 3: She decided it was best to ignore the feeling since it wouldn't last anyway.</td>
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<tr>
<td></td>
<td>Very Ineffective...1.....2.....3.....4.....5..Very Effective</td>
</tr>
<tr>
<td>Perception of Emotion</td>
<td>Indicate how much of each emotion is expressed by this face:</td>
</tr>
<tr>
<td></td>
<td>None 1 2 3 4 5 Very Much</td>
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<tr>
<td></td>
<td>Happiness</td>
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<td>Anger</td>
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<td>Fear</td>
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<td></td>
<td>Excitement</td>
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<td></td>
<td>Surprise</td>
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<tr>
<td>Understanding of Emotion</td>
<td>Tom felt anxious, and became a bit stressed when he thought about all the work he needed to do. When his supervisor brought him an additional project, he felt ____. (Select the best choice.)</td>
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<tr>
<td></td>
<td>a) Overwhelmed</td>
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<td>b) Depressed</td>
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<td>c) Ashamed</td>
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<td></td>
<td>d) Self Conscious</td>
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<tr>
<td></td>
<td>e) Jittery</td>
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<tr>
<td>Use of Emotion</td>
<td>What mood(s) might be helpful to feel when meeting in-laws for the very first time?</td>
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<tr>
<td></td>
<td>Not Useful 1 2 3 4 5 Useful</td>
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<td></td>
<td>a) Slight Tension 1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>b) Surprise 1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>c) Joy 1 2 3 4 5</td>
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Appendix 4

Conflict Resolution Exercise

Please think of a time when you got into a serious argument with someone and there was *clearly a right answer*. We would like you to recall both your perspective and the perspective of the other person.

Now, please describe the argument. Specifically, describe:

1. All of the facts and possible perspectives, including the opposing perspective.
2. How you thought through all of the perspectives to arrive at a resolution that *favored EITHER your perspective OR the perspective of the other person.*
Appendix 5

Conflict Reconciliation Exercise

Please think of a time when you got into a serious argument with someone and there was no clear right answer. We would like you to recall both your perspective and the perspective of the other person.

Now, please describe the argument. Specifically, describe:
1. All of the facts and possible perspectives, including the opposing perspective.
2. How you thought through all of the perspectives to arrive at a solution that reconciled BOTH your perspective AND the perspective of the other person.
Appendix 6

Dialectical and Logical Reasoning (Subset of Analytical and Holistic Thinking Scale)

Using the following scale, please indicate (by circling the appropriate number) the extent to which you agree or disagree with each of the following statements:

1. It is more desirable to take the middle ground than go to extremes.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   | Strongly disagree | Neither agree nor disagree | Strongly agree

2. When disagreement exists among people, they should search for ways to compromise and embrace everyone’s opinions.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   | Strongly disagree | Neither agree nor disagree | Strongly agree

3. It is more important to find a point of compromise than to debate who is right/wrong, when one’s opinions conflict with other’s opinions.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   | Strongly disagree | Neither agree nor disagree | Strongly agree

4. It is desirable to be in harmony, rather than in discord, with others of different opinions than one’s own.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   | Strongly disagree | Neither agree nor disagree | Strongly agree

5. Choosing a middle ground in an argument should be avoided.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   | Strongly disagree | Neither agree nor disagree | Strongly agree

6. We should avoid going to extremes.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   | Strongly disagree | Neither agree nor disagree | Strongly agree
Appendix 7

Remaining Items of Analytical and Holistic Thinking

Using the following scale, please indicate (by circling the appropriate number) the extent to which you agree or disagree with each of the following statements:

1. **Everything in the universe is somehow related to each other.**

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2. **Nothing is unrelated.**

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3. **Everything in the world is intertwined in a causal relationship**

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4. **Even a small change in any element of the universe can lead to significant alterations in other elements.**

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5. **Any phenomenon has numerous number of causes, although some of the causes are unknown.**

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6. **Any phenomenon entails a numerous number of consequences, although some of them may not be known.**

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7. Every phenomenon in the world moves in predictable directions.

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8. A person who is currently living a successful life will continue to stay successful.

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9. An individual who is currently honest will stay honest in the future.

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10. If an event is moving toward a certain direction, it will continue to move in that direction.

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11. Current situations can change at any time.

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12. Future events are predictable based on present situations.

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13. The whole, rather than its parts, should be considered in order to understand a phenomenon.

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14. It is more important to pay attention to the whole than its parts.

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</table>
15. The whole is greater than the sum of its parts.

1 2 3 4 5 6 7
Strongly disagree Neither agree nor disagree Strongly agree

16. It is more important to pay attention to the whole context rather than the details.

1 2 3 4 5 6 7
Strongly disagree Neither agree nor disagree Strongly agree

17. It is not possible to understand the parts without considering the whole picture.

1 2 3 4 5 6 7
Strongly disagree Neither agree nor disagree Strongly agree

18. We should consider the situation a person is faced with, as well as his/her personality, in order to understand one’s behaviour.

1 2 3 4 5 6 7
Strongly disagree Neither agree nor disagree Strongly agree
Appendix 8

Independent Interdependent Self-Construal Scale (Singelis et al., 1994)

On 7-point Likert scale where 1 = strongly disagree to 9 = strongly agree:

Interdependent items
1. I have respect for the authority figures with whom I interact
2. It is important for me to maintain harmony within my group
3. My happiness depends on the happiness of those around me
4. I would offer my seat in a bus to my professor
5. I respect people who are modest about themselves
6. I will sacrifice my self-interest for the benefit of the group I am in
7. I often have the feeling that my relationships with others are more important than my own accomplishments
8. I should take into consideration my parents’ advice when making education/career plans
9. It is important to me to respect decisions made by the group
10. I will stay in a group if they need me, even when I’m not happy with the group
11. If my brother or sister fails, I feel responsible
12. Even when I strongly disagree with group members, I avoid an argument

Independent items
13. I’d rather say “No” directly, than risk being misunderstood
14. Speaking up during a class is not a problem for me
15. Having a lively imagination is important to me
16. I am comfortable with being singled out for praise or rewards
17. I am the same person at home that I am at school
18. Being able to take care of myself is a primary concern for me
19. I act the same way no matter who I am with
20. I feel comfortable using someone’s first name soon after I meet them, even when they are much older than I am
21. I prefer to be direct and forthright when dealing with people I’ve just met
22. I enjoy being unique and different from others in many respects
23. My personal identity independent of others, is very important to me
24. I value being in good health above everything