THE DEVELOPMENT AND INITIAL VALIDATION OF THE MULTICULTURAL READINESS SCALE

by

Ricardo Obasare

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Chair of Committee: Dr. L. A. Witt Committee Member: Dr. Vincent L. Ng Committee Member: Dr. Rodica Damian Committee Member: Dr. Leanne Atwater

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ABSTRACT

Given the increasingly multicultural nature of the US workforce, organizations need to prepare employees to work effectively in settings where multiple cultures are represented. One way organizations can gauge employees' level of preparedness for multicultural contexts is through an assessment of their multicultural readiness. I defined multicultural readiness as a set of thoughts, feelings, and behaviors that aid in minimizing internal and external discomfort stemming from cultural differences. I conducted three studies to test the substantive, structural, and external validity of the new measure. Sample data included 1, 447 undergraduate students at a large Southwestern Univerity in the USA. Results provided support for a second-order, threefactor model comprising cultural identity, cultural self-efficacy, and cultural empathy. Model fit indices suggested that the second-order 13-item model yielded the best fit to the data. Results provided initial evidence of convergent validity (i.e., cultural intelligence) and divergent validity (i.e., personality, social skill). Additionally, I found that multicultural readiness was a significant predictor of international orientation, but not creativity. Overall, the findings indicated a need for a better understanding of the conceptual dimensions of multicultural readiness. Moreover, the results suggested that the pathway between multicultural readiness and creativity may be more complex. Thus, additional evidence is needed to support the predictive utility of multicultural readiness to important organizational criteria, beyond international orientation.

Keywords: multicultural readiness, openness to experience, personality, creativity

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CHAPTER I

Introduction

U.S. demographics are changing rapidly; it is estimated that by 2055, the U.S. will not have a single racial or ethnic majority (Cohn & Caumont, 2016). The U.S. workforce now has more racial and ethnic minorities, older workers, people with disabilities, LGBT persons, and women than ever before (Cohn & Caumont, 2016). It has become more commonplace for employees to work in environments where there are numerous cultures represented. It is evident from these demographic changes that expatriates are not the only ones who need to be prepared for multicultural environments. However, the current literature primarily focuses on identifying personal cultural attributes that predict success in cultural adaptation and adjustment overseas. This emphasis seems appropriate given the financial risks associated with repatriation. Some estimates suggest that organizations stand to lose upwards of \$2 billion from failed expatriate assignments (Black, Mendenhall, & Oddou, 1991). Nonetheless, this focus on expatriate success overseas has overshadowed the need for organizations to prepare everyday employees for the increased multiculturalism nature of the domestic landscape.

To prepare employees for a multicultural workplace, organizations would need a tool to gauge employees' level of preparedness. However, this presents a challenge for researchers because there is no easily quantifiable way of measuring the "amount" of cultural preparedness an individual possesses. Cross-cultural psychology researchers have extensively explored different ways of measuring an individual's ability to adapt or adjust to multicultural settings (see Matsumoto and Hwang (2013) for a comprehensive review). The majority of this research focuses on understanding the capabilities or cultural attributes that lead people to adapt and adjust effectively in international contexts. Some of the more common conceptualizations

include cross-cultural competence (Abbe, Gulick, & Herman, 2007), multicultural personality (Van der Zee, Zaal, & Piekstra, 2003), and cultural intelligence (Ang et al., 2007). However, despite the plethora of existing measures, this research generally suffers from poor conceptual definitions, ambiguous theoretical foundations, and a narrow focus on cultural adaptation overseas (Johnson, Lenartowicz, & Apud, 2006; Yamazaki, & Kayes, 2004). Additionally, these measures tend to conflate predictors of cultural adaptation with cultural adaptation itself, which presents issues from a conceptual perspective. These issues point to a need for a measure of cultural preparedness that is grounded in theory, conceptually distinct, and relevant for both domestic and international contexts.

In this dissertation, I develop and validate a measure for the Multicultural Readiness construct. I define multicultural readiness (MCRs) as a set of thoughts, feelings, and behaviors that foster intrapersonal and interpersonal harmony. Harmony in this context refers to a set of attitudes that minimize internal and external discomfort that may arise from cultural differences. The main distinction between the proposed measure and existing measures is that I frame multicultural readiness as a set of attitudes that are separate and apart from adaptation outcomes. Moreover, the proposed scale does not presume that an individual has traveled or worked overseas. In conceptualizing multicultural readiness, I drew on humility research for the theoretical foundation. From an organizational standpoint, I argue that multicultural readiness is a useful construct for gauging a person's preparedness for domestic or international contexts.

Beyond being a useful tool for assessing cultural preparedness, I sought to demonstrate that multicultural readiness predicts meaningful organizational criteria, namely, creativity. With globalization, companies today face increased competition from around the world. For instance, whereas Facebook initially dominated the social media landscape, companies across the pond

like TikTok are dominating the market due to their ability to capitalize on the next "big thing." Companies that can effectively harness the creativity of their employees are better able to maintain a competitive advantage. Increasing evidence points to a link between cultural variables and creativity (Damian & Tou, 2017). Researchers have found that people who identify with more than one culture exhibit higher levels of creativity and professional success (Tadmor, Galinksy & Maddux, 2012). Social network research suggests that greater network diversity is linked to creativity (Burt, 2004; Chua, 2018; Perry-Smith, 2006). Moreover, having close intercultural relationships correlates with higher levels of creativity, innovation, and entrepreneurship (Lu et al., 2017). Similarly, I employ a creative cognition approach to establish a link between multicultural readiness and creativity. In doing so, I: (1) underscore the organizational benefits of multicultural readiness, and (2) contribute to the literature through a better understanding of the pathways linking cultural attributes and creativity. In short, I aim to inform theory and practice by: (1) establishing a need for a new construct, (2) differentiating the multicultural readiness construct from existing constructs, and (3) demonstrating a link between multicultural readiness and organizational outcomes.

Theoretical Development and Hypotheses

The rationale for the creation of the Multicultural Readiness Scale

In this section, I outline the primary reasons that informed the creation of the Multicultural Readiness Scale. First, existing scales often conflate personal cultural characteristics with cultural adaptation outcomes (Chiu et al., 2013). In contrast, I define multicultural readiness as an attitude that reflects a level of preparedness for multicultural environments. Although these personal cultural characteristics may help delineate those who

have a better likelihood of cultural adaptation, it is not a measure of adaptation itself. Thus, I define multicultural readiness as an attitude that antecedes any performance-related outcomes.

Second, research points to the importance of one's identity in the cultural learning process (Sue, 2001). Our experiences shape the way we see the world and form the basis of our identity. This identity comprises different aspects of ourselves, such as our age, ethnicity, gender, socioeconomic status, etc. Our cultural identity influences our views about what is normal and dictates norms that guide our thoughts and behaviors. Our attachment to our culture also provides a sense of security and stability in unfamiliar settings or situations (Tajfel & Turner, 1986). In contrast, not having a strong cultural identity can make it challenging to synthesize cultural differences that conflict with your own established beliefs. The importance of one's cultural identity in cultural adjustments has been corroborated by researchers studying expatriates (Abbe, Gulick, & Herman, 2007; Johnson et al., 2006). Despite its importance, quantitative measures of cultural identity are largely non-existent in the literature (Matsumoto & Hwang, 2013). To address this gap in the literature, I included cultural identity as a core component of the proposed scale.

Third, existing measures of personal cultural attributes often lack strong theoretical foundations; instead, they often appear to be a collection of arbitrary facets tied together (Chiu et al., 2013). There are some exceptions to this, such as cultural intelligence (Ang et al., 2007) which is grounded in intelligence theory. However, there is a need for additional theoretical rigor to inform new insights in this area of research. To address this issue, I draw on a humility framework to define multicultural readiness as comprising of interpersonal and intrapersonal components. Additionally, whereas traditional measures of cultural attributes are housed in personality or intelligence literature, multicultural readiness is housed in the attitudes literature. By doing so, I aim to ground the proposed scale with a strong theoretical foundation.

Fourth, measures of cultural characteristics primarily focus on persons working overseas (Johnson et al., 2006). Traditionally, measures of cultural characteristics are framed in a manner that presumes that the respondent intends to travel or has traveled overseas (Matsumoto & Hwang, 2013). However, given the current demographic and globalization trends, employees in the United States are more likely to interact with people from different cultures without ever leaving the country. Accordingly, my proposed scale is predated on the fact that persons do not have to travel to acquire cultural experiences. My purpose in doing so is twofold: (1) to facilitate measurements of a broader realm of cultural contexts within a domestic context, and (2) to reflect the future trends in the workplace. In sum, in developing the Multicultural Readiness Scale, I hope to build on existing measures by creating a scale that addresses these limitations. In the next section, I review the theory behind the dimensions of the Multicultural Readiness Scale.

Nature and conceptualization of Multicultural Readiness

Definition. Research suggests that certain attributes contribute to effective cultural adaptation (Johnson et al., 2006; Yamazaki & Kayes, 2004). These attributes are conceptualized most commonly as cross-cultural competence (Abbe, Gulick, & Herman, 2007), multicultural personality (Van der Zee et al., 2003), and cultural intelligence (Ang et al., 2007). Here, *culture* refers to a set of values, beliefs, customs, and practices that are shared among a group of people (Betancourt & Lopez, 1993). In this dissertation, I define culture as a group of people of the same country (e.g., Russia) or ethnicity (e.g., African American). I chose this focus because one's nationality and ethnicity are salient parts of one's identity that influence how we perceive others and are perceived by others.

I define *multicultural readiness* as a set of thoughts, feelings, and behaviors that foster intrapersonal and interpersonal harmony in multicultural settings. Here, *harmony* refers to a set

of attitudes that minimize internal and external conflicts that arise due to cultural differences. Internal conflict may arise if one feels uncomfortable due to cultural differences. For example, if I find myself in a situation where I am reading directions listed in a language that I do not understand, it may prompt feelings of stress. My attitude in managing that discomfort internally may promote or hinder my effectiveness. Similarly, external conflict may arise if I encounter people who practice norms that contradict my beliefs. For example, I may meet someone who believes that a woman's place is in the home. If that differs from my beliefs, it may cause friction. However, an attitude of respect, understanding, and appreciation for other cultures may minimize friction and promote interpersonal harmony. I discuss the multidimensional nature of multicultural readiness in more detail in subsequent sections.

Researchers frequently use the term competence to refer to these cultural attributes, which implies there is an innate level of performance ability being assessed. This conflation blurs the conceptual line between antecedent and traditional performance outcome measures. Within cultural contexts, the nature of performance takes on a slightly new meaning. Unlike traditional performance outcomes, cross-cultural competence reflects effectiveness in a context rather than competence at a task (Caligiuri, 2000). The reason for this is that performance in a cultural context is situational. Therefore, one's assessment of performance must consider whether the set of behaviors are appropriate given the specific cultural norms. To this point, measures of cultural competence often examine the degree of self-reported or observer-rated difficulty engaging in a range of social and day-to-day activities overseas (Wilson, Ward, Fetvadjiev, & Bethel, 2017). Therefore, performance in a cross-cultural context is not synonymous with behaviors as would be traditionally the case within Industrial-Organizational psychology literature (Campbell, McCloy, Oppler, & Sager, 1993; Motowidlo & Kell, 2012).

Rather, performance within the cross-cultural psychology domain represents the effectiveness of one's behaviors in adapting to a cultural context (Johnson et al., 2006). Accordingly, I use the terms *competence* and *intercultural effectiveness* synonymously to refer to the effectiveness of one's cultural adaptation behaviors.

Although the definition of multicultural readiness used in this dissertation does include behaviors, I included behaviors that may be indicative of underlying attitudes. This approach is similar to personality measures that tap into behaviors as a way of indirectly gauging one's traits. For example, included in the measure for extraversion is the behavioral item "I talk to lots of different people at parties" (Donnellan, Oswald, Baird, & Lucas, 2006; Goldberg, 1999). Similarly, in developing items for multicultural readiness, I included behaviors that may provide insight into one's preparedness for new cultural contexts, both locally and abroad (e.g., "I attend events or presentations where I can learn about other cultures"). Thus, although multicultural readiness may indicate a level of cultural preparedness, it is not a measure of one's effectiveness at cultural adaptation or adjustment. For example, multicultural readiness capture attitudes (e.g., "I enjoy speaking with people from different cultures") whereas cross-cultural competence assesses effectiveness in cultural adjustment and adaptation (e.g., "I am skilled at communicating with people from different cultures"). Thus, I define multicultural readiness as an attitude that antecedes any performance-related or effectiveness outcomes.

Measures of cultural attributes often include personality traits, skills, or a combination of the two (Chiu, Lonner, Matsumoto, & Ward, 2013). However, in this dissertation, I conceptualize multicultural readiness as an attitude. An *attitude* is as an evaluation of socially significant objects across attribute dimensions, such as favorable-unfavorable, likable-dislikable, and good-bad (Dalal, 2012). People form attitudes toward a range of identifiable psychological

objects, such as groups of people (e.g., African-Americans), issues (e.g., abortion), or concrete objects (e.g., sports cars). The classic tripartite model conceptualizes attitudes as thoughts (i.e., cognition), feelings (i.e., affect), and past behaviors (i.e., overt actions) regarding an object (Thurstone, 1928). Cognitive attitudes reflect beliefs about the characteristics of the target (e.g., "Fast food is unhealthy"). Affective attitudes reflect positive or negative moods evoked by the object (e.g., "I hate fast food"). Behavioral attitudes reflect actions directed at either approaching or avoiding the object (e.g., "I often eat fast food"). Although the three dimensions are interrelated, researchers maintain that a conceptual distinction between the dimensions is useful (Dalal, 2012). In sum, under the tripartite model of attitudes, attitudes are formed when one has a set of enduring thoughts, feelings, and behaviors about an object that are evaluative in nature.

Although there is evidence to support the tripartite model (Olson & Maio, 2003), its usage is criticized (Dalal, 2012). Scholars argue that affective and cognitive attitudes predict behaviors (Dalal, 2012). That is, if people are rational beings then their behavior should be consistent with their attitudes. Thus, researchers argue that it is problematic to conceptualize behaviors as both a component and outcome of attitudes. However, people do not always behave in rational ways, for example, smoking cigarettes while knowing that it causes lung cancer. Moreover, evidence linking attitudes to behavior is inconsistent (Ajzen & Fishbein, 1977) leading researchers to conclude that measures of attitudes appear to be linked to behavior in some circumstances but not others (Olson & Maio, 2003). In support of the inclusion of behaviors as a component of attitudes, other researchers argue that behaviors inform attitudes through self-perception processes. Self-perception theory (Bem, 1972) states that people logically infer their attitudes are consistent with their past behaviors. For example, people may infer that they like Chinese food because they can recall eating it often. Thus, I measured past

behaviors as they may be indicative of underlying attitudes. Additionally, including behavioral items may help to minimize socially desirable responses associated with self-report attitudinal measures (Paulhus, 1991). The inclusion of behaviors is consistent with existing readiness measures (Biener & Abrams, 1991; Pantalon & Swanson, 2003). In the following section, I review the theoretical framework used to conceptualize multicultural readiness.

Multicultural Readiness as a multidimensional construct. In setting the theoretical framework for multicultural readiness I drew on humility literature. Humility is defined as comprising interpersonal and intrapersonal dimensions. From an intrapersonal perspective, humble individuals form accurate perceptions of themselves. In contrast, from an interpersonal perspective, humble individuals are other-oriented, respectful, and non-judgmental (Davis et al., 2011). Using this framework, researchers developed the concept of cultural humility, which is the ability to "overcome the natural tendency to view one's own beliefs, values, and worldview as superior" (Hook, Davis, Owen, Worthington Jr, & Utsey, 2013, p. 354). To provide effective therapy to clients of diverse backgrounds, skilled therapists are considerate of clients' cultural identities and open-minded when cultural differences arise. Whereas humility definitions focus equally on the interpersonal and interpersonal dimensions, cultural humility definitions tend to focus on the interpersonal dimension. The priority in therapy is to enhance client outcomes; thus, the focus on the interpersonal dimension seems appropriate. However, multicultural readiness focuses on an individual's internal state as well as their relationship with culturally different others. Thus, the ideal outcome is not solely promoting harmony with culturally different others, but also promoting internal harmony when dealing with discomfort in multicultural environments. Accordingly, the proposed multicultural readiness scale comprises affective, cognitive, and behavioral items that span intrapersonal and interpersonal factors.

Intrapersonal factor. To be successful in multicultural settings, one must maintain a sense of mental and emotional stability (Bird, Mendenhall, Stevens, & Oddou, 2010). The intrapersonal factor of multicultural readiness reflects thoughts, feelings, and behaviors that promote internal harmony when dealing with the discomfort associated with cultural differences. In new cultural contexts, people will encounter cultural differences that may prompt feelings of discomfort or stress, particularly if these differences are vast (Yamazaki, & Kayes, 2004). People who possess a strong cultural identity may feel more stable and secure because of their attachment to their cultural group (Tajfel & Turner, 1986). Additionally, people who believe in their abilities to succeed may fare better than those riddled with self-doubt (Abbe et al., 2007). Thus, the intrapersonal factor comprises two dimensions: cultural identity and cultural self-efficacy. I define these dimensions in more detail below.

People have different characteristics (e.g., gender and religion) that comprise their identity. As human beings, one of the ways we form cultural identities is through our shared experiences. As we mature as cultural beings, we go through changes in our attitudes towards ourselves, persons of the same culture, and persons of different cultures (Mio, Barker, & Domenech Rodriguez, 2019). Additionally, we become more aware of cultural differences between ours and other cultures, both positive and negative (Mio et al., 2019). Identifying these differences may lead us to question our deeply held beliefs, which can prompt feelings of stress. This stress may be heightened if it leads us to question beliefs or practices that are salient parts of our cultural identities. For example, if I am from a culture where I eat food with my hands and I move to a culture that uses forks and knives, I may feel discomfort because I am doing something that is not considered normal in this context. However, being connected to one's culture may provide advantages that aid in dealing with this internal tension.

People with strong cultural identities have a personal connection to their culture which fosters belongingness that can promote internal stability (Tajfel & Turner, 1986). Thus, when people encounter cultural differences, they can more easily integrate new knowledge without feeling overwhelmed or threatened (Johnson et al., 2006). In doing so, they can maintain a sense of stability and promote internal harmony when they experience discomfort in multicultural settings. Evidence suggests that expatriates with a strong sense of identity reported higher levels of psychological adjustment (Johnson et al., 2006). Within the literature, measures of cultural identity are primarily qualitative and focus on outcomes relevant to the therapist-client relationship (Sue et al., 2011). However, in this dissertation, I quantitatively assess cultural identity and explore its link to organizational outcomes.

The second dimension of multicultural readiness is cultural self-efficacy. Self-efficacy is defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). When in a new setting with different or unfamiliar norms, people are likely operating outside of their comfort zones. Furthermore, the mental schemas that they have used to guide them with challenges in the past may not be relevant to the present context. Thus, when faced with challenges, people may experience heightened feelings of stress, depression, and loneliness (Yamazaki, & Kayes, 2004). I argue that cultural self-efficacy is an important dimension of multicultural readiness because it reflects confidence in one's abilities to adapt to new cultures. Whereas those who are optimistic may have positive feelings about the future, a lack of self-confidence may inhibit their ability to act on this optimism. Moreover, when faced with discomfort and difficulties, this self-confidence may help people to endure which promotes internal harmony. Evidence suggests that those high in self-efficacy show better levels of expatriate adjustment (Bhaskar-Shrinivas, Harrison,

Shaffer, & Luk, 2005; Hechanova, Beehr, & Christiansen, 2003; Wilson, Ward, & Fischer, 2013). Although it seems likely that persons with prior international experience would demonstrate higher levels of self-efficacy, there is a lack of evidence to support this link (Abbe et al., 2007). In sum, I conceptualize cultural self-efficacy as the belief in one's ability to change one's behaviors as necessary in order to fit into unfamiliar cultural contexts.

Interpersonal factor. The interpersonal factor of multicultural readiness reflects thoughts, feelings, and behaviors that foster external harmony with culturally different others. In multicultural environments, one is likely to interact with people who have different perspectives. To facilitate interpersonal harmony, people exhibit an attitude that is other-centric, nonjudgmental, and open-minded to divergent cultural beliefs and norms. Accordingly, the first dimension of the interpersonal factor of multicultural readiness involves being open to learning about cultural differences. In doing so, one is likely to increase one's cultural knowledge which can aid in building relationships. For example, if I am non-Korean and I watch Korean dramas, I may learn new things about Korean culture. This insight can provide a conduit to form connections with Koreans with whom I may not have otherwise shared anything in common. The second dimension of the interpersonal factor of multicultural readiness involves understanding the emotions of culturally different others. As humans, we all belong to different cultures, and that brings with it unique challenges and circumstances. Being able to empathize with others creates an atmosphere where culturally different others feel understood and feel safe being vulnerable about different aspects of their identity. Therefore, I argue that being open and empathetic fosters interpersonal harmony. I define these two dimensions in more detail below.

Cultural openness refers to the extent to which an individual is interested in cultural differences (Nesdale & Todd, 2000). Although openness is a common aspect of cultural aptitude

measures, it is commonly defined as being open-minded to different ideas or ways of doing things (Van der Zee et al., 2003). For example, the multicultural personality questionnaire includes a measure of openness items, such as "tries out various approaches" or "is looking for new ways to attain his or her goal" (Van der Zee et al., 2003). However, as a dimension of multicultural readiness, I define openness as the extent to which one enjoys engaging in cultural activities (e.g., "I like to try different foods from other cultures"). I also assessed behaviors that may indicate an affinity towards learning about culture (e.g., "I spend my spare time learning about other cultures"). These past behaviors may be indicative of underlying attitudes and less susceptible to socially desirable responses (Olson & Maio, 2003). I argue that cultural openness is an important interpersonal element of multicultural readiness because it reflects an other-focused attitude. Thus, rather than becoming threatened or uncomfortable, open individuals welcome learning about differences. Research suggests that being open is linked to positive cultural adaptation outcomes (Abbe et al., 2007).

Empathy is "the ability to experience the same feelings as those of another person in response to a particular situation" (Nesdale, Griffith, Durkin, & Maass, 2005, p. 624). Scholars also define it as the ability to "put yourself in someone else's shoes" (Abbe et al., 2007, p. 16). Empathy is an important element of cultural aptitude as such, it appears in numerous measures (Yamazaki, & Kayes, 2004). Despite the frequency with which it appears in measures, there is limited empirical evidence supporting its usage (Abbe et al., 2007). Additionally, popular measures of empathy lack face validity, making it unclear whether these measures would be directly relevant in a cultural context. For example, the multicultural personality questionnaire includes a measure of cultural empathy items, such as "pays attention to the emotions of others" and "is a good listener" (Van der Zee et al., 2003), which are rather broad indicators of empathy.

As a dimension of multicultural readiness, cultural empathy is important because it indicates an understanding of the experiences of people from different cultures. As such, I included a measure of cultural empathy that focuses on experiencing the same feelings as others but also engaging in perspective-taking. Evidence suggests that empathy predicts a range of subjective well-being and adjustment outcomes (Abbe et al., 2007). In sum, I argue that the interpersonal factor of multicultural readiness comprises cultural openness and cultural empathy, and the intrapersonal factor comprises cultural identity and cultural self-efficacy.

Multicultural Readiness as a latent model. I define multicultural readiness as a latent multidimensional construct at the third-order level of abstraction. According to Law, Wong, and Mobley (1998), a latent multidimensional construct comprises dimensions that represent manifestations of the overall construct measured with different degrees of accuracy. I propose that the second-order level of abstraction of multicultural readiness comprises intrapersonal and interpersonal factors. These factors represent thoughts, feelings, and behaviors that promote internal and external harmony respectively. The first-order level of abstraction comprises cultural identity, cultural self-efficacy, cultural openness, and cultural empathy. Like general mental ability (GMA), multicultural readiness represents an underlying latent construct that is not directly observed but rather inferred from the items measured directly (Simms, 2008). Thus, any changes in the observable items are attributed to changes in the underlying latent construct (i.e., multicultural readiness). Similar multidimensional models have been proposed and tested for the multicultural personality questionnaire (Van der Zee et al., 2003) and the cultural intelligence scale (Ang et al., 2007). Accordingly, I propose:

Hypothesis 1a: Multicultural readiness has a latent multidimensional factor structure at the third-order level of abstraction.

Hypothesis 1b: The interpersonal and intrapersonal dimensions load on to the higher-order multicultural readiness factor.

Hypothesis 1c: The cultural identity and cultural self-efficacy dimensions load on to the intrapersonal factor of multicultural readiness.

Hypothesis 1d: The cultural openness and cultural empathy dimensions load onto the interpersonal factor of multicultural readiness.

Conceptual distinctiveness of Multicultural Readiness

An important phase of scale construction is to examine how the new measure (i.e., multicultural readiness) relates to existing measures to determine whether its relationships are consistent with theoretical underpinnings (Simms, 2008). By examining its relationships with purported similar and dissimilar constructs, researchers can provide validity evidence to support the conceptual distinctiveness of the new construct (Simms, 2008). Accordingly, in the sections that follow, I explore the nomological network of the multicultural readiness construct. First, I argue that multicultural readiness relates to similar constructs (e.g., cultural intelligence). Second, I argue that multicultural readiness differs from constructs that it is not intended to measure (e.g., social skill, Big-Five personality, openness to cultural experiences). Discrepancies in the proposed relationships, likely indicate a lack of evidence to support the need for a new construct (Simms, 2008).

Cultural intelligence. Cultural Intelligence refers to "a person's capability to gather, interpret, and act upon radically different cues to function effectively across cultural settings" (Lee & Sukoco, 2010, p. 964). It represents a form of 'real world' intelligence similar to social intelligence however, it focuses on intercultural domains. Cultural intelligence comprises four dimensions: meta-cognition, cognition, motivation, and behavior (Ng & Earley, 2006).

Metacognitive intelligence refers to the processes people use to attain and make sense of knowledge about themselves and others during cultural interactions. Cognitive intelligence refers to cultural knowledge acquired through learning or experiences. Motivational intelligence refers to one's capability to direct and maintain cognitive resources toward learning about cultural differences. Behavioral intelligence refers to one's capacity to display appropriate verbal and non-verbal actions in cultural settings (Ang et al., 2007). The motivational dimension of cultural intelligence bears similarities with the openness dimension of multicultural readiness as they both capture an affinity towards learning about other cultures. Moreover, both constructs involve introspection and reflection about one's behaviors in cultural settings. Accordingly, I propose:

Hypothesis 2: The higher-order multicultural readiness construct positively relates to cultural intelligence.

Personality. As an attitude, multicultural readiness refers to a set of thoughts, feelings, and behaviors that foster intrapersonal and interpersonal harmony. Personality traits describe what people typically do over time and across different contexts (Costa and McCrae, 1992). The Five-Factor model is a prominent theory of personality that comprises openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa and McCrae, 1992). Evidence suggests that of these five traits, neuroticism, openness to experience, and extraversion correlate with numerous cultural adjustment outcomes (Wilson et al., 2013). As one's disposition influences one's propensity for certain behaviors and experiences, it follows that personality traits are likely to relate to multicultural readiness. Of the five, openness to experience bears the most similarities with multicultural readiness.

Openness to experience comprises two dimensions: openness to intellect/imagination and openness to cultural experiences. At the lower-order level, openness to cultural experiences

comprises aesthetics, cultural tolerance, and depth facets (Woo et al., 2014). These facets reflect people who enjoy exploring various forms of art, learning about culture, and gaining insights about themselves and the world (Woo et al., 2014). It follows that cultural tolerance (e.g., "Immigrants really irritate me") may relate to multicultural readiness as it captures affect towards cultural differences. In contrast, the aesthetic (e.g., "Art bores me") and depth (e.g., "I am always interested in learning more about philosophy") dimensions focus on one's interest in art and philosophy broadly. While one could argue that these may be useful skills to have in a cultural context, they do not tap into attributes that are directly relevant to cultural contexts. In sum, while I anticipate that openness to experience shares similarities with multicultural readiness, I argue that multicultural readiness captures more specific knowledge components and behaviors that are necessary for adaptation. Thus, I propose:

Hypothesis 3a: The higher-order multicultural readiness construct weakly correlates with openness to cultural experiences.

Although multicultural readiness is likely to share similarities with the Five-Factor Model of personality, I anticipate that it will be distinct from these personality traits. Researchers argue that the Big Five alone is not a complete and comprehensive theory of personality (John, Naumann, & Soto, 2008). Due to its broad groupings, it is useful from a structural perspective. However, because of its low fidelity, it is not ideal for capturing all the relevant elements of personality that influence outcomes across all contexts. In their meta-analysis, Wilson et al. (2013) found that more narrowly defined cultural concepts, such as cross-cultural self-efficacy and cultural empathy predicted cultural adaptation above and beyond the broad conceptualizations of personality traits. Additionally, researchers have found that narrower personality traits demonstrate incremental validity in predicting culturally relevant outcomes

beyond the Big Five (Leone, Van der Zee, van Oudenhoven, Perugini, & Ercolani, 2005). Thus, while there may be similarities between multicultural readiness and personality, I argue that multicultural readiness is a distinct construct because it focuses more narrowly on thoughts, feelings, and behaviors that are relevant to multicultural environments. Accordingly, I propose:

Hypothesis 3b: The higher-order multicultural readiness construct weakly correlates with the overall Big Five-Factor Model of personality.

Social skill. Social skill is the ability to understand peoples' thoughts feelings, and intentions (Drasgow, 2012). It comprises two components, the ability to: (1) understand others, and (2) act or behave appropriately. Effective social communication involves several steps: (1) recognition that people have different perspectives, (2) understanding the importance of considering these different perspectives, (3) predicting how others will perceive situations, (4) viewing situations from others' perspectives when in conflict, and (5) applying knowledge of how others will behave to inform one's response and behaviors to situations (Drasgow, 2012). Thus, it follows that those social skills may be similar to the interpersonal dimension of multicultural readiness. This dimension reflects attitudes of openness and empathy which aid in promoting harmony with culturally different others. Being effective at communicating likely plays a role in helping to see things from different perspectives and adjusting one's behaviors to suit the context, both of which may promote interpersonal harmony.

Although multicultural readiness bears similarities to social skills, I argue that it represents a unique construct for several reasons. First, multicultural readiness involves understanding what is appropriate within the cultural context. Although people may be socially adept in the culture in which they grew up, these skills may not translate to settings in which they are unfamiliar with local norms. Therefore, they may find it hard to interpret and predict others'

behaviors in these settings. Second, socially adept people often demonstrate an interest in people however, multicultural readiness reflects a narrower interest in the influence of culture. There is likely some overlap whereby socially adept people learn about culture as a result of their interest in others however, this may not always hold true. It could also be that those skilled at interpersonal communication do not demonstrate an interest in culture. Third, social skill is likely to require introspection to correctly interpret social cues and respond appropriately. However, multicultural readiness goes a step further because it involves being aware of oneself as a cultural being and managing any internal discomfort that may arise due to cultural differences. From this perspective, social skills do not involve the intrapersonal elements that comprise multicultural readiness. Accordingly, I propose:

Hypothesis 4: The higher-order multicultural readiness construct weakly correlates with social skills.

Utility of Multicultural Readiness

An important aspect of scale construction involves demonstrating links between the new construct and meaningful outcomes. This aids in providing evidence that the new construct has utility in predicting criteria of interest (Simms, 2008). I established the external validity of multicultural readiness by examining its relationships with two outcomes of interest. First, I examined the relationship between multicultural readiness and a relevant cultural outcome, namely, *international orientation*. To demonstrate the utility of multicultural readiness, one provides evidence that it relates to criteria that it ought to relate to based on theory. Second, in addition to looking at a cultural outcome, I sought to show that multicultural readiness relates to useful outcomes outside of cultural contexts. Based on its conceptualization, it is clear why one would expect multicultural readiness to relate to cultural outcomes. However, it is less clear why

multicultural readiness would relate to outcomes that are not cultural in nature. A part of the rationale for developing this construct is to provide evidence that multicultural readiness may be valuable to organizations. Thus, I examine its link to an important organizational criterion, *creativity*. In sum, by examining these relationships, I sought to provide evidence that multicultural readiness has useful applications that extend beyond cultural domains.

International orientation. Personal cultural attributes correlate with cultural adjustment outcomes in a new country (Gelfand, Erez & Aycan, 2007; Ward & Fischer, 2008). However, due to globalization, it is becoming more common to interact with people from various cultures without having to travel to another country. As a result, I looked to culturally relevant outcomes that do not need to be assessed in an international context (i.e., international orientation). International orientation refers to a person's desire to live and work internationally (Leone et al., 2005). People high in multicultural readiness espouse thoughts, feelings, and behaviors that reflect respect and appreciation for culture. Moreover, they understand themselves as cultural beings and how culture influences the way they perceive others and are perceived by others. It follows then that there are likely to have an interest in living or working overseas as it would allow them to encounter new cultures. Thus, I expect that multicultural readiness predicts international orientation. Accordingly, I propose that:

Hypothesis 5: The higher-order multicultural readiness construct is positively related to international orientation.

Creativity. Creativity is the process through which one develops and executes creative ideas (Amabile, 1983; Oldham & Cummings, 1996). Traditionally, researchers use either two or three criteria to determine what constitutes creativity. Under the "two criteria" definition, an idea is creative if it is original and useful (Runco & Jaeger, 2012). Under the "three criteria"

definition, an idea must not only be original and useful but also have an element of surprise (Simonton, 2012). Each of these criteria is quantitative, such that the creativity of an idea is the product of these three components. Therefore, if an idea has zero utility, zero originality, and zero surprise, it follows that the idea has zero creativity (Damian & Tou, 2017). Researchers also distinguish between the levels of magnitude of creativity. Specifically: (1) "mini-c" creativity denotes subjective acts of everyday creativity (e.g., coming up with a different hairstyle); (2) "little-c" creativity includes more objective acts of everyday creativity (e.g., creating a new outfit from old clothes); (3) "Pro-c" creativity refers to creativity within a professional domain (e.g., developing an algorithm that reduces computation time); and (4) "Big-C" creativity which denotes ideas that have a significant impact on society (e.g., finding a cure for polio; Damian & Tou, 2017). Examining the processes underlying "Big-C" or "Pro-C" creativity would be meaningful given the potentially far-reaching impact of these ideas. However, this was beyond the scope of this study given the student sample that I used, so I focused instead on the originality of ideas within the "Little-c" domain.

Measures of creativity tend to focus on the creative thinking processes that underlie creative ideas, specifically divergent and convergent thinking. Divergent thinking reflects one's ability to move easily from one idea to the next or to generate *multiple* creative ideas (Mednick, 1962). In contrast, convergent thinking reflects one's ability to correctly arrive at the *best* or *unique* solution for a problem that may not be immediately apparent (Cropley, 2006). Although both dimensions of creativity may be valuable to organizations, I focus on divergent thinking in this dissertation. In today's business climate, innovation is a key driver of success within organizations (Anderson, De Dreu, & Nijstad, 2004). Organizations that can quickly develop and execute creative ideas stand the best chance of creating and maintaining a competitive advantage.

From its conception, Facebook innovated the way people communicate through social media. Since that time, companies like Instagram, TikTok, and Snapchat have created novel platforms that push the boundaries of how we interact using social media. To sustain a competitive advantage and stay relevant in the increasingly saturated market, organizations must be able to generate multiple creative ideas to find the next "big thing". It follows then that divergent thinking is an important element of the creative processes that promote innovation.

The Unusual Uses Test (Guilford, 1967) is a common measure of divergent thinking where respondents are asked to come up with as many alternative uses for common objects (e.g., a paper clip) within a specified time limit. Responses are then coded for creative originality (i.e., the novelty of the idea) and cognitive flexibility (i.e., the total number of different categories of uses). The Unusual Uses Test provides a way to measure everyday acts of creativity (i.e., "little c" creativity) and the respondent's ability to "think outside of the box." Although this measure may not directly tap into creativity within a specific profession or domain, it taps into the general divergent thinking that underlies creative ideas which can be applied in different contexts. Thus, I ask respondents to complete an Unusual Uses Test to assess divergent thinking. Research suggests that explicitly asking respondents to "be creative" before a creativity task enhances the creativity of their responses (Nusbaum, Silvia, & Beaty, 2014). As such, I asked participants to prioritize coming up with creative ideas rather than a lot of ideas. Additionally, I counted the different categories of responses the participants provided to get an indication of how well they can draw on creative ideas from distinct categories.

I adopt a creative cognition approach to posit that being in high multicultural readiness is linked to creativity through two mechanisms: (1) increasing one's cognitive content, and (2) enhancing one's cognitive flexibility. The creative cognition approach states that creative

processes are not unlike the cognitive processes that inform our everyday activities, and that people can train their minds to be more creative (Finke, Ward, & Smith, 1992; Leung, Maddux, Galinsky, & Chiu, 2008). It appears that creativity is not a binary characteristic that some people innately possess, and others do not. To this point, research suggests that some strategies that induce promotion-oriented regulatory focus alter cognitive processes that enhance creativity (Friedman & Förster, 2001). Similarly, exposure to diverse ideas may increase the creative content of one's mind (Maddux & Galinsky, 2009). For example, exposure to different cuisines and cooking techniques in other countries can provide ideas about different ways to incorporate these techniques in one's home country. Those high in multicultural readiness have an interest in learning about cultural differences and interacting with culturally different others. These interactions expose them to different beliefs, norms, and values. This exposure may yield new insights that can inform creative ideas. Social network literature suggests that greater network diversity is linked to creativity (Burt, 2004; Chua, 2018; Perry-Smith, 2006). In sum, individuals high in multicultural readiness are likely exposed to more cultures which provides an avenue to increase one's cognitive content which may enhance creativity (Ritter et al., 2012).

Theories of creativity (e.g., Guildford, 1967) posit that there are fundamental cognitive processes presumed to underlie creative thought, regardless of the specific domain. These cognitive processes reflect one's ability to "think outside of the box" or engage in cognitive flexibility (Maddux, Bivolaru, Hafenbrack, Tadmor, & Galinsky, 2014; Tadmor, Galinsky, & Maddux, 2012). Diversifying experiences theory of creativity (Damian & Simonton, 2015) argues that one's life experiences can shape and influence one's creativity because they can expand one's way of thinking. Similarly, I argue that persons high in multicultural readiness acquire cultural experiences that provide an avenue for examining one's underlying assumptions

and schemas. Moreover, they are more apt to reflect on their cultural identity and examine their own beliefs in the context of the new culture(s). For example, an individual may come from a culture where having piercings is seen as immodest. However, being exposed to a culture where piercings are a form of adornment may expose this person to another perspective that he or she may not have previously considered.

Although people may pick up on these cultural differences, it may not automatically prompt the cognitive processes that yield creativity. In contrast, persons high in multicultural readiness may not only observe these cultural differences but engage in the reflection needed to examine their underlying beliefs and assumptions. Simply observing cultural differences may not prompt cognitive flexibility. Rather, I argue that it is through cultural empathy and cultural identity, that those high in multicultural readiness go from observation to reflection and initiate relevant cognitive processes. Moreover, repeated exposure to these diverse experiences is likely to increase one's ability to synthesize foreign concepts and further develop one's cognitive flexibility. People who engage in cultural learning processes exhibit higher levels of creativity (Lu et al., 2017). In sum, I argue that multicultural readiness may lead to higher levels of creativity by increasing one's cognitive content and enhancing one's cognitive flexibility Accordingly, I propose that:

Hypothesis 6: *The higher-order multicultural readiness construct is positively related to creativity.*

CHAPTER II

Method

Participants and procedures

I recruited 1,447 students from a large, public Southwestern university in the USA. Participants completed an online survey that first asked about their demographic background followed by items related to personality, creativity, and multicultural readiness. To qualify for the study, respondents had to be 18 years of age or older. The university's institutional review board (IRB) approved the recruitment methods and study procedures on March 24th, 2020. Recruitment took place using the university's SONA system, and students received one unit of course credit in exchange for their participation. Items were randomized to control for the potential of item-order effects (Knowles, 1988). Outliers in survey completion time, those who provided the same response for all items, those who did not pass attention check items, and those who had more than 20% of responses missing (total or for any scale) were excluded from further analysis. After cleaning the data, I was left with a final sample of 1,239. Before starting the analyses, I randomly split the sample into three as follows: 500 participants for exploratory factor analyses (Study 2a), 500 participants for SEM and CFA analyses (Study 2b), and 239 participants for external validity analyses (Study 3). I examined variable distribution across the samples to ensure that they were consistent across the three samples.

Measures

Demographic and Background questionnaire. Respondents provided the following: age, gender, country of origin, race/ethnicity, grape point average (GPA), number of languages spoken at an intermediate level, number of countries traveled to, and length of time spent living in a foreign country. They also indicated the number of diversity workshops or presentations

attended in the past year and their frequency of interaction with persons from other racial or ethnic backgrounds in the past year. I list below the measures used in this study; the complete scale items are provided in the Appendices.

Multicultural Readiness. The initial 36-item Multicultural Readiness Scale consisted of four dimensions: cultural self-efficacy (e.g., "I would be good at coping with the uncertainties of living in a foreign place"), cultural openness (e.g., "I spend my spare time learning about other cultures"), cultural identity (e.g., "I can explain how my culture has informed my views on life"), and cultural empathy (e.g., "I know what it feels like to experience culture shock"). I determined the final scale items based on the substantive, structural and external validity analyses. I used a 7-point Likert response scale (1 = *strongly disagree*; 7 = *strongly agree*).

Cultural Intelligence. I used the 20-item Cultural Intelligence Scale (CQ) developed by Earley and Ang (2003) with 4, 6, 5, and 5 items assessing metacognitive CQ (e.g., "I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me"), cognitive CQ (e.g., "I know the rules for expressing nonverbal behaviors in other cultures"), motivational CQ (e.g., "I enjoy living in cultures that are unfamiliar to me"), and behavioral CQ (e.g., "I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it") respectively. I used a 7-point Likert response scale (1 = *strongly disagree*; 7 = *strongly agree*).

Personality. I used the 20-item measure of the Big-Five, which comprises 4-item measures of openness to experience (e.g., "I have a vivid imagination"), conscientiousness (e.g., "I like order"), extraversion (e.g., "I am the life of the party"), agreeableness (e.g., "I feel others" emotions"), and emotional stability (e.g., "I am relaxed most of the time;" Donnellan et al., 2006; Goldberg, 1999). Of the five personality traits, openness to experience, in particular, correlates with various measures of cultural adjustment (Huang, Chi, & Lawler, 2005; Ward, Leong, &

Low, 2004). Thus, to increase the fidelity of the openness to experience measure, I included a 27-item measure of the openness to cultural experiences sub-dimension (e.g., "I enjoy (racial) diversity in the community;" Woo et al., 2014). I used a 7-point Likert response scale (1 = *strongly disagree*; 7 = strongly agree).

Social Skill. To measure social skills, I used the seven-item scale from Ferris, Witt, and Hochwarter (2001). Example items include "In social situations, it is always clear to me exactly what to say," "I am able to adjust my behavior and become the type of person dictated by any situation," and "I am good at reading others' body language." I used a 7-point Likert response scale (1 = strongly disagree; 7 = strongly agree).

International Orientation. To measure international orientation, I adapted the 3-item measure used by Leone et al. (2005). To account for the fact that participants may have burdens that influence their desires to live and work internationally, I modified the original item wording to include "If you were not restricted financially or otherwise burdened." Accordingly, the first item asks, "If you were not restricted financially or otherwise burdened, how likely is it that you will pursue an international career?" I used a 6-point Likert response scale (1 = *extremely unlikely*; 6 = *extremely likely*). The second item asks, "If you were not restricted financially or otherwise burdened, how long would you like to live abroad for career purposes?" I used a 7-point response scale (1 = *would not like to live abroad*; 7 = *greater than 5 years*). The third item asks, "How capable do you feel about pursuing an international career?" I used a 6-point Likert response scale (1 = *not capable at all*; 6 = *extremely capable*). I standardized and summed the 3 measures to create a composite measure of international orientation.

Creativity. To measure divergent thinking, I asked participants to complete the Unusual Uses test (Guilford, 1967). Participants were instructed to list as many creative uses for a paper

clip as possible within a two-minute time limit. I instructed participants to "be creative" (Nusbaum, Silvia, & Beaty, 2014) and to generate new ideas "these ideas should be new to you, meaning you have never seen, heard, or thought of these ideas before." Instructing participants to be creative increases between-person variance in creativity and increases the validity of creativity scores (Harrington, 1975). I also emphasized quality over quantity "it is more important to come up with creative ideas than a lot of ideas." Once the data was collected, I transcribed each participant's response into a spreadsheet, corrected spelling errors, and sorted each use alphabetically. I also deleted any identifying information, such as the position of a response in the overall set, and any information about the participants (Silvia et al., 2008, Silvia, Martin, & Nusbaum, 2009).

I obtained originality scores for each participant using subjective scoring methods by averaging across rater response scores for each use (Silvia et al., 2008). Evidence suggests that this method is reliable in assessing scores from the Unusual Uses test (Silvia, 2011). Each participant's response was scored by two independent undergraduate raters on a 1 (*not at all original*) to 5 (*extremely original*) scale. I adopted Wilson et al.'s (1953) scoring criteria which denote creative ideas as those which are uncommon, remote, and clever. Prior to rating, I trained the raters on how to categorize and rate the uses. I instructed raters to assign lower scores to actual uses of paper clips or highly common uses given by a large proportion of the sample. I instructed raters to read all the responses in the sample before rating and highlight the top 2 creative uses for each participant. After this initial review, the raters then assigned a score to each valid use the participant provided. The scores for each use were then summed and divided by the number of uses. For example, let's say a rater provides a score of 3,1 and 5 for participant 7. The rater's overall score for that participant was calculated as the sum of the ratings divided

by the total number of valid uses. In this example, the rater's score of participant 7 would be the sum of ratings (i.e., 3+1+5) divided by the number of valid uses (i.e., 3) to get a final score of 3. Example uses that received low originality scores were bookmarks, hair clips, jewelry, clipping money together, and cleaning your nails. Uses that received high scores include using a paper clip as a piercing instrument, tattoo instrument, guitar pick, metal lingerie, dog leash, cigarette holder, and compass. Inconsistencies across the rater scores were resolved by discussion.

To measure cognitive flexibility, raters counted the total number of different categories for each participant's response. I provided raters with a list of 18 different potential categories for paper clip uses (e.g., playing, weapon, linking objects, etc.) High cognitive flexibility scores indicate an ability to switch between categories and thus, think more creatively. Whereas low scores indicate that the participant came up with uses from the same categories, indicating a limited ability to switch between different categories. The raters showed high inter-rater reliability for cognitive flexibility scoring (Cronbach's alpha = .84), so I used the average of their score in the subsequent analyses. I standardized and summed their originality and cognitive flexibility scores to produce a composite creativity score for each participant.

Overview of Studies

Consistent with Loevinger's (1957) framework for scale development, I conducted three studies to demonstrate evidence of substantive, structural, and external validity of the multicultural readiness scale. The purpose of Study 1 was to establish substantive validity by demonstrating the need for a new construct. Accordingly, I assessed substantive validity by: (1) conducting a thorough literature review to define the construct and its relevant components, (2) generating an initial item pool, and (3) evaluating the relevance and representativeness of the new construct (Clark & Watson, 2019).

The purpose of Study 2 was to establish structural validity by creating a scale whose internal structure mirrors the external structure of the underlying trait (i.e., adequate construct validity). That is, the interitem correlations of the scale ought to resemble the correlations of comparable nontest manifestations of the trait (Clark & Watson, 2019; Simms, 2008). I established structural validity by: (1) developing an item selection strategy, and (2) evaluating the scale's psychometric properties (Clark & Watson, 2019; Simms, 2008). I conducted two studies to assess structural validity. In Study 2a, I determined the items to eliminate or retain based on the exploratory factor analyses (EFA) and item-response theory (IRT) analyses. EFA analyses were done in SPSS 27 (IBM Corp, 2020) and IRT analyses were performed in IRTPRO 5.0. IRT (Reise, Ainsworth & Haviland, 2005). In Study 2b, I assessed the scale's psychometric properties by looking at internal consistency reliability estimates and examining the factor structure through confirmatory factor analyses (CFA) and structural equation modeling (SEM) techniques. All CFA and SEM analyses were performed in R (R Core Team, 2022). The results of Studies 2a and 2b informed Hypotheses 1a – 1d.

Once I generated a set of parsimonious items and evaluated the scale's psychometric properties, I explored the nomological network of the new construct (Clark & Watson, 2019; Simms, 2008). I established external validity by examining (1) the extent to which multicultural readiness relates to constructs of a similar nature (i.e., convergent validity) and differs from constructs that it is not intended to measure (i.e., divergent validity; Messick, 1995), and (2) the degree to which it is predictive of international orientation and creativity (i.e., criterion-related validity). I performed regression analyses in SPSS 27 (IBM Corp, 2020). The results of study 3 informed Hypotheses 2 - 6.

CHAPTER III

Results

Study 1: Substantive Validity

Literature Review. To determine the need for a new measure of cultural attributes, I reviewed cross-cultural psychology, cultural psychology, international business, and expatriate adjustment journals to determine what measures currently exist. I looked at existing measures from different fields including medicine, business, sociology, social work, and education. I found a need for a measure that: (1) does not conflate personal cultural attributes with cultural adaptation outcomes, (2) has a strong theoretical framework, and (3) applies to both domestic and international contexts. This review provided support for a multidimensional, hierarchical structure of multicultural readiness. Specifically, I hypothesized that multicultural readiness comprises identity, openness, self-efficacy, and empathy dimensions at the first-order level of abstraction. At the second-order level of abstraction, the literature suggests that these first-order dimensions may load onto interpersonal and intrapersonal factors. In turn, these second-order dimensions may explain variance within the third-order superordinate multicultural readiness construct. Thus, I expected multicultural readiness to reflect a unidimensional construct at the higher-order level, with correlated subfactors at the lower-order level. Existing measures (Matsumoto & Hwang, 2013; Van der Zee et al., 2003; Yamazaki, & Kayes, 2004) often include self-efficacy, openness, and empathy. The fourth dimension, cultural identity, is a critical component of one's multicultural effectiveness (Sue, 2001). However, researchers rarely measure it quantitatively, so I decided to include this dimension in the proposed measure. In sum, this review provided theoretical support for the differential utility of multicultural readiness and its potential conceptual dimensions.

Item generation. Second, I generated an initial list of items (see Table 1) to assess the multicultural readiness construct based on theory. Research suggests that well-written items must be: (1) representative of all potentially important components of the construct, and (2) relevant to the constructs being measured (Simms, 2008). Accordingly, I identified and defined the key conceptual dimensions of multicultural readiness based on the literature and wrote items that aligned with these definitions. Consistent with Simms' (2008) guidelines, I also wrote items keeping in mind the following considerations. First, I included a mix of relatively difficult and less difficult items to differentiate between those who had high versus low levels of the underlying trait. Second, I wrote items that require a reading comprehension of no more than the 8th-grade level (based on the Flesch Reading Ease and Flesch-Kincaid Grade Level tests). Third, I included items that reflect experiences one might encounter domestically or internationally. Fourth, I avoided confusing or lengthy jargon and ensured that the item phrasing was consistent with the proposed response option anchors. Last, to avoid potential threats to internal consistency stemming from using a mix of positively and negatively worded items (Barnette, 2000), I wrote only positively worded items.

Content Validation. Third, to demonstrate that the items are representative and relevant, I assembled two panels of graduate students to each item for relevance to the overall construct and relevance to the dimension. The first panel consisted of 10 graduate students who were provided with the definition of the construct and asked to rate each item based on how relevant it was to the overall construct using a 4-point Likert response scale (1 = not relevant at all; 4 = highly relevant). Items that received an average score of less than 3 were removed or reworded (see Table 1). The second panel was asked to match each item to a single dimension. Items placed in the correct subfactor by at least 6 raters were retained. Items that were unclear, lengthy,

poorly worded, or a poor match to the dimension were revised or removed. Throughout the process, I consulted with 2 Industrial-Organizational Psychology Faculty members and 6 Industrial-Organizational doctoral students to elicit verbal and written feedback on the definition of the construct, the dimensions, and the item wording. Once the final revised list items were compiled, I surveyed 25 undergraduate students on item clarity and length.

Based on this feedback, I made additional modifications to problematic items (e.g., unclear, redundant, or lengthy) to form the 36-item Multicultural Readiness Scale shown in Table 2. From the original set of items, 12 items were removed, 7 items were added, and the remaining 29 items were reworded or revised. I removed items that had an average score of less than 3 for relevance and items that were placed in the right subcategory by less than 6 raters. If more than 50% of the undergraduates surveyed rated an item as unclear or confusing, I reworded the item. I also removed item qualifiers such as, "easily" to avoid confusion with the response anchors. Additionally, I added new items based on suggestions from faculty members and panel members. The revised scale comprised 36 items, with 9 items per each of the four dimensions.

Study 2a: IRT and EFA

Sample. For Study 2a, I used a sample of 500 respondents that were randomly selected from the original sample of 1,239. The mean age of the sample was 21.5 (*SD* = 4.58, *Mdn* = 20.0). The sample was primarily female (76%); most of the participants listed their home country as the United States (82%). The ethnic breakdown of the sample is Asian American/Pacific Islander (32%), Hispanic/Latino American (29%), White/European American (15%), Black/African American (13%), Middle Eastern/North African (5%), and Two or more races (5%). The education breakdown of the sample is some college but no degree (42%), high school diploma (32%), associate's degree (18%), bachelor's degree (7%), and professional degree (1%).

Approximately 63% percent of participants spoke at least two languages; 85% traveled to at least one country; 46% attended a workshop on diversity issues within the past year; 75% have never lived abroad; 94% lived in the US for over 5 years; 87% had frequent interactions with persons from different races or ethnicities in the past year.

Measures. I used the 36 items generated from Study 1 for Multicultural Readiness (see Table 2) in this study. Participants responded using a 7-point Likert response scale (1 = strongly *disagree*; 7 = strongly agree).

IRT Results. I examined the relationship between item responses and the underlying latent factors using IRTPRO 5.0. IRT (Reise, Ainsworth & Haviland, 2005) is useful for item selection because it establishes a link between item responses and levels of the underlying trait. Therefore, it highlights items that provide the most information about persons at various continuums of the underlying trait. Specifically, IRT identifies the items that have a weak relationship with the underlying trait or do a poor job of differentiating among individuals high versus low in the underlying trait. I fit the item responses to a two-parameter model (2PL) using the maximum likelihood function. The 2PL model provides estimates for item difficulty (i.e., slope parameter) and item discrimination (i.e., threshold parameter).

The slope parameter indicates the strength of the relationship between the underlying latent variable and the item responses (Steinberg & Thissen, 2013, Thissen & Steinberg, 2009). A low slope parameter suggests that an increase in the underlying latent construct does not result in a significant increase in the probability of item endorsement. Specifically, this means that the item in question does a poor job of tapping into the latent construct. In contrast, the threshold parameter indicates the point at which people high in the underlying latent construct have a 50% likelihood of endorsing the item (Steinberg & Thissen, 2013, Thissen & Steinberg, 2009). The

slope parameters for each of the 36 items are provided in Table 3. Item 17 ("I enjoy hearing the experiences of people from different cultures") had the highest slope parameter (a = 2.53) indicating that it is highly related to the underlying construct. Items 5, 6, and 22 also had high slope parameters. In contrast, item 29 ("I would enjoy living far away from my home for a long period of time") had the lowest slope parameter (a = .66) suggesting it is not doing a good job of tapping into the underlying construct. Additionally, items 28 and 30 also had relatively low slopes, therefore, increases in the underlying latent variable do not result in a significant increase in the probability of endorsing these item responses.

A high threshold parameter indicates that a respondent would require a high level of the latent trait to positively endorse a response in that category or higher. The threshold parameters for each of the 36 items are provided in Table 3. These parameters indicate the point on the trace line at which respondents have a 50% likelihood of endorsement in that response category. For example, for item 1 ("I can explain how my culture has informed my views on life."), the threshold parameter ($b_1 = -2.99$) indicates that a respondent would possess very low levels of the underlying trait to have a 50% likelihood of selecting the response category of "Strongly Disagree". To determine which items, discriminate among people at varying levels of the trait I examined the information curves for each item. Items that discriminate well provide better measurement precision at varying levels of the underlying trait (Simms, 2008). In contrast, items that provide less information have flat information curves and may be candidates for removal. Looking at the information curves (see Appendix J), 20 items had flat information curves, items 4, 7, 8, 11, 12, 13, 14, 15, 16, 19, 20, 21, 23, 25, 28, 29, 30, 32, 33, and 34. Thus, these items do not do a good job of differentiating between those who are high versus low in the underlying trait and thus, do not contribute to the precision of the overall items.

EFA Results. I conducted an EFA in SPSS 27 (IBM Corp, 2020) to identify the latent dimensions and assess for covariation among the factors. I submitted the full set of 36 items to an EFA, the results are shown in Table 4. The Kaiser-Meyer-Olkin measure of sampling adequacy was .92 which indicated that the sample was suitable for factor analysis (Dziuban & Shirkey, 1974). I used principal factor analysis (PFA) with Promax rotation as it is suited for correlated subfactors (Fabrigar, Wegener, MacCallum, & Strahan, 1999; Reise, Waller, & Comrey, 2000). Consistent with the literature (Clark & Watson, 2019; Simms, 2008), I considered items that moderately loaded on a primary factor (at least |0.35|; Clark & Watson, 1995) and had minimal cross-loadings candidates for items to retain. Three items fell below the .35 threshold, item 17 ("I enjoy hearing the experiences of people from different cultures"), item 22 ("When I talk to people from other cultures, I look at things from their perspective"), and item 31 ("I would enjoy discovering new ways of living in a foreign culture").

The items loaded onto seven factors, with the first four factors having eigenvalues greater than one. The first factor explained 30.17% of the variance providing initial evidence of a common factor. The items did not load cleanly onto the hypothesized five dimensions. All the cultural identity items loaded onto factor one, however items 21 and 22 from the empathy dimension also loaded onto factor one as well. It appears that these items may be loading closely together because they are tapping into thinking or reflecting. The majority of the self-efficacy items loaded onto factor two. The cultural empathy items were split between factors three and six. The items that loaded onto the same factor appear to have similar word structures, which could explain the loading pattern. The cultural openness items were also split across factors four and five. The items that loaded onto factor four reflect an interest in attending cultural events or learning about other cultures, whereas factor five captures interest in different cultural activities.

Of the 36 items, item 29 ("I would enjoy living far away from my home for a long period of time") was the only one that loaded onto a separate, seventh factor. A likely reason for this is that it does not reference the word "culture" explicitly in the way that the other items do. It could also be that there may be other reasons prompting persons to live far away from home that may not stem from a desire to interact with different cultures. Therefore, this item may not be tapping into the underlying construct as well as the other items.

In sum, based on the IRT analyses, I removed 20 items that did not discriminate well as they do not improve the precision of the overall set of items (i.e., items 4, 7, 8, 11, 12, 13, 14, 15, 16, 19, 20, 21, 23, 25, 28, 29, 30, 32, 33, and 34). Based on the EFA analyses, I removed item 22 ("When I talk to people from other cultures, I look at things from their perspective"). I removed this item because it had the lowest loading of .30 across the items, and it seems to be tapping more into perspective-taking that the underlying latent variable. After removing these 21 items, I reran the EFA on the remaining 15 items as shown in Table 5. The items loaded cleanly onto 3 factors, with the first factor explaining 43.30% of the variance. Additionally, the factors all had reliabilities greater than .80 suggesting that the items hang together. After reviewing the items, I decided to remove item 10 ("I look for opportunities to speak to people from other cultures") and item 17 ("I enjoy hearing the experiences of people from different cultures"). These two items seem to be tapping into engaging with culturally different others, whereas the remaining four items in that dimension seem to tap more clearly into adapting and adjusting to different cultural settings specifically. In sum, based on the EFA and IRT analyses, 23 items were removed leaving a total of 13 items across three dimensions. With factors 1, 2, and 3 representing identity, self-efficacy, and empathy dimensions respectively. From the openness dimension, one item was retained (i.e., item 18) that appeared to hang more closely together with the efficacy dimension. The remaining items from the openness dimension were removed due to low information curves. The EFA results provide initial evidence of a possible three-factor structure. In the next section, I conduct a confirmatory factor analysis to examine the hierarchical structure and model fit of the items.

Study 2b: CFA and Internal Consistency Reliability.

Sample. For Study 2b, I used a sample of 500 respondents that were randomly selected from the original sample of 1,239. The mean age of the sample was 21.2 (*SD* = 4.17, *Mdn* = 20.0). The sample was primarily female (79%); most of the participants listed their home country as the United States (82%). The ethnic breakdown for the sample is Hispanic/Latino American (31%), Asian American/Pacific Islander (30%), Black/African American (16%), White/European American (14%), Two or more races (5%), and Middle Eastern/North African (4%). The education breakdown of the sample is some college but no degree (46%), high school diploma (31%), associate degree (18%), bachelor's degree (4%), and professional degree (1%). Approximately 67% percent of the sample spoke at least two languages; 85% have traveled to at least one country; 47% attended a workshop on diversity issues within the past year; 74% have never lived abroad; 95% lived in the US for over 5 years; 88% had frequent interactions with persons from different races or ethnicities in the past year.

Measures. I used the 13-item Multicultural Readiness measure retained from Study 2a in this study. Participants responded using a 7-point Likert response scale (1 = *strongly disagree*; 7 = *strongly agree*).

CFA Results. To determine the optimal model fit for the items, I submitted the retained items to a CFA (Netemeyer, Bearden, & Sharma, 2003). I first specified a single-factor solution model using R software where the items loaded directly onto a general factor. I compared this solution against a series of alternative nested models, merging two or more of the three

dimensions extracted from the EFA. I also tested the multidimensional nature of the construct using a second-order CFA (Johnson et al., 2012; Johnson, Rosen, & Chang, 2011). To compare the models, I computed the Akaike information criterion index (AIC; Akaike, 1987). The results shown in Table 6 indicate that the second-order, three-factor model fit the data better than the competing models $\chi^2(62) = 332.45$, p = .056, square root mean residual (SRMR) = .054, comparative fit index (CFI) = .95, root mean square error of approximation (RMSEA) = .09, AIC = 19031.86. Moreover, the second-order MCRs model fits the data as well as the first-order model. Consistent with Hu and Bentler (1998), RMSEA values greater than .10 indicate poor fit. CFI values of .95 or above suggest a good model fit (Kline, 2015).

Bollen (1989) argues that a second-order model is preferable to a first-order model if it fits the data as it allows for covariation among first-order factors and accounts for the corrected errors that commonly exist with first-order models. All factor loadings for the second-order factor (SO.FL in Table 7) were statistically significant and substantive in size, ranging from .76 to .85 (M = .81). I also used Edwards's (2001) multivariate coefficients of determination (R_m^2) to assess the subdimensions of MCRs as a multidimensional, superordinate construct. These values were substantive ranging from .58 to .72 (M = .53). The AVE accounted for in the second-order factor by its first-order factors was 65%, above Fornell and Larcker's (1981) threshold. Finally, the composite latent variable reliability (CLVR) of the second-order MCRs factor was .85, well above the .70 criterion (Johnson, Rosen, & Chang, 2011; MacKenzie, Podsakoff, & Podsakoff, 2011). In summary, the CFA showed that a second-order MCRs construct existed and significantly explained the relationships among the three first-order dimensions. However, based on these results, findings, Hypotheses 1a – 1d were not confirmed. Rather, it appears that

although MCRs may have a multidimensional structure with three factors: cultural identity, cultural self-efficacy, and cultural openness loading onto the higher-order construct.

Internal Consistency Results. Consistent with Johnson, Rosen, and Chang (2011) and Johnson, Rosen, Chang, Djurdjevic, and Taing (2012), I used the following criteria to determine which indicator variables to retain: (1) the indicator variables should have significant and substantial loadings on the higher-order factor (using a cut-off of .50), (2) the higher-order factor model should demonstrate suitable fit, and (3) the set of indicators should be unidimensional, with high internal consistency based on estimates of Cronbach's alpha and omega (McNeish, 2018). Consistent with Johnson et al. (2011), I consider reliability values above .70 as evidence of high internal consistency. The path diagram from the model is shown in Figure 1. As shown, the indicator variables were significant and substantial, ranging from .65 to .84, well above the cut-off of .50 (Johnson, Rosen, & Chang, 2011)

As an initial test of the convergent validity of each of the dimensions, I computed the average variance extracted, which should be greater than .50 for each multicultural readiness dimension (Fornell & Larcker, 1981). As shown in Table 7, the AVE for the identity and empathy dimensions was greater than .50, however, the AVE for the self-efficacy dimension fell slightly below this threshold at .49. The AVE accounted for by the factor indicators was satisfactory, ranging from 49% to 74%, with an average of 61%. Moreover, as shown in Table 7, cultural self-efficacy correlated significantly and strongly with cultural identity (r = .63), p < .01 and cultural empathy (r = .74), p < .01. This suggests that there may be some redundancy between self-efficacy and the other dimensions.

The reliability estimates (Cronbach's α and omega) shown in Table 7 exceeded recommended levels, with the Cronbach alpha's ranging from .74 (self-efficacy) to .87 (identity).

I also looked at omega values which estimate composite reliability by allowing for items to vary in how strongly related they are to the latent factor (i.e., does not assume item factor loadings are equal; McNeish, 2018). The omega estimates ranged from .77 (self-efficacy) to .89 (identity) which suggests that the items in each dimension hang well together. High-reliability estimate values suggest that a large portion of the variance is due to group factors and not item-specific variance (Cortina, 1993). However, because alpha is influenced by other factors (e.g., standard error of the correlations in the intercorrelation matrix, the number of dimensions, and the number of items; Cortina, 1993), I also examined average inter-item correlations (AICs) as shown in Table 8. The AICs range from .24 to .68. The majority of the correlations fell within the .15 - .50 range recommended by Clark and Watson (2019). Overall, the AICs were moderate in value and clustered around the mean (M = .39, SD = .11). There was no significant variance in inter-item correlations which would suggest other potential underlying issues. Based on these findings, I decided to retain the second-order three-factor model for further analyses.

Study 3: External Validity

In Study 3, I examined the nomological network of the new measure by conducting tests of convergent and divergent validity. I also tested the utility of the proposed construct by examining its relationship with two outcomes international orientation and creativity.

Sample. For Study 3, I used a sample of 239 respondents that were randomly selected from the original sample of 1,239. The mean age of the sample was 21.6 (SD = 4.97, Mdn = 20.0). The sample was primarily female (77%); most of the participants listed their home country as the United States (83%). The ethnic breakdown of the sample is Asian American/Pacific Islander (32%), Hispanic/Latino American (31%), Black/African American (15%), White/European American (13%), Middle Eastern/North African (6%), and Two or more races

(3%). Education levels for the sample were some college but no degree (42%), high school diploma (30%), associate's degree (21%), bachelor's degree (6%), and professional degree (1%). Approximately 63% percent of the sample spoke at least two languages; 85% have traveled to at least one country; 46% attended a workshop on diversity issues within the past year; 76% have never lived abroad; 93% lived in the US for over 5 years; 86% had frequent interactions with persons from different races or ethnicities in the past year.

Measures.

Multicultural Readiness. I used the 13-item Multicultural Readiness scale generated from Study 2 in this study. Participants responded using a 7-point Likert scale (1 = *strongly disagree*; 7 = *strongly agree*). The Cronbach's alpha coefficient for the items was .88.

Cultural Intelligence. I used the 20-item Cultural Intelligence Scale (CQ) developed by Earley and Ang (2003). with 4, 6, 5, and 5 items assessing metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ respectively. I used a 7-point Likert response scale (1 = *strongly disagree*; 7 = strongly agree). The Cronbach's alpha coefficient for the items was .93.

Personality. I used the 20-item measure of the Big-Five, which comprises 4-item measures of openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability (Donnellan et al., 2006; Goldberg, 1999). The Cronbach's alpha coefficient for the personality items was .76. I also used a 27-item measure of the openness to cultural experiences sub-dimension. The Cronbach's alpha coefficient for the openness to cultural experiences items was .90. I used a 7-point Likert response scale (1 = strongly disagree; 7 = strongly agree) for both scales.

Social Skill. To measure social skills, I used the seven-item scale from Ferris, Witt, and Hochwarter (2001) with a 7-point Likert scale ($1 = strongly \ disagree; 7 = strongly \ agree$). The Cronbach's alpha coefficient for the items was .74.

International Orientation. To measure international orientation, I adapted the 3-item measure used by Leone et al. (2005). I standardized and summed the 3 measures to create a composite measure. The Cronbach's alpha coefficient for the items was .73.

Creativity. To measure creativity, participants were asked to complete the Unusual Uses test as a measure of originality. Each participant's response was scored by two independent undergraduate raters on a 1 (*not at all original*) to 5 (*extremely original*) scale. I determined cognitive flexibility scores by having raters count the different categories of use for each participant's response. I standardized and summed the originality and cognitive flexibility scores to produce a composite creativity score.

Convergent Validity Results. As a test of convergent validity, I examined the correlation between the higher-order multicultural readiness and similar constructs (i.e., cultural intelligence). I consider convergent validity to be established if the correlations are strong (i.e., greater than 0.50; Cohen, 1992). As shown in Table 9, I found a significant, positive, moderately large relationship of the second-order MCRs construct with overall cultural intelligence (r = .62), p < .01, in support of Hypothesis 2. Looking more closely at the correlations in Table 10, The identity subfactor of multicultural readiness correlated strongly with the metacognitive subfactor of cultural intelligence (r = .60), p < .01. Additionally, the self-efficacy subfactor of multicultural readiness correlated strongly with the motivation subfactor of cultural intelligence (r = .71), p < .01. As a whole, the higher-order multicultural readiness construct correlated significantly and strongly with the metacognitive (r = .63), p < .01 and motivational (r = .61), p < .01 dimensions

of cultural intelligence. However, it correlated significantly and weakly with cognitive (r = .40), p < .01 and behavioral (r = .47), p < .01 dimensions of cultural intelligence. This pattern of results supports Hypothesis 2. Moreover, the findings suggest that although multicultural readiness is similar to cultural intelligence, this correlation is strongest across the metacognitive and motivational dimensions.

Divergent Validity Results. As a test of divergent validity, I examined the correlations between the higher-order multicultural readiness and other potentially related constructs (i.e., openness to cultural experiences, personality, and social skills). There are differing viewpoints as to how high correlations between two measures must be to suggest a lack of divergent validity. However, I used Cohen's (1988) standards for small (less than .29), medium (.30–.49), and large (more than .50) correlations. As shown in Table 9, the second-order MCRs construct was significantly and strongly correlated with overall openness to cultural experiences (r = .60), p < .60.01. Looking more closely at these correlations as shown in Table 10, the tolerance subfactor of the openness to cultural experiences has the strongest correlations with the multicultural readiness dimensions (r = .65), p < .01, which is consistent with my expectations. Moreover, openness to cultural experiences significantly but weakly correlated with the aesthetic (r = .43), p < .01 and depth dimensions (r = .48), p < .01. These results provide partial support for Hypothesis 3a. As shown in Table 11 and consistent with Hypothesis 3b, the second-order MCRs construct was significantly but weakly correlated with measures of personality. Similarly, the second-order MCRs construct was significantly but weakly related to social skill (r = .37), p < .27.01. These results provide support for Hypothesis 4. Overall, these results suggest that although multicultural readiness bears similarities to openness to cultural experiences, it correlates

strongly with one of the three dimensions. The findings also suggest that multicultural readiness correlates weakly with measures of personality and social skills.

Criterion-Related Validity Results. As an initial test of criterion-related validity, I calculated zero-order correlations between the higher-order multicultural readiness construct and international orientation. Substantial and statistically significant zero-order correlations provide initial evidence of criterion-related validity. As shown in Table 12, multicultural readiness was significantly correlated with international orientation (r = .40), p < .01. As a further test, I tested a linear regression model with multicultural readiness predicting international orientation. As shown in Table 13, multicultural readiness was a significant predictor of international orientation (b = .45, p < .01). Overall, these findings provide support for Hypothesis 5.

I also calculated zero-order correlations between the higher-order multicultural readiness construct and creativity. As shown in Table 14, multicultural readiness was not significantly correlated with the composite measure of creativity (r = .03), p = n.s. or its dimensions, which was not consistent with my expectations. As a further test, I tested a linear regression model with multicultural readiness predicting creativity. However, as shown in Table 15, these results were not significant (b = .06, n.s.). Overall, these findings do not provide support for Hypothesis 6. In sum, although the second-order MCRs measure strongly correlated with international orientation and creativity, there was no evidence to support its power in predicting these outcomes.

CHAPTER IV

General Discussion

In this dissertation, I sought to demonstrate the novelty and utility of multicultural readiness. Accordingly, I conducted three studies to demonstrate evidence of substantive, structural, and external validity. First, to establish substantive validity, I outlined possible

dimensions based on existing literature. Based on theory, I argued that multicultural readiness comprises interpersonal and intrapersonal dimensions that function to foster harmony, internally and externally in multicultural contexts. Moreover, I hypothesized that the interpersonal dimension would comprise cultural openness and cultural empathy, and the intrapersonal dimension would comprise cultural identity and cultural self-efficacy. I then generated an initial set of items and subjected these items to a review from graduate students and faculty within Industrial-Organizational Psychology. Based on the feedback, I modified and added items to obtain a parsimonious set of 36 items which I retained for further tests of structural validity.

Second, to assess the structural validity of the measure, I: (1) conducted EFA and IRT analyses to determine candidates for elimination or retention, and (2) evaluated the scale's psychometric properties through CFA and SEM analyses. I then fit the items to a 2PL model using IRT analyses. The findings suggested that roughly 20 of the items did not improve the overall precision of the measure as evidenced by the item information curves. Overall, the IRT analyses suggest that the openness, empathy, and self-efficacy items need to be revised or new items added that better discriminate between hose low and high in the underlying construct.

To determine which items to retain, I also conducted an EFA. The items did not load onto the hypothesized interpersonal and intrapersonal factors as expected, rather they loaded onto an initial set of seven factors. Overall, all the items loaded moderately onto a primary factor and had minimal cross-loadings with other factors. Three items (i.e., items 17, 22, 31) fell below the .35 threshold. However, these items did not fall far below the threshold and were theoretically relevant to the factor, so they were not removed initially. One item (i.e., item 29) loaded onto its own factor and appeared to be theoretically different from the overall set of items, so I removed it from further analyses.

After removing the 20 items from the IRT, and 1 item based on the EFA, I reran the remaining 15 items. The remaining empathy and identity items loaded cleanly onto their separate factors. However, the remaining openness and self-efficacy items loaded on the same factor. Looking more closely at the items, they seem to be tapping into motivation or interest in other cultures, which may explain why they hang well together. Moreover, upon further examining the items, I removed items 10 and 17. They seemed to be tapping into hearing about the experiences of others. In contrast, the remaining four items in that dimension seemed to more clearly tap into one's interest in different events or activities within other countries or cultures. After the EFA and IRT analyses, I retained a total of 13 items. The remaining openness items loaded onto the self-efficacy dimensions, so I was left with three dimensions: identity, self-efficacy, and empathy. Thus, the modified scale contained 6, 4, and 3 items across the identity, self-efficacy, and empathy dimensions respectively.

In the second step of the structural validity process, I examined the hierarchical structure of the retained items and examined their psychometric properties. The findings suggest the hierarchical structure may be of the second-order, rather than the third-order level of extraction as I hypothesized. The indicator items loaded onto the dimensions well above the .50 cut-off. Additionally, first-order dimensions all had factor loadings above .70, suggesting that they strongly relate to the underlying dimension. The model fit indices suggest that although the second-order three-factor model fit better than competing models, it was only marginally significant. As a result, there may be a need to further refine the model through the addition of new items or revised items. In terms of reliability, the individual dimensions all had reliability estimates greater than .70, and the AICs clustered around the mean. However, the self-efficacy dimension correlated strongly with the identity and empathy dimensions, which suggests

possible redundancy. In sum, the items within the dimensions seem to hang well together, and the dimensions seem to be tapping well into the same underlying construct. However, the model fit indices and reliability estimates suggest the model and items would need to be further refined to better capture the underlying latent variable. Moreover, the self-efficacy dimension needs to be revisited to better distinguish it from the other two dimensions.

Last, I examined the nomological network of the new measure. I found a significant, positive, moderately large relationship between the second-order MCRs construct and overall cultural intelligence. Moreover, the higher-order multicultural readiness correlated strongly with the metacognitive and motivational dimensions of cultural intelligence. Specifically, the cultural identity dimension strongly correlated with the metacognitive dimension of multicultural readiness. One reason for this strong relationship could be that the process of thinking about one's identity involves deep self-reflection which may be similar to the processes involved in metacognition. Moreover, the cultural identity piece reflects one's knowledge about oneself, which the metacognitive dimension of cultural intelligence also assesses (e.g., "I am conscious of the cultural knowledge I apply to cross-cultural interactions"). I found a similarly strong correlation between self-efficacy and the motivational dimension of cultural intelligence. Both dimensions likely tap into one's beliefs about your ability to cope in new multicultural settings.

In terms of divergent validity, I found that the second-order MCRs construct strongly correlated with overall openness to cultural experiences. Specifically, it strongly correlated with the tolerance subfactor of the openness to cultural experiences and weakly correlated with the aesthetic and depth dimensions. Interestingly, the tolerance subfactor was most strongly correlated with the empathy dimension of multicultural readiness. The tolerance subfactor as the name implies reflects feelings of acceptance of different others (e.g., "I enjoy (racial) diversity in

the community"). Not surprisingly, this may involve some level of empathy so it follows that these factors will be strongly correlated. Additionally, the second-order MCRs construct weakly correlated with the overall five-factor measure of personality and social skill. Together, these findings provide initial support for the divergent validity of multicultural readiness.

Last, I tested the relationships between multicultural readiness and two outcomes of interest: international orientation and creativity. Consistent with my expectations, I found that multicultural readiness was a significant predictor of international orientation, after controlling for age, gender, ethnicity, personality, and education level. These findings suggest that people high in multicultural readiness likely have a desire to live or work abroad and feel capable about their ability to pursue an international career. Moreover, these results suggest that multicultural readiness may more strongly predict cultural outcomes than just personality alone. These findings support ongoing research that suggests that more specific traits can provide better predictive utility than broader, global measures of personality (Leone et al., 2005). Overall, these results indicate that multicultural readiness predicts a relevant outcome within the cultural domain. Thus, from an organizational standpoint, this measure may be a useful starting point to gauge which employees may be best suited for multicultural assignments. To provide further evidence of its utility, future studies should more directly examine the link between MCRs and measures of cultural adjustment or adaption. Moreover, it will also be important to more clearly identify the point that delineates those high versus low in MCRs and demonstrate how that correlates with a broader range of cultural outcomes.

I also examined the relationship between MCRs and creativity. I found that multicultural readiness was not significantly correlated with creativity, nor did it predict creativity after controlling for age, gender, personality, education, and GPA. I argued that multicultural

readiness would predict creativity by increasing one's cognitive content and enhancing one's cognitive flexibility. However, the results suggest that this pathway may be more complex than hypothesized. There may be a few explanations for these inconsistent findings. First, this weak relationship may be due to the specific domain of creativity that I measured. Specifically, I examined "little-c" creativity (e.g., creating a new outfit from old clothes) but I did not assess creativity within a professional domain (i.e., "Pro-c" creativity) or ideas that have a significant impact on society (i.e., "Big-C" creativity). It could be that the processes that lead to creativity in the "little-c" domain may be different from those that lead to more significant types of creative output. Therefore, being high in MCRs may not be useful in coming up with uses for a paper clip, but may be useful in other more impactful forms of creative output.

Second, there may be mediating variables that better explain the relationship between MCRs and creativity. Lu and colleagues (2017) found that intercultural dating led to higher levels of creativity through cultural learning. Specifically, those partners who could recall specific knowledge that they acquired when dating interculturally demonstrated higher levels of creativity. Moreover, this study also found that the duration of the intercultural relationship was a better predictor of creative performance that the total number of cultural relationships that one had. These findings suggest that the pathway linking MCRs to creativity may depend on whether cultural learning took place. Therefore, having an interest in culture may not in and of itself lead to creativity if no cultural learning takes place. As Lu and colleagues (2017) indicate, it's not the number of intercultural relationships that matter but the depth of the relationships. As a result, MCRs may be tapping into an attitude of openness or interest in cultural experiences but not directly tapping into whether those experiences lead to cultural learning. More explicitly measuring mediators may help our understanding of the mechanisms that lead to creativity.

Overall, these findings provide initial support for the substantive, structural, and criterion-related validity of MCRs. Specifically, I found that although several measures of personal cultural attributes exist, they lack theoretical rigor. As such, I grounded MCRs within the attitudes literature and humility theories. Moreover, the findings suggest that cultural identity may be an important cultural attribute that has been largely excluded from existing measures. Interestingly, cultural identity strongly correlated with the metacognitive dimension of cultural intelligence, which suggests that self-reflection may be an important underlying process linking these two dimensions. The results of the structural validity analyses suggest that there is a need for items that better tap into the construct. Moreover, the analyses revealed that self-efficacy strongly correlated with the other two dimensions suggesting a need for clearer conceptualizations of the overall dimensions. Last, external validity results suggest that MCRs is distinct from social skill and personality but shared some similarities with cultural intelligence. Additionally, MCRs demonstrated utility in predicting international orientation but it was not predictive of creativity. In sum, these findings suggest that there is room for improvement in the conceptualization of the dimensions of MCRs, the psychometric properties of the scale items, and evidence supporting its linkage to important organizational criteria.

Theoretical Implications

This study potentially aids research in several ways. First, this study adds to our theoretical understanding of how culture influences us on an individual level. Existing measures often link dimensions together without a strong unifying theoretical framework. In this study, I drew on a humility framework to illustrate the interpersonal and intrapersonal elements that may influence how we process cultural differences. Second, this study contributes to our ongoing understanding of pathways linking personal cultural attributes to creativity, as this research is

still in its infancy. Specifically, I employed a creative cognition approach to argue that cultural attributes may enhance one's cognitive content and cognitive flexibility. However, based on these findings there is a need for more research that examines whether this pathway is direct or indirect through other intervening mechanisms (e.g., cultural learning, social networks).

Practical Implications

This study aids practitioners in several ways. First, this study aids organizations by preparing them for the increasingly multicultural nature of domestic environments. Rather than assuming that only expatriates need to be multiculturally ready, I argue in this dissertation that given the current demographic makeup of the US, all employees need to be multiculturally ready to some extent. Thus, this proposed measure helps organizations by developing a way of gauging one's preparedness for multicultural settings both local and overseas. Second, this study helps organizations by examining ways they can harness creativity among their employees. Specifically, we know that diverse social networks can lead to creativity (Chua, 2018; Fang et al., 2015), but are there specific individual differences that influence why and how people build diverse social networks. Organizations play an important role in shaping the working environment (e.g., assigning people to different teams, or assignments overseas). Having a better understanding of the pathway from personal cultural attributes to creativity can help organizations create environments that foster creative thought and output.

Limitations and Future Research

In the following section, I draw attention to the limitations of this study and possible ways in which future research could address these concerns. First, this study used primarily a student sample which could have limited the range of creative output. Additionally, I used one sample split across the three studies. However, to ensure that these findings are consistent, future

studies should employ more varied samples across different populations. Second, I was unable to test for acquiescence bias, which refers to the propensity for respondents to agree with items regardless of their content (Billiet & McClendon 2000; McClendon, 1991). My measure of multicultural readiness contained only positively worded items, as a result, participants may have been responding in a way to preserve their self-image which could skew the results. Last, although I found evidence linking MCRs to international orientation, future studies to examine more direct measures within the cultural domain such as adaptation or adjustment. This can help establish a more direct link between MCRs and meaningful outcomes within the cultural domain. **Conclusion**

Employees today are more likely to work in environments where there are numerous cultures represented. As a result, organizations need to ensure that their employees are prepared to work and interact in these environments. The multicultural readiness scale aids in this goal by providing organizations with a tool to gauge the various levels of preparedness among employees. Moreover, this study adds to research by expanding our understanding of the personal attributes that enhance preparedness in multicultural settings, locally and abroad. The overall findings suggest that there is still much to be done in theorizing and refining the conceptual dimensions that comprise these cultural attributes. Specifically, it is important to continue to identify areas of overlap with existing measures to delineate those attributes that consistently demonstrate utility in predicting cultural outcomes. Beyond predicting cultural outcomes, the results suggest that there is a need to understand how these attributes relate to organizational criteria. The cultural landscape within the US will continue to change, and employees must be equipped to work and interact effectively in these environments.

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Table 1.

Items of four subscales of the proposed Multicultural Readiness scale.	Revised	Added	Removed
Cultural identity (CI)			
1. I can easily explain how my culture has informed my views on life	Х		
2. I am aware of how my culture influences how people perceive me	Х		
3. I am aware of how my culture influences how I perceive others	Х		
 My cultural upbringing plays a significant role in the personal and professional goals I set for myself 	Х		
5. I often reflect on how my culture has shaped the person I am today	Х		
6. I frequently reflect on how my cultural values and beliefs differ from others	Х		
7. I recognize the ways in which my culture has made me prejudiced or biased	Х		
8. I am reminded daily of the ways in which my culture differs from others	Х		
9. I often try to learn more about the history, traditions, and customs of my people so I can feel more connected to my culture	Х		
My culture plays a significant role in my day-to-day life experiences			Х
I can identify normal behaviors in my culture that are not normal in other cultures			Х
My connection to my culture is a large part of my personal identity			Х
Cultural openness (CO)			
10. I regularly seek out conversations with people from other cultures to learn about our similariti and differences	es X		
11. I normally listen to music from artists that are not from my own culture	Х		
12. I frequently watch TV shows and movies that are not in my native language	Х		

Table 1 continued.

Items of four subscales of the proposed Multicultural Readiness scale.	Revised	Added	Removed
Cultural openness (CO) continued			
13. I often spend my spare time learning about other cultures'	Х		
14. I often attend courses or presentations to learn about other cultures	Х		
15. I often read international news sources (e.g., Al Jazeera, Euro News, BBC)	Х		
16. I prefer to eat food from cultural groups other than my own	Х		
17. I enjoy hearing the experiences of people from different cultures'		Х	
18. I often attend events unique to other cultures (e.g., Lunar New Year, Diwali, Nowruz, Traditional	Х		
Weddings, Independence Day Celebrations)			
I can easily discuss current events taking place in several other countries			Х
I usually spend my free time learning new languages			Х
Cultural empathy (CE)			
19. I can easily relate to the experience of facing culture shock from moving to a new cultural location	n X		
20. I often have sympathy for the internal struggle people face when deciding which culture(s) they	Х		
most strongly identify with			
21. I know what it feels like to be the only person of my culture in a group of people		Х	
22. During my interactions with people from different cultures, I often find myself thinking about	Х		
situations from their perspective to better understand their feelings and emotions			
23. I can sympathize with feeling like you do not belong when living in a different cultural environme	ent X		
24. I feel a great sense of sadness when I think about how people can be unfairly treated because of the	ie X		
culture they belong to			

Table 1 continued.

Items of four subscales of the proposed Multicultural Readiness scale.	Revised	Added	Removed
Cultural empathy (CE) continued			
25. I share the frustration of those who face injustice because of where they were born		Х	
26. I have a deep understanding of how being from another culture can present unique obstacles	Х		
that I may not experience			
27. I feel a sense of sorrow when I reflect on the ways in which one's culture can place someone a	t X		
a disadvantage in life			
I often volunteer my time to interact with other cultural groups so I can better appreciate the			Х
unique challenges they face			
I can easily sympathize with the challenges that people face adjusting to a new country			Х
Cultural self-efficacy (CSE)			
28. I would not need much to feel at home in a new culture		Х	
29. I would enjoy living far away from my home for a long period of time		Х	
30. I would enjoy living in a cultural setting where I only knew a few people		Х	
31. I would enjoy navigating the uncertainties of living in an unfamiliar culture	Х		
32. I would find it easy to adjust to the ups and downs of living in a new culture	Х		
33. I would find it easy to refocus when things do not go as planned due to cultural mishaps (e.g.,	Х		
arriving at the wrong destination due to unclear directions)			
34. I would be good at coping with the uncertainties of living in a different culture		Х	
35. I trust in my ability to cope with ups and downs of living in a new cultural setting	Х		

Table 1 continued.

Items of four subscales of the proposed Multicultural Readiness scale.	Revised	Added	Removed
Cultural self-efficacy (CSE) continued			
36. If I were invited to the house of a friend of a different culture, I would be eager to adopt	new X		
cultural practices I am unfamiliar with (e.g., kissing on both cheeks when greeting, etc.)			
I would enjoy the feeling of not knowing what to expect each day when living in a new c	cultural		Х
environment			
If I were to miss a connecting bus in an unfamiliar cultural environment, it is unlikely that	at my		Х
first reaction would be to panic			
If I were lost in an unfamiliar cultural environment, it is unlikely that I would be flustered	d about		Х
how to find my way home.			
If I were invited to dinner with a friend of a different culture, I would be most eager to tr	у		Х
dishes that I have not seen before			
If I were to attend the wedding of a friend from a different culture, I would likely be the	first		Х
one to participate in the traditions of that culture.			

Table 2.

Revised list of 36 items retained from content validation

Items of four subscales of the proposed Multicultural Readiness scale.

Cultural identity (CI)

- 1. I can explain how my culture has informed my views on life.
- 2. I am aware of how my culture influences how people view me
- 3. I am aware of how my culture influences how I view others
- 4. My cultural upbringing influences the professional goals I set for myself
- 5. I reflect on how my culture has shaped the person I am today
- 6. I reflect on how my cultural beliefs differ from others
- 7. I reflect on biases towards other people that exist in my culture'
- 8. I am reminded that I have different cultural beliefs when I interact with others
- 9. I make an effort to learn about the history of my culture

Cultural openness (CO)

- 10. I look for opportunities to speak to people from other cultures
- 11. I listen to music from different cultures
- 12. I watch foreign TV shows or movies
- 13. I spend my spare time learning about other cultures
- 14. I attend events or presentations where I can learn about other cultures

Table 2 continued.

Revised list of 36 items retained from content validation

Items of four subscales of the proposed Multicultural Readiness scale.

Cultural openness (CO) continued

- 15. I read about global current events
- 16. I like to try different foods from other cultures
- 17. I enjoy hearing the experiences of people from different cultures
- 18. I enjoy attending cultural events from other countries (e.g., Independence Day Celebrations)

Cultural empathy (CE)

- 19. I know what it feels like to experience culture shock
- 20. I know what it feels like to feel forced to choose between cultures
- 21. I know what it feels like to be the only person of my culture in a group of people
- 22. When I talk to people from other cultures, I look at things from their perspective
- 23. I can relate to feeling like you do not fit in with a new culture
- 24. I share the frustration people feel when they are treated unfairly due to their culture
- 25. I share the frustration of those who face injustice because of where they were born
- 26. I feel sad when I hear about the discrimination people from other cultures face
- 27. I feel sad when I hear how people are disadvantaged in life because of their culture

Table 2 continued.

Revised list of 36 items retained from content validation

Items of four subscales of the proposed Multicultural Readiness scale.

Cultural self-efficacy (CSE) continued

- 28. I would not need much to feel "at home" in a new culture
- 29. I would enjoy living far away from my home for a long period of time
- 30. I would enjoy living in a cultural setting where I only knew a few people
- 31. I would enjoy discovering new ways of living in a foreign culture
- 32. I would be good at managing stress in unpredictable situations while living abroad
- 33. I would be good at adjusting to ever-changing plans in an unfamiliar environment
- 34. I would be good at coping with the uncertainties of living in a different culture
- 35. I trust in my ability to cope with ups and downs of living in a new cultural setting
- 36. I trust in my ability to adapt to new cultural norms (e.g., bowing as a sign of respect)

Table 3.

Graded response model	navamaton	actimator	for	26 itom model
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Item	а	<i>s.e</i> .	b_1	s.e.	b_2	<i>s.e</i> .	b_3	s.e.	b_4	<i>s.e</i> .	b_5	<i>s.e</i> .	b_6	<i>S.e</i> .
1	1.92	0.16	-2.99	0.27	-2.11	0.16	-1.71	0.12	-1.05	0.08	-0.17	0.06	0.83	0.10
2	1.81	0.15	-3.61	0.39	-2.56	0.21	-2.21	0.17	-1.40	0.11	-0.54	0.07	0.69	0.09
3	1.73	0.14	-3.53	0.37	-2.38	0.19	-2.09	0.16	-1.31	0.10	-0.35	0.07	0.90	0.11
4	1.18	0.11	-3.14	0.31	-2.26	0.21	-1.80	0.17	-0.96	0.11	0.05	0.09	1.23	0.15
5	2.17	0.18	-2.82	0.25	-2.29	0.17	-1.70	0.12	-1.16	0.08	-0.39	0.06	0.55	0.08
6	2.28	0.18	-3.10	0.30	-2.20	0.16	-1.76	0.12	-1.13	0.08	-0.26	0.06	0.82	0.09
7	1.15	0.11	-3.67	0.39	-2.44	0.24	-1.98	0.19	-0.88	0.11	0.07	0.09	1.41	0.16
8	1.32	0.12	-4.19	0.47	-2.83	0.26	-2.18	0.19	-1.20	0.12	-0.14	0.08	1.20	0.14
9	1.79	0.15	-2.91	0.26	-2.16	0.17	-1.45	0.11	-0.89	0.08	0.02	0.07	0.93	0.11
10	1.72	0.14	-2.87	0.25	-2.07	0.16	-1.62	0.12	-0.73	0.08	0.13	0.07	0.97	0.11
11	1.41	0.13	-4.00	0.45	-2.48	0.22	-1.78	0.16	-1.33	0.12	-0.55	0.08	0.53	0.10
12	1.35	0.13	-2.71	0.26	-1.73	0.16	-1.37	0.13	-1.01	0.10	-0.24	0.08	0.67	0.11
13	1.38	0.12	-2.98	0.27	-1.37	0.12	-0.81	0.09	-0.09	0.08	1.07	0.12	2.31	0.21
14	1.15	0.11	-2.75	0.27	-1.47	0.15	-0.83	0.11	0.21	0.09	1.19	0.15	2.34	0.24
15	1.33	0.12	-3.75	0.39	-2.41	0.22	-1.70	0.15	-1.04	0.11	0.11	0.08	1.26	0.14
16	1.32	0.14	-3.99	0.46	-3.26	0.33	-2.74	0.27	-2.00	0.19	-0.99	0.11	0.02	0.09
17	2.53	0.21	-3.72	0.48	-2.69	0.23	-2.24	0.16	-1.63	0.11	-0.94	0.07	0.13	0.06
18	1.55	0.14	-3.21	0.31	-2.50	0.21	-2.10	0.17	-0.90	0.09	-0.13	0.07	0.92	0.11
19	1.06	0.11	-3.45	0.37	-2.04	0.21	-1.43	0.16	-0.70	0.11	0.25	0.10	1.41	0.17
20	0.72	0.09	-2.96	0.39	-1.50	0.22	-0.72	0.15	0.06	0.13	1.32	0.21	2.66	0.36
21	1.39	0.13	-2.64	0.25	-1.89	0.17	-1.45	0.13	-1.03	0.10	-0.31	0.08	0.59	0.10
22	2.15	0.17	-3.06	0.29	-2.48	0.20	-2.10	0.15	-1.26	0.09	-0.36	0.06	0.84	0.09
23	1.26	0.12	-3.17	0.31	-2.24	0.21	-1.74	0.16	-1.06	0.11	-0.03	0.08	1.17	0.14
24	1.56	0.15	-3.22	0.32	-2.63	0.23	-2.17	0.18	-1.32	0.11	-0.66	0.08	0.32	0.09

Note. a represents slope parameter estimates and *b* represents threshold paramter estimates, *s.e.* represents standard error estimates.

Table 3 (continued).

Item	а	<i>s.e</i> .	b_1	<i>s.e</i> .	b_2	<i>s.e</i> .	<i>b</i> ₃	<i>s.e</i> .	b_4	<i>s.e</i> .	b_5	<i>s.e</i> .	b_6	<i>s.e</i> .
25	1.61	0.17	-4.51	0.62	-3.69	0.41	-3.39	0.35	-1.99	0.17	-1.28	0.11	-0.38	0.07
26	1.55	0.15	-4.55	0.61	-3.58	0.38	-3.01	0.29	-2.03	0.17	-1.22	0.11	-0.12	0.07
27	0.69	0.09	-4.35	0.59	-2.81	0.38	-1.31	0.21	0.11	0.14	1.73	0.26	3.78	0.51
28	0.66	0.09	-4.35	0.61	-2.47	0.35	-1.35	0.22	-0.42	0.15	1.23	0.22	2.85	0.41
29	0.79	0.10	-4.21	0.53	-2.72	0.33	-1.51	0.20	-0.20	0.12	1.06	0.18	3.04	0.38
30	1.74	0.15	-3.90	0.45	-2.77	0.24	-2.14	0.17	-1.31	0.10	-0.30	0.07	0.74	0.10
31	0.97	0.10	-3.97	0.45	-2.49	0.27	-1.45	0.17	-0.42	0.11	0.94	0.15	2.53	0.28
32	1.01	0.11	-3.82	0.42	-2.61	0.27	-1.49	0.17	-0.52	0.10	0.76	0.13	2.52	0.28
33	1.15	0.11	-3.54	0.37	-2.63	0.25	-1.59	0.16	-0.56	0.10	0.74	0.12	2.23	0.23
34	1.48	0.13	-3.78	0.40	-2.75	0.24	-1.89	0.16	-0.98	0.09	0.22	0.08	1.39	0.14
35	1.49	0.14	-4.60	0.60	-3.59	0.36	-2.48	0.21	-1.59	0.13	-0.53	0.08	0.77	0.11
36	1.61	0.17	-4.51	0.62	-3.69	0.41	-3.39	0.35	-1.99	0.17	-1.28	0.11	-0.38	0.07

Note. a represents slope parameter estimates and *b* represents threshold paramter estimates, *s.e.* represents standard error estimates.

Table 4.

Exploratory Factor Analysis

Factor and items	F1	F2	F3	F4	F5	F6	F7
Factor 1							
3. I am aware of how my culture influences how I view others (CI)	.89	04	12	11	07	.09	.15
5. I reflect on how my culture has shaped the person I am today (CI)	.85	.01	.11	02	11	.00	19
1. I can explain how my culture has informed my views on life (CI)	.79	.02	05	.04	01	.03	21
2. I am aware of how my culture influences how people view me (CI)	.71	01	.02	06	03	.06	.14
4. My cultural upbringing influences the professional goals I set for myself (CI)	.63	04	02	.10	16	.13	07
6. I reflect on how my cultural beliefs differ from others (CI)	.60	09	03	.07	.17	.11	.06
8. I am reminded that I have different cultural beliefs when I interact with others (CI)	.50	.06	.01	10	.09	.18	.01
9. I make an effort to learn about the history of my culture (CI)	.50	.09	05	.34	.02	03	27
21. I know what it feels like to be the only person of my culture in a group of people (CE)	.47	.06	.03	05	01	.41	.04
7. I reflect on biases towards other people that exist in my culture (CI)	.41	.02	.01	.13	12	.04	.23
22. When I talk to people from other cultures, I look at things from their perspective (CE)	.29	.01	.23	.25	.08	05	.04
Factor 2							
34. I would be good at coping with the uncertainties of living in a different culture (CSE)	.01	.79	07	.03	03	.01	.10
32. I would be good at managing stress in unpredictable situations while living abroad (CSE)	02	.79	13	.11	03	05	.05

Table 4 (continued).

Exploratory Factor Analysis

Factor and items	F1	F2	F3	F4	F5	F6	F7
Factor 2 (continued)							
33. I would be good at adjusting to ever-changing plans in an unfamiliar environment (CSE)	.03	.74	.02	.03	09	13	.08
35. I trust in my ability to cope with ups and downs of living in a new cultural setting (CSE)	.10	.69	.00	15	.17	05	.01
28. I would not need much to feel at home in a new culture (CSE)	13	.59	.02	.00	03	.12	.15
36. I trust in my ability to adapt to new cultural norms (e.g., bowing as a sign of respect) (CSE)	.12	.49	.21	27	.22	09	.01
30. I would enjoy living in a cultural setting where I only knew a few people (CSE)	.05	.46	04	.08	17	.15	.35
31. I would enjoy discovering new ways of living in a foreign Culture (CSE)	.00	.33	.31	.06	.08	06	.32
Factor 3							
24. I share the frustration people feel when they are treated unfairly due to their culture (CE)	03	.02	.91	.00	13	.23	10
25. I share the frustration of those who face injustice because of where they were born (CE)	14	.04	.84	.11	08	.15	10
26. I feel sad when I hear about the discrimination people from other cultures face (CE)	.03	12	.75	06	.15	13	.07
27. I feel sad when I hear how people are disadvantaged in life because of their culture (CE)	.07	09	.69	01	.04	14	.12

Table 4 (continued).

Exploratory Factor Analysis

Factor and items	F1	F2	F3	F4	F5	F6	F7
Factor 4							
14. I attend events or presentations where I can learn about other cultures (CO)	04	.00	.06	.89	19	04	.11
13. I spend my spare time learning about other cultures (CO)	02	.05	10	.54	.21	.14	.14
10. I look for opportunities to speak to people from other cultures (CO)	.12	.03	.02	.52	.18	16	04
15. I read about global current events (CO)	.07	.03	.03	.40	.22	03	16
 I enjoy attending cultural events from other countries (e.g., Independence Day Celebrations) (CO) 	.00	.06	.02	.37	.25	.02	.19
Factor 5							
11. I listen to music from different cultures (CO)	13	05	04	01	.88	.21	12
12. I watch foreign TV shows or movies (CO)	23	01	.01	.07	.77	.27	05
16. I like to try different foods from other cultures (CO)	.15	02	01	04	.54	10	.01
17. I enjoy hearing the experiences of people from different cultures (CO)	.33	07	.17	.08	.34	15	.03
Factor 6							
20. I know what it feels like to feel forced to choose between cultures (CE)	.07	.05	02	.00	.15	.63	.14
23. I can relate to feeling like you do not fit in with a new culture (CE)	.37	07	.08	08	.07	.62	.10
19. I know what it feels like to experience culture shock (CE)	.30	01	02	.01	.13	.47	.05

Table 4 (continued).

Exploratory Factor Analysis

Factor and items	F1	F2	F3	F4	F5	F6	F7
Factor 7							
29. I would enjoy living far away from my home for a long period	15	.45	01	.06	06	.18	.55
of time (CSE)							
Eigenvalue	10.86	2.90	1.78	1.06	0.93	0.74	0.48
Common variance explained by each factor ^a	30.17	8.05	4.94	2.94	2.57	2.04	1.32
Cronbach's alpha	.88	.86	.84	.81	.72	.72	-

Note: N = 500 (Study 2a). The items in bold signify the strongest correlation between that item and the extracted factor. Items within the blocks are presented in descending order of correlation size. CI = cultural identity; CO = cultural openness; CE = cultural empathy; CSE = cultural self-efficacy.^a In the principal axis analysis, the proportion of shared variance among the items measuring each factor (Preacher & MacCallum, 2003).

Table 5.

Exploratory Factor Analysis Revised

Factor and items	F1	F2	F3
Factor 1			
1. I can explain how my culture has informed my views on life (CI1)	.86	.02	10
5. I reflect on how my culture has shaped the person I am today (CI5)	.84	10	.10
3. I am aware of how my culture influences how I view others (CI3)	.82	08	.00
2. I am aware of how my culture influences how people view me (CI2)	.70	06	.16
6. I reflect on how my cultural beliefs differ from others (CI6)	.69	.03	.11
9. I make an effort to learn about the history of my culture (CI9)	.67	.28	21
Factor 2			
35. I trust in my ability to cope with ups and downs of living in a new cultural setting (CSE8)	05	.89	20
18. I enjoy attending cultural events from other countries (e.g., Independence Day Celebrations) (CO9)	.04	.68	.00
36. I trust in my ability to adapt to new cultural norms (e.g., bowing as a sign of respect) (CSE9)	08	.65	.17
31. I would enjoy discovering new ways of living in a foreign culture (CSE4)	13	.64	.32
10. I look for opportunities to speak to people from other cultures (CO1)	.24	.60	07
17. I enjoy hearing the experiences of people from different cultures (CO8)	.26	.36	.32
Factor 3			
26. I feel sad when I hear about the discrimination people from other cultures face (CE8)	05	.04	.92
27. I feel sad when I hear how people are disadvantaged in life because of their culture (CE9)	06	.02	.90
24. I share the frustration people feel when they are treated unfairly due to their culture (CE6)	.20	14	.70

Table 5 continued.

Exploratory Factor Analysis Revised

Factor and items	F1	F2	F3
Eigenvalue	6.45	1.57	1.21
Common variance explained by each factor ^a	43.03	10.50	8.09
Cronbach's alpha	.87	.83	.80

Note: N = 500 (Study 2a). The items in bold signify the strongest correlation between that item and the extracted factor. Items within the blocks are presented in descending order of correlation size. CI = cultural identity; CO = cultural openness; CE = cultural empathy; CSE = cultural self-efficacy.^a In the principal axis analysis, the proportion of shared variance among the items measuring each factor (Preacher & MacCallum, 2003).

Table 6.

Fit indices of competing models of multicultural readiness scale

	Confirmatory Factor Analysis								
Model	χ^2 (df)	CFI	SRMR	RMSEA	AIC				
First-order, three-factor model	332.45 (62)	.95	.05	.09	19031.86				
Second-order, three-factor model	332.45 (62)	.95	.05	.09	19031.86				
First-order, two-factor model									
Merging factor 2 and factor 3	570.82 (64)	.91	.07	.12	19224.68				
Second-order, two-factor model									
Merging factor 2 and factor 3	355.15 (63)	.95	.07	.10	19226.68				
Single-factor model	1126.71 (65)	.82	.11	.18	19627.86				

 $\overline{Note. N = 500, CFI = comparative fit index; SRMR = square root mean residual; RMSEA = root mean square error of approximation.}$

Table 7.

Test of Convergent and Discriminant Validity Evidence for Multicultural Readiness (MCRs) dimensions

		Statistics and Shared Variance Estimates ^a										
	1	2	3	М	SD	α	ω _h	CR	AVE	ASV	SO.FL	R_m^2
1. Cultural Identity				5.65	.93	.87	.89	.90	.60	.30	.76	.58
2. Cultural Self-efficacy	.63**			5.89	.87	.74	.77	.79	.49	.47	.85	.72
3. Cultural Empathy	.45**	.74**		6.21	.93	.80	.86	.90	.74	.38	.81	.65
Higher-order MCRs constru	uct											
AVE	.65											
CLVR	.85											

Note. N = 500, AVE = average variance extracted; ASV = average shared squared variance; SO.FL = second-order factor loading; R_m 2 = multivariate coefficient of determination; CLVR = composite latent variable reliability. CR = composite reliability. *p < .05 (two-tailed). **p < .01 (two-tailed).

Table 8.

Descriptive Statistics and Average Inter-Item Correlation Matrix

Item	1	2	3	5	6	9	18	24	26	27	31	35	36
1													
2	.50												
3	.56	.60											
5	.68	.54	.54										
6	.52	.51	.55	.57									
9	.56	.38	.41	.55	.51								
18	.29	.32	.28	.27	.35	.36							
24	.34	.36	.30	.43	.37	.32	.25						
26	.28	.37	.30	.38	.39	.27	.34	.54					
27	.50	.49	.61	.55	.49	.42	.26	.42	.42				
31	.23	.33	.27	.30	.37	.29	.44	.34	.49	.38			
35	.30	.25	.25	.25	.25	.34	.35	.20	.24	.31	.43		
36	.28	.31	.28	.32	.31	.26	.33	.33	.39	.37	.47	.52	

Note. N = 500, All correlations were significant at p < .01.

Figure 1.

Path Diagram for second-order MCRs Construct

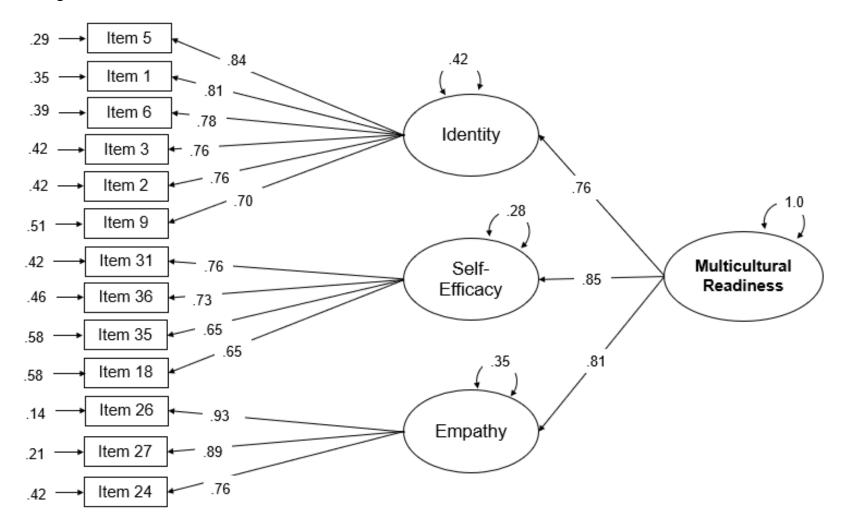


Table 9.

Test of Convergent and Discriminant Validity Evidence for Multicultural Readiness (Study 3)

	1	2	3	4	5	М	SD
1. Social Skill	(.74)					4.96	.81
2. Emotional Stability	.31**	(.65)				4.14	.72
3. Openness to Cultural Experiences	.40**	.11	(.90)			5.30	.72
4. Cultural Intelligence	.43**	.23**	.43**	(.93)	•	4.87	.88
5. Higher Order MCRs	.37**	.14*	.60**	.62**	(.88)	5.71	.78

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed). Reliabilities estimates (α) reported on the diagonal. MCRs = Multicultural Readiness

Table 10.

Test of Convergent and Divergent Validity Evidence (Part 1)

	1	2	3	4	5	6	7	8	9	10	11	М	SD
1. OP - Tolerance	(.76)											5.60	.73
2. OP - Aesthetics	.51**	(.86)										5.15	1.04
3. OP - Depth	.70**	.57**	(.76)									5.15	.77
4. CI- Metacognition	.48**	.25**	.37**	(.85)								5.28	1.02
5. CI- Cognition	.20**	.31**	.19**	.57**	(.89)							4.13	1.21
6. CI- Motivation	.47**	.31**	.35**	.66**	.60**	(.80)						5.09	.99
7. CI- Behavior	.32**	.27**	.25**	.68**	.54**	.55**	(.85)					4.96	1.04
8. MCRs - Identity	.52**	.33**	.40**	.60**	.37**	.43**	.44**	(.84)				5.61	.89
9. MCRs - Self-Efficacy	.54**	.43**	.39**	.53**	.44**	.71**	.44**	.58**	(.74)			5.47	.96
10. MCRs - Empathy	.58**	.32**	.43**	.46**	.21**	.40**	.30**	.53**	.55*	(.76)		6.07	.93
11. Higher Order MCRs	.65**	.43**	.48**	.63**	.40**	.61**	.47**	.83**	.85**	.83*	(.88)	5.71	.78

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed). Reliabilities estimates (α) reported on the diagonal.

OP = Openness to cultural experiences, CI = Cultural Intelligence, MCRs = Multicultural Readiness

Table 11.

Test of Convergent and Divergent Validity Evidence (Part 2)

	1	2	3	4	5	6	7	8	9	10	11	М	SD
1. Social Skill	(.74)											4.95	.81
2. Emotional Stability	.31**	(.65)										4.13	.72
3. BF – Conscientiousness	.27**	.19**	(.61)									5.04	.91
4. BF - Agreeableness	.45**	.16**	.34**	(.73)								5.56	.91
5. BF – Extraversion	.41**	.26**	.01	.31**	(.72)							3.94	1.14
6. BF- Emotional Stability	.20**	.75**	.16*	.16**	.08	(.70)						4.27	1.14
7. BF – Openness	.31**	.16*	.15*	.44*	.08	.18**	(.75)					5.18	1.04
8. MCRs - Identity	.34**	.11	.11	.40**	.15*	.09	.30**	(.84)				5.61	.89
9. MCRs - Self-Efficacy	.36**	.26**	.15*	.39**	.31**	.19**	.29**	.58**	(.74)			5.47	.96
10. MCRs - Empathy	.24**	02	.05	.42**	.12	.13	.30**	.53**	.55*	(.76)		6.07	.93
11. Higher Order MCRs	.37**	.14*	.13	.48**	.23**	.12	.36**	.83**	.85**	.83*	(.88)	5.71	.78

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed). Reliabilities estimates (α) reported on the diagonal. BF = Big Five Factor of Personality, MCRs = Multicultural Readiness

Table 12.

Test of Criterion Validity of International Orientation

	1	2	3	4	5	6	7	8	9	10	11	M	SD
1. Age													
2. Gender	.06												
3. Education	- .17**	03											
4. Conscientiousness	.11	12	.07										
5. Neuroticism	.21**	.19**	.02	.16*									
6. Extraversion	01	11	.05	.01	.08								
7. Openness	.21**	.08	.14*	.15*	.18**	.08							
8. Agreeableness	.04	21**	.06	.34**	.16*	.31**	.44**						
9. Race/Ethnicity	.18**	02	.08	.23**	10	.01	.11	.10					
10. Higher Order MCRs	.03	17**	.11	.12	.12	.23**	.36**	.48**	10			5.71	.77
11. Intl. Orientation	.10	09	01	.12	.06	.15*	.12	.14*	.06	.40**		.51	1.96

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed).

Age is coded $1 = [\le 24 \text{ years}], 2 = [25 \text{ to } 29 \text{ years}], 3 = [30 \text{ to } 34 \text{ years}], 4 = [35 \text{ to } 39 \text{ years}], 5 = [40 \text{ to } 49 \text{ years}], 6 = [50 \text{ to } 59 \text{ years}], 7 = [50 \text{ to } 59 \text{ yea$ $7 = [\geq 60 \text{ years}].$

Gender is coded 1 for female and 2 for male.

Education is coded as 1 = Associate degree in college (2-year), 2 = Bachelor's degree in college (4-year), 3 = High school graduate (high school diploma or equivalent including GED), 4 = Less than high school degree, 5 = Master's degree, 6 = Professional degree (JD, MD), 7 = Some college but no degree

MCRs = Multicultural Readiness

Table 13.

	Model 1	Model 2
Step 1:		
Age	.06	.05
Gender	08	02
Education	03	06
Conscientiousness	.07	.08
Neuroticism	.03	.02
Extraversion	.13	.09
Openness	.07	02
Agreeableness	.02	13
Race/Ethnicity	.03	.03
tep 2:		
Higher-Order MCRs		.45**
ΔR^2		.13
R ²	.07	.20
Total Adjusted R ²	.02	.16

Regression Analyses for Predictors of International Orientation

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed). The standardized regression coefficients are presented. MCRs = Multicultural Readiness

Table 14.

Test of Criterion Validity of Creativity

	1	2	3	4	5	6	7	8	9	10	11	12	13	М	SD
1. Age															
2. Gender	.06														
3. Education	17**	·03													
4. Conscientiousness	.11	12	.07												
5. Neuroticism	.21**	.19**	.02	.16*											
6. Extraversion	01	11	.05	.01	.08										
7. Openness	.21**	* .08	.14*	.15*	.18**	.08									
8. Agreeableness	.04	21**	.06	.34**	.16*	.31**	.44**								
9. GPA	09	.02	.02	.16*	08	11	07	.01						3.28	.86
10. Higher Order MCRs	.03	17**	.11	.12	.12	.23**	.36**	.48**	03					5.71	.77
11. Originality	.04	.12	.12**	.02	.07	.01	.06	.03	03	.00				.02	.96
12. Cognitive Flexibility	.01	.04	.10	.03	.09	.09	01	.02	05	.04	.02			.01	.99
13. Composite Creativity	.04	11	.19**	.03	.11	.07	.03	.03	06	.03	.70**	.73**		.03	1.40

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed).

Age is coded $1 = [\le 24 \text{ years}]$, 2 = [25 to 29 years], 3 = [30 to 34 years], 4 = [35 to 39 years], 5 = [40 to 49 years], 6 = [50 to 59 years], $7 = [\ge 60 \text{ years}]$.

Gender is coded 1 for female and 2 for male.

Education is coded as 1 = Associate degree in college (2-year), 2 = Bachelor's degree in college (4-year), 3 = High school graduate (high school diploma or equivalent including GED), 4 = Less than high school degree, 5 = Master's degree, 6 = Professional degree (JD, MD), 7 = Some college but no degree

GPA is coded as $1 = [\le 2.50]$, 2 = [2.51 to 3.00], 3 = [3.01 to 3.50], 4 = [3.51 to 4.00].

MCRs = Multicultural Readiness

Table 15.

	Model 1	Model 2
Step 1:		
Age	.05	.05
Gender	.12	.12
Education	.20	.20
Conscientiousness	.02	.02
Neuroticism	.07	.07
Extraversion	.06	.06
Openness	05	05
Agreeableness	.03	.03
GPA	05	05
tep 2:		
Higher-Order MCRs		.00
ΔR^2		.00
\mathbb{R}^2	.07	.07
R Total Adjusted R ²	.03	.03
5		

Regression Analyses for Predictors of Creativity

Note. N = 239, *p < .05 (two-tailed). **p < .01 (two-tailed). The standardized regression coefficients are presented.

Appendix A.

Demographic and Background Data

- 1. Which country do you currently reside in? [Afghanistan..., Zimbabwe]
- 2. Where is your hometown located? [Afghanistan..., Zimbabwe]
- 3. Which of the following best describes your race/ethnicity?
 - White or European American
 - Black or African American Not Hispanic or Latino
 - Hispanic/Latino American White
 - Hispanic/Latino American Black
 - Hispanic/Latino American Other
 - Asian American or Pacific Islander
 - Native American or Alaska Native
 - Middle Eastern American
 - Two or more
 - Other (please specify)
- 4. What is your gender? [Male, Female, Other (please specify)]
- 5. What is your age? [18...., 100]
- 6. What is the highest level of school you have completed or the highest degree you have received?
 - Less than high school degree
 - High school graduate (high school diploma or equivalent including GED)
 - Some college but no degree
 - Bachelor's degree in college (4-year)
 - Associate degree in college (2-year)
 - Master's degree
 - Doctoral degree
 - Professional degree (JD, MD)
- 7. Are you currently a student? [Yes, No]
 - If student, what is your GPA on a 4.0 scale?
 - i. Prefer not to answer
 - ii. Less than 2.50
 - iii. Between 2.50 and 3.00
 - iv. Between 3.00 and 3.50

- v. Between 3.50 and 4.00
- 8. How many languages can you speak at an intermediate level? [1, 2,3,4,5, 6, 7, 8, 9, 10 or more]
- 9. How many countries have you traveled to? [0,1, 2,3,4,5 or more]
 - If you have travelled, what is the longest amount of time you have spent living or working abroad?
 - i. Never lived or worked abroad
 - ii. Less than 12 months
 - iii. Between 1 and 2 years
 - iv. Between 2 and 3 years
 - v. Between 3 and 4 years
 - vi. Between 4 and 5 years
 - vii. Greater than 5 years
- 10. How long have you lived in the US?
 - Never lived in the US
 - Less than 12 months
 - Between 1 and 2 years
 - Between 2 and 3 years
 - Between 3 and 4 years
 - Between 4 and 5 years
 - Greater than 5 years
- 11. Which of the following best describes the frequency with which you interacted with people of different racial and ethnic backgrounds during the past year?
 - 1 Never
 - 2 Rarely
 - 3 Sometimes
 - 4 Often
 - 5 Always
- How many workshops or presentations (online or face-to-face) with a primary focus on multicultural and/or diversity issues have you attended during the past year? [None, One, Two, Three, Four or more]

Appendix B.

36-item Multicultural Readiness Scale (Original)

Likert scale 1- Strongly Disagree to 7- Strongly Agree.

Cultural identity

- 1. I can explain how my culture has informed my views on life.
- 2. I am aware of how my culture influences how people view me
- 3. I am aware of how my culture influences how I view others
- 4. My cultural upbringing influences the professional goals I set for myself
- 5. I reflect on how my culture has shaped the person I am today
- 6. I reflect on how my cultural beliefs differ from others
- 7. I reflect on biases towards other people that exist in my culture'
- 8. I am reminded that I have different cultural beliefs when I interact with others
- 9. I make an effort to learn about the history of my culture

Cultural openness

- 1. I look for opportunities to speak to people from other cultures
- 2. I listen to music from different cultures
- 3. I watch foreign TV shows or movies
- 4. I spend my spare time learning about other cultures
- 5. I attend events or presentations where I can learn about other cultures
- 6. I read about global current events
- 7. I like to try different foods from other cultures
- 8. I enjoy hearing the experiences of people from different cultures
- 9. I enjoy attending cultural events from other countries (e.g., Independence Day Celebrations)

Cultural empathy

- 1. I know what it feels like to experience culture shock
- 2. I know what it feels like to feel forced to choose between cultures
- 3. I know what it feels like to be the only person of my culture in a group of people
- 4. When I talk to people from other cultures, I look at things from their perspective
- 5. I can relate to feeling like you do not fit in with a new culture
- 6. I share the frustration people feel when they are treated unfairly due to their culture
- 7. I share the frustration of those who face injustice because of where they were born
- 8. I feel sad when I hear about the discrimination people from other cultures face
- 9. I feel sad when I hear how people are disadvantaged in life because of their culture

Cultural self-efficacy

- 1. I would not need much to feel "at home" in a new culture
- 2. I would enjoy living far away from my home for a long period of time
- 3. I would enjoy living in a cultural setting where I only knew a few people
- 4. I would enjoy discovering new ways of living in a foreign culture
- 5. I would be good at managing stress in unpredictable situations while living abroad
- 6. I would be good at adjusting to ever-changing plans in an unfamiliar environment
- 7. I would be good at coping with the uncertainties of living in a different culture
- 8. I trust in my ability to cope with ups and downs of living in a new cultural setting
- 9. I trust in my ability to adapt to new cultural norms (e.g., bowing as a sign of respect)

Appendix C.

13-item Multicultural Readiness Scale (Revised)

Likert scale 1- Strongly Disagree to 7- Strongly Agree.

Cultural identity

- 1. I can explain how my culture has informed my views on life.
- 2. I reflect on how my culture has shaped the person I am today
- 3. I am aware of how my culture influences how I view others
- 4. I am aware of how my culture influences how people view me
- 5. I reflect on how my cultural beliefs differ from others
- 6. I make an effort to learn about the history of my culture

Cultural self-efficacy

- 10. I trust in my ability to cope with ups and downs of living in a new cultural setting
- 11. I enjoy attending cultural events from other countries (e.g., Independence Day Celebrations)
- 12. I trust in my ability to adapt to new cultural norms (e.g., bowing as a sign of respect)
- 13. I would enjoy discovering new ways of living in a foreign culture

Cultural empathy

- 10. I share the frustration people feel when they are treated unfairly due to their culture
- 11. I feel sad when I hear about the discrimination people from other cultures face
- 12. I feel sad when I hear how people are disadvantaged in life because of their culture

Appendix D.

Cultural Intelligence Scale (Ang et al., 2007)

The 40-item CQ was given to 576 Singaporean undergrads. Items with high residuals, low factor loadings, small standard deviations, or extreme means and low item-total correlations were removed, resulting in a 20-item scale, with 4, 6, 5, and 5 items assessing metacognitive, cognitive, motivational, and behavioral CQ, respectively (s = .70-.86). Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you AS YOU REALLY ARE (1=strongly disagree; 7=strongly agree)

Metacognitive

- 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

Cognitive

- 1. I know the legal and economic systems of other cultures
- 2. I know the rules (e.g., vocabulary, grammar) of other languages
- 3. I know the cultural values and religious beliefs of other cultures
- 4. I know the marriage systems of other cultures
- 5. I know the arts and crafts of other cultures
- 6. I know the rules for expressing nonverbal behaviors in other cultures

Motivational

- 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

Behavioral

- 1. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it
- 2. I use pause and silence differently to suit different cross-cultural situations
- 3. I vary the rate of my speaking when a cross-cultural situation requires it
- 4. I change my nonverbal behavior when a cross-cultural situation requires it
- 5. I alter my facial expressions when a cross-cultural interaction requires it

Appendix E.

Big Five (Donnellan et al., 2006; Goldberg, 1999)

Likert scale 1- Strongly Disagree to 7- Strongly Agree.

Conscientiousness

- 1. Get chores done right away
- 2. Often forget to put things back in their proper place (R)
- 3. Like order
- 4. Make a mess of things (R)

Emotional Stability

- 1. Have frequent mood swings (R)
- 2. Am relaxed most of the time
- 3. Get upset easily (R)
- 4. Seldom feel blue

Extraversion

- 1. Am the life of the party
- 2. Don't talk a lot (R)
- 3. Talk to lot of different people at parties
- 4. Keep in the background (R)

Intellect/Imagination

- 1. Have a vivid imagination
- 2. Am not interested in abstract ideas (R)
- 3. Have difficulty understanding abstract ideas (R)
- 4. Do not have a good imagination (R)

Agreeableness

- 1. Sympathize with others' feelings
- 2. Am not interested in other people's problems(R)
- 3. Feel others' emotions
- 4. Am not really interested in others (R)

Appendix F.

Openness to cultural experiences (Woo et al., 2014)

Likert scale 1- Strongly Disagree to 7- Strongly Agree.

Tolerance

- 1. Immigrants really irritate me(R)
- 2. I think it is rude when others speak in a language I can't understand(R)
- 3. I prefer to visit countries where they speak my language(R)
- 4. I like to hear different people's views on political issues
- 5. I understand that people can have different attitudes toward certain things than I do
- 6. Like most people I am open to listening to what others have to say
- 7. I enjoy experiencing the rituals associated with different religions.
- 8. I learn a great deal from people with differing beliefs.
- 9. I enjoy (racial) diversity in the community.

Aesthetics

- 1. I think viewing art is a waste of time(R)
- 2. Art bores me(R)
- 3. I don't find Classical Ballet interesting(R)
- 4. I don't find literature especially interesting(R)
- 5. I have a passion for art
- 6. I enjoy art exhibitions
- 7. I see the beauty in art when others do not
- 8. I have been touched emotionally by a great musical performance
- 9. If I see artwork I like in a gallery, I will visit it more than once to fully appreciate it

Depth

- 1. I believe in-depth discussions are a complete waste of time(R)
- 2. I regard philosophy as a disease of the idle(R)
- 3. Sometimes I avoid getting involved in philosophical discussions(R)
- 4. I'm happiest when conversations are practical rather than philosophical(R)
- 5. I take the time to reflect on my thoughts and actions
- 6. For me personal growth is more important than success
- 7. I am always interested in learning more about philosophy
- 8. For me, there is nothing better than taking the time to think deeply about something
- 9. I am fascinated by meditation and processes which encourage one to look inward

Appendix G.

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Social skill (Ferris et al., 2001)

Likert scale 1- Strongly Disagree to 7- Strongly Agree

- 1. I find it easy to put myself in the position of others
- 2. I am keenly aware of how I am perceived by others
- 3. In social situations, it is always clear to me exactly what to say
- 4. I am particularly good at sensing the motivations and hidden agendas of others
- 5. I am good at making myself visible with influential people
- 6. I am good at reading others' body language
- 7. I am able to adjust my behavior and become the type of person dictated by any situation.

Appendix H.

International Orientation (Leone et al., 2005)

- 1. If you were not restricted financially or otherwise burdened, how long would you like to live abroad for career purposes?
 - Would not like to live abroad
 - Less than 12 months
 - Between 1 and 2 years
 - Between 2 and 3 years
 - Between 3 and 4 years
 - Between 4 and 5 years
 - Greater than 5 years
- 2. If you were not restricted financially or otherwise burdened, how likely is it that you will pursue an international career?
 - 1 Extremely unlikely
 - 2 Moderately unlikely
 - 3 Slightly unlikely
 - 4 Slightly likely
 - 5 Moderately likely
 - 6 Extremely likely
- 3. How capable do you feel about pursuing an international career?
 - 1 Not Capable at all
 - 2 Moderately Uncapable
 - 3 Slightly Uncapable
 - 4 Slightly Capable
 - 5 Moderately Capable
 - 6 Extremely Capable

Appendix I.

Creativity (Guilford, 1967)

For this section, you will be asked to complete an open-ended activity, there is no right or wrong answer. In the empty box below, please list as many creative uses for a paper clip that you can think of. The goal is to come up with creative ideas, which are ideas that strike people as clever, unusual, interesting, uncommon, humorous, innovative, or different. These ideas should be new to you, meaning you have never seen, heard, or thought of these ideas before. The task will take 2 minutes, so you can type in as many ideas as you like until then, but it is more important to come up with creative ideas than a lot of ideas.

Appendix J.

Item trace lines and information curves

