Intercultural Competence

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Abstract

We review recent theoretical and empirical developments in the intercultural competencies literature, highlighting contemporary models and empirical research in organizational contexts. We survey the current conceptualizations of intercultural competencies and propose that intercultural competencies can be classified based on traits, attitudes and worldviews, capabilities, or a combination of these dimensions. We identify key psychological, behavioral, and performance outcomes associated with these models. We review empirical studies of intercultural competencies at the group level and discuss emerging models of dyad-level, firm-level, and multilevel intercultural competencies. We evaluate the current measurement of intercultural competencies and suggest alternative approaches. Finally, we examine research on selection, training, and development of intercultural competencies. We end each section by identifying future research foci, and we offer an integration of the literature at the end of the review.

INTRODUCTION

At the turn of the century, Bandura (2001, p. 12) remarked, "Revolutionary advances in electronic technologies and globalization are transforming the nature, reach, speed, and loci of human influence." Although an emerging global village offers exciting new experiences and ideas, persisting hot spots of intercultural conflict around the world serve as stark reminders of the malevolence of cultural misunderstandings, tensions, and intolerance. To understand why and how some people thrive in intercultural situations, researchers have introduced the concept of intercultural competence. Both academic and applied interests in intercultural competence are burgeoning, as evidenced by the numerous books and articles devoted to the topic (e.g., Spitzberg & Changnon 2009).

OVERVIEW OF INTERCULTURAL COMPETENCE

Working across cultures is inherently challenging (Earley & Ang 2003, Leung & Stephan 1998, Molinsky 2013). To shed light on what it takes to be interculturally effective, academics and practitioners alike have advanced a plethora of models of intercultural competence from a variety of research areas and disciplines, such as global leadership (e.g., Bird et al. 2010, Inceoglu & Bartram 2012), international business (e.g., Leiba-O'Sullivan 1999, Lloyd & Härtel 2010), international management (Bücker & Poutsma 2010, Earley & Ang 2003), intercultural communication (e.g., Imahori & Lanigan 1989, Lustig & Koester 2010), intercultural counseling (e.g., D'Andrea et al. 1991), international education (e.g., Cushner & Mahon 2009), intercultural psychology (e.g., Chiu & Hong 2005, LaFramboise et al. 1993), and personality (e.g., Matsumoto et al. 2001, Van der Zee & Van Oudenhoven 2000). This disciplinary diversity reflects the importance and relevance of intercultural competence across a broad range of contexts.

Conceptualizations of Intercultural Competence

There is consensus that intercultural competence refers to an individual's ability to function effectively across cultures (Whaley & Davis 2007). For example, Hammer et al. (2003, p. 422) defined intercultural competence as "the ability to think and act in interculturally appropriate ways." Similarly, Johnson et al. (2006, p. 530) defined intercultural competence as "an individual's effectiveness in drawing upon a set of knowledge, skills, and personal attributes in order to work successfully with people from different national cultural backgrounds at home or abroad."

Although the main gists of different definitions of intercultural competence converge, there is divergence in their particular contents. Recent reviews (e.g., Holt & Seki 2012, Johnson et al. 2006, Paige 2004, Spitzberg & Changnon 2009) include more than 30 intercultural competence models and more than 300 related constructs. This proliferation may appear overwhelming, but a closer inspection suggests that prior research has generally taken an individual-differences approach (Sandberg 2000) and has conceptualized intercultural competence as a set of personal characteristics. The 300-plus personal characteristics identified in previous research can be distilled into the content domains of (*a*) intercultural traits, (*b*) intercultural attitudes and worldviews, and (*c*) intercultural capabilities.

Intercultural traits. Just as personality traits refer to enduring personal characteristics that determine a stable pattern of cross-situational behaviors (Costa & McCrae 1992, Funder 2001), intercultural traits refer to enduring personal characteristics that determine an individual's typical behaviors in intercultural situations. Examples of intercultural traits include open-mindedness (Van der Zee & Van Oudenhoven 2000), dissimilarity openness (Lloyd & Härtel 2010), tolerance of ambiguity (Bird et al. 2010, Deardorff 2006), cognitive complexity (Lloyd & Härtel 2010),

flexibility (Matsumoto et al. 2001, Van der Zee & Van Oudenhoven 2000), inquisitiveness (Bird et al. 2010), quest for adventure (Javidan & Teagarden 2011), patience (Kealey 1996), and emotional resilience (Kelley & Meyers 1995).

Intercultural attitudes and intercultural worldviews. By contrast, intercultural attitudes and intercultural worldviews focus on how individuals perceive other cultures or information from outside their own cultural worlds. One may have positive or negative attitudes toward other cultures or intercultural interactions. Individuals who are highly culturally competent have positive attitudes toward intercultural contact. One may have cultural/global worldviews that either are ethnocentric (i.e., seeing the world from one's own cultural worldview) or emphasize the complexity and contradictions of different cultures and countries (Bennett 1986, 1993; Srinivas 1995) as well as the similarities beneath surface-level differences. Individuals who are highly interculturally competent have sophisticated, rather than ethnocentric or simplistic, construals of cultural differences and similarities. Constructs that capture such individual differences include ethnocentric-ethnorelative cultural worldviews (Bennett 1986, 1993; Hammer 2011), cosmopolitan outlook (Bird et al. 2010, Javidan & Teagarden 2011), and category inclusiveness (Bird et al. 2010).

Intercultural capabilities. Intercultural capabilities emphasize what a person can do to be effective in intercultural interactions (Earley & Ang 2003). Examples include showing knowledge of other cultures/countries (e.g., Earley & Ang 2003, Javidan & Teagarden 2011, Redmond & Bunyi 1993, Spitzberg & Cupach 1984); metacognitive, motivational, and behavioral cultural intelligence (Earley & Ang 2003); linguistic skills (Imahori & Lanigan 1989); social flexibility (Bird et al. 2010); adaptability to communication (Gudykunst 1993, Lloyd & Härtel 2010); and cultural tuning in terms of holistic concern, collaboration, and learning (Leung & Cheng 2014).

Summary

Some intercultural competence models are domain specific and focus solely on either intercultural traits (e.g., Van der Zee & Van Oudenhoven 2000), intercultural attitudes and worldviews (e.g., Bennett 1986, 1993), or intercultural capabilities (e.g., Earley & Ang 2003). Other models are mixed and include constructs from multiple domains (e.g., Bird et al. 2010, Javidan & Teagarden 2011). These differences mirror ongoing debates about what constitutes work competence (Sandberg 2000). Narrower perspectives of work competence (e.g., Sternberg 2005) focus solely on the skills required for effective performance in a particular domain. Broader perspectives (e.g., Spencer & Spencer 1993) embrace all the underlying individual characteristics that are essential for effective work performance, including traits, motives, knowledge, and skills.

These differences also reflect varying disciplinary origins. For example, intercultural competence models grounded in the personality traditions focus on intercultural traits (e.g., Van der Zee & Van Oudenhoven 2000, 2001), whereas models drawing on the intelligence literature focus on intercultural capabilities (e.g., Earley & Ang 2003). Other intercultural competence models draw on multiple disciplines and thus embrace a wide variety of constructs (e.g., Bird et al. 2010, Javidan & Teagarden 2011). We highlight some specific intercultural competence models next.

MODELS OF INTERCULTURAL COMPETENCE

To illustrate the differences between trait-based, attitude/worldview-based, capability-based, and mixed models of intercultural competence, we review five intercultural competence models: the

global leadership competency model (Bird et al. 2010), the global mindset model (Javidan & Teagarden 2011), the multicultural personality model (Van der Zee & Van Oudenhoven 2000), the Developmental Model of Intercultural Sensitivity (Bennett 1986, 1993), and the cultural intelligence model (Ang & Van Dyne 2008a, Earley & Ang 2003) (see the instruments based on these models in **Table 1**). The global leadership competency model (Bird et al. 2010) is a relatively new but comprehensive model. The other four models have attracted considerable attention in organizational research.

Below, we provide brief overviews of each model, with a focus on the validity of the intercultural competence instruments associated with the models. Intercultural competence instruments have to demonstrate not only construct validity, but also measurement equivalence across cultures (Schaffer & Riordan 2003, Van de Vijver & Leung 2009). When available, we review empirical evidence for both aspects. Intercultural competence instruments must also predict intercultural outcomes, so we highlight evidence of predictive validity for each instrument as well.

Global Leadership Competency

Bird et al. (2010) formulated the global leadership competency model by synthesizing theory and research on global leadership and expatriation; the model comprises 17 dimensions organized into three broad factors: (*a*) perception, (*b*) relationship, and (*c*) self-management. It is a mixed model that combines traits (e.g., inquisitiveness), attitudes and worldviews (e.g., cosmopolitanism), and capabilities (e.g., emotional sensitivity and social flexibility). The global leadership competency model is relatively new, but it is promising because of its comprehensiveness. Future research needs to evaluate the Global Competencies Inventory (GCI), which is based on this model.

Global Mindset

About two decades ago, many researchers independently began to explore the concept of global mindset. Early writings characterize global mindset as a cognitive filter that embraces the complexity and paradoxes inherent in global interactions (Rhinesmith 1992). The initial global mindset concept is similar to Bennett's (1986, 1993) notion of worldviews (see the section on the

Table 1 Content domains of intercultural competence instruments

Intercultural competence instrument	Content domain		
	Intercultural traits	Intercultural attitudes and worldviews	Intercultural capabilities
Global Competencies Inventory (GCI; Bird et al. 2010)	X	X	X
Global Mindset Inventory (GMI; Javidan & Teagarden 2011)	X	X	X
Multicultural Personality Questionnaire (MPQ; Van der Zee & Van Oudenhoven 2000, 2001)	X	–	–
Intercultural Development Inventory (IDI; Hammer & Bennett 1998)	–	X	–
Cultural Intelligence Scale (CQS; Ang et al. 2007)	–	–	X

Developmental Model of Intercultural Sensitivity below) in that it captures how one processes complex information in a global environment. Subsequent writings have built on this basic idea but diverge in their emphases. Some scholars link global mindset to organizational performance in global markets rather than to individual intercultural outcomes (Begley & Boyd 2003, Gupta & Govindarajan 2002). Others expound on behaviors and personal characteristics associated with a global mindset (Srinivas 1995). Yet others focus on the knowledge and skills required for a global mindset, such as knowledge of culture and intercultural issues, and behavioral skills for effective intercultural work (Kedia & Mukherji 1999).

Javidan & Teagarden (2011) attempted to consolidate and integrate the diverse definitions and conceptualizations of global mindset. Through an extensive literature review and interviews with global mindset experts, they developed the Global Mindset Inventory (GMI), comprising nine subdimensions organized into three major forms of capital: (*a*) psychological, (*b*) social, and (*c*) intellectual.

Like GCI, GMI is based on a mixed model that combines traits (such as passion for diversity and quest for adventure), worldviews (such as a cosmopolitan outlook), and capabilities (such as diplomacy). Notably, the conceptualization of global mindset in GMI has evolved from its cognitive origins (a mindset) to a broader set of factors (traits, worldviews, and capabilities). Confirmatory factor analysis on the 50-item GMI supported the expected nine-factor model with high internal consistencies. However, the nine subdimensions yielded two, rather than the proposed three, factors, owing to the high correlations of social capital with both psychological and intellectual capitals. More research is needed to examine the factor structure of GMI across cultures and its predictive validity.

Multicultural Personality

The multicultural personality model (Van der Zee & Van Oudenhoven 2000) is rooted in the view that stable dispositions are reliable, albeit modest, predictors of performance (Barrick & Mount 1991, Hurtz & Donovan 2000). Based on the extant expatriate literature, Van der Zee & Van Oudenhoven (2000, 2001) developed the Multicultural Personality Questionnaire (MPQ), which measures five specific, narrow traits deemed predictive of multicultural effectiveness: (*a*) emotional stability, (*b*) social initiative, (*c*) open-mindedness, (*d*) cultural empathy, and (*e*) flexibility.

Across several different countries, MPQ has demonstrated good internal consistencies (e.g., Leone et al. 2005; Leong 2007; Van der Zee & Van Oudenhoven 2000, 2001; Van Oudenhoven et al. 2003) and similarity in factor structure across cultures (Leone et al. 2005, Van der Zee & Van Oudenhoven 2001, Van Oudenhoven et al. 2007). For instance, Leone et al. (2005) found measurement equivalence for MPQ across samples from Italy and the Netherlands. In terms of predictive validity, MPQ is significantly and positively associated with (*a*) sociocultural adjustment, psychological well-being, mental health, and physical health of international students and expatriates; (*b*) international aspirations of students and employees; and (*c*) expatriate job satisfaction, multicultural activity, and examination grades of students working in culturally diverse teams (see sidebar, Outcomes Predicted by the Multicultural Personality Questionnaire).

Developmental Model of Intercultural Sensitivity

Bennett's (1986, 1993, 2004) Developmental Model of Intercultural Sensitivity (DMIS), with cultural worldviews as its conceptual basis (Bennett 1986, 1993), posits that intercultural competence advances along a developmental continuum, with increasing complexity and sophistication in the perception and understanding of cultures and cultural differences. The trajectory of intercultural competence development begins with an ethnocentric mindset characterized by

OUTCOMES PREDICTED BY THE MULTICULTURAL PERSONALITY QUESTIONNAIRE (MPQ)

Psychological outcomes

- Sociocultural adjustment (Leong 2007, Van Oudenhoven et al. 2003)
- Psychological well-being (Van der Zee et al. 2003, Van Oudenhoven & Van der Zee 2002, Van Oudenhoven et al. 2003)
- Mental health (Van Oudenhoven & Van der Zee 2002)
- Physical health (Van Oudenhoven & Van der Zee 2002)
- International aspirations (Leone et al. 2005, Van der Zee & Brinkmann 2004, Van der Zee & Van Oudenhoven 2000)
- Expatriate job satisfaction (Van Oudenhoven et al. 2003)

Behavioral outcome

- Multicultural activity (Van der Zee & Van Oudenhoven 2000)

Performance outcome

- Exam grades of students working in culturally diverse teams (Van der Zee et al. 2004)

a simplistic set of perceptions regarding cultural commonalities and differences. Across six distinct stages, intercultural competence progresses toward an ethnorelative mindset characterized by a complex understanding of cultural commonalities and differences and the ability to shift between cultural perspectives. These six stages are (*a*) denial, (*b*) defense, (*c*) reversal, (*d*) minimization, (*e*) acceptance, and (*f*) adaptation (Hammer 2011).

Hammer & Bennett (1998) developed the Intercultural Development Inventory (IDI) to measure an individual's, a group's, or an organization's level of intercultural competence across the proposed developmental continuum. Research on the latest 50-item version of the IDI (IDI v3; Hammer 2011) has supported the proposed six-dimensional factor structure and shown acceptable internal consistencies across 12 countries. Furthermore, the level of intercultural development significantly and positively predicts satisfaction with studying abroad, percentage of intercultural friends, and effectiveness in meeting diversity and inclusion staffing goals. People with higher levels of intercultural development are also less anxious in intercultural situations (see sidebar, Outcomes Predicted by the Intercultural Development Inventory).

Cultural Intelligence

Cultural intelligence (CQ) is conceptualized as a set of malleable capabilities that enable an individual to effectively function in and manage culturally diverse settings (Ang & Van Dyne 2008a, Earley & Ang 2003). Drawing upon Sternberg & Detterman's (1986) multifactor view of intelligence, the cultural intelligence model comprises four factors: (*a*) metacognitive cultural intelligence (i.e., the mental capability to acquire and understand cultural knowledge), (*b*) cognitive cultural intelligence (i.e., knowledge and knowledge structures about cultures and cultural differences), (*c*) motivational cultural intelligence (i.e., the capability to direct and sustain energy toward functioning in intercultural situations), and (*d*) behavioral cultural intelligence (i.e., the ability of behavioral flexibility in intercultural interactions). Motivation is a crucial component of

OUTCOMES PREDICTED BY THE INTERCULTURAL DEVELOPMENT INVENTORY (IDI)

Psychological outcomes

- (Less) Intercultural anxiety (Hammer 2005)
- Satisfaction with study abroad experience (Hammer 2005)

Behavioral outcome

- Percentage of intercultural friends (Hammer 2005)

Performance outcome

- Effectiveness in meeting diversity and inclusion staffing goals (objective data) (Hammer 2011)

the cultural intelligence model because much, if not all, of cognition is motivated (Ceci 1996). Motivation affects whether and to what extent an individual directs energy to learn about cultural differences and to understand culturally different others accurately. Given the inextricable link between cognition and motivation, intelligence models that ignore the role of motivation are fundamentally incomplete.

Based on the CQ model, Ang et al. (2007) developed the four-factor, 20-item Cultural Intelligence Scale (CQS), which has shown similarity in factor structure and good internal consistency across multinational samples (Shannon & Begley 2008, Shokef & Erez 2008) and various countries, including South Korea (Moon 2010a, Moon et al. 2012), Singapore (Ang et al. 2007), Turkey (Şahin et al. 2013), and the United States (Ang et al. 2007, Imai & Gelfand 2010). CQS has also demonstrated measurement equivalence across two countries: Singapore and the United States (Ang et al. 2007). Cultural intelligence consistently predicts psychological outcomes such as intercultural adjustment, behavioral outcomes such as idea sharing and development of social networks with culturally different others, and performance outcomes such as task performance and cross-border leadership effectiveness (see sidebar, Outcomes Predicted by the Cultural Intelligence Scale). Empirical evidence suggests that although all four factors are significantly and positively correlated with psychological and performance outcomes, motivational cultural intelligence is more strongly correlated with psychological outcomes, and metacognitive and behavioral cultural intelligence is more strongly correlated with performance outcomes.

Summary

We conclude that the CQ model and the multicultural personality model have thus far provided the most promising evidence as intercultural competence models. Both have demonstrated similarity of factor structure and measurement equivalence across multiple cultures and have predicted a range of psychological, behavioral, and performance outcomes. In a recent review of 10 intercultural competence models, Matsumoto & Hwang (2013) reached a similar conclusion in identifying the CQ and multicultural personality models as particularly promising.

Future Research Foci

Model validation. Model validation is a rigorous and ongoing process that involves iterations of measurement development and validity studies to support the validity of a measure and the

associated theoretical model. Although the extent of validation varies for the five models of intercultural competence discussed here, all require more evidence to substantiate their validity, especially the more recently formulated models, such as the global leadership competency model (Bird et al. 2010) and the global mindset model (Javidan & Teagarden 2011).

Comparing different measures of intercultural competence. Little research has compared the predictive validity of different measures. Their usefulness may depend on the nature of the outcome variables in question. One conjecture is that traits and attitudes/worldviews may be more predictive of intercultural adjustment, whereas capabilities may be more predictive of problem solving in an intercultural context. A comparison of the predictive validity of different models of intercultural competence is sorely needed.

OUTCOMES PREDICTED BY THE CULTURAL INTELLIGENCE SCALE (CQS)

Individual Outcomes

Psychological outcomes

- Intercultural and psychological adjustment (Abdul Malek & Budhwar 2013, Ang et al. 2007, Gong & Fan 2006, Huff 2013, Lee & Sukoco 2010, Lin et al. 2012, Moon et al. 2012, Sri Ramalu et al. 2012a, Templer et al. 2006, Ward & Fischer 2008, Ward et al. 2009, Wu & Ang 2011)
- Work adjustment (Abdul Malek & Budhwar 2013, Ang et al. 2007, Chen et al. 2010, Huff 2013, Lin et al. 2012, Moon et al. 2012, Sri Ramalu et al. 2012a, Templer et al. 2006)
- Psychological well-being (Ang et al. 2007, Ward et al. 2011)
- (Lower) Culture shock (Chen et al. 2011)
- (Less) Emotional exhaustion (Tay et al. 2008)
- Expatriates' intention to complete assignment (Wu & Ang 2011)
- Satisfaction with expatriate assignment (Huff 2013)
- Expectations about goals of culturally diverse interaction partners (Mor et al. 2013)

Behavioral outcomes

- Frequency and likelihood of idea sharing with culturally different others (Chua et al. 2012)
- Development of social networks for international students (Fehr & Kuo 2008)
- Heterophily of social networks within a multinational corporation (Gjertsen et al. 2010)
- Intercultural cooperation (Mor et al. 2013)

Performance outcomes

- Task and contextual performance (Abdul Malek & Budhwar 2013; Ang et al. 2007; Chen et al. 2010; Chen et al. 2011; Chen et al. 2012; Duff et al. 2012; Nafei 2013; Rockstuhl et al. 2013a,b; Şahin et al. 2013; Sri Ramalu et al. 2012a; Wu & Ang 2011)
- Leader performance in culturally diverse teams (Groves & Feyerherm 2011)
- International leadership potential (Kim & Van Dyne 2012)
- Cross-border leadership effectiveness (Rockstuhl et al. 2011)

Dyadic/Team Outcomes

Psychological outcomes

- Affect-based trust in culturally diverse dyads (Chua et al. 2012, Rockstuhl & Ng 2008)
- Team cohesion in multicultural teams (Moynihan et al. 2006)

Behavioral outcomes

- Information integration behaviors and cooperative relationship management behaviors in intercultural negotiation pairs (Imai & Gelfand 2010)
- Fusion teamwork in multicultural teams (Crotty & Brett 2012)

Performance outcomes

- Joint profits of intercultural negotiation pairs (Imai & Gelfand 2010)
- Creativity performance of intercultural dyads (Chua et al. 2012)
- Team creativity in multicultural teams (Crotty & Brett 2012)
- Team performance of multicultural teams (Groves & Feyerherm 2011)

The structure of intercultural competence. Another area in need of research concerns how the different constructs of intercultural competence relate to each other and whether they overlap. Regarding intercultural traits, we need greater clarity about the convergent and discriminant validity among the different trait constructs proposed. One may query whether the MPQ, GCI, and GMI identify traits that are similar or different. This question can be addressed by a trait-complex approach in which items from different instruments are combined and subjected to an exploratory factor analysis. Traits that load on the same dimension form a trait complex (Ackerman & Heggestad 1997). The same approach can be adopted for synthesizing the attitudes and worldviews and the capabilities proposed by different models of intercultural competence.

Another interesting question is whether some constructs are the antecedents of others. The trait-complex approach suggests that trait complexes influence individual differences in domain knowledge through a motivational process of knowledge acquisition (Ackerman 1996). In this vein, Ang & Van Dyne (2008a) proposed that intercultural traits are antecedents of cultural intelligence, which is a measure of intercultural capabilities. Consistent with this argument, Ward & Fischer (2008) found that the individual traits of flexibility, social initiative, and emotional stability, all from the MPQ, affected the general adjustment of international students in New Zealand through the traits' effects on motivational cultural intelligence. Similarly, cultural intelligence mediated the effect of openness to experience, a personality trait, on both job performance (Sri Ramalu et al. 2012b) and adaptive performance (Oolders et al. 2008). These results support the argument that traits are antecedents of intercultural capabilities.

As intercultural traits as well as intercultural attitudes and worldviews are likely to influence the effort allocated to acquiring intercultural capabilities (Deardorff 2006), attitudes and worldviews may also function as antecedents of capabilities. Furthermore, we propose that intercultural traits may shape intercultural attitudes and worldviews because traits orient people toward certain experiences and hence influence their intercultural attitudes and worldviews. It would be interesting to evaluate a general framework in which both traits and attitudes/worldviews influence capabilities, which in turn influence intercultural effectiveness. Traits, which are the most stable

among these individual differences, should influence attitudes/worldviews (see **Figure 1**). Rather than viewing the different components of intercultural competence as independent predictors of intercultural effectiveness, researchers need to explore in future studies how the components interrelate in exerting their influence on intercultural effectiveness.

OUTCOMES OF INDIVIDUAL-LEVEL INTERCULTURAL COMPETENCE

Predictive Validity of Intercultural Competence

All intercultural competence models aim to predict intercultural effectiveness, a complex criterion. In clarifying the criterion space for intercultural effectiveness, Bhaskar-Shrinivas et al. (2005) and Ng et al. (2012) identified three types of outcomes: psychological (e.g., cultural adjustment), behavioral (e.g., intercultural cooperation), and performance (e.g., job performance and global leadership effectiveness).

Psychological, behavioral, and performance outcomes of intercultural effectiveness are also structurally related to each other. For example, Mol et al. (2005) argued that job performance is the ultimate measure of intercultural effectiveness and that psychological and behavioral outcomes are of interest only to the extent that they mediate the effects of intercultural competence on intercultural effectiveness. We echo Mol et al.'s (2005) call to focus on job performance to assess intercultural effectiveness and to conceptualize psychological and behavioral outcomes as intermediate intercultural outcomes that mediate the effects of intercultural competence on intercultural job performance.

Against this backdrop, we note that empirical research has thus far focused primarily on psychological and behavioral outcomes (see sidebars). Multicultural personality, intercultural development, and cultural intelligence all predict behavioral outcomes (e.g., engagement in intercultural interactions). In addition, multicultural personality predicts psychological outcomes (e.g., cultural adjustment) consistently, and cultural intelligence predicts both psychological (e.g., cultural adjustment) and performance (e.g., task performance) outcomes consistently.

A critical step in advancing theorizing about intercultural competence is to probe the mechanism through which intercultural competence contributes to intercultural effectiveness. It is also crucial to identify the circumstances under which intercultural competence is especially relevant for intercultural effectiveness. Among the five intercultural competence models reviewed, only the cultural intelligence model has sufficient empirical findings for addressing these two important questions. Drawing on motivation theories (Kanfer 1990, Kanfer et al. 2008), Chen et al. (2010) posited that expatriates high in motivational cultural intelligence are more efficacious and

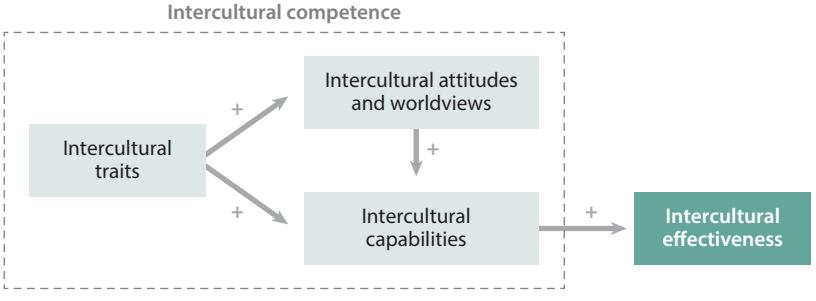

Figure 1

A general framework of intercultural effectiveness.

intrinsically interested in their intercultural tasks and are hence more likely to marshal personal resources to overcome intercultural challenges and adapt to their foreign work environments. In turn, expatriates who adjust well perform better because they have more personal resources to dedicate to work tasks. In support of their theorizing, the authors reported that motivational cultural intelligence influenced expatriate job performance through its effects on work adjustment. Other studies also support the mediating role of cultural adjustment in the relationship between cultural intelligence and expatriate performance (Lee & Sukoco 2010, Sri Ramalu et al. 2012a). In line with this reasoning, Chua et al. (2012) showed that metacognitive cultural intelligence enhanced creative collaboration in culturally diverse dyads through affect-based trust, which was essential for establishing cooperative relationships.

With regard to boundary conditions for the effects of cultural intelligence, Chen et al. (2010) found that high subsidiary support attenuated the effect of motivational cultural intelligence on work adjustment. Based on trait activation theory (Tett & Burnett 2003), they proposed that expatriates did not need to exert discretionary effort to adjust to their new work environment in situations of high subsidiary support, thus reducing the benefit of motivational cultural intelligence. The authors also found that higher cultural distance attenuated the effect of motivational cultural intelligence on work adjustment. Based on Kanfer & Ackerman's (1989) resource allocation perspective, Chen et al. (2010) argued that allocating effort to a task (in this case, work adjustment) helps if one is familiar with the task. When cultural distance—the extent to which another culture (e.g., an expatriate's host-country culture) is different from one's own (Shenkar 2001)—is high, individuals are less likely to be aware of appropriate work norms, making motivational cultural intelligence less useful. Chen et al. (2012) drew on trait activation theory to propose and show that firm diversity climate functioned as an organization-level situational cue that activated individual motivational cultural intelligence to drive intercultural sales performance. In other words, the effect of motivational cultural intelligence on intercultural sales performance was stronger when a firm valued cultural diversity.

Future Research Foci

Predictor–criterion matching. Although the predictive validity of intercultural competence models is encouraging, their precision still needs to be improved. An important strategy is to match intercultural competencies and outcomes more closely for better conceptual alignment. Ajzen (2005) proposed that relationships between predictors and criteria are stronger when constructs are matched in terms of their target, context, time, or action. Research matching cultural intelligence and outcomes in terms of target and context supports this strategy. For example, cultural intelligence predicted affect-based trust and idea sharing in intercultural, but not intracultural, dyads (Chua et al. 2012, Rockstuhl & Ng 2008). Groves & Feyerherm (2011) found that leader cultural intelligence was related to leader performance when team diversity was high, but not when it was low. This suggests that the predictive validity of intercultural competencies increases with the cultural diversity of contexts.

Future research should explore other forms of matching between intercultural competencies and outcomes. For instance, temporal matching, such as using attitudes or moods at time 1 to predict relevant behaviors at time 2, is an interesting direction. This type of research can take advantage of developments in research about intraindividual variation in responses to specific events based on diary and event studies.

Underlying processes of intercultural competence. Very few studies have examined the underlying processes of intercultural competence, but we need to know how intercultural competence

translates into intercultural effectiveness. One approach is to theorize about the effects of different elements of an intercultural competence model to shed light on the underlying processes involved. For instance, the effects of metacognitive cultural intelligence may be distinct from the effects of other dimensions of cultural intelligence because metacognitive cultural intelligence involves an awareness of cultural influence on others' behaviors. Future research should also investigate the critical role of intercultural perspective taking (Mor et al. 2013, Van Dyne et al. 2012) and interpersonal attributions (Chiu & Hong 2005) in mediating the effects of metacognitive cultural intelligence on intercultural outcomes. Research on motivational cultural intelligence can draw on the richness of motivation theories (Kanfer 1990, Kanfer et al. 2008) to explore additional motivational explanations of performance, such as persistence and intensity of efforts (Diefendorff & Lord 2008) or emotion regulation mechanisms (Kuhl 1987).

Boundary conditions of intercultural competence. Very few studies have examined the boundary conditions of the effects of intercultural competence. Trait activation theory (Tett & Burnett 2003) provides fertile ground for hypothesizing boundary conditions at task, social, and organizational levels. Recent extensions of trait activation theory suggest that variables at all three levels can activate traits and hence provide the theoretical basis for identifying boundary conditions for the effects of intercultural competence (Simonet & Tett 2013). Situational strength theory (Mischel 1977) is useful in suggesting conditions that attenuate intercultural competence effects. Strong situations have high levels of clarity, consistency, constraints, and consequences (Meyer et al. 2010), which may attenuate the effects of intercultural competence. For example, Nouri et al. (2013) found that culturally heterogeneous dyads were less cooperative, experienced more conflict, and performed worse than culturally homogeneous dyads did in weak situations. However, there were no significant differences in relational processes and performance outcomes between culturally homogeneous and heterogeneous dyads in strong situations, suggesting that intercultural competence may be less useful or unnecessary in strong situations.

The positive psychology perspective. The positive psychology perspective (Cameron et al. 2003) may provide new insight into the role of intercultural competence. A "neutralizing the negative" perspective would suggest that individuals with high intercultural competence may effectively manage their uncertainty, anxiety, or intergroup biases in intercultural interactions. By contrast, the positive psychology perspective would suggest that individuals with high intercultural competence cultivate positive intercultural relationships because of their allophilia (i.e., positive attitudes toward out-groups; Pittinsky et al. 2011) or their compassion and learning goals in intercultural interactions (Migacheva & Tropp 2013) (see **Figure 2** for a contrast of the two perspectives). The positive psychology perspective points to some new mechanisms for the effects of intercultural competence that deserve attention in future research.

MULTILEVEL MODELS OF INTERCULTURAL COMPETENCE

An emerging body of research adopts multilevel perspectives of intercultural competence. In particular, research has begun to explore cultural intelligence within dyads, teams, and firms.

Intercultural Competence in Dyads

Studies of dyads have found that dyadic cultural intelligence predicts relational processes, such as affect-based trust (Chua et al. 2012, Rockstuhl & Ng 2008) and dyadic creativity performance (Chua et al. 2012), as well as cooperative relationship management behaviors and joint outcomes

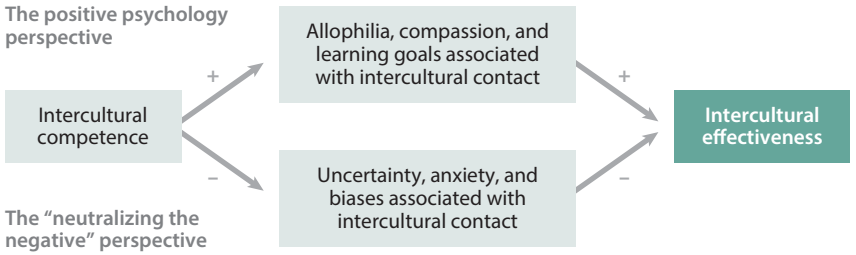

Figure 2

The "neutralizing the negative" perspective versus the positive psychology perspective.

in dyadic negotiation (Imai & Gelfand 2010). Interestingly, Chua et al.'s (2012) study of creative collaboration in intercultural dyads found that it was the person with higher rather than lower metacognitive cultural intelligence who influenced the dyadic relationship and dyadic performance outcomes. By contrast, in dyadic negotiations, it was the person with lower motivational and behavioral cultural intelligence who influenced relational processes (Imai & Gelfand 2010). Perhaps in cooperative tasks, the person with higher cultural intelligence would guide the interaction and hence influence team outcomes, whereas in competitive tasks, such as negotiation, the member with low cultural intelligence may set the tone of the interaction because of the salience of the tit-for-tat norm in this context.

Intercultural Competence in Teams

Given the prevalence of multicultural teams, research on the influence of intercultural competence on team performance is emerging. Culturally diverse teams often experience negative interpersonal dynamics, and the intercultural competence of team members should alleviate such negative dynamics and improve team performance. In terms of team dynamics, Moynihan et al. (2006) found that high team-level cultural intelligence facilitated team cohesion. Adair et al. (2013) found that high team-level metacognitive and behavioral cultural intelligence facilitated the development of shared values in culturally diverse work teams. Chen & Lin (2013) found that leader motivational, cognitive, and metacognitive cultural intelligence predicted knowledge sharing in multicultural teams. Groves & Feyerherm (2011) found that leader cultural intelligence predicted team performance in a study of project teams. Likewise, Crotty & Brett (2012) found that the average metacognitive cultural intelligence of team members predicted team creativity.

Intercultural Competence in Firms

Ang & Inkpen (2008) proposed that firm-level managerial, competitive, and structural cultural intelligence capabilities influence the success of offshore outsourcing services. Moon (2010b) proposed a conceptualization of organizational cultural intelligence consisting of three capabilities —processes, positions, and paths—for managing and leveraging cultural diversity. The author also provided detailed discussions and concrete propositions of how organizational cultural intelligence translates into organizational performance for firms entering foreign markets. Empirically, Yitmen (2013) showed that firm-level cultural intelligence related positively to performance of international strategic alliances in the Turkish construction industry. Magnusson et al. (2013) showed that in a sample of US exporting firms, export managers' motivational cultural intelligence positively moderated the relationship between environmental differences and

marketing mix adaptations and that the managers' metacognitive cultural intelligence in turn positively moderated the relationship between marketing mix adaptations and export performance.

Chen et al. (2012) recently tested a multilevel model of motivational cultural intelligence in which high individual motivational cultural intelligence translated into high levels of individual intercultural sales for real estate agents only in firms that had high motivational cultural intelligence (i.e., the agents in the firm had high average motivational cultural intelligence). Based on trait activation theory (Tett & Burnett 2003), Chen et al. (2012) argued that higher firm motivational cultural intelligence was a situational cue that activated individual motivational cultural intelligence, which in turn promoted individual effort to achieve higher intercultural sales. They also suggested that individual-level and firm-level motivational cultural intelligence are cultivated through reciprocal top-down (e.g., organizational vision/mission and core values) and bottom-up processes (e.g., mutual interactions and idea exchange between peers and between leaders and members).

Future Research Foci

Multilevel frameworks integrate micro and macro perspectives and have the potential to offer a rich understanding of how intercultural competence drives organizational outcomes. We encourage further research on the mutual influence and combinative effects of intercultural competence across different levels of analysis (individual, dyad, team, and firm). In particular, research should investigate composition models of intercultural competence and team-level effects of intercultural competence in greater depth.

Dyad and team composition of intercultural competence. Chan's (1998) typology of composition models provides guidance on possible conceptualizations of dyad and team intercultural competence. For example, additive models are models in which dyad or team intercultural competence is based on the mean intercultural competence of individual members (e.g., Adair et al. 2013, Crotty & Brett 2012, Moynihan et al. 2006). In dispersion models, dyads or teams require not only high mean-level intercultural competence, but also the absence of extreme variance in intercultural competence among individual team members. Alternatively, a dyad or team may require only one person—such as the leader (e.g., Chen & Lin 2013, Groves & Feyerherm 2011)—with high intercultural competence to function well. Importantly, different tasks may pose different requirements for intercultural competence. Rather than developing just one dyad or team intercultural competence composition model, we may need a better understanding of how task characteristics and context affect intercultural competence requirements in dyads and teams.

Team-level effects. More work on the effects of intercultural competence on team-level outcomes is needed. Prior research has focused primarily on cultural intelligence, so future research should be directed at other models of intercultural competence as well. We also need to explore the processes associated with the effects of intercultural competence in team contexts.

MEASUREMENT OF INTERCULTURAL COMPETENCE

There are a wide range of constructs formulated by intercultural competence scholars, but the approaches developed to measure intercultural competence are less diverse. We identify three broad approaches to the measurement of intercultural competence: self-reported, informant based, and performance based.

Self-Reported Measures

In self-reported measures, focal individuals report about their own intercultural competence (Stone et al. 2000). Other than standardized scales, behavior description interviews have been used, in which interviewees describe their own experiences and past behaviors (McDaniel et al. 1994). Much of the research on intercultural competence has depended on self-reported measures.

Providing self-reports is a complex process (Tourangeau et al. 2000), and many factors may influence the accuracy of self-reports (Dunning et al. 2004). Self-reports may contain substantial method variance (Campbell & Fiske 1959), but we are of the view that measurement variance also reveals unique information about a person. Campbell & Fiske (1959, p. 102) noted, "More likely, what we have called method variance will be specified theoretically in terms of a set of constructs. . . . It will then be recognized that measurement procedures usually involve several theoretical constructs in joint application." Cronbach (1995, p. 145) also stressed that method variance is not "the serpent in the psychologist's Eden" but rather informs theory-driven research. More recently, Diener & Eid (2006) reiterated that different methods capture different but theoretically meaningful aspects of a construct, rather than mere bias. For intercultural competence, self-reported measures may reflect a person's intercultural self-efficacy, which is consistent with the definition of self-efficacy as one's perceived capability (Bandura 1997). As meta-analyses show that self-efficacy is an important predictor of performance (Stajkovic & Luthans 1998), self-reports of intercultural competence can provide valuable performance-related information about a person.

Lance et al. (2008) argued cogently that predictive validity is the sine qua non to determine whether measurement variance is valuable information or bias. If self-reports reflect valuable information, then they would predict performance over and above alternative measures. Research across a variety of domains shows that self-reports do just that. For instance, meta-analyses show that self-reported emotional intelligence incrementally predicts transformational leadership (Harms & Credé 2010) and job performance (Joseph & Newman 2010) over and above ability-based tests of emotional intelligence. Similarly, Rockstuhl et al. (2013a) showed that self-reported cultural intelligence predicted task performance in multicultural teams over and above a situational judgment test of cultural intelligence.

We see little value for intercultural competence researchers to embark on what Roberts et al. (2006, p. 321) regarded as "a misguided boondoggle to search for the methodological Holy Grail—the one method that deserves our ultimate attention." Instead, we advocate the use of predictive validity as the major criterion to identify the best measurement approach for a given criterion.

We also see a need to better understand the impact of data collection for research purposes, as opposed to high-stakes selection contexts, on the predictive validity of different measurement approaches. The influence of social desirability may be of particular concern when self-reported measures are used in high-stakes selection contexts. Research on the influence of social desirability in domestic selection contexts suggests that its impact on the predictive validity of self-report measures may be minimal (Morgeson et al. 2007). Yet, we know very little about the impact of social desirability on the predictive validity of self-reports of intercultural competence because of the lack of relevant research.

Informant- and Performance-Based Measures

Informant- and performance-based measures are alternatives to self-reports, but they are not commonly used to measure intercultural competence. In informant-based measures, informants report about a focal person's intercultural competence (Hogan et al. 1996, Mount et al. 1994). Critical issues include the possibility that informants (e.g., supervisors, peers, and subordinates) may differ in their opportunities to observe a focal person's behavior (Hoffman et al. 2010) and in

the training they receive as observers (Woehr & Huffcutt 1994). The use of multisource ratings, which ask multiple informants to provide ratings based on recall, is one approach to deal with these potentially biasing influences (Conway & Huffcutt 1997). Performance-based measures are based on a focal person's performance in a standardized test (Schmidt & Hunter 1998). Examples of performance-based measures include multiple-choice assessments of knowledge or assessment centers. Performance-based measures may vary in the extent to which performance reflects conscious versus nonconscious cognitive processes.

Scholars have repeatedly called for greater methodological diversity in the measurement of intercultural competence. Deardorff (2006, p. 241) noted that intercultural competence assessments should include a "mix of quantitative and qualitative methods. . .including interviews, observation, and judgment by self and others." Similarly, Gelfand et al. (2008, p. 384) advised that future research on cultural intelligence "would benefit from having methodological diversity in assessing such a complex construct, as has been done for other intelligence constructs." In response to these calls and others, the methodological diversity of intercultural competence assessment has increased in recent years. **Table 2** provides examples of the diverse measures developed for measuring intercultural competence. Self-reported measures are sometimes complemented by both informant- and performance-based measures.

Research on cultural intelligence has been particularly active in developing and validating alternative measures. Van Dyne et al. (2008) introduced an informant-based measure of cultural intelligence. Subsequently, Kim & Van Dyne (2012) showed that informant-based cultural intelligence predicted the international leadership potential of working adults as rated by independent observers. Rockstuhl et al. (2013a) developed a performance-based measure of cultural intelligence based on a multimedia intercultural situational judgment test (iSJT). They found that performance-based cultural intelligence predicted peer-rated task performance and interpersonal helping in samples of undergraduate seniors and working adults working in multicultural teams. Similarly, Rockstuhl et al. (2013b) showed that performance-based cultural intelligence measured

Table 2 Measurement approaches of intercultural competence instruments[a]

Source of information	Basis of intercultural competence instrument		
	Intercultural traits	Intercultural attitudes and worldviews	Intercultural capabilities
Self	Survey MPQ (Van der Zee & Van Oudenhoven 2000, 2001) Behavior description interview Mixed traits (Lievens et al. 2003)	Survey IDI v3 (Hammer 2011)	Survey CQS (self) (Ang et al. 2007) E-CQS (self) (Van Dyne et al. 2012) Behavior description interview Mixed skills (Lievens et al. 2003)
Informant	–	–	Survey CQS (observer) (Van Dyne et al. 2008)
Performance	Situational judgment test Empathy (CCSI-SJT; Ascalon et al. 2008) Assessment center Mixed traits (Lievens et al. 2003)	Situational judgment test Ethnocentrism (Ascalon et al. 2008)	Situational judgment test Cultural intelligence (iSJT; Rockstuhl et al. 2013a,b) Assessment center Mixed skills (Lievens et al. 2003)

[a]Abbreviations: CQS (self), Cultural Intelligence Scale (self-report); E-CQS (self), Expanded Cultural Intelligence Scale (self-report); CQS (observer), Cultural Intelligence Scale (observer-report); IDI, Intercultural Development Inventory; MPQ, Multicultural Personality Questionnaire; CCSI-SJT, cross-cultural social intelligence situational judgment test; iSJT, intercultural situational judgment test.

by the multimedia iSJT predicted supervisor-rated task performance of Filipino offshoring professionals measured three months after the CQ test.

Mixed models of intercultural competence have also explored alternative measures. Lievens et al. (2003) developed a behavior description interview and two assessment center exercises measuring various intercultural traits and skills. In particular, skills in intercultural communication, intercultural teamwork, and intercultural adaptability (as measured by a group-discussion assessment center exercise with culturally diverse participants) predicted intercultural training performance. Ascalon et al. (2008) developed a text-based cross-cultural social intelligence situational judgment test (CCSI-SJT) to measure both cultural empathy (a trait) and ethnocentrism (a worldview).

Future Research Foci

Van de Vijver & Leung (2009) suggested that measures of intercultural competence should meet standards of psychometric properties and demonstrate measurement equivalence across cultures. A range of new measures has emerged, but research to validate them is still in its infancy. In particular, more work needs to demonstrate similarity in factor structure and measurement equivalence across cultures for these measures.

One exciting development concerns implicit measures of intercultural competencies. Implicit measures, such as the Go/No-go Association Task (Nosek & Banaji 2001), assess implicit motivation to work with culturally diverse others. A strength of this approach is that it allows the examination of implicit evaluation of a single target category (e.g., culturally diverse others). As noted by Gelfand et al. (2008), implicit measures such as the spontaneous cultural inference task may also assess implicit cultural knowledge. Another promising area is the development of physiological and neurological measures of intercultural competence. Rockstuhl et al. (2010) recently suggested possible neurological bases for culturally intelligent global leaders. For example, perspective-taking abilities may draw upon both simulation mechanisms supported by the mirror-neuron system (Iacoboni & Mazziotta 2007) and inferential mechanisms supported by prefrontal cortical regions (Gallagher & Frith 2003). Research on the neural substrates of intercultural competence may eventually lead to the development of neurological measures of intercultural competence.

More research also needs to examine the incremental and unique predictive validity of different measures of the same intercultural competence dimension. Such research may draw upon the concept of saturation (Lievens & Sackett 2012, Lubinski & Dawis 1992), which reflects how a particular construct influences a complex outcome measure. Some behaviors, such as volunteering for intercultural social services, are primarily determined by deliberate actions, whereas others, such as emotional responses in intercultural situations, are primarily determined by spontaneous actions. Dual process models of social cognition suggest that self-reported attitudes guide deliberate behaviors but play a lesser role in determining spontaneous behaviors (Dovidio et al. 1997). Thus, self-reported measures of intercultural competence may outperform implicit tests in predicting outcomes based on deliberate actions. In a nutshell, we recommend that researchers examine a wider range of outcomes in intercultural contexts with multiple measures of the same intercultural competence dimension to differentiate their usefulness.

APPLICATIONS OF INTERCULTURAL COMPETENCE

We review how intercultural competence is applied in two major contexts: (*a*) selection and (*b*) training and development. Historically, selection and training focused primarily on expatriates

to ensure success of such individuals in international assignments. However, cultural heterogeneity is rising in many regions, and the importance of intercultural competence is no longer limited to expatriates.

Selection for International Assignments

For intercultural competence to be useful as a selection criterion, two things must be shown. First, intercultural competence must predict relevant criteria. Performance outcomes are the most important criteria in domestic selection research (Sackett & Lievens 2008) and are also crucial for international selection (Bhaskar-Shrinivas et al. 2005, Mol et al. 2005). Because international assignments often fail due to assignees' inability to adjust to working in another culture (Caligiuri et al. 2009), psychological outcomes are also crucial criteria in international selection. As highlighted above, the MPQ, IDI, and CQS all predict psychological outcomes (see also sidebars). Research on cultural intelligence has provided the strongest support to date for predicting performance outcomes such as task performance, contextual performance, and leadership effectiveness in culturally diverse contexts (see sidebar, Outcomes Predicted by the Cultural Intelligence Scale).

Second, for any selection procedure to be useful, it should predict criteria over and above established predictors (Sackett & Lievens 2008). Cognitive ability is the most established predictor of performance (Schmidt & Hunter 1998), and Big Five personality dimensions and previous international experience are commonly used predictors in international selection (Caligiuri et al. 2009, Mol et al. 2005). Cultural intelligence predicts performance outcomes consistently over and above cognitive ability (Ang et al. 2007; Rockstuhl et al. 2011, 2013a,b), Big Five personality dimensions (Rockstuhl et al. 2011, 2013a; Şahin et al. 2013), and previous international experience (Ang et al. 2007; Rockstuhl et al. 2011, 2013a; Şahin et al. 2013). Unfortunately, we know much less about the incremental predictive validity of other intercultural competence models.

Cultural intelligence research not only shows incremental validity but also illustrates the unique usefulness of intercultural competence for international assignments. For example, Rockstuhl et al. (2011) found that, for Swiss military officers operating both in domestic and cross-border contexts, cultural intelligence predicted cross-border leadership effectiveness but not general leadership effectiveness. Chen et al. (2012) found that real estate agents' motivational cultural intelligence predicted intercultural sales—housing transactions between people of different cultural origins—but not the total number of sales (X.-P. Chen, personal communication, Apr. 25, 2012).

In sum, the empirical evidence suggests that intercultural competencies hold great potential to improve international selection, which has relied primarily on informal assessments in the past (Caligiuri et al. 2009). To fully realize the utility of intercultural competence as a selection tool, research needs to proceed in several directions. First, the differentiation of the criterion variables has important implications for the application of intercultural competencies in selection. Ajzen's (2005) principle of compatibility implies that a specific intercultural competence should predict optimally an aspect of intercultural performance matched in specificity. Certain personality traits, attitudes and worldviews, and capabilities may be differentially predictive of different facets of performance in different intercultural contexts.

Second, we sorely need research that examines the predictive validity of intercultural competencies in high-stakes selection contexts. Validation studies have relied exclusively on data collected for research purposes, and we know little about how well results based on such data generalize to high-stakes selection contexts where the influence of social desirability or faking is a concern. Although prior research on personality measures has revealed limited faking in

selection contexts (Ellingson et al. 2007), there is some degree of faking when job applicants apply for the same job twice (Hogan et al. 2007), and there is some impact of faking on the predictive validity of personality measures in selection contexts (Morgeson et al. 2007). It is not clear to what extent the results of research on faking personality measures are applicable to self-reported intercultural competence measures, and this issue needs to be ascertained in future research. One promising approach to minimize faking in selection contexts is the response elaboration technique, that is, requiring job applicants to provide supporting information to justify their responses (Levashina et al. 2012, Schmitt & Kunce 2002). We encourage future research to explore the usefulness of this technique for self-reported measures of intercultural competence in selection contexts.

Different approaches to assessing intercultural competence may also be differentially predictive of intercultural performance. In particular, to augment self-reported measures, the development and validation of behavior description interviews, situational judgment tests, and assessment centers to assess intercultural competencies is an important area for future research. As noted by Deardorff (2009a, p. 486), "Intercultural competence is a very complex concept with a variety of components and aspects. One tool or method does not provide a comprehensive measurement of the complexity of this concept." Combining different measures provides a more comprehensive assessment of intercultural competence and enhances its predictive validity for international assignments.

Training and Development of Intercultural Competence

Earlier writings on intercultural training report suites of interventions that focus on preparing individuals for living and working abroad. For instance, cultural awareness training aims to help individuals understand and appreciate cultural differences and to develop attitudinal flexibility; cultural assimilators aim to train individuals to make isomorphic attributions in foreign countries (Fiedler et al. 1971); didactic training includes informational briefings and formal training activities; and experiential exercises aim to modify behavior through look-see visits, role plays, intercultural workshops, and simulations (Bhawuk & Brislin 2000). The primary focus of these interventions is to familiarize individuals with living, working, and the social environments in a different culture.

Empirical research has supported the benefits of intercultural training. Morris & Robie (2001) conducted a meta-analysis and found positive correlations between intercultural training and expatriate intercultural adjustment ($\rho = 0.12$; $p < 0.05$) and performance ($\rho = 0.23$; $p < 0.05$). Littrell et al. (2006) conducted a qualitative review of intercultural training research and concluded that intercultural training was effective in facilitating expatriate success. More recent studies suggest that such training may increase intercultural effectiveness primarily by increasing cognitive capabilities. For example, Rehg et al. (2012) reported on a nine-day, lecture-based training course for US military and government contractors, where trainees were taught basic knowledge of culture with an emphasis on cultural differences between the United States and Iraq. Analyses of pre- and posttraining self-rated scores indicated a 20% improvement in cognitive cultural intelligence and a 6% improvement in behavioral cultural intelligence.

Fischer (2011) reported on an eight-session intercultural training intervention embedded in a university course, consisting of lectures on culture and cultural diversity, one simulation game, and one behavior modification session. Analyses of pre- and postintervention scores showed an increase in cultural essentialism, which refers to one's beliefs that culture influences the way individuals act, feel, and behave. This change indicates a development along Bennett's (1986, 1993, 2004) Developmental Model of Intercultural Sensitivity (DMIS), whereby intercultural sensitivity, or understanding of cultural differences, increases in sophistication. Self-rated cognitive and metacognitive cultural intelligence decreased after the intervention, and Fischer

suggested that this indicated a progression from unconscious incompetence to conscious incompetence, which is a sign of intercultural competence development. He also found that open-minded students were more likely to report increases in motivational cultural intelligence after the intervention, which illustrates the role of trait-based intercultural competencies in the development of intercultural capabilities.

Rosenblatt et al. (2013) reported on a six- to eight-week intervention focusing on cultural intelligence development, in which intergroup contact played a crucial part. Perceptions of optimal contact conditions (i.e., equal status between contact parties, establishment of common goals, meaningful personalized contact, and support of the contact by recognized authorities) predicted the development of cultural intelligence. This effect was mediated by the extent to which the contact disconfirmed previously held expectations about the other contact party.

With new forms of global work arrangements emerging (Shaffer et al. 2012), intercultural interventions have also evolved to facilitate effectiveness in multinational teams and/or global work environments. New forms of intercultural competence interventions aim to increase general intercultural competencies, in addition to the ability to adapt to a specific foreign country. Many of these new forms are varieties of developmental experiences, including participation in global teams, long-term and short-term global assignments, coaching, and stretch assignments (Caligiuri & Tarique 2009). For example, Erez et al. (2013) introduced a four-week online virtual multicultural team project as an intercultural competence intervention. This experience was associated with a 4% increase in overall cultural intelligence, which was maintained six months later. Pless et al. (2011) reported on an eight-week-long integrated international service-learning program, in which partners from a global accounting and consulting firm were sent in multinational teams to developing countries to work on humanitarian projects in partnership with nongovernmental organizations or social entrepreneurs. This program integrated coaching, 360-degree feedback, reflective exercises, meditation and yoga, and storytelling sessions to facilitate learning. Content analysis of postprogram narratives indicated development of cognitive and metacognitive cultural intelligence, as well as of the intellectual capital dimension of global mindset. Postprogram surveys conducted approximately two years after the program indicated sustained improvements in cultural intelligence and global mindset.

The positive effects of training and development activities for intercultural competence are encouraging, as they indicate that global talent can be developed. However, we need to open the black box of intercultural competence interventions and identify their effective elements. To paraphrase Dewey (1938), genuine development comes from experience, but not all experiences are equally developmental. Because practitioners need to understand the features that drive learning and development, we discuss several learning and development perspectives that may guide future research in this direction.

Intercultural experiences as a development tool. The literature on leader and executive development suggests that 70% of development occurs through direct, on-the-job experiences, whereas training accounts for less than 10% of development, and coaching and mentoring account for the remaining 20% (DeRue & Wellman 2009, McCall 2004, McCauley et al. 1994, Robinson & Wick 1992). Similarly, Erez et al. (2013) and Pless et al. (2011) provided evidence for the effectiveness of direct experiences in developing intercultural competence. Many scholars have advocated direct, on-the-job experiences as the primary developmental tool, with other forms of development (i.e., formal training, coaching, and mentoring) playing a supporting role (DeRue & Wellman 2009).

Robinson & Wick (1992) argued that to enhance the value of challenging experiences, accountability and autonomy should be involved, as these characteristics combine interactively to

heighten an individual's arousal, which is positively linked to learning (DeRue & Wellman 2009). Future research should evaluate the extent to which accountability and autonomy in intercultural competence interventions contribute to the interventions' effectiveness.

Intercultural cognition apprenticeship. The concept of cognitive apprenticeship (Collins et al. 1991, Collins 2006), like the leader and executive development perspective, also advocates learning by doing. Collins et al. (1991) used the term situated learning to refer to learning in the context of working on authentic or realistic tasks. The importance of situated learning follows from arguments that "doing" is not separable from "knowing" and that learners must have the opportunity to combine knowing and doing in a realistic context. This approach also emphasizes the usefulness of learning communities, in which groups of learners engage in collaborative learning via sharing of cultural practices, collective problem solving, and reflection (Lave & Wenger 1991). Future research should examine the extent to which the key principles of cognitive apprenticeship—situated learning and learning communities—contribute to the effectiveness of intercultural competence interventions.

Experiential cultural learning. Experiential learning theory (Kolb 1984) provides an account of how individuals develop intercultural competence from intercultural experiences (e.g., Ng et al. 2009). By delineating the mechanisms involved, experiential learning theory informs the design of intercultural competence interventions (e.g., Erez et al. 2013, MacNab 2012, Rosenblatt et al. 2013). According to this theory, individuals learn as they undergo four stages of development: (*a*) engaging in concrete experiences, (*b*) reflecting critically on their experiences, (*c*) abstract conceptualization (i.e., the distillation of reflections into general theories to guide future actions), and (*d*) active experimentation (i.e., testing newly formed theories and assessing the extent to which they fit reality). One important topic for future research is to evaluate the relative importance of these four stages in nurturing intercultural competence development. For example, Li et al. (2013) found that the relationship between international experience and cultural intelligence was strongest for individuals who emphasized both concrete experiences and reflection on those experiences.

In conclusion, the diverse learning and development perspectives provide different ways to unpack the effects of the underlying components of intercultural competence interventions. Such knowledge will enable practitioners and organizations to design appropriate, feasible, and effective interventions. A final point is that a long-term view of intercultural competence development is essential (Fantini 2009), as it takes years to master the necessary know-how for tasks as complex as crossing cultures and bridging different deep-seated worldviews.

CONCLUSION

Trends in Current Research on Intercultural Competence

Our review of intercultural competence research reveals several important trends. The first relates to the increasing sophistication of intercultural competence models. Researchers have proposed a multitude of models, but current research increasingly focuses on explicating structural relationships between trait-, attitude/worldview-, and capability-based competencies. There are also efforts to span different levels of analysis and to include boundary conditions for the effectiveness of intercultural competence. Moving forward, we also expect intercultural competence researchers to adopt greater dynamic orientations in their models that take into account the temporal development of intercultural competence and how its effects on intercultural effectiveness unfold over time.

The second trend involves the growing methodological diversity in assessing intercultural competence. We expect to see a greater use of mixed-methods designs in future research. Self-reported measures have dominated the field, but alternative measures, such as informant- and performance-based ones, have received more attention and should be integrated with self-reports to provide a comprehensive, holistic assessment of intercultural competence.

The third trend involves probing the myriad ways in which intercultural competence affects performance outcomes. We are witnessing a move from an initial focus on cultural adjustment toward a wider range of psychological, behavioral, and performance outcomes. We expect that there will also be a concomitant rise in research on various mediators and moderators that help to explain how culturally competent individuals achieve valued intercultural outcomes. The general framework that psychological and behavioral outcomes mediate the effects of intercultural competence on performance outcomes should be examined and developed in future research.

With the increased attention to psychological and behavioral mediators, we expect further refinements about the processes underlying different models of intercultural competence. Existing models place greater emphasis on deliberate cognitive and motivational processes underlying intercultural competence. With advancements in neuroscience and automatic social cognition, there will likely be a greater integration of nonconscious processes into models of intercultural competence. Future research needs to address the interplay of conscious and nonconscious processes when people function in intercultural situations, and how the interplay affects intercultural outcomes. More broadly, we call for greater attention to the processes underlying the differential effects of different dimensions of intercultural competence on different aspects of intercultural effectiveness in different contexts.

Finally, we reiterate our opening statement that intercultural competencies have never been more crucial. Much of intercultural competence research has focused on relatively elite groups of expatriates. However, with the rising globalizing trend and cultural heterogeneity in many nations, intercultural competence is becoming important for low-level employees, such as sales personnel and even factory floor workers. Global firms and local firms in ethnically diverse nations cannot afford to ignore the intercultural competence of their grassroots employees, and we expect research and theory on selection and development of intercultural competence to extend to all organizational levels.

The Crucial Role of In Situ Intercultural Competence

The majority of intercultural competence models emphasize generalized or decontextualized intercultural competencies. We know a lot about the personal characteristics of people with high intercultural competence, including their traits, attitudes and worldviews, and capabilities. The general assumption is that interculturally competent individuals are able to function effectively across different intercultural contexts because of these personal attributes. In this sense, generalized intercultural competence reflects a person's potential to be effective across cultures and job roles, such as by being an effective intercultural negotiator or intercultural counselor. By contrast, we know much less about what interculturally competent people actually do in specific intercultural job contexts. Effective intercultural negotiators are likely to engage in different behaviors than effective intercultural counselors. Traditional competency models recognize the job-specific and context-specific nature of competencies (Lievens et al. 2010) and emphasize a grounded theory approach to understanding the specific competencies required in particular jobs (Spencer & Spencer 1993). Accordingly, a crucial future research direction is to identify context-specific intercultural competencies for specific job roles in well-defined intercultural contexts, as this type

of research will be most useful to inform practitioners about effective behaviors in a given intercultural context.

We refer to such context-specific intercultural competencies as in situ intercultural competencies. Drawing upon extant definitions of work competence that emphasize competencies as demonstrated behaviors for achieving desired outcomes (Bartram 2005, Kanfer & Ackerman 2005), we offer the following definition of in situ competencies: In situ intercultural competencies are demonstrated sets of coordinated behaviors that are instrumental for achieving desired results or outcomes in specific intercultural contexts.

To illustrate the difference between generalized and in situ competencies, we ask the reader to consider the case of relationship building in different Asian contexts. Although relationship building generally precedes the development of business partnerships in Asia, there are differences in norms across different Asian cultures. In some Asian cultures, a single episode of relationship building suffices, whereas in other Asian cultures, relationship building is a more prolonged affair whereby getting down to business after only one episode of relationship building is regarded as highly inappropriate. Foreign business development managers working in such cultures would require not only generalized intercultural competencies (such as the motivation to work with culturally different business partners and the declarative knowledge that relationship building is an important component of business development in Asian cultures), but also in situ intercultural competencies (e.g., the ability to identify appropriate moments to initiate business discussion in a specific Asian culture and orchestrate events that give rise to such moments).

Our model of in situ intercultural competence, depicted in **Figure 3**, posits that generalized intercultural competencies as identified by current models of intercultural competence develop into in situ intercultural competencies through direct experiences and training, which in turn drive intercultural job performance. In situ intercultural competence is not necessarily synonymous with intercultural job performance because external factors beyond an individual's control, such as macroenvironmental factors and actions of customers and coworkers, may affect job performance. Our model is consistent with the views that general abilities develop into domain-specific competencies through active participation and direct instruction (Sternberg 2005) and that domain-specific competencies are causally and proximally related to job performance (Bartram 2005, Kanfer & Ackerman 2005, Spencer & Spencer 1993). To develop this model, the immediate task for future research is to identify in situ intercultural competencies for specific jobs and roles in specific contexts and countries (or regions) via a grounded theory approach. The identification of in situ intercultural competencies has immense applied value, as these competencies provide specific guidance for the refinement of selection and training procedures, such as in the development of assessment centers.

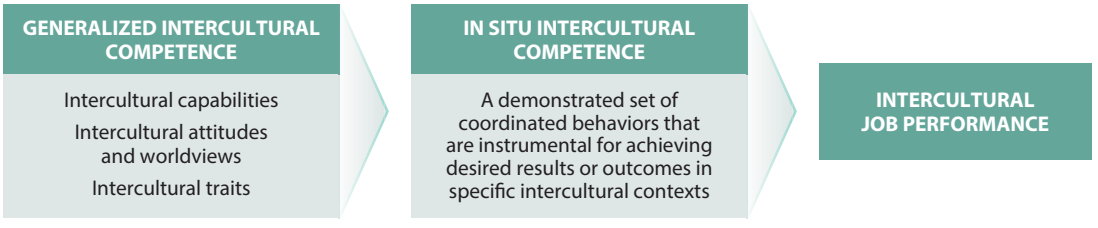

Figure 3

Proposed model for in situ intercultural competence.

Summary

Since the turn of the century, intercultural competence research has made tremendous progress in uncovering why some people thrive more than others in intercultural interactions. We have gained deep insight into which traits, attitudes and worldviews, and capabilities predict success in intercultural contexts, why they do so, and which contextual variables modify their effects. Nonetheless, what we know lags far behind the dire need of individuals and firms confronted with the challenge of cultural diversity and globalization. Theory and research on intercultural competence are entering a new stage with many exciting opportunities for significant new developments and for applying our knowledge to solve important real-world challenges. We hope that by integrating diverse streams of research and identifying important topics for future research, our review provides an impetus to further develop this fascinating field.

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Errata

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