Investigating the Validity of the Integrated Measure of Intercultural Sensitivity:

Predicting Success in a Multicultural Workplace

By

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Abstract

In response to previous unsuccessful attempts to produce a valid measure of intercultural sensitivity, Weiss (2012) created the Integrated Measure of Intercultural Sensitivity (IMIS). The aim of the current thesis was to examine the validity of an English version of the IMIS. After back-translation of the scale, two studies were conducted. Study 1 tested the construct validity of the IMIS amongst a population of native English speakers. Study 2 investigated the predictive and incremental validity of the IMIS subscales in regard to outcomes relating to success in a multicultural workplace. The results of these two studies reveal that only one subscale is a valid predictor of such outcomes; this subscale did not predict additional variance when compared to existing predictive measures such as the Multicultural Personality Questionnaire and the Cultural Intelligence Scale. The results of these two studies indicate that the IMIS is not a valid measure of intercultural sensitivity; however the potential for a valid measure intercultural sensitivity is emphasized.

Keywords: Intercultural Sensitivity, Predicting Success, Multicultural Workplace

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Chapter 1: Introduction

The effect of increased globalization means that people from different cultures are coming into more frequent and prolonged contact with each other. Interactions between cultures are complex, because members of each culture hold different cultural worldviews, "the set[s] of distinctions that is appropriate to a particular culture" (Hammer, Bennett, & Wiseman, 2003, p. 423). It is helpful to conceptualize a cultural worldview as a *lens* that dictates how the wearer interprets his or her surroundings. The lens begins to develop from the first moment of socialization in a person's life and continues to develop and evolve as one gets older.

Due to the implicit influence of this lens on our everyday experiences, people frequently are not aware of their own cultural lens. When people from different cultures interact, they will likely hold different worldviews and therefore interpret actions and situations in different ways. These cultural differences can lead to difficulties in communication and misunderstandings, which, in turn, lead to feelings of resentment towards people of other cultures (Aghazadeh, 2004). In a world where cross-cultural contact is becoming easier and more frequent, reducing these misunderstandings and difficulties and facilitating successful cross-cultural encounters is beneficial.

This thesis will outline the importance of intercultural sensitivity to being successful in a multicultural environment. A new model of intercultural sensitivity (the Integrated Model of Intercultural Sensitivity (Weiss, 2012)) will be presented and discussed in relation to existing models and measures. Two studies were conducted to evaluate the validity of a measure based off the Integrated Model (Study 1 to test construct validity, and Study 2 to test predictive and incremental validity). The results and their implications will be discussed.

Success in a Multicultural Environment

Put simply, success in a multicultural environment means being able to complete day to day activities (such as going to work, attending school, and interacting with members of other cultures) effectively and without experiencing emotional disturbances. Although the processes involved in negotiating intercultural encounters may be complex, being successful in multicultural situations involves two main components, feeling well and doing well (Searle & Ward, 1990). Feeling well is defined by Berry (1997) as being a "set of internal psychological outcomes including a sense of personal and cultural identity, good mental health, and the achievement of personal satisfaction" (p. 14). In other words, feeling well refers to the affective aspects of success, usually measured using positive and negative indicators of psychological wellness (such as depression and satisfaction with life).

Doing well refers to the behavioural indicators of success in a multicultural environment. This includes using specific cultural knowledge and skills to effectively interact with members of other cultures. A large portion of intercultural literature focuses on this concept of "doing well", also referred to as intercultural competence (Sinicrope, Norris & Watanabe, 2007)

Intercultural Competence

Hammer et al. (2003) define intercultural competence as "the ability to act and think in culturally appropriate ways" (p. 422). This definition has its advantages (it is easy to visualize and simple to understand), however it is possible to have the "ability" for such interactions yet not demonstrate that ability (Ruben, 1976). Thus, a more suitable definition for intercultural competence may be "the *demonstrated* ability to act and think in culturally appropriate ways". Adding the term "demonstrated" clarifies the behavioral nature of intercultural competence. Chiu, Lonner, Matsumoto, and Ward (2013) have discussed

intercultural competence as a behavioural manifestation located "outside of the individual". That is, intercultural competence is evident in the observable behaviour of an individual.

While intercultural competence is largely behaviourally focused, Deardorff (2006) argues that in order for knowledge and skills to be used effectively, they must be preceded by the correct attitudes. In a study polling intercultural scholars, Deardorff found the top rated definition of intercultural competence to be "the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills, and *attitudes* "(Deardorff, 2004 as cited in Deardorff, 2006). Other researchers have emphasized the importance of attitudes as a necessary antecedent for intercultural competence (Bennett, 1986; Bhawuk & Brislin, 1992; Dusi, Messetti, & Steinbach, 2014; Fantini, 2000; Gertsen, 1990; Hannigan, 1990).

Intercultural Sensitivity: The Key to Success in a Multicultural Environment

Intercultural sensitivty has been proposed as the "mind-set" that precedes intercultural competence (Chen & Starosta, 2000; Weiss, 2012). While intercultural competence is conceptualized as being outside of the individual, intercultural sensitivity is located inside of the individual. Intercultural sensitivity cannot be directly experienced by others, but sets the foundations for effective intercultural interactions (Hammer et al., 2003; Matveev & Milter, 2004; Weiss, 2012).

Hammer et al. (2003) argue that intercultural sensitivity is associated with "greater potential for exercising intercultural competence" (p.422). In other words, intercultural sensitivity sets the scene for an individual to behave in a more interculturally competent way. In accordance with this line of thought, increased levels of intercultural sensitivity have been found to lead to greater success in multicultural environments (Hammer et al., 2003; Weiss, 2012) including cross-cultural service encounters (Sizoo, Iskat, Plank, & Serrie, 2004; Sizoo, Plank, Iskat, & Serrie, 2005;), international study (Anderson, Lawton, Rexeisen, & Hubbard,

2006), overseas assignments (Graf & Harland, 2005), and multicultural workplace teams (Metveev & Miller, 2004).

Conceptualizing Intercultural Sensitivity

A clear definition of intercultural sensitivity appears to be missing. A new conceptualization of intercultural sensitivity seems to evolve with each new model or measure of intercultural sensitivity. The lines between intercultural sensitivity and other related constructs such as intercultural communication are unclear. It is important to keep these constructs separate, as intercultural sensitivity is an antecedent to effective intercultural behaviors such as intercultural communication (Oetzel, 2009).

In an attempt to further clarify the topic, Weiss (2012) conceptualizes intercultural sensitivity as a social attitude or "sets of beliefs which express individuals' chronically salient motivational goals" (p. 7). In addition, she proposes intercultural sensitivity to be at an "intermediate level of personality", that is, less stable than personality traits. This clarification is important, as classing intercultural sensitivity as an attitude implies that it is more easily influences (or trained) than other constructs such as personality and intelligence.

The literature suggests two components to intercultural sensitivity, an awareness and an evaluation of cultural differences. There are those who define intercultural sensitivity as an awareness of cultural differences. Hammer et al.'s (2003) definition of intercultural sensitivity as "the ability to discriminate and experience relevant cultural differences" (p.422) falls into this category, as does Kealey (1996, as cited in Weiss, 2012) who defines intercultural sensitivity as "the important ability to recognize differences and similarities between cultures and to understand how social and cultural realities affect professional attitudes and practices of individuals." In contrast, there are others who define intercultural sensitivity as an *evaluation* of cultural differences. For example, Chen and Starosta (1996) define intercultural sensitivity as a desire to accept and appreciate cultural differences. Each

of these two schools of thought has its merits; yet, both seem to lack theoretical support and coherence. Models combining both an awareness and an evaluation of cultural differences may provide a more encompassing view of intercultural sensitivity (Hammer et al., 2003; Weiss, 2012).

Two such models have been proposed – Bennett's (1986) Developmental Model, and Weiss's (2012) Integrated Model. Bennett's (1986) Developmental Model of Intercultural Sensitivity (DMIS) outlines the development of intercultural sensitivity in an individual, with six stages – denial, defence, minimization, acceptance, adaptation, and integration. The stages represent the movement from ethnocentric (denial, defence, minimization) to ethnorelativistic (acceptance, adaptation, integration) thought. In the initial stage of denial, an individual has not come into contact with (and is therefore unaware of) cultural differences. As the individual moves through the stages of the model, their awareness of cultural differences increases and a positive evaluation of cultural differences forms, from the ethnocentric stages of defence (cultural differences are seen as negative) and minimization (cultural differences are trivialized) to the ethnorelativistic stages of acceptance (cultural differences are acknowledged and respected), adaptation (empathy for cultural differences), and integration (cultural differences are seen as part of the self).

Similar to the DMIS, Weiss's (2012) Integrated Model of Intercultural Sensitivity combines an awareness and an evaluation of cultural differences. The Integrated Model consists of four sub-dimensions, two reflecting an awareness of cultural differences (General Cultural Awareness and Self Cultural Awareness) and two reflecting an evaluation of cultural differences (Cultural Openness and Cultural Relativism). General Cultural Awareness (GCA) is defined as "the generalized acknowledgement of cultural diversity and its impacts" (Weiss, p.5). Going back to the analogy of culture as a lens, GCA refers to individuals' awareness of other peoples' lenses. Self Cultural Awareness (SCA) is defined as "the extent

to which individuals acknowledge their own culture's influence on their personality, thoughts, and behaviour" (Weiss, 2012, p.5). SCA measures the extent to which an individual acknowledges their own cultural lens. Cultural Openness (CO) is defined by Weiss (2012) as the extent to which an individual "engages and rejoices in cultural differences" (p.5). Cultural Relativism (CR) is "the extent to which individuals perceive different cultures as equally [legitimate] and withdraw from notions of cultural hierarchy" (p.5). In other words, CR refers to the idea that although cultural lenses might be different, none are better or worse compared to each other.

Although at first glance these two models seem markedly different, they can arguably be viewed as measuring the same concepts (an awareness and an evaluation of cultural differences). However while the DMIS describes the development and manifestation of intercultural sensitivity in an individual's attitudes and behaviours, the Integrated Model provides a more detailed view of the concept of intercultural sensitivity. Another advantage the Integrated Model proposed by Weiss (2012) holds over the DMIS is the removal of any behavioural characteristics that may blur the boundary between intercultural sensitivity and intercultural competence.

Measuring Intercultural Sensitivity

The Intercultural Sensitivity Inventory (developed by Bhawuk and Brislin (1992)) measures intercultural sensitivity in relation to the cultural dimensions of individualism and collectivism. This scale mainly focuses on comparing behaviours between highly individualistic and highly collectivistic cultures. Attempts to validate the Intercultural Sensitivity Inventory have however concluded that the dimension of individualism-collectivism is not appropriate for measuring the concept of intercultural sensitivity (Comadena, Kapoor, Konsky, & Blue, 1999; Kapoor & Comadena, 1996).

The Intercultural Development Inventory (IDI) developed by Hammer and Bennett (1998), was developed based on the Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1986). The IDI assesses the complexity of the individual's intercultural mindset, and evaluates the individual's stage of intercultural sensitivity development according to the DMIS. Measurement tools based on the DMIS can be problematic, as individuals go through stages at different rates, some skipping stages altogether.

Chen and Starosta (2000) developed the Intercultural Sensitivity Scale to measure intercultural sensitivity as the affective component of intercultural competence. The Intercultural Sensitivity Scale was found to be a valid measure in both English (Chen & Starosta, 2000) and German (Fritz, Mollenberg & Chen, 2001), however the scale contains behaviourally-focused items which can be argued to measure intercultural competence rather than intercultural sensitivity.

Attempts to produce a reliable and valid measurement tool for intercultural sensitivity have not been successful thus far. This may be due to poor conceptualization of what intercultural sensitivity exactly is, or due to poor operationalization. In any case, there is a pressing need for a psychometrically sound measure of intercultural sensitivity.

In an attempt to bring clarity and authority to the concept, the Integrated Measure of Intercultural Sensitivity (IMIS) based on Weiss's (2012) Integrated Model contains purely attitude-based measures (e.g. "For me cultural differences make living with other people interesting"). By eliminating the behavioural component that has marred previous measures, Weiss's scale provides a more focused measure of intercultural sensitivity.

This Thesis

The Integrated Model of Intercultural Sensitivity makes an important contribution to the literature on intercultural senitivity. Where previous models and measures include behavioural components, the Integrated Measure is purely attitude-based. This distinction is

important to maintain the clarity between intercultural sensitivity and related terms such as intercultural communication.

The Integrated Measure of Intercultural Sensitivity (IMIS) has been developed and validated in Germany by Weiss (2012) as a way to measure intercultural sensitivity according to the Integrated Model. As the IMIS has not yet been used outside of Germany, the aim of this thesis is to examine the validity of an English (translated) version of the IMIS. The following chapters will describe two studies investigating the construct (Chapter 2), predictive and incremental validity (Chapter 3) of an English version of the IMIS, and follow up with a general discussion of the topic.

Chapter 2: Construct Validity

Weiss's (2012) Integrated Model makes a significant contribution to the literature on intercultural sensitivity. In contrast to previous measures, the IMIS removes any behavioural aspect, and combines both an awareness and an evaluation of cultural differences to produce a clear, encompassing view of intercultural sensitivity. A scale based on this model may allow for intercultural sensitivity to be used for the prediction of outcomes relating to success in a multicultural environment.

Based on the Integrated Model of Intercultural Sensitivity, Weiss (2012) developed the Integrated Measure of Intercultural Sensitivity (IMIS). The IMIS consists of four subscales consistent with the model's four sub-dimensions: General Culture Awareness (GCA), Self Cultural Awareness (SCA), Cultural Openness (CO) and Cultural Relativism (CR). Each subscale consists of four items, with the exception of GCA which has six items.

Weiss (2012) conducted two pilot studies to select the items of the IMIS. Weiss's manuscript provides little detail about the scale development process, but does state that the pilot studies were conducted with young adults. After developing the scale, Weiss conducted three studies to investigate the reliability, validity and nomological network of the IMIS and its subscales. Each study examined the IMIS in relation to theoretically related measures such as the Schwartz values (Study 1 and Study 2), Social Dominance Orientation and Right-Wing Authoritarianism (Study 2), and the Big 5 personality traits (Study 3).

Participants for all three studies were students; however, study 1 participants were mostly Psychology majors from a single university, while study 2 and 3 participants were recruited from diverse subjects at a range of universities all over Germany. The average age of participants was 21.51 years, 22.84 years, and 22.49 years respectively. The samples consisted mainly of females (85.5%, 68.9%, and 79.9% respectively) (Weiss, 2012). Although it is good practice to test the validity of a scale in different populations, each set of

validation measures was administered to a different population (Study 1: Schwartz values, Study 2: Schwartz values, SDO and RWA, and Study 3: the Big 5 personality traits), thus the advantages of sampling from different populations were negated.   Study 1 of this thesis will attempt to establish the construct validity of the IMIS with a single population.

To investigate the factor structure of the IMIS, Weiss (2012) conducted a confirmatory factor analysis (CFA) on the IMIS data collected from Study 1. While Weiss theorizes the awareness and evaluation dimensions of the IMIS to be orthogonal, it can be argued that in order to evaluate differences, one must first be aware of such differences. Through this relationship, it is possible that the awareness and evaluation dimensions of the IMIS are correlated and form a comprehensive conceptualization and measurement of Intercultural sensitivity. Although limited information on the CFA is provided in Weiss's (2012) manuscript, she reports setting the correlations between awareness (GCA and SCA) and evaluation subscales (CO and CR) to 0. This unnecessarily constrains Weiss's investigation of the IMIS's factor structure.

Weiss (2012) found a four factor solution provided the best model fit compared to a one and a two factor solution. Correlations between subscales showed GCA and SCA to be significantly correlated with each other, as were CO and CR. Cronbach's alphas indicated an acceptable to good level of internal reliability for each of the subscales (Weiss, 2012).

To further investigate the construct validity of the IMIS, Weiss (2012) examined the convergent and discriminant validity of the four subscales. Relationships between the subscales and theoretically relevant constructs were analysed. The validation measures used in these studies were the Schwartz values, Social Dominance Orientation, Right-Wing Authoritarianism, and the Big 5.

Weiss (2012) used the Schwartz values (self-enhancement, self-transcendence, openness, and conservatism) to validate the IMIS due to the assumption that the subscales of

the IMIS would reflect similar inclinations to personal values.   Schwartz values were

measured by the German version of the Portrait Value Questionnaire (Schmidt et al., 2007, as

cited in Weiss, 2012). Weiss hypothesized Cultural Openness (CO) and Cultural Relativism

(CR) to be positively correlated to the Schwartz values of Self-Transcendence and Openness

to Change. She also expected Self Cultural Awareness (SCA) to be positively correlated to

the Schwartz value of Conservation, and General Cultural Awareness to be positively

correlated to Self-Enhancement. Results largely supported her hypotheses. However,

unexpectedly, GCA negatively correlated to Openness to Change, and SCA negatively

correlated to self-transcendence.

Social Dominance Orientation (SDO) was measured by the German version of the

Social Dominance Orientation Scale (von Collani, 2002, as cited in Weiss, 2012), which has

two subscales – egalitarianism (the belief in the equality of all people), and group dominance

(the extent to which one endorses the inequality of groups). Weiss selected these two

measures to validate the IMIS as both RWA and SDO reflect a preference for intergroup

hierarchy, a view which opposes those of the IMIS.   The egalitarianism subscale of SDO

was found to be positively correlated with both Cultural Openness (CO) and Cultural

Relativism (CR), and negatively correlated with General Cultural Awareness (GCA). The

group dominance subscale of the SDO measure was found to be negatively correlated to both

CO and CR, and positively correlated to GCA. These results supported the predictions made

by Weiss (2012). Neither dimension correlated to Self Cultural Awareness (SCA).   Right-

Wing Authoritarianism (RWA) was measured by the RWA[3]D Scale (Funke, 2005, as cited in

Weiss, 2012). RWA was negatively correlated to both CO and CR, results that also

supported predictions.

The last group of validation measures used by Weiss (2012) was the Big 5 personality

traits (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) (Lang,

Ludtke & Asendorpf, 2001, as cited in Weiss, 2012). It was hypothesized that CR would

show a positive relationship with both Agreeableness and Openness. CO was predicted to be

positively correlated to Openness and Extraversion, and GCA was predicted to be negatively

correlated to Agreeableness. No predictions were made for neuroticism or conscientiousness.

Results support the hypotheses for CO and GCA, however CR was not found to be

significantly correlated to any of the Big 5 traits.

Interestingly, the results of Weiss's (2012) study revealed that the CO and CR

subscales of the IMIS performed slightly better than the GCA and SCA subscales. The

relationships between CO and CR and related constructs supported Weiss's (2012)

hypotheses more often than either GCA or SCA.

In general, the results of Weiss's (2012) study provide evidence for the validity of the

German version of the IMIS.   Table 1 provides a summary of her results. This study hopes

to provide further evidence for the IMIS as a valid scale that can be used cross-culturally to

measure intercultural sensitivity.

Table 1.

Results of Convergent Validity Testing of the IMIS Subscales with Related Measures from Weiss's (2012) study

	Measures		
IMIS subscales	Big 5	Schwartz's values	RWA and SDO
GCA	**Agreeableness (-)**	**Self-enhancement (+)**	**SDO Egalitarianism (-)**
		Openness to change (-)	**SDO Group Dominance (+)**
SCA		Self-transcendence (-)	
		Conservation (+)	
CO	**Openness (+)**	**Self-transcendence (+)**	**SDO Egalitarianism (+)**
	Extraversion (+)	**Openness to change (+)**	**SDO Group Dominance (-)**
			RWA (-)
CR		**Self-transcendence (+)**	**SDO Egalitarianism (+)**
		Openness to change (+)	**SDO Group Dominance (-)**
			RWA (-)

Note. The hypothesised relationships are in bold.

This Study

The aim of this study is to validate an English version of the Integrated Measure of Intercultural Sensitivity (IMIS) and extend its nomological network. The IMIS was developed by Weiss (2012) in German and validated using samples of the young adult population. This study will build on the German effort by validating an English version of the IMIS using a sample of native English speakers.

After back-translation, a Confirmatory Factor Analysis (CFA) will be conducted to confirm the four factor structure of the IMIS found by Weiss (2012). Where Weiss set the correlations between subscales to 0, in this study, the correlations between subscales will be

allowed to vary freely. By not constraining the relationships between factors, a more

thorough evaluation of the factor structure of the IMIS will be examined.

Once the factor structure is tested, the relationships between the IMIS subscales and

relevant existing measures will be examined to determine convergent and discriminant

validity. The relevant validation measures to be used in this study are Cultural Essentialism,

the Motivational and Metacognitive subscales of Cultural Intelligence (CQ),

Openmindedness (as measured by the Multicultural Personality Questionnaire (MPQ)),

Social Dominance Orientation (SDO), and Right-Wing Authoritarianism (RWA). In a meta-

analysis, Wilson, Ward and Fischer (2013) found culturally focused measures to have

stronger relationships with sociocultural adaptation than broader personality traits did.

Compared to the measures used by Weiss (2012) in her original validation (Big 5 personality

traits, Schwartz values, SDO, and RWA), the measures to be used in the current study are

more culturally focused, and thus more appropriate to use in the validation of a culturally

focused scale such as the IMIS.

Criterion Measures

Cultural Essentialism.

Cultural Essentialism is defined as the degree to which an individual sees culture as

an essential and defining aspect of a person and their behaviour (Fischer, 2011). Similar to

the General Cultural Awareness (GCA) subscale of the IMIS, Cultural Essentialism measures

an individual's awareness of the permeating influence of culture on all aspects of daily life.

However, while the Cultural Essentialism Scale contains behavioural-based items (e.g. "If I

knew someone was from a different culture, I would mention this in describing them to

someone else"), the GCA subscale of the IMIS contains purely attitude-based items.

Theoretically, Cultural Essentialism and GCA are very much alike. However, the scales

operationalize this theory in quite different ways. Thus, scores on the Cultural Essentialism

Scale and the GCA subscale of the IMIS are expected to have a positive correlation of medium strength.

Cultural Essentalism also draws significant parallels with the Self Cultural Awareness (SCA) subscale of the IMIS. SCA measures the extent to which an individual recognizes the influence of their own culture on how he/she interprets the world. If a person holds very high Cultural Essentialist beliefs, the influence of culture on the self will be recognized as highly as the influence of culture on others. It is therefore hypothesized that SCA will also have a positive correlation of medium strength with Cultural Essentialism.

Cultural Intelligence.

The Metacognitive subscale of the Cultural Intelligence Scale (CQS) will be used to validate the GCA and SCA subscales of the IMIS. Metacognitive CQ refers to an individual's capacity to adjust their cultural knowledge to suit the person they are interacting with (Ang et al., 2007). In order to have this capacity, an individual must be aware of the permeating influence of cultural differences on everyday interactions. Specifically, an individual must be aware of the cultural knowledge they bring to an interaction, and adjust it accordingly. Metacognitive CQ is expected to correlate positively with both GCA and SCA; however the correlation with SCA is expected to be of medium strength, while the correlation with GCA is expected to be small.

The Motivational subscale of the CQS will be used to validate the Cultural Openness (CO) subscale of the IMIS. Motivational CQ is defined as "the capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences" (Ang et al., 2007, p. 338). Weiss (2012) defines CO as the extent to which an individual "[engages] and rejoices in cultural differences" (p. 5). Both of these subscales reflect an individual's desire to interact with members of other cultures, and a positive evaluation of cultural differences. Considering the similarities between these two scales, they

are expected to correlate (relatively highly) with each other.

Openmindedness.

The Openmindedness subscale of the Multicultural Personality Questionnaire (MPQ) is expected to correlate positively with the CO subscale of the IMIS. Openmindedness is defined by van Oudenhoven, Mol, and Van der Zee (2003) as "an open and unprejudiced attitude towards outgroup members and towards different cultural norms and values" (p.160-161). Although both Openmindedness and CO measure an individual's attitude towards interactions with other cultures, the items on the MPQ subscale are largely behaviourally based (e.g. "Seeks contact with people from a different background"), while the items on the IMIS subscale are purely attitude based. Because of this disparity, the correlation between the two subscales is expected to be of medium strength.

SDO and RWA.

To aid in validating the CO and Cultural Relativism (CR) subscales of the IMIS, relationships with Social Dominance Orientation (SDO) and Right-Wing Authoritarianism (RWA) will be examined. Both of these constructs were used to validate the original German version of the IMIS. SDO is defined by Pratto, Sidanius, Stallworth, and Malle (1994) as "the extent to which one desires that one's in-group dominate and be superior to outgroups" (p.742). Similarly, RWA reflects a preference for in-group favouritism, and strong prejudice against out-groups (Whitley, 1999).

While SDO and RWA both endorse ideas of hierarchy between different social groups, both the CO and CR subscales of the IMIS reflect a positive evaluation of cultural differences. Thus, moderately negative correlations are expected between these two subscales of the IMIS and measures of SDO and RWA.

Social Desirability.

One of the potential drawbacks to developing a self-report scale is the tendency for socially desirable responses. Socially desirable responding can conceal participants' true responses and cause a measurement tool to be invalid. A measure of social desirability will thus be included in the current study. None of the subscale scores of the IMIS are expected to be correlated with the measure of social desirability.

Hypotheses

For validation purposes, the following pattern of results is expected:

1.   The four factor structure of the IMIS will be replicated by the CFA.

2.   The Self Cultural Awareness subscale of the IMIS will have a moderate positive correlation with Cultural Essentialism and Metacognitive CQ.

3.   The General Cultural Awareness subscale of the IMIS will have a moderate positive relationship with Cultural Essentialism, as well as a small positive correlation with Metacognitive CQ.

4.   The Cultural Openness subscale of the IMIS will have a relatively strong positive correlation with Motivational CQ, as well a moderate positive correlation with the Openmindedness subscale of the MPQ. CO will also exhibit a moderate negative correlation with both Social Dominance Orientation and Right-Wing Authoritarianism.

5.   The Cultural Relativism subscale of the IMIS will have a moderate negative correlation with both Social Dominance Orientation and Right-Wing Authoritarianism.

6.   Social desirability will be unrelated to the IMIS subscales.

Method

Participants

Five hundred and thirty-five respondents participated in the research; however, 32 did not meet the inclusion criteria and were dropped from the study (2 were under the age of 16, and 30 did not speak English as their first language).   The remaining 503 participants (75% female) ranged in age from 16 to 75 (M=33.90 years, SD=16.28).

One hundred and seventy-five participants were recruited from Victoria University of Wellington's first year Psychology subject pool. These respondents received course credit in return for their participation. The other 326 participants volunteered their time to take part in the study and were recruited via the use of email snowballing and public online discussion forums such as Reddit (United States based) and TradeMe (New Zealand based).

The majority of participants (83%, N=420) resided in New Zealand, while the remaining 17% of participants were recruited from other countries (the United States being the second largest sample at 5%). 62% of participants indicated NZ/European ethnicity; however, a broad range of ethnicities (including European, Australian, Maori, Indian, and mixed ethnicity) were also reported.

Materials

As well as demographic information (age, gender, ethnicity, country of origin, current country of residence), the survey included the Integrated Measure of Intercultural Sensitivity (IMIS) and various other relevant scales, including measures of Cultural Essentialism, Motivational and Metacognitive Cultural Intelligence, Openmindedness, Social Dominance Orientation, Right-Wing Authoritarianism, and Social Desirability.

Intercultural Sensitivity.

The Integrated Measure of Intercultural Sensitivity (IMIS), originally developed in German by Weiss (2012), was used to measure intercultural sensitivity. The IMIS was translated from German into English by a bilingual academic colleague at Victoria University[1], and then sent back to the original author to be back translated. The English translation was examined for grammatical errors, and a final English version of the IMIS was produced.

The IMIS consists of 18 items (see Table 2 for items). Participants are asked to indicate their level of agreement with each of the 18 items. Each item is responded to on a 5-point Likert scale with 1 indicating "strongly disagree", 3 indicating "undecided" and 5 indicating "strongly agree." When scoring the IMIS, the average of a participant's responses is taken, with a higher score indicating a higher level of intercultural sensitivity.

Following Weiss's (2012) Integrated Model, the IMIS is comprised of four subscales: General Cultural Awareness (GCA), Self Cultural Awareness (SCA), Cultural Openness (CO), and Cultural Relativism (CR).

The General Cultural Awareness subscale of the IMIS measures the extent to which an individual is aware that the way a person views the world is a consequence of one's cultural background. The subscale consists of six items, such as "Cultural differences do not play an important role during daily interactions" (this item is reverse coded).

Self Cultural Awareness measures the extent to which an individual is aware of the impact his/her own culture has on the way he/she views the world. The SCA subscale has four items, an example of which is "The culture of my country of origin shapes a part of my identity."

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[1] Thanks to Claudia Recker for her help in translating the IMIS.

The Cultural Openness subscale of the IMIS measures the extent to which an individual engages and rejoices in cultural differences. CO is measured by four items, an example of which is "I am interested in foreign cultures and their customs and traditions."

The Cultural Relativism subscale of the IMIS measures the extent to which an individual recognizes that, even though cultures can be very different, they are all equally legitimate, and none is better than the others. This subscale consists of four items, including "When comparing cultures, some are better than others" (this item is reverse coded).

Table 2.
Items of the Integrated Measure of Intercultural Sensitivity and Their Relevant Subscales

	Item	Subscale
1	Cultural differences do not play an important role, considering that people are biologically basically the same. (r)	GCA
2	Cultural differences do not play an important role during daily interactions. (r)	GCA
3	There will be no difficulties during cultural encounters, as long as you know the customs and practices of other cultures. (r)	GCA
4	No matter what culture they belong to, all humans are the same, deep within themselves. (r)	GCA
5	If one has a good knowledge of the local language, one does not have problems getting along in a foreign culture. (r)	GCA
6	One should emphasize what people of different cultures have in common, rather than focusing on the differences. (r)	GCA
7	The culture of my country of origin shapes a part of my identity.	SCA
8	The way I act and think is influenced by the culture of my country of origin.	SCA
9	I do not have a strong link to my country of origin. (r)	SCA
10	The culture of my country of origin has strongly influenced the development of my personality.	SCA
11	I am interested in foreign cultures and their customs and traditions.	CO
12	I enjoy observing people from other cultures in order to develop an understanding of the meaning of their behaviors.	CO
13	I think it is exhausting to deal with the values and norms of a foreign culture. (r)	CO
14	For me cultural differences make living with other people interesting.	CO
15	Considering out values, customs, and traditions, one notices that we are way ahead of other cultures. (r)	CR
16	When comparing cultures, some are better than others. (r)	CR
17	Some cultures are superior to others. (r)	CR
18	When dealing with other cultures, it is important to be aware of one's own views and values in order not to forget what is right. (r)	CR

*from Weiss (2012)

Cultural Essentialism.

Cultural Essentialism was measured using the 15-item Cultural Essentialism Scale (CES) developed by Fischer (2011). The instructions given to participants were as follows:

"We have collected a sample of people's ideas about 'culture' (national or ethnic culture, as in Chinese culture). Sometimes, ideas about 'culture' can be quite abstract. We are interested in knowing what you think about the following ideas relating to culture."

Participants rated each item (e.g., "Culture helps determine differences in people's behaviour.") on a 7-point Likert scale (1=*not at all true*, 7=*completely true*). When scoring this scale, a higher score indicates a higher level of Cultural Essentialism. The CES has previously demonstrated good reliability with an average Cronbach's alpha of .71 (Fischer, 2011).

Motivational and Metacognitive CQ.

The Motivational and Metacognitive subscales of the CQS (Ang et al., 2007) were used to measure motivational and metacognitive CQ, respectively. The subscales consist of 5 items each and were responded to on a 7-point Likert scale (1=*strongly disagree*, 7=*strongly agree*). A higher score indicates a higher level of CQ. The instructions given to participants were as follows:

"Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you AS YOU REALLY ARE."

An example item from the Motivational subscale is "I enjoy interacting with people of different cultures", and an example item from the Metacognitive subscale is "I am conscious of the cultural knowledge I apply when interacting with people from different cultural backgrounds". The CQS has been used widely across cultures with the Motivational and

Metacognitive subscales presenting good Cronbach's alphas of .77 and .77 respectively, in

Ang et al.'s (2007) research.

Openmindedness.

Openmindedness was measured using the Openmindedness subscale of the

Multicultural Personality Questionnaire (MPQ 91-item version) as published by Van der Zee

and van Oudenhoven (2001). Participants were asked to indicate "to what extent the

following statements apply to [them]." The scale consists of 18 items (e.g., "Is intrigued by

differences"), answered on a 5-point Likert scale (1= *totally not applicable*, 5= *completely*

applicable). When scoring this scale, a higher score indicates a higher level of

Openmindedness.

Social Dominance Orientation (SDO).

SDO was measured using the 16-item Social Dominance Orientation Scale developed

by Pratto, et al. (1994). Participants were asked to rate how positive or negative they found

each item (e.g., "No one group should dominate in society"). Responses were recorded on a

7-point Likert scale with 1 indicating "very negative" and 7 indicating "very positive". A

higher score indicates a higher level of SDO. This 16-item scale is highly reliable with an

average Cronbach's alpha of .91 (Pratto et al., 1994).

Right-Wing Authoritarianism (RWA).

A 22-item scale (Altemeyer, 1981) was used to measure RWA. The items consisted

of statements such as "Everyone should have their own lifestyle, religious beliefs, and sexual

preferences, even if it makes them different from everyone else". The instructions given to

participants were as follows:

> "Please indicate your reaction to each statement according to the
>
> following scale. You may find that you sometimes have different
>
> reactions to different parts of a statement. For example, you might very

strongly disagree ("-4") with one idea in a statement, but slightly agree

("+1") with another idea in the same item. When this happens, please

combine your reactions, and write down how you feel on balance (a "-3"

in this case)."

Participants responded to the items on a 9-point Likert scale ranging from -4 (*very strongly*

disagree) to 4 (*very strongly agree*). When scoring the RWA scale, a higher score indicates a

higher level of Authoritarianism (items 1, 2, 4, 6, 8, 9, 11, 13, 15, 18, 20, and 21 are reverse

coded). The RWA scale has demonstrated a good Cronbach's alpha of .90 (Altemeyer,

1994).

        Social Desirability.

        A shortened version of the Marlowe-Crowne Social Desirability Scale developed by

Reynolds (1982) was used to measure social desirability. The scale consists of 13 items (e.g.,

"I am always willing to admit when I make a mistake"). Participants are asked to read each

statement and respond true or false as to whether the statement pertains to them personally.

This scale has demonstrated an acceptable level of internal consistency with a Kuder-

Ruchardson (formula 20) score of .76 (Reynolds, 1982).

<div align="center">

Results

</div>

        A preliminary analysis was conducted to examine the psychometric properties of the

criterion measures. This was followed by multiple confirmatory factor analyses to confirm

the factor structure of the IMIS, and correlations between the IMIS subscales and criterion

measures to determine the construct validity of the IMIS. Missing data were accounted for

using Maximum Likelihood Estimation.

Preliminary Analyses

The means, standard deviations and alphas of the criterion measures are reported in

Table 3. The measures showed an acceptable level of internal consistency with Cronbach's

alphas ranging from .69 to .93.

Table 3.
Psychometric Properties of the Measurement Scales for Study 1

Scale	*M**	*SD*	Alpha	Number of Items
Cultural Essentialism	4.48	.61	.69	15
Motivational CQ	3.70	.76	.84	5
Metacognitive CQ	5.08	1.22	.91	5
SDO	2.05	.95	.93	16
Openness	3.66	.53	.88	18
RWA	3.27	1.04	.88	22
Social Desirability	.50	.22	.70**	13

*Mean item scores
**Kuder-Richardson Formula 20

Confirmatory Factor Analyses (CFA)

Multiple CFAs were conducted using AMOS to test the factor structure of the IMIS

(Figure 1). Weiss (2012) tested the fit of a one and a two factor model and found that a four

factor model showed better levels of fit. The current study also tested a one factor, a two

factor, and a four factor model.

A wide variety of indices were used to evaluate the fit of a model, including Chi

square, CFI, TLI, NFI, and RMSEA. Generally, non-significant Chi square, CFI values of

above .90, TLI values close to .95, NFI values of .90, and RMSEA values of .06 or below

indicate an acceptable level of model fit (Albright & Park, 2009; Bentler & Bonett, 1980).

Consistent with the results of Weiss's (2012) study, neither a one (CFI=.37, TLI=.20,

NFI=.36, RMSEA=.16) nor a two (CFI=.63, TLI=.58, NFI=.59, RMSEA=.12) factor model

of the IMIS reached acceptable levels of fit. The four factor structure of the IMIS produced

fit indices that reached a near acceptable level. The Chi square value was significant (X^2(129,

N=503) = 310.77, $p \leq .001$) indicating a discrepancy between the hypothesized model and the

data; however due to the large sample size other indices are considered more appropriate

indicators of the model fit (Marsh & Balla, 1986). The fit indices showed a near acceptable

fit for the four factor model of the IMIS (CFI= .91, TLI=.89, NFI=.85, and RMSEA=.06).

Table 4 provides a summary of fit indices for the 1, 2, and 4 factor models.

Although a two factor model (testing for the possibility of an awareness and an

evaluation dimension of the IMIS) did not reach acceptable levels of fit, the pattern of

correlations (see Figure 1) between factors in the four factor model supported the idea of

these dimensions. GCA and SCA were positively correlated (r=.26), as were CO and CR

(r=.48). The subscales of the awareness dimension (GCA and SCA) were found to be

positively correlated with the subscales of the evaluation dimension (CO and CR) (See Figure

1 for coefficients). Although the relationships between subscales of different dimensions

were not significantly smaller than the relationships between subscales of the same

dimension, they trended towards that direction.

All items loaded onto their respective factors, however examination of the item

loadings revealed that two items (namely GCA item 6, and CR item 4) had particularly low

loadings (.28 and .37 respectively).

As neither a one nor a two factor model reached acceptable levels of model fit, and

consistent with Weiss's (2012) results, there is no evidence to support the use of a total IMIS

score. Thus, further analyses were conducted on the four individual subscales of the IMIS.

Table 4.

Fit Indices for 1, 2 and 4 Factor Models of the IMIS

Model	χ^2	CFI	TLI	NFI	RMSEA
1	1770.24***	.37	.20	.36	.16
2	871.55***	.63	.58	.59	.12
4	310.77***	.91	.89	.85	.06

***p<0.001

* Standardized estimates are presented in brackets
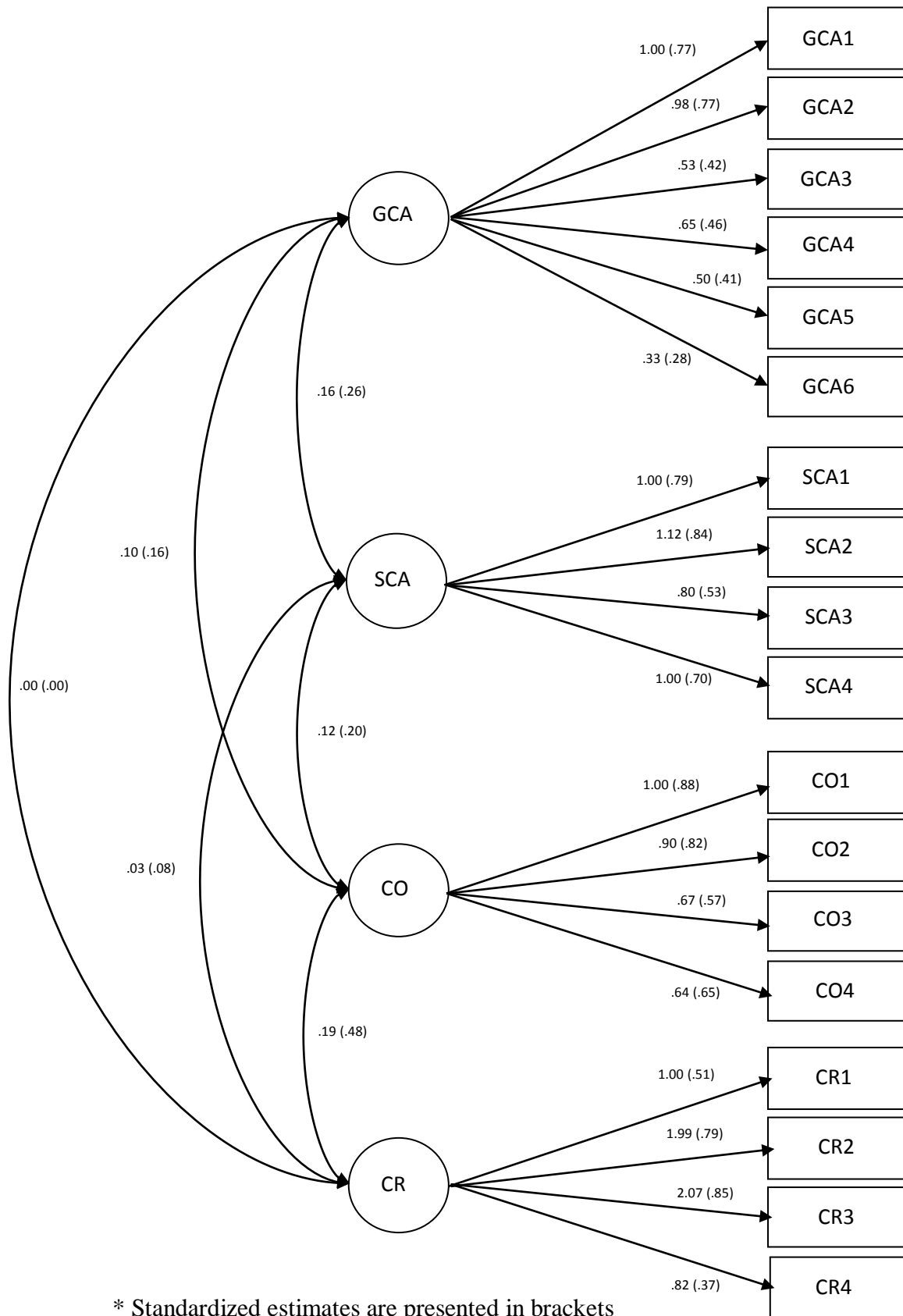
Figure 1. CFA Examining the Four Factor Structure of the IMIS

Internal Reliability of the IMIS

Internal reliabilities of the IMIS and its subscales were evaluated using Cronbach's

alphas. All subscales revealed alphas of .69 or greater (see Table 5). Briggs and Cheek

(1986) recommend that alphas over .70 indicate acceptable levels of internal reliability.

Considering that the subscales consist of four items (with the exception of GCA with six

items), the calculated alphas can be interpreted as acceptable.

Table 5.
Psychometric Properties of the IMIS subscales

Scale	M*	SD	Alpha	Number of Items
General Cultural Awareness	3.16	.63	.69	6
Self Cultural Awareness	3.62	.83	.81	4
Cultural Openness	3.92	.69	.80	4
Cultural Relativism	3.40	.82	.74	4

*Mean item scores

Correlations

Pearson's correlation coefficients were calculated between scores on the four IMIS

subscales and criterion measures in order to test the convergent and discriminant validity of

the IMIS (Table 6).

The four subscales of the IMIS were correlated with a measure of social desirability.

Although each of the four subscales correlated significantly with the measure of social

desirability, the effect sizes were small (largest $r = -.17$). Overall the results suggest that the

influence of social desirability is minimal.

Inter-Subscale Correlations.

Again, the pattern of correlations between subscales supported the theory behind the

IMIS. Positive relationships were found between GCA and SCA ($r(487)=.21$, $p<.001$) and

CO and CR ($r(487)=.39$, $p<.001$). A significant positive correlation was found between SCA

and CO (r(487)=.12, p<.05), however the size of this relationship is small, and represents the assumed relationship between awareness and evaluation.

Self Cultural Awareness (SCA).

Self Cultural Awareness was hypothesized to exhibit a medium strength positive correlation with both the Metacognitive subscale of the CQS and Cultural Essentialism. A significant positive correlation was found between SCA and Metacognitive CQ (r(487)=.19, p <.001); however it was smaller than predicted. As expected, SCA was also found to have a moderate positive correlation with Cultural Essentialism (r(467)=.36, p<.001).

A significant positive correlation was found between SCA and the Openmindedness subscale of the MPQ (r(464)=.17, p<.001). This correlation was not hypothesized, but adds to the nomological network of the IMIS.

General Cultural Awareness (GCA).

General Cultural Awareness correlated positively with measures of Metacognitive CQ (r(484)=.09, p<.05) and Cultural Essentialism (r(464)=.28, p<.001). As predicted, the size of the correlation between GCA and CE was moderate while the size of the relationship between GCA and Metacognitive CQ was small.

A small positive correlation was also found between GCA and Social Dominance Orientation (r(470)=.13, p<.01). Although this relationship was not predicted, it is small, and adds to the nomological network of the IMS.

Cultural Openness (CO).

As predicted, Cultural Openness correlated strongly with measures of both Motivational CQ (r(364)=.57, p<.001) and the Openmindedness subscale of the MPQ (r(345)=.57, p<.001). CO was also found to significantly correlate with SDO (r(357)=-.34, p<.001), and RWA (r(348)=-.12, p<.05) in the predicted direction.

A strong significant relationship was additionally found between CO and Metacognitive CQ ($r(365)=.50$, $p<.001$). Although this relationship was not hypothesized, it can be seen to add to the nomological network of the IMIS.

Cultural Relativism (CR).

As hypothesized, Cultural Relativism was found to have moderate negative relationships with measures of Social Dominance Orientation ($r(354)=-.36$, $p<.001$) and Right-Wing Authoritarianism ($r(345)=-.29$, $p<.001$).

Moderate positive relationships were also found between Cultural Relativism and Metacognitive CQ ($r(361)=.25$, $p<.001$), Motivational CQ ($r(361)=.33$, $p<.001$), and the Openmindedness subscale of the MPQ ($r(361)=.39$, $p<.001$).

Table 6.
Correlations between IMIS Subscales and Criterion Measures

	Scale									
	SCA	GCA	CO	CR	Cultural Essentialism	Motivational CQ	Metacognitive CQ	Openmindedness	SDO	RWA
GCA	.205***									
CO	.115*	.037								
CR	.047	-.018	.393***							
Cultural Essentialism	**.362***	**.279***	.058	-.022						
Motivational CQ	.015	-.083	**.565***	.325***	-.047					
Metacognitive CQ	**.192***	**.093*	.499***	.253***	.027	.487***				
Openmindedness	.167**	.064	**.574***	.267***	.029	.626***	.571***			
SDO	-.046	.126**	**-.338***	**-.361***	.111*	-.287***	-.192***	-.299***		
RWA	-.026	-.012	**-.122*	**-.291***	.091	-.139**	-.170***	-.233***	.381***	
Social Desirability	-.130***	-.179***	.110*	.171**	-.128***	.219***	.040	.132**	-.184***	-.017

Notes. *p<.05 **p<.01 ***p<.001

Hypothesized results in bold

Discussion

The aim of Study 1 was to investigate the construct validity of an English version of the Integrated Measure of Intercultural Sensitivity (IMIS) (Weiss, 2012).   After back-translation of the scale from its original German version to English, a confirmatory factor analysis was conducted, and the convergent validity of the IMIS subscales was examined.

Factor Structure

Weiss's (2012) confirmatory factor analysis (CFA) showed a four factor model of the IMIS to be of best fit when compared to a two and a one factor model. Although judged to be of "best fit", the indices reported in Weiss's manuscript indicate a minimally acceptable level of fit. The fit indices from this study indicate that a four factor model is the best fit for the IMIS; however they also indicate that there is plenty of room for improvement. Close inspection of this study's CFA results suggest there may be some underlying problems within the factor structure. For example, two items in particular loaded relatively weakly on their respective factors. Future studies may look into the effect dropping or improving these items may have on the fit of the four factor structure of the IMIS.

The Integrated Model of Intercultural Sensitivity (Weiss, 2012) suggests that the four factors of the IMIS fall under two higher-order dimensions, awareness and evaluation. Although the results of the current study indicate that a two-factor model did not reach acceptable levels of fit, the relationships between factors (both in the CFA and in the zero-order correlations) provide some support for these two higher order dimensions. Factors that fall under the awareness dimension (General Cultural Awareness (GCA) and Self-Cultural Awareness (SCA)) were positively related to each other, as were the factors that fall under the evaluation dimension (Cultural Openness (CO) and Cultural Relativism (CR)). The correlations between factors of the same dimension were slightly stronger than those between factors of different dimensions. Although the differences between these relationships were

not significant, they reflect the possible existence of an awareness and an evaluation dimension.

In her manuscript describing the development and initial validation of the IMIS, Weiss (2012) argues that the awareness and evaluation dimensions are unrelated, orthogonal dimensions. Thus, when conducting her CFA Weiss set the relationships between factors of the awareness and evaluation dimensions to 0. In contrast, the CFA conducted in this study did not place any constraints on the relationships between factors, and found the factors of the awareness and evaluation dimensions to be positively related to each other (not orthogonal). Although this result does not support the argument made by Weiss (2012), an awareness and an evaluation of cultural differences arguably should be related. In order to evaluate cultural differences, a certain level of awareness must be present.

The results of the CFA conducted in Study 1 support the four factor model of the IMIS as found by Weiss (2012). The pattern of inter-subscale correlations also lends some support for the idea of two higher-order dimensions of awareness and evaluation proposed by the Integrated Model of Intercultural Sensitivity. Future studies may look to improve the fit of the four-factor model, and further explore the possibility of the higher-order awareness and evaluation dimensions (and the relationship between the two).

Validity

To examine convergent and discriminant validity, correlations between the subscales of the IMIS and relevant constructs were examined. The four subscales of the IMIS (General Cultural Awareness, Self Cultural Awareness, Cultural Openness and Cultural Relativism) all exhibited convergent validity; they correlated with theoretically related constructs in a predictable way. The results of this analysis generally reflected hypothesized relationships, with a few exceptions.

Unexpectedly, a significant positive correlation was found between GCA and Social

Dominance Orientation (SDO). Although the current study did not hypothesize this relationship, Weiss (2012) also found GCA to relate significantly with SDO. Where GCA measures an individual's awareness of cultural differences, SDO reflects a preference for intergroup inequality. Weiss (2012) argues that GCA and SDO are related due to their "shared content with agreeableness" (p.8); however it may be the case that SDO includes a certain amount of awareness of intergroup differences. That in order to judge groups as better or worse than one another, a certain level of awareness of the differences between groups is necessary.

A significant, strong, positive correlation was also found between CO and Metacognitive CQ, which was not hypothesized. CO is defined as the extent to which an individual engages and rejoices in cultural differences (Weiss, 2012). It is part of the "evaluation" dimension of the IMIS. This is seemingly in contrast to the definition of Metacognitive CQ as an individual's ability to adjust his/her cultural knowledge according to the person he/she is interacting with. The difference between the two scales is even more evident when the scales' items are directly compared. While CO is measuring an attitude (e.g. "I am interested in foreign cultures and their customs and traditions"), Metacognitive CQ is measuring a cognitive ability.

CR was significantly positively correlated to Metacognitive CQ, Motivational CQ, and Openmindedness. While these correlations were not predicted, it can be theorized that all four of these dimensions are related through their understanding that people can be different but still equal.

A significant but weak positive correlation was found between SCA and the MPQ subscale of Openmindedness. An individual who is aware of the extent to which his/her own culture influences his/her view of the world is more likely to be understanding and open to other cultural views.

The results of Study 1 revealed more significant relationships than expected, however examination of the hypotheses can give insight into this. The hypothesized correlations were focused on relationships between the awareness subscales of the IMIS and criterion measures that reflect an awareness of intergroup differences. Likewise, the hypothesized correlations for the evaluation subscales of the IMIS were focused on criterion measures that reflect an evaluation of intergroup differences. Many of the unpredicted correlations revealed relationships between the awareness subscales of the IMIS and criterion measures reflecting an evaluation of differences. These relationships do not invalidate the IMIS; however they do raise questions about the relationship between possible awareness and evaluation dimensions. Perhaps it is the case that awareness is an antecedent to evaluation, and that in order to form an evaluation of cultural differences, a certain level of awareness is necessary. Future studies should further explore the relationship between awareness and evaluation in this context.

Strengths and Limitations

Compared to Weiss's (2012) validation, the current study relied on a broader, more diverse sample of participants. The current study was able to replicate the four factor structure of an English version of the IMIS in a general population of native English speakers. The results of the current study show that the IMIS functions similarly in two different languages in two different populations. This provides support for the use of the IMIS as a measure.

Of particular strength to this study was the selection of relevant criterion measures used to establish convergent validity. Following the findings of Wilson et al. (2013) that culturally focused concepts were found to have stronger relationships with measures of sociocultural adaptation, the criterion measures used in this study were chosen to reflect culturally focused concepts in order to maximise their relevance to the IMIS.

A risk of studies that involve scale translation is the risk of losing any implicit meanings underlying the original scale items. To minimize these risks, the original author of the IMIS was involved in the translation process in this study.

Conclusions

Overall, the results of Study 1 provide support for the IMIS as a valid measure of intercultural sensitivity. A CFA revealed a four-factor structure was most appropriate for the IMIS when compared to a two and a one factor model. The four subscales of the IMIS exhibited convergent and divergent validity. Combined, the results of this study support the construct validity of the IMIS. As the ultimate goal is to use the IMIS to predict outcomes, the next step is to establish predictive validity of the IMIS. This is the aim of Study 2.

Chapter 3: Predictive and Incremental Validity

With increased globalization, workplaces are becoming more multicultural, and the chance of interactions between individuals from different cultures is increasing. Thus, effective intercultural interaction is becoming a critical skill not only for business leaders and managers, but also for employees. As discussed in previous chapters, success in multicultural environments is multifaceted. In the context of a workplace, performance expectations can make intercultural interactions even more complex. It is important for employers to be aware of the impact intercultural interactions can have on the well-being and functioning of their employees, which, in turn, have a resounding influence on the business running smoothly and effectively.

Defining Success in a Multicultural Workplace

As defined in Chapter 1, feeling well and doing well refer to the affective and behavioural components of intercultural success (Searle & Ward, 1990). These two components are often talked about in terms of acculturation, defined by Redfield, Linton, and Herskovits (1936) as "the changes that occur as a result of continuous first-hand contact between individuals of differing cultural origins" (as cited in Ward, 2001). Although much of the acculturation literature focuses on the experiences of migrants, international students, and expatriates, the ideas and theories of acculturation can be applied in any situation in which people of different cultures have prolonged interaction with each other. One place where feeling well and doing well are of particular importance is a multicultural workplace. There are many factors involved in being successful in a multicultural workplace, including personal well-being, interpersonal interactions, and job performance.

Feeling well refers to the emotive aspects of success, also referred to as subjective well-being. Satisfaction with life is a key positive indicator of subjective well-being (Diener, Emmons, Larsen, & Griffin, 1985; Erdogan, Bauer, Truxillo, & Mansfield, 2012) and has

also been related to positive work outcomes. For example, Haar and Roche (2010) found that higher levels of life satisfaction were negatively related to job burnout and turnover intention. Jones (2006) found life satisfaction to be a positive predictor of organizational citizenship behaviours (behaviours that promote the functioning of the organization) and job performance.

Depression is another indicator commonly used as a negative measure of subjective well-being. In the workplace, depression can be as debilitating as some forms of major medical conditions, with depressed employees taking more sick days, participating in less extra-role behaviour, and decreasing overall productivity (Haslam, Atkinson, Brown & Haslam, 2005; Kessler et al., 1999; Wells et al., 1989). Depressed employees are also more likely to have accidents in the workplace and are apt to make hasty decisions (Haslam et al., 2005).

Not only is the well-being of employees important for the morale of a company, but happier employees are likely to be more productive (Erdogan et al., 2012). As productivity is a common priority for workplaces, employees' "feeling well" is equally as important as "doing well".

Doing well in a multicultural workplace refers to two main factors -- interpersonal interactions and job performance. In any workplace, the establishment and maintenance of positive relationships (with superiors, subordinates, colleagues, customers, etc.) is important (Kamdar & Van Dyne, 2007). Effective interpersonal interactions are essential to a business running smoothly and efficiently. In a multicultural workplace, cultural differences further complicate these interactions. Thus, interculturally competent employees are more likely to conduct business interactions in a culturally appropriate way, leading to business efficiency.

Job performance is another indicator that is commonly used as a measure of success in the workplace. Generally, a measure of job performance includes ratings from multiple

dimensions (e.g. technical ability, communication competence, interpersonal relationships, productivity) (Caliguri, 1997; Viswesvaran, Ones, & Schmidt, 1996). Measures of performance on these dimensions are determined by scores obtained from self-ratings, supervisor ratings, and peer ratings (Viswesvaran et al., 1996).

The need for companies to successfully function with a multicultural workforce is gaining increased recognition in the organizational literature (Mamman, 2006; Matveev & Miller, 2004; Miller & Rowney, 1999). As globalization brings cultures closer together, multicultural teams are becoming more prevalent in the workplace, and the need for interculturally effective employees grows. In a qualitative study, Matveev and Milter (2004) found that both American and Russian managers rated intercultural competence as one of the most important qualities relative to managers working in a multicultural team. Thus, intercultural success is important and beneficial to business success.

Predicting Success in a Multicultural Workplace

Two types of individual differences have predominantly been used to predict factors relating to multicultural success—personality and intelligence. The Multicultural Personality Questionnaire (Van der Zee & van Oudenhoven, 2000), and the Cultural Intelligence Scale (Ang, et al., 2007) have both been shown to be useful in predicting outcomes related to success in a multicultural workplace.

The Multicultural Personality Questionnaire (MPQ) was developed by Van der Zee and van Oudenhoven (2000) as a measurement tool for "multicultural effectiveness". It measures personality dimensions that are thought to be necessary for multicultural success (Van der Zee, Zaal, & Piekstra, 2003). The theory supporting the MPQ argues that intercultural effectiveness is preceded by five "multicultural" personality traits: cultural empathy, open-mindedness, social initiative, emotional stability, and flexibility (Van der Zee & van Oudenhoven, 2000). Cultural empathy measures an individual's ability to empathize

with the feelings, thoughts and behaviours of members from different cultural groups. Open-mindedness refers to an open and unprejudiced attitude towards out-group members and towards different cultural norms and values. Social initiative assesses the ability to establish and maintain contacts. Emotional stability is an individual's tendency to remain calm in stressful situations, and flexibility is the ability to switch easily from one communication strategy to another (Van der Zee & van Oudenhoven, 2000).

Although the MPQ has not specifically been applied in the context of a multicultural workplace, it has been used to predict many factors relating to success in an international setting. For example, the MPQ has been found to predict levels of mental health and subjective well-being (Leong, 2007; van Oudenhoven & Van der Zee, 2002; van Oudenhoven et al., 2003), as well as sociocultural adaptation/behavioural competence (Leong, 2007; Peltokorpi & Froese, 2012; Van der Zee & van Oudenhoven, 2001; Van der Zee, et al., 2003) in both international students and expatriates. The MPQ has also been found to predict academic achievement (van Oudenhoven & Van der Zee, 2002) in international students. The MPQ has been used in the workplace as a tool for expatriate selection (Leone, Van der Zee, van Oudenhoven, Perugini & Ercolani, 2005).

Traditionally, personality traits are thought to be relatively stable constructs; they are not readily subject to outside influences. While the MPQ conceptualizes intercultural effectiveness as a set of stable personality traits, others argue that intercultural effectiveness is a set of learned knowledge and skills.

Defined by Ang et al. (2007) as "an individual's capability to function and manage effectively in culturally diverse settings" (p. 336), Cultural Intelligence (CQ) is another concept that has been commonly used as a predictor of multicultural success. CQ can be thought of as a set of knowledge and skills that, when used appropriately, can aid effective intercultural adaptation and communication.   The Cultural Intelligence Scale (CQS) (Ang et

al., 2007) was developed to measure CQ and consists of four subscales – behavioural,

cognitive, motivational, and metacognitive. Behavioural CQ is the ability to effectively

communicate with other cultural groups. Motivational CQ is an individual's ability to adjust

their cultural knowledge depending on the person they are communicating with. Cognitive

CQ can be defined as the set of knowledge an individual holds about the norms, practices,

and conventions in different cultures. Metacognitive CQ refers to the mental ability to

organize and manage the knowledge that one has about a culture (Earley, 2002).

Much like the MPQ, the CQS has been used to predict multiple factors relating to

success in an intercultural environment. Higher levels of CQ are associated with higher

levels of both psychological and sociocultural adjustment (Ang et al., 2007; Ward, et al.,

2011), as well as overall levels of well-being (Ang et al., 2007) in populations of international

sojourners. Ang et al. (2007) found that the subscales of metacognitive and cognitive CQ

predicted performance on cultural judgment and decision-making tasks in an international

sample of managers. Possessing knowledge about other cultures along with the ability to

effectively manage that knowledge was related to a greater aptitude for analysing cultural

situations and responding appropriately to cultural dilemmas. Motivational CQ and

behavioural CQ have been related to increased cultural adjustment (Ang et al., 2007;

Templer, Tay, & Chandrasekar, 2006), reinforcing the idea that wanting and being able to "fit

in" with the local culture increases feelings of "belonging".

As discussed in Chapter 1, intercultural success is complex, with many different

factors coming into play. Therefore, when attempting to predict factors related to success in

any multicultural environment, it is important to keep in mind other factors that may

influence "success". One such factor that has received much attention in the intercultural

literature is the idea of cultural distance.

Cultural Distance is a simplified way of judging how similar two cultures are (Froese

& Peltokorpi, 2011). The cultural distance theory suggests that the more dissimilar two cultures are the more difficulty members will experience when attempting to cross from one culture to another (Searle & Ward, 1990; Ward & Kennedy, 1992; Ward & Kennedy, 1993). Previous studies have investigated the role of cultural distance in the context of expatriate adjustment and found higher cultural distance between the home and host cultures to be associated with lower levels of expatriate adjustment, job satisfaction, and performance (Colakoglu & Caliguri, 2008; Froese & Peltokorpi, 2011). Cultural distance has also been found to moderate the relationship between CQ and expatriate adjustment such that the relationship between CQ and expatriate adjustment is stronger when there is a greater cultural distance between home and host cultures (Kim, Kirkman, & Chen, 2008).

Intercultural Sensitivity and Multicultural Success

Although culturally relevant aspects of personality and intelligence (i.e. the MPQ and the CQS) have successfully been used to predict variance in outcomes relating to intercultural success, intercultural sensitivity may also be able to shed some light on "feeling well" and "doing well" in a multicultural workplace. Previously used predictors of such outcomes have conceptualized intercultural success as either an aspect of intelligence (CQS) or personality (MPQ). On the other hand, intercultural sensitivity is best conceptualized as a social attitude (Weiss, 2012). When compared to the relatively stable constructs of intelligence and personality, conceptualizing intercultural sensitivity as a social attitude may predict different aspects of outcomes than the CQS or the MPQ.

Although previous measures of intercultural sensitivity have been used in a workplace context, they have mainly been used as pre-test post-test measures to evaluate a change in an individual's level of intercultural sensitivity (Anderson, Lawton, Rexeisen, & Hubbard, 2006; Kitsanta, 2004; Williams, 2005). While there is merit in a pre-test post-test measure, being able to use intercultural sensitivity to predict outcomes relating to success in a multicultural

workplace would be extremely useful. Many researchers have emphasized the importance of the correct attitude as a basis for intercultural competence (Bennett, 1986; Bhawuk & Brislin, 1992; Deardorff, 2006; Dusi et al., 2014; Fantini, 2000; Gertsen, 1990; Hannigan, 1990; Repeckiene, Kvedaraite, and Jankauskiene; 2011). A valid predictive measure of intercultural sensitivity would therefore have important implications for selection and training purposes.

This Study

Study 1 was conducted to examine the construct validity of Weiss's (2012) Integrated Measure of Intercultural Sensitivity (IMIS). The results of Study 1 suggest that the four individual subscales (General Cultural Awareness (GCA), Self-Cultural Awareness (SCA), Cultural Openness (CO) and Cultural Relativism (CR)) may be valid measurement tools of the four factors of intercultural sensitivity as proposed by the Integrated Model (Weiss, 2012). The purpose of Study 2 is to further investigate the validity of these subscales by examining their predictive and incremental validity.

The predictive validity of these subscales is tested in relation to outcomes associated to success in a multicultural workplace. Four outcomes will be examined – depression, satisfaction with life, cultural judgement and decision making, and self-rated job performance.

The incremental validity of the subscales will be assessed in relationship to personality and cultural intelligence. While the MPQ and CQS have been used consistently to predict outcomes relating to success in a multicultural workplace, due to the differences in conceptualization, it is possible that the subscales of the IMIS can account for variance not explained by the MPQ and the CQS.

As cultural distance has been shown to influence concepts related to intercultural sensitivity (e.g. CQ) (Kim et al., 2008), it is presumed to also have an effect on the

functioning of intercultural sensitivity. Therefore, this study will also look for a potential moderating effect of cultural distance on the relationship between intercultural sensitivity and outcomes relating to success in a multicultural workplace.

Objectives

The aims of Study 2 are threefold:

1. Examine the predictive validity of each of the four subscales of the IMIS in regards to outcomes relating to success in a multicultural workplace (satisfaction with life, depression, cultural judgment and decision making, and job performance).

2. Examine the influence (if any) of cultural distance on the relationship between the predictive relationship between the subscales of the IMIS and outcomes.

3. Examine the incremental validity of the IMIS subscales in comparison to the MPQ and the CQS.

Method

Participants

Two hundred and four survey responses were collected. Fifty responses were removed from the final data set due to only demographic information being filled out. The remaining 154 participants ranged in age from 25 years to 65 years (M=37.24, SD=7.35). Of this, 65 participants (42%) were male, and 89 (58%) female. Participants were of various ethnicities. Just over half (56%) of participants were of Asian ethnicity (19% Chinese, 19% Indian, 18% other Asian), and the rest were of non-Asian ethnicity (24% Caucasian, 20% other ethnicities).

Participants were employees of a multinational banking and finance company with branches in over 70 countries. All respondents were working in Singapore at the time of survey completion. Participants were sent the survey link by their employer and invited to

participate in the study. Upon completion of the survey, participants received immediate feedback on their Intercultural Sensitivity score, along with a short explanation of intercultural sensitivity. Participant responses were anonymous and voluntary.

Materials

As well as demographic information (age, gender, ethnicity, country of origin, current country of residence), the survey included the Integrated Measure of Intercultural Sensitivity, a measure of self-rated job performance, measures of psychological well-being (depression and satisfaction with life), and four cultural judgement and decision making tasks (to measure intercultural competence). To assess the incremental validity of the IMIS, the two most common measures (the MPQ and the CQS) used to predict these outcomes were also included.

Intercultural Sensitivity.

Intercultural Sensitivity was measured using the English version of Weiss's (2012) 18-item Integrated Measure of Intercultural Sensitivity (as described in Study 1).

Depression.

Depression was measured using a 20-item version of Zung's Self-Rating Depression Scale (GlaxoWellcome, 1997). Participants were asked to "Please read each statement and decide how much of the time this statement describes how you have been feeling during the past several days". Items (e.g. "I feel down-hearted and blue") were responded to on a 4-point Likert scale ranging from 1 (a little of the time) to 4 (most of the time). To score this scale, participants' responses for each item were totalled (ten items were reverse coded). A higher score indicates a more severe level of depression.

Satisfaction with Life.

As a positive indicator of psychological well-being, the Satisfaction with Life Scale (SWLS) (Diener, et al., 1985) was administered to participants. The SWLS consisted of five

items (e.g. "In most ways, my life is close to my ideal.") answered on a 7-point Likert scale

(1=strongly disagree, 7= strongly agree). Participants were given the following instructions:

"Below are five statements with which you may agree or disagree. Using the 1-7 scale

below, indicate your agreement with each item. Please be open and honest in your

responding". Responses to the five items were added together, producing a score from five to

35 with a higher score indicating a higher level of satisfaction. The SWLS has shown an

alpha of .87 (Diener et al., 1985).

Self-Rated Job Performance.

Job performance was measured using a self-rating scale adapted from the Self-Rated

Performance Dimensions used by Caliguri (1997) to measure expatriate success. The

measure contained four performance dimensions – overall performance, technical

performance, contextual/managerial performance, and expatriate specific performance. As

the sample for this study was not specifically expatriates (but instead employees in a

multicultural environment), the scale was adjusted accordingly. Only the overall, technical

and expatriate specific dimensions were used, and the expatriate specific items were adapted

to suit non-expatriate employees. Participants were asked to "Please rate yourself on the

following items according to the scale below" and responded to each item (e.g. "Your

effectiveness at communicating and keeping others in your work unit informed") on a 5-point

Likert scale (1=Unsatisfactory or Poor, 5= Exceptional or Outstanding). To score this scale,

the average of participants' responses was taken. A higher score indicated a higher level of

job performance. The internal reliabilities of the dimensions used range from .63-.67

(Caliguri, 1997).

Cultural Judgment and Decision Making.

A measure of Cultural Judgment and Decision Making was used to assess

intercultural competence. Four critical incidents, each consisting of a short (paragraph) story

describing a situation in which an ambiguous situation between two members of different cultures occurred, were used. Two scenarios were adapted from "The Workplace" section of Cushner and Brislin's (1996) Intercultural Interactions, another was adapted from Seelye and Seelye-James's (1996) scenarios, and the fourth was written for the purpose of this study. The scenarios were selected for their relevance to the workplace, and adapted to suit a Southeast Asian cultural context (see Appendix B for the scenarios). The plausibility of the scenarios (as well as the answer choices) was checked by a colleague from Southeast Asia.

After reading the story, participants were given four potential explanations for the ambiguity and were asked to choose the explanation they felt best described the situation. Out of the four answer options, multiple answers may be plausible; however, one answer was the best choice. Only this "best choice" was scored as correct. When scoring these scenarios, a wrong answer was scored as a 0, and a correct answer was scored as a 1, giving participants a score ranging from 0 (0 correct answers) to 4 (4 correct answers).

Multicultural Personality Questionnaire.

The Multicultural Personality Questionnaire Short Form-40 (MPQ SF-40) (developed by Van der Zee, Van Oudenhoven, Ponterotto, & Fietzer, 2013) used in this study consisted of 40 items (e.g. "Has a feeling for what is appropriate in a specific culture") that measured five subscales (cultural empathy, flexibility, social initiative, openmindedness, and emotional stability). Participants were asked to indicate "To what extent [do] the following statements apply to you" on a 5-point Likert scale (1= totally not applicable, 5=totally applicable). Item scores are summed (12 items were reverse scored) so that higher scores indicate stronger MPQ traits. The five subscales of the MPQSF-40 have demonstrated alphas of .72-.82 (Van der Zee, et al., 2013)

Cultural Intelligence (CQ).

The Cultural Intelligence Scale (CQS) (Ang et al., 2007) was included in the survey in order to measure cultural intelligence and its four subscales (metacognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ). The CQS consisted of 20 items (e.g. "I enjoy interacting with people from different cultures"), responded to on a 7-point Likert scale (1=strongly disagree, 7=strongly agree). Participants were asked to "Read each statement and select the response that best describes your capabilities". The four subscales of the CQS have demonstrated alphas of .77-.87 (Ang et al., 2007). To score the CQS, the average of the participant's responses was taken, with a higher score indicating a higher level of cultural intelligence.

Results

After preliminary analyses, correlations between the IMIS subscales and other measures were examined. Multiple regressions were conducted to determine the predictive power of the IMIS and its subscales. Hierarchical regressions were also conducted to examine the IMIS's incremental validity over the MPQ and the CQS.

Preliminary Analyses

The psychometric properties of the criterion measures were examined prior to analyses. The means, SDs, and alphas are reported in Table 7. The measures showed an acceptable level of internal consistency, with Cronbach alphas ranging from .70-.94.

Table 7.

Psychometric Properties of the Measurement Scales for Study 2

Scale	M*	SD	Alpha	Number of Items
GCA	3.15	.72	.74	6
SCA	3.83	.67	.71	4
CO	4.17	.58	.71	4
CR	3.49	.85	.74	4
Depression	3.10	1.75	.70	20
Satisfaction with Life	5.05	1.20	.90	5
Self-Rated Job Performance	3.97	.44	.86	8
CJDM[a]	2.17	.91	**	4
MPQ	3.52	.35	.89	40
CQS	5.22	.86	.94	20

Note. Mean item scores are reported for all measures.

[a] As each item was scored for correctness (correct/incorrect decision) , a Cronbach alpha is not a suitable indicator of internal consistency.

Correlations

Zero order correlations were performed on the data. Significant correlations are reported in Table 8.

Inter-Subscale Correlations.

Weiss (2012) argues that the subscales reflecting an awareness of cultural differences (GCA and SCA) should not be related to the subscales reflecting an evaluation of cultural differences (CO and CR) (Weiss, 2012). However, the results of Study 1 indicated a relationship between SCA and CO, suggesting a relationship between an awareness and an

evaluation of cultural differences. This study re-examined the correlations between the four subscales of the IMIS.

Examination of the pattern of correlations revealed issues in the inter-subscale relationships. While CO and CR revealed an expected positive correlation of $r(153)=.29$, $p<.001$), GCA and SCA were not significantly correlated with each other. GCA was negatively correlated with CO ($r(153)=-.17$, $p<.05$), which does not support the theory behind the IMIS.

Correlations with Outcome Measures.

GCA was found to be negatively correlated with both life satisfaction ($r(153)=-.210$, $p<.01$) and also job performance ($r(153)=-.211$, $p<.01$). SCA was not significantly correlated with any of the outcome measures.

CO positively correlated with measures of life satisfaction ($r(153)=.28$, $p<.001$), CJDM ($r(116)=.192$, $p<.05$), and job performance ($r(153)=.37$, $p<.001$). A significant negative correlation was found between CO and depression ($r(153)=-.31$, $p<.001$). CR was negatively correlated with depression ($r(153)=-.26$, $p<.01$), and positively correlated with CJDM ($r(116)=.185$, $p<.05$).

Summary.

The pattern of intersubscale correlations found in Study 2 raise questions about the structural validity of the IMIS in this sample. As part of the same dimension, GCA and SCA should significantly correlate with each other. Not only did the correlations in this study reveal no significant relationship between these two subscales, the pattern of correlations between GCA and SCA and other measures raised concerns about the validity of both subscales. GCA exhibited negative relationships with constructs which it should be positively related to. SCA was not significantly correlated with any other subscale (including those

from the MPQ and CQS), nor was it significantly correlated to any outcome measure. These

concerns were kept in mind when conducting further analyses.

Table 8.

Correlations between Predictor and Outcome Variables

Scale	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. GCA																
2. SCA	.118															
3. CO	-.173*	.179*														
4. CR	.018	-.067	.293***													
5. Cultural Empathy[†]	-.193*	.131	.564***	.229**												
6. Openmindedness[†]	-.225**	.121	.549***	.097	.671***											
7. Social Initiative[†]	-.157	.090	.496***	.191*	.454***	.616***										
8. Flexibility[†]	.221**	-.129	.075	.323***	-.061	.012	.152									
9. Emotional Stability[†]	-.115	-.102	.240**	.230**	.195*	.259**	.364***	.388***								
10. Metacognitive CQ	-.258**	.095	.456***	.150	.490***	.483***	.366***	-.043	.294***							
11. Cognitive CQ	-.265**	-.071	.385***	.110	.383***	.506***	.343***	.033	.270**	.648***						
12. Motivational CQ	-.095	.102	.617***	.293***	.549***	.599***	.503***	.119	.421***	.684***	.589***					
13. Behavioral CQ	.014	-.055	.402***	.288***	.291***	.282***	.133	.050	.312***	.465***	.374***	.456***				
14. Depression	-.004	-.032	-.308***	-.255**	-.233**	-.212**	-.170*	-.111	-.475***	-.290***	-.185*	-.414***	-.305***			
15. Life Satisfaction	-.210**	.134	.208***	.140	.286***	.337***	.313***	.017	.378***	.263**	.276**	.406***	.050	-.570***		
16. CJDM	-.022	.026	.192*	.185*	.091	.140	-.008	.092	.101	.169	.126	.133	.170	.012	-.026	
17. Self-Rated Job Performance	-.211**	.098	.373***	-.021	.566***	.628***	.474***	-.155	.152	.443***	.451***	.499***	.163*	-.101	.346***	.064

[†]MPQ Subscales

* $p<0.05$ ** $p<0.01$ ***$p<0.001$

Predictive Validity of the IMIS

Multiple hierarchical regressions were calculated to assess the predictive validity of the four subscales of the IMIS in relation to various outcomes (job performance, Cultural Judgement and Decision Making (CJDM), life satisfaction, and depression). The moderating effect of ethnicity on the relationship between Intercultural Sensitivity and relevant workplace outcomes was also investigated.   Subjects were categorized into two groups based on their ethnicity (Asian vs. Non-Asian), according to the cultural distance hypothesis. Interaction terms were created with the centred IMIS subscales and coded ethnicity (Asian vs. Non-Asian). A summary of the regression results can be found in Table 9.

In all regressions, age, gender and ethnicity were entered into the first step, with the IMIS subscales (GCA, SCA, CO, and CR) in the second step. The interaction terms with ethnicity were entered into the third step of the regression equations. Collinearity diagnostics were all found to be within acceptable range.

Depression.

The IMIS subscales significantly accounted for variance in depression scores over and above demographics (age, gender and ethnicity) (ΔR^2=.08, p<.0). The interactions with ethnicity did not account for significant variance. In the final model, both CO (β=-.33, p<.01) and age negatively predicted depression (β=-.18, p<.05).

Life Satisfaction.

The IMIS subscales significantly accounted for variance in life satisfaction scores over and above demographics (age, gender and ethnicity) (ΔR^2=.116, p<.01). CO was a significant positive predictor of life satisfaction (β=.23, p<.05), and GCA was a negative predictor (β=-.17, p<.05). However, with the addition of the interaction terms in the third step, both of these main effects became non-significant.

Cultural Judgment and Decision Making.

The IMIS subscales did not account for any significant variance in CJDM scores. However with the addition of the interaction terms, 12.8% of variance was accounted for, and CR was found to be a positive predictor (β=.34, p<.05).

Job Performance.

The IMIS subscales significantly accounted for variance in self-rated job performance scores over and above demographics (age, gender and ethnicity) (ΔR^2=.18, p<.001). CO was a significant predictor (β=.39, p<.001).

With the addition of the interaction terms in the third step of the regression, a significant amount of variance in self-rated job performance scores was explained, (ΔR^2=.09, p<.01). The interaction term between Cultural Openness (CO) and ethnicity was a significant predictor (β=.30, p<.05) A simple slope analysis revealed a statistically significant positive slope between CO and self-rated job performance in participants who were of non-Asian ethnicity (b=.36, SE=.08, t(150)=4.76, p<.001) and a non-significant slope in participants of Asian ethnicity (b=.13, SE=.08, t(139)=1.69, p=.09) (See Figure 2). This indicated that the relationship between CO and self-rated job performance is stronger when the cultural distance between an employee and their workplace is larger.

A significant interaction term between Cultural Relativism and Ethnicity was also found (β=-.27, p<.05). A simple slope analysis revealed a statistically significant negative slope between Cultural Relativism and self-rated job performance in participants of non-Asian ethnicity (b=-.12, SE=.05, t(150)=-2.14, p<.05) and a non-significant slope in participants of Asian ethnicity (b=.06, SE= .06, t(139)=.87, p=.38) (See Figure 3). This suggested that CR is a negative predictor of self-rated job performance in employees of a non-Asian ethnicity.

Summary.

Overall, the results provide little support for the predictive validity of the IMIS subscales.

Table 9.

Hierarchical Multiple Regression Analyses Predicting Multicultural Success

|	Step	Depression 1	2	3	Life Satisfaction 1	2	3	CJDM 1	2	3	Self-Rated Job Performance 1	2	3
Age		-.243**	-.190*	-.178*	.025	-.020	-.019	.049	.016	.011	.056	.000	.012
Gender		-.018	-.009	-.008	.099	.066	.062	-.107	-.090	-.071	.006	-.015	-.009
Ethnicity		-.093	-.015	-.040	.037	.017	.014	.079	.031	.010	-.098	-.115	-.143
GCA			-.064	-.145		-.172*	-.115		-.015	.002		-.137	-.078
SCA			-.010	.015		.104	.030		-.015	.156		.055	-.025
CO			-.241*	-.325**		.227*	.195		.165	.154		.386***	.171
CR			-.119	-.045		.054	.038		.152	.341*		-.122	.104
GCA x Ethnicity				.154			-.091			.020			-.036
SCA x Ethnicity				-.071			.098			-.258			.079
CO x Ethnicity				.151			.041			.053			.300*
CR x Ethnicity				-.108			.035			-.213			-.268*
F		3.905*	3.607**	2.557**	.536	2.829**	1.960*	.836	1.254	1.267	.491	4.581***	4.663***
R^2		.078	.158	.177	.011	.128	.141	.024	.081	.128	.010	.192	.281
ΔR^2			.080*	.019		.116**	.013		.058	.047		.181***	.089**

* $p<0.05$ ** $p<0.01$ ***$p<0.001$
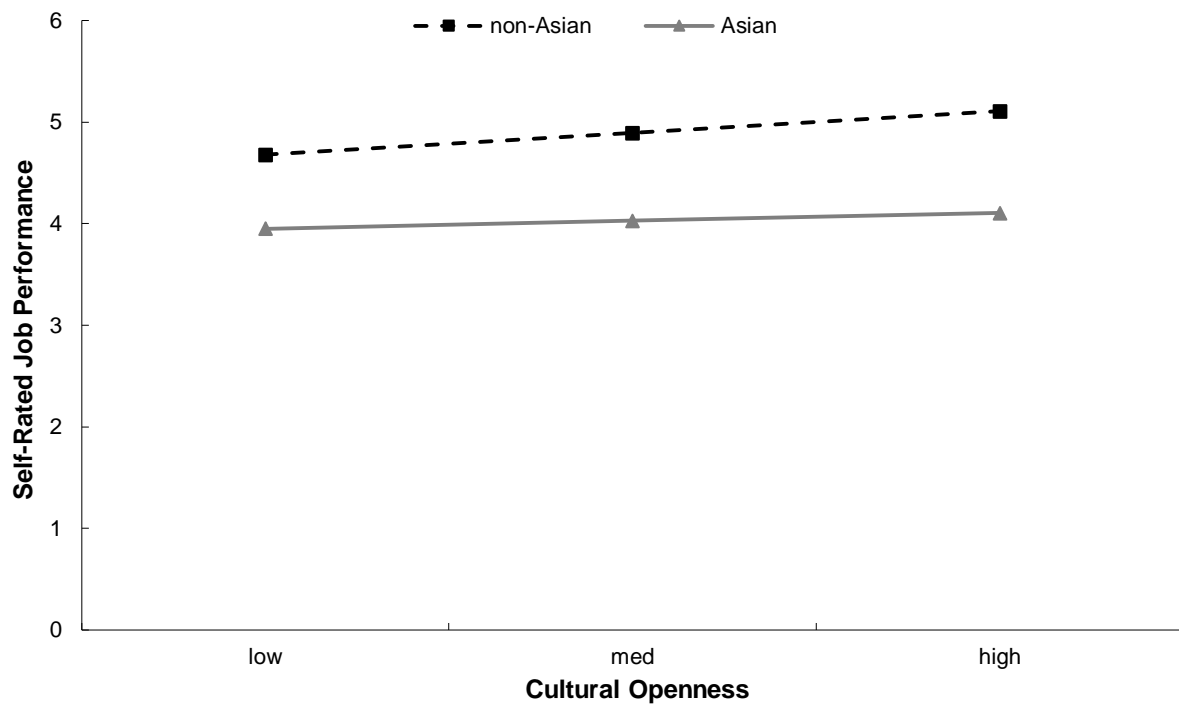
Figure 2. The moderating effect of ethnicity on the relationship between cultural openness and self-rated job performance.
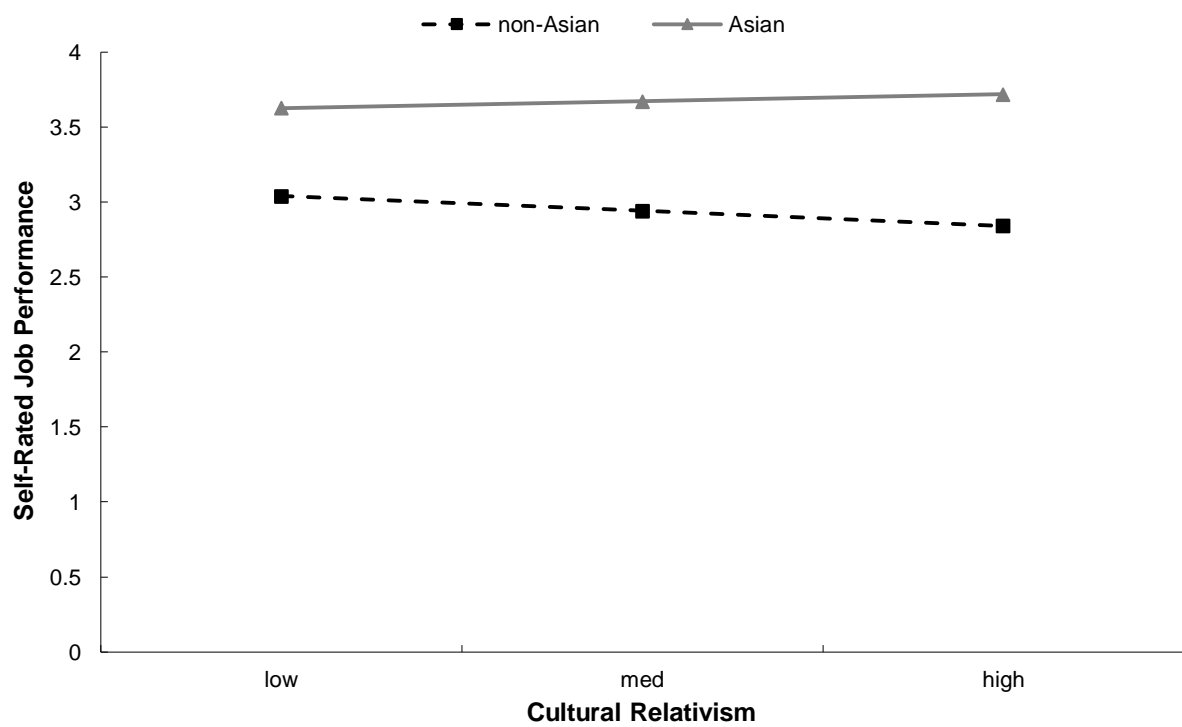

Figure 3. The moderating effect of ethnicity on the relationship between cultural relativism and self-rated job performance.

Incremental Validity of the IMIS

Multiple hierarchical regressions were calculated to evaluate the predictive power of the IMIS subscales over those of the MPQ and the CQS. As described in the introduction to this Chapter, the MPQ contains five subscales (Cultural Empathy, Openmindedness, Social Initiative, Flexibility, and Emotional Stability) and the CQS contains four subscales (Metacognitive CQ, Cognitive CQ, Motivational CQ, and Behavioral CQ).

Due to the limited sample size of this study, two sets of analyses were conducted, one evaluating the incremental validity of the IMIS over the MPQ subscales, and the other evaluating the incremental validity of the IMIS over the CQS subscales. In these regressions, age, gender, and ethnicity were controlled for by placing them in the first step of the regression. The subscales of the MPQ or the CQS were placed in the second step of the regression and the subscales of the IMIS in the third step. Collinearity diagnostics were all within acceptable ranges. A summary of the results of these regressions can be found in Tables 10 (MPQ) and 11 (CQS).

MPQ.

The subscales of the MPQ accounted for significant variance in depression scores over and above demographics (age, gender and ethnicity) (ΔR^2=.24, p<.001). Emotional Stability was found to be a significant predictor of depression (β=-.51, p<.001). With the subscales of the IMIS in the third step, no significant increase in variance was explained however the MPQ subscales of Social Initiative (β=.20, p<.05) and Flexibility (β=.17, p<.05) became significant predictors of depression.

The subscales of the MPQ explained significant variance in life satisfaction scores over and above demographics (ΔR^2=.23, p<.001). With the subscales of the IMIS in the third step of the regression, no significant increase in variance was explained. Emotional Stability MPQ was the only significant predictor (β=.37, p<.001).

Neither MPQ nor IMIS subscales were found to predict Cultural Judgment and Decision Making (CJDM) scores.

The subscales of the MPQ explained significant variance in self-rated job performance scores over and above demographics ($\Delta R^2=.48$, $p<.001$). Cultural Empathy ($\beta=.22$, $p<.01$), Openmindedness ($\beta=.38$, $p<.01$), Social Initiative ($\beta=.17$, $p<.05$) and Flexibility ($\beta=-.17$, $p<.05$) were significant predictors. The addition of the IMIS subscales explained no significant additional variance; however the main effect of Flexibility became non-significant.

CQS.

The subscales of the CQS explained significant variance in depression scores over and above demographics (age, gender and ethnicity) ($\Delta R^2=.18$, $p<.001$). Both Motivational ($\beta=-.36$, $p<.01$) and Behavioural ($\beta=-.18$, $p<.05$) CQ were significant predictors. The addition of the subscales of the IMIS in the third step of the regression did not explain any additional variance; however the main effect of Behavioural CQ became non-significant.

The subscales of the CQS explained significant variance in life satisfaction scores over and above demographics ($\Delta R^2=.18$, $p<.001$). Motivational CQ was found to be a significant predictor of life satisfaction ($\beta=.46$, $p<.001$). The IMIS did not explain a significant increase in variance over the CQS.

Neither CQS nor IMIS subscales were found to predict significant variance in CJDM scores.

The subscales of the CQS explained significant variance in self-rated job performance scores over and above demographics ($\Delta R^2=.33$, $p<.001$). Cognitive ($\beta=.23$, $p<.05$), Motivational ($\beta=.40$, $p<.001$), and Behavioural ($\beta=-.16$, $p<.05$) CQ were found to be significant predictors. The subscales of the IMIS did not explain any significant additional variance.   Interestingly, in the final model ethnicity was found to be a predictor of self-rated

job performance (β=-.16, p<.05), indicating that participants of Asian ethnicity reported higher self-rated job performance.

Summary.

Overall, these results do not provide support for the incremental validity of the IMIS subscales. The subscales of the CQS and the MPQ are far superior predictors of depression, life satisfaction, cultural judgment and decision making, and self-rated job performance.

Table 10.

Hierarchical Multiple Regression Analyses Examining the Incremental Validity of the IMIS over the MPQ

	Step	Depression			Life Satisfaction			CJDM			Self-Rated Job Performance		
		1	2	3	1	2	3	1	2	3	1	2	3
Age		-.243**	-.190*	-.181*	.025	-.037	-.040	.049	.066	.046	.056	.044	.051
Gender		-.018	-.069	-.083	.099	.137	.124	-.107	-.071	-.046	.006	-.019	-.019
Ethnicity		-.093	-.178*	-.121	.037	.091	.091	.079	.099	.060	-.098	-.084	-.060
MPQ													
CE			-.106	-.026		.058	.023		.090	-.027		.216*	.268**
O			-.111	-.108		.168	.132		.220	.233		.382***	.369**
SI			.175	.202*		.057	.026		-.242	-.252		.172*	.186*
F			.121	.173*		-.106	-.068		.083	.060		-.172*	-.136
ES			-.507***	-.513***		.374***	.365***		.097	.056		.001	.010
IMIS													
GCA				-.124			-.115			-.023			-.014
SCA				-.038			.113			.010			-.001
CO				-.152			.063			.128			-.045
CR				-.087			.004			.174			-.114
F		3.905*	7.811***	5.952***	.536	5.287***	3.871***	.836	1.110	1.075	.491	15.842***	10.763***
R²		.078	.318	.355	.011	.240	.263	.024	.083	.121	.010	.486	.498
ΔR²			.240***	.037		.229***	.023		.059	.038		.476***	.012

** p<0.05 ** p<0.01 ***p<0.001*

Note. CE = Cultural Empathy, O = Openmindedness, SI = Social Initiative, F = Flexibility, ES = Emotional Stability.

Table 11.

Hierarchical Multiple Regression Analyses Examining the Incremental Validity of the IMIS over the CQS

	Step	Depression			Life Satisfaction			CJDM			Self-Rated Job Performance		
		1	2	3	1	2	3	1	2	3	1	2	3
Age		-.243**	-.204**	-.202*	.025	-.022	-.030	.049	.067	.037	.056	-.005	-.002
Gender		-.018	-.040	-.039	.099	.080	.058	-.107	-.112	-.104	.006	-.014	-.013
Ethnicity		-.093	-.045	-.030	.037	-.037	-.017	.079	.067	-.009	-.098	-.183*	-.157*
CQS													
Metacognitive			-.076	-.092		-.001	-.076		.187	.235		.102	.044
Cognitive			.189	.179		.056	.053		.075	.110		.231*	.221*
Motivational			-.356**	-.337**		.457***	.423**		-.046	-.159		.403***	.376**
Behavioral			-.179*	-.160		-.173	-.154		-.005	-.115		-.162*	-.120
IMIS													
GCA				-.032			-.155			.073			-.064
SCA				-.001			.091			-.028			.062
CO				-.006			.058			.154			.116
CR				-.039			.046			.200			-.131
F		3.905*	6.680***	4.166***	.536	4.653***	3.462***	.836	1.011	1.138	.491	10.085***	7.115***
R^2		.078	.257	.259	.011	.194	.225	.024	.067	.116	.010	.343	.374
ΔR^2			.180***	.002		.183***	.031		.043	.050		.333***	.031

* *p*<0.05 ** *p*<0.01 ****p*<0.001

Note. CE = Cultural Empathy, O = Openmindedness, SI = Social Initiative, F = Flexibility, ES = Emotional Stability.

Discussion

The aim of Study 2 was to further validate the Integrated Measure of Intercultural Sensitivity (IMIS) (Weiss, 2012) by evaluating its predictive and incremental validity in a sample of employees in a multicultural workplace. The predictive validity of the four IMIS subscales -- General Cultural Awareness (GCA), Self Cultural Awareness (SCA), Cultural Openness (CO), and Cultural Relativism (CR) -- in relation to outcomes relevant to success in a multicultural workplace (depression, life satisfaction, cultural judgment and decision making, and self-rated job performance). Subsequently, the incremental validity of the IMIS subscales was examined in relation to the Multicultural Personality Questionnaire (MPQ) and the Cultural Intelligence Scale (CQS).

Revisiting the Structure of the IMIS

The Integrated Model proposed by Weiss (2012) suggests that GCA and SCA together reflect an awareness of the influence of cultural differences, and together CO and CR reflect an evaluation of those differences. While the results of Study 1 supported this theory, zero-order correlations between subscales in Study 2 suggested a different story. No significant correlation was found between GCA and SCA, even though they are presumed to comprise the same dimension.

Weiss argues that awareness and evaluation are orthogonal dimensions, however the results of Study 1 suggest that is not the case. In Study 1, significant positive relationships were found between awareness and evaluation subscales. The results of Study 2 found a significant negative correlation between GCA (reflecting an individual's awareness of the permeating influence of culture on all aspects of daily life) and CO (reflecting an individual's desire to celebrate and interact with people from different cultures).

These two results do not support an awareness and an evaluation as orthogonal dimensions, nor do they support a positive relationship between awareness and evaluation as

found in Study 1. This suggests there may be some underlying problems within the factor structure of the IMIS.

Examining the Predictive Validity of the IMIS

Study 2 examined the predictive validity of the four IMIS subscales in relation to outcomes relevant to success in a multicultural workplace (depression, satisfaction with life, cultural judgment and decision making (CJDM), and self-rated job performance). The results provided very limited support for the IMIS.

Of particular concern are the patterns of regressions exhibited by both the GCA and SCA subscales of the IMIS. The results of Study 2 found GCA to be a negative predictor of satisfaction with life. This relationship suggests that individuals who are more aware of the permeating influence of culture are less satisfied with their own life. Although this result was surprising, the context of the sample of Study 2 may offer an explanation. The participants in Study 2 were employees in a multicultural workplace in Singapore. The high rate of immigration into Singapore has resulted in a decrease in acceptance and tolerance for cultural differences (Noor & Leong, 2013). It is possible that in this context, a high level of awareness of cultural differences may have a negative effect on well-being.

The results of Study 2 found that SCA was not a significant predictor of any of the four outcomes. Examination of the zero-order correlations revealed no significant correlations between SCA and any outcome variables. The results of Study 1 found significant positive correlations between SCA and Metacognitive CQ, and SCA and Openmindedness (MPQ), however no significant correlation was found between SCA and either of these subscales (or any other predictor variable) in the correlations of Study 2. One explanation for this result which received particular thought was the effect that participants'

countries of origin may have on their cultural perception[2]. For example, a higher degree of cultural distance may cause individuals to become more aware of their own "cultural lens", where a lower degree of cultural distance may allow an individual to remain unaware of the influence of their own culture. However, due to the extremely diverse nature of the sample of Study 2, this explanation was not able to be thoroughly investigated. Future studies may further investigate the functioning of the IMIS in such multicultural environments to clarify the nature of this effect.

Of the four IMIS subscales, CO performed the best. CO was found to be a significant predictor of psychological well-being (higher levels of CO result in lower levels of depression and higher levels of satisfaction with life). Individuals with a higher level of CO (defined as the extent to which an individual "embraces and rejoices in cultural differences" (Weiss, 2012, p.5)), are more likely to evaluate cultural differences in a positive way. Due to this evaluation, these individuals are also more likely to be tolerant of the ambiguity that can come with intercultural interactions and are less likely to get frustrated with cultural misunderstandings. Individuals with a higher level of CO are likely to focus on the positive aspects of intercultural interaction rather than the negative, thus leading to higher levels of overall well-being.

Although "Cultural Openness" has never specifically been tested in relation to well-being, these results are in line with previous studies that have found factors closely related to Cultural Openness (Openmindedness (MPQ) and Motivational CQ) to predict levels of psychological adjustment and well-being (e.g. Ang, et al., 2007; Ward, et al., 2011).

The results of Study 2 also found differences in the functioning of CO depending on the ethnicity of participants. CO was a positive predictor of self-rated job performance for participants of non-Asian ethnicity, and did not have any significant effect participants of

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[2] An additional analysis revealed that there were differences in the pattern of correlations between participants of Asian ethnicity and participants of non-Asian ethnicity.

Asian ethnicity. As non-Asian ethnicities are the minority in Singapore, this result suggests that acculturating minorities benefit more from a positive attitude towards cultural differences. This is in line with previous research that has found higher levels of Openmindedness (MPQ) and Motivational CQ to predict work and general interactional adjustment in samples of international students and expatriates (Ang et al., 2007; Huang, Chi & Lawler, 2005; Kim et al., 2008; Peltokorpi & Froese, 2012; Templer, et al., 2006; Ward & Fischer, 2008).

This finding is also supported by the cultural distance literature which finds that individuals from very dissimilar cultures will have greater difficulty interacting with and adapting to one another than individuals form more similar cultures will (Searle & Ward, 1990; Ward & Searle, 1991; Ward & Kennedy, 1993; Ward et al, 2011; Waxin, 2004). In the context of Singapore where Asian ethnicities are the majority, participants of non-Asian ethnicity will likely experience greater interactional and adaptation difficulty than participants of Asian ethnicity. Thus, participants of non-Asian ethnicity will benefit more from CO.

Participant's ethnicity was also found to influence the effect of Cultural Relativism (CR) on self-rated job performance. While there was no significant relationship between CR and job performance in participants of Asian ethnicity, higher levels of CR were found to predict lower levels of self-reported job performance in participants of non-Asian ethnicity. Again, an examination of the context of participants in this study may offer an explanation.

CR represents an acknowledgement that even though cultures may be very different, no culture is better or worse than any other. An individual with a high level of cultural relativism will be able to appreciate the strengths of other cultures, and will be less likely to engage in notions of cultural hierarchy. Research on the influence of cultural distance suggests that the more different two cultures are, the more difficulty will be experienced by

individuals attempting to interact and adjust to the new culture (Searle & Ward, 1990; Ward & Searle, 1991; Ward & Kennedy, 1993; Ward, Wilson & Fischer, 2011; Waxin, 2004). Thus individuals of an ethnic minority (in this case, non-Asian ethnicity), will more likely experience greater adaptation difficulty in a multicultural workplace. The measure of self-rated job performance used in this study included items on interpersonal interactions, and asked participants to rate their skill at communicating and maintaining good working relationships with colleagues and customers. Individuals with high CR will likely acknowledge that they have greater difficulty than individuals of the ethnic majority, and thus be more humble when answering these items, resulting in a lower self-rated job performance score.

The results of Study 2 also found CR to be a significant predictor of scores on the Cultural Judgment and Decision Making measure. Cultural Judgment and Decision Making refers to an individual's ability to make "decisions regarding intercultural interactions" (Ang et al., 2007, p.341). CR will benefit individuals on this task by allowing them to take a step back and analyse the scenario without any judgmental biases. This will allow the individual to make a more accurate interpretation of the scenario.

Age was found to be a significant predictor of depression such that participants of a higher age reported lower levels of depression. Fiske, Wetherell, and Gatz (2009) suggest that elderly people develop protective factors such as emotion regulation and a sense of self-efficacy that decreases their likelihood of developing depression. This association has been found in previous research on cross-cultural adjustment in Singapore (Armes & Ward, 1989).

Although there seems to be some validity in the CO and CR subscales, overall, the subscales of the IMIS do not fare well in terms of predicting the outcomes included in Study 2.

Examining the Incremental Validity of the IMIS

When compared to the subscales of the Multicultural Personality Questionnaire (MPQ) and the Cultural Intelligence Scale (CQS), the subscales of the IMIS did not predict any additional variance for any of the four outcomes in Study 2. Although the IMIS did not exhibit incremental validity over the subscales of the MPQ and CQS, the predictive results of the MPQ and the CQS (See Tables 10 and 11) generally follow those of previous studies.

Controlling for the influence of the IMIS subscales, three MPQ subscales (Social Initiative, Emotional Stability, and Flexibility), and one CQS subscale (Motivational CQ) predicted depression. The direction of these relationships (higher subscale score, lower depression) reflects those found in the previous literature (Ang et al., 2007; Leong, 2007; van Oudenhoven & Van der Zee, 2002; Ward et al., 2011), with the exception of the MPQ subscales of Social Initiative and Flexibility, which were found to positively predict depression.

Both Motivational CQ and the MPQ subscale of Emotional Stability were found to predict satisfaction with life (higher subscale score, higher satisfaction with life). This is in line with previous studies which have found Emotional Stability (van Oudenhoven, et al., 2003) and Motivational CQ (Ang et al., 2007) to positively predict well-being.

Controlling for the influence of the IMIS subscales, Cultural Empathy, Open-mindedness, Social Initiative, Motivational CQ, and Cognitive CQ were all significant predictors of self-rated job performance. Although neither the MPQ nor the CQS have been directly related to self-rated job performance, their subscales have been found to positively predict work adjustment (a factor critical to job performance) in expatriates (Huang et al., 2005; Templer et al., 2006; van Oudenhoven et al., 2003).

Interestingly, in the regressions comparing the MPQ and the IMIS subscales, ethnicity was found to be a significant predictor of self-rated job performance indicating that

participants of non-Asian ethnicity rated themselves lower than participants of Asian ethnicity. As the aim of the current study was to focus on the validation of the IMIS, this relationship was not investigated further, however these results suggest that ethnicity may moderate the relationship between the subscales of the MPQ and self-rated job performance. Future studies should investigate this possibility further.

Strengths and Limitations

The sample population was a major strength of Study 2. As employees of a multinational company working in Singapore, Study 2's participants are living and working in a place where intercultural interactions are unavoidable. As the ultimate aim is the ability to use the IMIS as a selection tool for expatriates (or more generally, employees in a multicultural workplace), this sample provided an excellent context in which to test its validity.

The results of Study 2 make a significant contribution to the literature on predicting self-rated job performance. As far as I am aware, neither the MPQ nor the CQS have been directly related to a measure of self-rated job performance. The results of Study 2 suggest that both the MPQ and CQS are valid predictors of self-rated job performance in a sample of employees in a multicultural work environment. Further research should further investigate the nature of this relationship.

Organizational literature suggests that job performance is best measured using a variety of sources (e.g. peer and supervisor ratings) (Caliguri, 1997; Hoffman, Nathan, & Holden, 1991). However, due to time and resource constraints, a self-report measure of job performance was used in this study. Further studies may look to replicate the results of Study 2 using multiple sources of job performance ratings.

It should be noted that the measure of cultural judgement and decision making (CJDM) used in this study was only significantly correlated with the IMIS subscales of CO

and CR (regression analyses showed neither CO nor CR to be a significant predictor of CDJM). Ang et al. (2007) found the CQS to be a significant predictor of CJDM scores; however the results of this study indicate no significant correlation between either the CQS or the MPQ and CJDM. This may be due to a measurement error. Future studies may wish to use a different measure of CJDM.

Conclusions

A multicultural sample of employees working in a multicultural workplace was employed to test the predictive and incremental validity of the IMIS. The structure of the IMIS did not hold up in this sample as the awareness subscales were not significantly correlated with each other. The evaluation dimension (CO and CR) was found to be a significant predictor of lower depression levels, higher life satisfaction, and higher self-reported job performance. However, the MPQ and the CQS were found to be better predictors of these outcomes than was the IMIS.

Chapter 4: General Discussion

The aim of this thesis was to examine the validity of an English version of the Integrated Measure of Intercultural Sensitivity (IMIS) (Weiss, 2012). Two studies were conducted; Study 1 to investigate construct validity, and Study 2 to explore predictive and incremental validity. The results of these two studies conclude that the IMIS in its current form is of little use in the prediction of success in a multicultural workplace.

Weiss's (2012) Integrated Model of Intercultural Sensitivity makes an important contribution to the literature by clarifying some of the confusion around the definition of intercultural sensitivity. Previously, the most widely used and accepted model of intercultural sensitivity was Bennett's (1986) Developmental Model (DMIS). The DMIS conceptualizes intercultural sensitivity as a series of stages, through which an individual develops an awareness and a positive evaluation of intercultural differences (Bennett, 1986). A disadvantage of previous measures of intercultural sensitivity is their inclusion of behavioural characteristics, which blur the boundaries between intercultural sensitivity and intercultural competence. Weiss's (2012) Integrated Model also integrates an awareness and an evaluation of cultural differences. By removing any behavioural aspect, the model provides a clearer view of the attitudes that comprise intercultural sensitivity, and helps to clear up some of the confusion around the definition of intercultural sensitivity.

While Weiss's (2012) model makes significant advances in the area of intercultural sensitivity, the Integrated Measure of Intercultural Sensitivity (IMIS) falls short. Although Study 1 found some support for the construct validity of the IMIS, in Study 2's sample of employees in a multicultural workplace, there appeared to be some problems with the factor structure.

The IMIS consists of subscales measuring both an awareness and an evaluation of cultural differences. Although these two "dimensions" are theorized by Weiss (2012) to be

orthogonal, the results of Study 1 indicated that this was not the case. The CFA conducted in Study 1 found awareness and evaluation subscales to positively relate to each other. However the results of Study 2 found a negative relationship between awareness and evaluation subscales. The relationship between awareness and evaluation is a critical component of intercultural sensitivity and is not made clear by either Weiss's (2012) manuscript, or the results of the two studies conducted in this thesis. It may be that awareness is a precedent to evaluation or that the two constructs cannot be separated from each other. In any case, this relationship warrants further exploration.

In addition to the problems with the factor structure of the IMIS, the results of Study 2 indicated that only one of the four subscales was able to predict outcomes related to success in a multicultural environment. In Study 2, the Cultural Openness (CO) subscale was found to be a significant predictor of well-being and self-rated job performance. No incremental validity was found for the IMIS over the sub scales of either the Multicultural Personality Questionnaire (MPQ), or the Cultural Intelligence Scale (CQS).

From the results of these two studies, it can be concluded that the IMIS in its current form is not a valid tool for the prediction of factors relating to success in a multicultural environment. As the IMIS was developed with the intention of becoming a tool for the selection and training of employees in a multicultural work environment (Weiss, 2012), the validity of the scale in this kind of sample is extremely relevant. While the CO subscale of the IMIS was found to be a significant predictor of relevant outcomes, the MPQ and the CQS were better predictors.

The results of Study 2 make a significant contribution to the literature on the MPQ and CQS. Subscales of both the MPQ and CQS were significant predictors of three indicator of success in a multicultural workplace (depression, life satisfaction, and self-rated job

performance). These results indicate that the MPQ and CQS can predict intercultural effectiveness from a personality and intelligence standpoint.

While the outlook seems grim for the IMIS, there is some hope in the finding that even though significance was not reached, the subscales of the IMIS were able to account for a small amount of variance over the subscales of the MPQ and CQS. This suggests that the items of the IMIS are tapping into an aspect of personal differences that is neither explained by the MPQ nor the CQS. Thus, a valid measurement tool of intercultural sensitivity would be valuable as it could provide another angle from which to predict success in a multicultural workplace.

Based on the conclusions of this thesis, it is recommended that the current version of the IMIS undergo major revisions. Although there may be some merit in keeping the items of the CO subscale, the other three subscales exhibit little validity. A valid measurement tool based on the IMIS would have beneficial implications for the prediction of success in a multicultural workplace. This may be applied in many areas of multicultural businesses, including recruitment and selection purposes, expatriate selection and training, and as a training tool for the everyday employee.

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Appendix A: Study 1 Survey

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

Samantha Pobog-Jaworowski   Colleen Ward
Masters Student   **Supervisor**
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What is the purpose of this research?
This research will allow us to validate a measurement tool to assess intercultural sensitivity.

Who is conducting the research?
·   We are a team of researchers in the Centre for Applied Cross-cultural Research and the School of Psychology at Victoria University of Wellington. Professor Ward is supervising this project. This research has been approved by the School of Psychology Human Ethics Committee under delegated authority of Victoria University of Wellington's Human Ethics Committee.

What is involved if you agree to participate?
·   If you agree to participate in this study, you will complete an anonymous survey where you will respond to questions such as "Please indicate your level of agreement with the following statement: The way I act and think is influenced by the culture of my country of origin." We anticipate that the survey will take you no more than half an hour to complete.
·   During the research you are free to withdraw, at any point before your survey has been completed.

Privacy and Confidentiality
·   We will keep your survey for at least five years after publication of the research results.
·   You will never be identified in this research project or in any other presentation or publication. The information you provide will be coded by number only.
·   In accordance with the requirements of some scientific journals and organizations, your coded survey may be shared with other competent researchers.
·   Your coded data may be used in other, related studies.
·   Copies of the coded data will remain in the custody of Samantha Pobog-Jaworowski and Professor Colleen Ward at Victoria University of Wellington.

What happens to the information that you provide?
·   The data you provide may be used for one or more of the following purposes:
·   The overall findings may be submitted for publication in a scientific journal, or presented at scientific conferences.
·   The overall findings may form part of a PhD Thesis, Master's Thesis, or Honours research project that will be submitted for assessment.

If you would like to know the results of this study, they will be available approximately four months after you return your survey. The results will be posted at http://cacr.victoria.ac.nz

Thank you for considering participation in this research.
Samantha Pobog-Jaworowski and Colleen Ward

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What is your age?

Are you: Male/Female

What is your ethnicity?

What is your country of origin?

What country do you live in now?

Is English your first language? Yes/No

Please indicate your level of agreement with the following statements.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

1. Cultural differences do not play an important role, considering that people are biologically basically the same
2. Cultural differences do not play an important role during daily interactions.
3. There will be no difficulties during cultural encounters, as long as you know the customs and practices of other cultures.
4. No matter what culture they belong to, all humans are the same, deep within themselves.
5. If one has a good knowledge of the local language, one does not have problems getting along in a foreign culture.
6. One should emphasize what people of different cultures have in common, rather than focusing on the differences.
7. The culture of my country of origin shapes a part of my identity.
8. The way I act and think is influenced by the culture of my country of origin.
9. I do not have a strong link to the culture of my country of origin.
10. The culture of my country of origin has strongly influenced the development of my personality.
11. I am interested in foreign cultures, and their customs and traditions.
12. I enjoy observing people from other cultures in order to develop an understanding of the meaning of their behaviours.
13. I think it is exhausting to deal with the values and norms of foreign culture.
14. For me cultural differences make living with other people interesting.
15. Considering our values, customs and traditions, one notices that we are way ahead of other cultures.
16. When comparing cultures, some are better than others.
17. Some cultures are superior to others.
18. When dealing with other cultures, it is important to be aware of one's own views and values in order not to forget what is right.

We have collected a sample of people's ideas about 'culture' (national or ethnic culture, as in Chinese culture). Sometimes, ideas about "culture" can be quite abstract. We are interested in knowing what you think about the following ideas relating to culture.

Not at all true						Completely true
1	2	3	4	5	6	7

1. Culture is a central aspect of a person's personality, it defines who you are.
2. People who belong to a different culture are a distinct type of person.
3. It is easy to change somebody's culture: it is not a fixed attribute of the person.
4. Culture has broad ramifications: it influences people's behaviour in a wide variety of situations and in many aspects of their lives.
5. People will tend to follow their cultural norms and customs in a consistent manner, in different situations and with different people.
6. Culture is a deeply-rooted part of the personality: it lies deep within the person.
7. Cultural groups are just arbitrary categories.
8. Culture is a social construct and has no real bearing on how people interact.
9. Culture helps determine differences in people's behaviour.
10. When meeting a new person it is important to know what culture they are from.
11. If I knew someone was from a different culture, I would mention this in describing them to someone else.
12. Culture does not have an inherent biological basis.
13. It is hard, if not impossible to change the basic qualities associated with a person's culture.
14. I change my behaviour depending on which culture the person I am interacting with is from
15. What a person is like (e.g., his or her abilities, traits) is deeply engrained by their culture.

Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you AS YOU REALLY ARE.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. I enjoy interacting with people from different cultures.
2. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
3. I am sure I can deal with the stresses of adjusting to a culture that is new to me.
4. I enjoy living in cultures that are unfamiliar to me.
5. I am confident that I can get accustomed to the shopping conditions in a different culture.

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don't get my way.
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter whom I'm talking to, I'm always a good listener.
6. There have been occasions when I took advantage of someone.
7. I'm always willing to admit when I make a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable.
10. I have never been annoyed when people express ideas very different from mine.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favours of me.
13. I have never deliberately said something that hurt someone's feelings.

Please indicate how positive or negative you find the following statements.

Very Negative						Very Positive
1	2	3	4	5	6	7

1. Some groups of people are simply inferior to other groups.
2. In getting what you want, it is sometimes necessary to use force against other groups.
3. It's OK if some groups have more of a chance in life than others.
4. To get ahead in life, it is sometimes necessary to step on other groups.
5. If certain groups stayed in their place, we would have fewer problems.
6. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
7. Inferior groups should stay in their place.
8. Sometimes other groups must be kept in their place.
9. It would be good if groups could be equal.
10. Group equality should be our ideal.
11. All groups should be given an equal chance in life.
12. We should do what we can to equalize conditions for different groups.
13. Increased social equality.
14. We would have fewer problems if we treated people more equally.
15. We should strive to make incomes as equal as possible.
16. No one group should dominate in society.

Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you AS YOU REALLY ARE.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
2. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
3. I am conscious of the cultural knowledge I apply to cross-cultural interactions.
4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.

To what extent do the following statements apply to you?

Totally Not Applicable	Hardly Applicable	Moderately Applicable	Largely Applicable	Completely Applicable
1	2	3	4	5

1. Is interested in other cultures.
2. Is fascinated by other people's opinions.
3. Is looking for new ways to attain his/her goal.
4. Is curious.
5. Finds other religions interesting.
6. Tries out various approaches.
7. Is intrigued by differences.
8. Starts a new life easily.
9. Gets involved in other cultures.
10. Has a feeling for what is appropriate in a specific culture.
11. Seeks contact with people from a different background.
12. Has a broad range of interests.
13. Puts his or her own culture in a perspective.
14. Is open to new ideas.
15. Is fascinated by new technological developments.
16. Likes to imagine solutions for problems.
17. Is a trendsetter in societal developments.
18. Reads a lot.

Please indicate your reaction to each statement according to the following scale. You might find that you sometimes have different reactions to different parts of a statement. For example, you might very strongly disagree ("-4") with one idea in a statement, but slightly agree ("+1") with another idea on the same item. When this happens, please combine your reactions, and write down how you feel on balance (a "-3" in this case).

Very Strongly Disagree			Slightly Disagree	Neutral	Slightly Agree			Very Strongly Agree
-4	-3	-2	-1	0	1	2	3	4

1. The established authorities generally turn out to be right about things, while the radicals and protesters are usually just "loud mouths" showing off their ignorance.
2. Women should have to promise to obey their husbands when they get married.
3. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.
4. Gays and lesbians are just as healthy and moral as anybody else.
5. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds.
6. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.
7. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.
8. There is absolutely nothing wrong with nudist camps.
9. Our country needs free thinkers who have the courage to defy traditional ways, even if this upsets many people.
10. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.
11. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.
12. The "old-fashioned ways" and the "old-fashioned" values still show the best way to live.
13. You have to admire those who challenged the law and the majority's view by protesting for women's abortion rights, for animal rights, or to abolish school prayer.
14. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.
15. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the "normal way things are supposed to be done".
16. God's laws about abortion, pornography and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.
17. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.

18. A "woman's place" should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.
19. Our country will be great if we honour the ways of our forefathers, do what the authorities tell us to do, and get rid of the "rotten apples" who are ruining everything.
20. There is no "ONE right way" to live life; everybody has to create their own way.
21. Homosexuals and feminists should be praised for being brave enough to defy "traditional" family values.
22. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group's traditional place in society.

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

- Thank you for participating in this study.

- This study will allow us to develop a measurement tool to examine intercultural sensitivity.

- Intercultural sensitivity is considered an antecedent to more positive intercultural interactions. Different cultures place emphasis on different values and employ different communication styles. Intercultural sensitivity is the ability to recognize and embrace different cultures' interaction styles, and adjust their own to match that of the interacting culture.

    Previous research has attempted to develop accurate measurement tools for intercultural sensitivity; however these attempts are few and far between. The present study combines both awareness and an evaluation of cultural differences in order to provide a more complete and encompassing approach to intercultural sensitivity.

    With increasing globalization, being able to interact effectively with members of other cultures is becoming an invaluable quality. Being able to accurately measure a person's level of intercultural sensitivity may allow us to predict outcomes such as how well a person will adjust to living and working in another culture.

- If you would like to know the results of this study, they will be available approximately four months after you return your survey. The results will be posted at http://cacr.victoria.ac.nz

    Thank you again for participating in this research.

Appendix B: Study 2 Survey

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

What is the purpose of this research?

This research will allow us to determine whether a measure of intercultural sensitivity can be used to predict success in working in a multicultural environment.

Who is conducting the research?

We are a team of researchers in the Centre for Applied Cross-cultural Research and the School of Psychology at Victoria University of Wellington. Professor Ward is supervising this project. This research has been approved by the School of Psychology Human Ethics Committee under delegated authority of Victoria University of Wellington's Human Ethics Committee.

What is involved if you agree to participate?

If you agree to participate in this study, you will complete a short survey where you will respond to questions such as "The way I act and think is influenced by the culture of my country of origin." We anticipate the survey will take you approximately half an hour to complete. During the research you are free to withdraw at any point before your survey has been completed. Upon completion of the survey, you will receive feedback about your intercultural sensitivity score

You may leave and return to complete this survey at a later date if you wish (as long as you access it from the same computer).

Privacy and Confidentiality

This survey is completely anonymous. Please do not put your name on it anywhere. We will keep your survey data for approximately 5 years after the publication of our results. In

accordance with the requirements of some scientific journals and organizations, your coded data may be shared with other competent researchers. No identifying names may be used in this study or other related studies. A copy of data without identifying names will remain in possession of Professor Ward in a secure hard-drive.

What happens to the information that you provide?
The data may be used for one or more of the following purposes:
The overall findings may be submitted for publication is a scientific journal, or presented at scientific conferences. The overall findings may form part of a PhD Thesis, Master's Thesis, or Honours project that will be submitted for assessment. The findings will be summarized in a report for Standard Chartered Bank

If you would like to know the results of this study they will be available approximately April 2014 from the following sources:

Posted on the website of the Centre for Applied Cross-Cultural Research
(CACR) http://www.victoria.ac.nz/cacr

Thank you for considering participation in this research
-Samantha Pobog-Jaworowski and Colleen Ward.

What is your age?

What is your gender?

What is your ethnicity?

What is your country of origin?

What country do you currently reside in?

How long have you been working for your current organization?

How long do you intend to stay with your current organization? Remember that this survey is completely anonymous. There will be no way for your answers to be traced back to you.

Please indicate your level of agreement with the following statements.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	2	3	4	5

1. Cultural differences do not play an important role, considering that people are biologically basically the same

2. Cultural differences do not play an important role during daily interactions.

3. There will be no difficulties during cultural encounters, as long as you know the customs and practices of other cultures.

4. No matter what culture they belong to, all humans are the same, deep within themselves.

5. If one has a good knowledge of the local language, one does not have problems getting along in a foreign culture.

6. One should emphasize what people of different cultures have in common, rather than focusing on the differences.

7. The culture of my country of origin shapes a part of my identity.

8. The way I act and think is influenced by the culture of my country of origin.

9. I do not have a strong link to the culture of my country of origin.

10. The culture of my country of origin has strongly influenced the development of my personality.

11. I am interested in foreign cultures and their customs and traditions.

12. I enjoy observing people from other cultures in order to develop an understanding of the meaning of their behaviours.

13. I think it is exhausting to deal with the values and norms of a foreign culture.

14. For me cultural differences make living with other people interesting.

15. Considering our values, customs and traditions, one notices that we are way ahead of other cultures.

16. When comparing cultures, some are better than others.

17. Some cultures are superior to others.

18. When dealing with other cultures, it is important to be aware of one's own views and values in order not to forget what is right.

Please rate yourself according to the scale below on the following items

Unsatisfactory or Poor	Not very good or Below Average	Moderate or Average	Very Good or Above Average	Exceptional or Outstanding
1	2	3	4	5

1. Your performance of your job responsibilities.

2. Your performance in general.

3. Your technical performance.

4. Your effectiveness at maintaining good working relationships with workmates of different cultural backgrounds.

5. Your effectiveness at communicating and keeping others in your work unit informed.

6. Your effectiveness at representing your company to customers and community.

7. Your effectiveness at training your replacement.

8. Your effectiveness at transferring information across strategic units.

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I would live my life over, I would change almost nothing.

To what extent do the following statements apply to you?

Totally not Applicable	Barely Applicable	Moderately Applicable	Largely Applicable	Totally Applicable
1	2	3	4	5

1. Sympathizes with others.
2. Tries out various approaches.
3. Finds it difficult to make contacts.
4. Is reserved.
5. Likes routine.
6. Sets others at ease.
7. Takes the lead.
8. Is often the driving force behind things.
9. Is looking for new ways to attain his/her goal.
10. Makes contacts easily
11. Keeps clam when things don't go well.
12. Has a feeling for what is appropriate in a specific culture.
13. Seeks contact with people from a different background.
14. Has fixed habits.

15. Likes to imagine solutions for problems.

16. Is insecure.

17. Wants to know exactly what will happen.

18. Enjoys other people's stories.

19. Starts a new life easily.

20. Is under pressure.

21. Gets upset easily.

22. Leaves the initiative to others to make contacts.

23. Pays attention to the emotions of others.

24. Looks for regularity in life.

25. Is nervous.

26. Functions best in a familiar setting.

27. Is a good listener.

28. Works according to plan.

29. Is inclined to speak out.

30. Has a broad range of interests.

31. Is apt to feel lonely.

32. Enjoys getting to know others profoundly.

33. Takes initiatives.

34. Is not easily hurt.

35. Works mostly according to a strict scheme.

36. Notices when someone is in trouble.

37. Senses when others get irritated.

38. Worries.

39. Works according to strict rules.

40. Is a trendsetter in societal developments.

Please read each statement and decide how much of the time the statement describes how you have been feeling over the past several days.

A Little of the Time	Some of the Time	Good Part of the Time	Most of the Time
1	2	3	4

1. I feel down-hearted and blue.

2. Morning is when I feel the best.

3. I have crying spells or feel like it.

4. I have trouble sleeping at night.

5. I eat as much as I used to.

6. I still enjoy sex.

7. I notice that I am losing weight.

8. I have trouble with constipation.

9. My heart beats faster than usual.

10. I get tired for no reason.

11. My mind is as clear as it used to be.

12. I find it easy to do the things I used to.

13. I am restless and can't keep still.

14. I feel hopeful about the future.

15. I am more irritable than usual.

16. I find it easy to make decisions.

17. I feel that I am useful and needed.

18. My life is pretty full.

19. I feel that others would be better off if I were dead.

20. I still enjoy the things I used to do.

Read each statement and select the response that best describes your capabilities. Select the answer the BEST describes you AS YOU REALLY ARE

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds.

2. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.

3. I am conscious of the cultural knowledge I apply to cross-cultural interactions.

4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.

5. I know the legal and economic systems of other cultures.

6. I know the rules (e.g. vocabulary, grammar) of other languages.

7. I know the cultural values and religious beliefs of other cultures.

8. I know the marriage systems of other cultures.

9. I know the arts and crafts of other cultures.

10. I know the rules for expressing nonverbal behaviors in other cultures.

11. I enjoy interacting with people from different cultures.

12. I am confident that I can socialize with locals in a culture that is unfamiliar to me.

13. I am sure I can deal with the stresses of adjusting to a culture that is new to me.

14. I enjoy living in cultures that are unfamiliar to me.

15. I am confident that I can get accustomed to the shopping conditions in a different culture.

16. I change my verbal behavior (e.g. accent, tone) when a cross-cultural interaction requires it.

17. I use pause and silence differently to suit different cross-cultural situations.

18. I vary the rate of my speaking when a cross-cultural situation requires it.

19. I change my nonverbal behavior when a cross-cultural interaction requires it.

20. I alter my facial expressions when a cross-cultural interaction requires it.

Please read through the following scenarios and answer the questions that follow.

1. Tom Bancroft, a top salesman in the Midwestern U.S. area, was asked to head a presentation of his office equipment firm to a Chinese company. He had set up an appointment for the day he arrived and even began explaining some of his objectives to the marketing representative who was sent to meet his plane. However, it seemed like the representative was always changing the subject as he persisted in asking a lot of personal questions about Tom, his family, and his interests. Tom was later informed that the meeting had been arranged for several days later as his hosts hoped that he would be able to relax a little first and recover from his journey, perhaps see some sights and enjoy the country's hospitality. Tom responded by saying that he was quite fit and prepared to give a presentation that day, if possible. The representative seemed a little taken aback by this, but said he would discuss it with his superiors. Eventually they agreed to meet with Tom, but at the subsequent meeting, after a bit of chat and some preliminaries, they suggested that as he might be tired and that they could continue the next day after he had some time to recover. During the next few days, Tom noticed that, though they had said they wanted to discuss details of his presentation, they seemed to spend an inordinate amount of time on inconsequential activities. This began to annoy Tom as he thought that the deal could have been closed several days ago. He just did not know what they were driving at.

   How would you help Tom understand the situation?
   a. The company was trying to check on Tom and his firm by finding out more information.
   b. Chinese are not used to working hard and just wanted to relax more.
   c. The Chinese company was not really interested in the products of Tom's company and were just putting him off.
   d. The representatives of the Chinese company were interested in building a relationship with Tom and his company.

2. Dr. Alex Lee, who worked at an important economic planning institute in Singapore, was on a study tour of the United States when he contacted Dr. Ronald Hastings, who was affiliated with a similar organization in New York City. Hastings was a high-status economist and was considered to be a leading authority in his field. Dr. Lee

invited Dr. Hastings to come to Singapore for two months to give seminars on his field of expertise. Dr. Hastings responded, "I'm interested, but I have to run this invitation past the administrators here in this [American] organization. The organization just received a grant, but I don't know the details of what the grant allows, for instance, time away from New York to go to Singapore. So I'll have to check with the administrators here to get their approval." Dr. Hastings then ended his meeting with Dr. Lee, thinking that it had gone well. However, Dr. Hastings never heard again from Dr. Lee.

Which of the following is the most likely explanation for the cross-cultural misunderstanding?

a. Dr. Lee thought that Dr. Hastings was trying to be polite in communicating the message "No."

b. Dr. Hastings wanted to return to the activity that gives the highest status in his profession, teaching, but did not want to tell this to Dr. Lee directly.

c. Dr. Lee thought that Dr. Hastings could make his own decisions about what he does with his time.

d. Dr. Lee wanted to meet Dr. Hastings because of the networking value of interacting with such a high-status person, but he had no intention of following through with the Singapore trip plans.

3. Machmud, an Indonesian businessman, was promoted to a position of authority and was asked to represent his company and Indonesia's needs at the head office in Montana (USA). His relationships with the American co-workers seemed cordial but rather formal from his perspective. He was invited to attend policy and planning sessions with other company officials, where he often sat rather quietly as others generated ideas and engaged in conversation. The time finally came when the direction the company was to take in Indonesia was to be discussed. A meeting was called to which Machmud was invited. As the meeting was drawing to a close after 2 hours of discussion Machmud, almost apologetically, offered a suggestion – his first contribution to any meeting. Almost immediately, John Stewart, a local vice president, said, "Why did you wait so long to contribute? We needed your comments all along." Machmud thought that Stewart's reply was harsh.

How would you best explain Machmud's behavior?

    a. It is common in Indonesia for decisions to take a long time to be made. Machmud was expecting much more discussion before the company adopted a new policy. When suddenly faced with the realization that his thoughts had not been heard, he let them be known at the last minute.

    b. Machmud did not want to stand out as an individual and therefore he did not make his contribution earlier.

    c. Machmud was overwhelmed by new policies, procedures, people, and customs, and was not able to function appropriately within this new context.

    d. Machmud was not confident with his use of the English language, and therefore was reluctant to participate.

4. Rose Kong, a young and talented Chinese-Malaysian woman enrolled in a Master's program at a university in Tokyo encountered a difficulty with her thesis committee. Committee members were reasonable in helping Rose deal with the exigencies that arose over the course of the year as she worked on the thesis. The thesis was due, she was told, by 4:30 pm on the tenth of January. Being a conscientious student, Rose saw the completion date as tight but doable. The afternoon before her thesis was due, Rose printed off a draft of her thesis on her old printer at home. She planned to print the final copy the next day on a laser printer at the university's Computer Center. Early the next morning, she went to the Computer Center and after a long wait for a free printer, started to print her thesis out. The printer quickly ran out of toner, and when the toner was finally replaced, the printer froze and refused to print the bibliography. Rose took the final version of her thesis – minus the bibliography – rushed back to her dorm, retrieved the copy of the bibliography she had printed out before and ran to the dean's office to hand in the thesis. She arrived thirty minutes late. She explained what had happened, including the replacement draft version of the bibliography. The dean refused to accept the thesis because it was late and incomplete at that. The deadline, he explained, had been clearly announced and was irrevocable. Rose, maintaining her professional demeanor, asked how the problem could be resolved. She was told it could not be resolved and that she would have to wait a year to meet next year's deadline (and pay another year's tuition).

What should Rose have done to persuade the dean to accept her thesis?

    a. Rose should have reminded the dean of the two previous students who were granted extensions on their thesis due date.

    b. Rose should have explained to the dean that having to wait another year to submit her thesis would bring shame and dishonor to her family.

    c. Rose should not have tried to make excuses for her lateness, but instead apologized profusely and assured the dean it would never happen again.

    d. Rose should have burst into tears and refused to leave the dean's office until an extension was granted.

5. Not long after moving to Malaysia, John found himself in the company of two of his local acquaintances, Amina (female) and Soleh (male) at a nearby marketplace. After walking around for some time, observing the local crafts and food items that were for sale, the trio stopped for a coffee. The conversation swayed between topics, from providing aid to developing nations to the role of women in society. Just after initiating a discussion of local politics, John excused himself to go buy a round of coffees, thus treating everyone at the table. He returned clutching a tray with three cups of coffee in his right hand. While still holding the tray, John suddenly remembered a point he wanted to stress with Amina. Leaning forward and reaching for Amina's shoulder with his left hand before sitting down, he proceeded to talk. Amina and her companion began to appear uncomfortable. The conversation began to move away from John. When the two Malaysians finished their coffee, they politely excused themselves and left. Neither made contact with John again.

How do you explain this incident?

    a. Physical contact between unmarried members of the opposite sex is considered culturally inappropriate in the local Muslim culture. Amina and Soleh were both put off by John's apparent advance.

    b. The left hand is considered unclean in some cultures, and there is a taboo against personal contact with it. Both Malaysians were insulted when John touched Amina with his left hand.

    c. Soleh perceived John as flaunting his wealth by paying for drinks. He was obviously insulted by John's purchase.

d. Both Malaysians were insulted that John would get up and leave just after initiating a discussion. It is preferable to signal to the waiter rather than leave your friends.

Are you an expatriate? An expatriate is a person working on temporary assignment outside his/her country of origin. *If participants answered no to this question, they were redirected to the debriefing and feedback section of the survey. If participants answered yes to this question, they received additional questions specific to expatriates.*

Expatriates face a unique set of challenges in the workplace. As well as having to adapt to working in a foreign environment, expatriates must also adapt to a new culture -- and sometimes an entirely different way of life.
In this section, you will be asked to respond to measures specifically relating to expatriates.

How long have you been living in your current country of residence?

How long do you plan to stay in your current country of residence?

Do you plan to finish your work assignment in this country?

Use the scales below to rate how life in your country of residence differs from your home country.

No Different	Slightly Different	Moderately Different	Very Different	Extremely Different
1	2	3	4	5

1. Climate
2. Clothing
3. Language
4. Educational system
5. Food
6. Religion
7. Material comfort (e.g. standard of living)
8. Recreational activities, entertainment

9. Family structure and family life

10. Forming friendships

Living in a different culture often involves learning new skills and behaviours. Thinking about life in [country], please rate your competence at each the following behaviours

Not at all Competent				Extremely Competent
1	2	3	4	5

1. Building and maintaining relationships.

2. Managing my work responsibilities.

3. Interacting at social events.

4. Maintaining my hobbies and interests.

5. Adapting to the noise level in my neighbourhood.

6. Accurately interpreting and responding to other people's gestures and facial expressions.

7. Working effectively with other work colleagues.

8. Obtaining community services I require.

9. Adapting to the population density.

10. Understanding and speaking the host national language.

11. Varying the rate of my speaking in a culturally appropriate manner.

12. Gaining feedback from other work colleagues to help improve my performance.

13. Accurately interpreting and responding to other people's emotions.

14. Attending or participating in community activities.

15. Finding my way around.

16. Interacting with members of the opposite sex.

17. Expressing my ides to other work colleagues in a culturally appropriate manner.

18. Dealing with the bureaucracy.

19. Adapting to the pace of life.

20. Reading and writing in the host national language.

21. Changing my behaviour to suit local norms, rules, attitudes, beliefs, and customs.

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

- Thank you for participating in this study.

- This study will allow us to determine whether a measure of intercultural sensitivity can be used to predict outcomes related to success in a multicultural workplace.

- Intercultural sensitivity is considered an antecedent to more positive intercultural interactions. Different cultures place emphasis on different values and employ different communication styles. Intercultural sensitivity is the set of attitudes that allows an individual to recognize and embrace cultural differences which leads to the ability to adjust one's behaviors in a culturally appropriate way when interacting across cultures.

- A measure of intercultural sensitivity may allow us to predict outcomes related to success in a multicultural environment (such as turnover intention, cultural judgment and decision-making tasks and job performance) as well as outcomes related to more general adjustment. The current study hopes to determine the predictive powers of a new measure of intercultural sensitivity.

- It is hoped that the results of this study will allow for the use of intercultural sensitivity as a tool for selection, development, and training.

Continuing on to the next two pages will give you your intercultural sensitivity score and a short explanation of how to interpret that score.

Thank you again for participating in this research.

Feedback for participants

Intercultural sensitivity is the tendency to understand cultural differences and to be open and non-judgmental about other cultures.   The interculturally sensitive person is aware of the influence culture has on the way people view the world, and does not judge people from other cultures simply because they may act or think differently.

On the next page you will find your intercultural sensitivity score (on a percentage scale of 1-100).

The average score on the Intercultural Sensitivity Scale is 65-75%.

People who score below this average are perhaps not aware of the influence their own culture has on them. Culture can be thought of as a lens through which we view the world. The culture we were brought up in influences the way in which we interpret the world around us. It is not possible to take off that lens, nor is it possible to put on the lens of another person. In order to be interculturally sensitive, we must acknowledge that our lens is no clearer or foggier than any other lens, it is simply different. This acknowledgment is often difficult, as it involves a certain amount of effort to put aside our preconceptions and take people for who they are, not what they are.