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Culture-general competence: Evidence from a cognitive field study of professionals who work in many cultures

Louise J. Rasmussen*, Winston R. Sieck

Global Cognition, United States

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ABSTRACT

We describe a cognitive field research study of professionals with repeated and varied intercultural experiences, and a resulting model of culture-general competence. Twenty professionals with varied sojourns and considerable experience working with members of other cultures participated in 2-h long, semi-structured interviews. We elicited critical intercultural interaction incidents during the interviews, and followed with detailed questions designed to probe existing competencies hypothesized to be important in the literature. Interview transcripts were subjected to a qualitative thematic analysis, as well as coding to support quantitative, frequency analyses. Results confirmed the importance of several hypothesized competencies, and suggested a reconceptualization of specific knowledge and skill elements. Several additional competencies emerged from the qualitative analysis, as well. Practical and theoretical implications are discussed.

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1. Introduction

I had studied German and Spanish in high school and college; I was an International Studies major. I lived in the Netherlands for a year and a half to go to graduate school before I came into the military. [...] When I first got selected into my career and organization, a few months before I started, I got a notice saying that they had selected me for an assignment in Korea. I had two weeks to accept it. They obviously didn't read my resume, because it had nothing to do with Korea and nothing to do with Asia; it was the opposite side of the world. I thought, sure, I will do that.

What are the culture-general competencies that allow people to go anywhere at a moment's notice—spend a small or large amount of time in a new environment—and work effectively with members of any local population? By “culture-general,” we mean the skills and knowledge that allow adaptation and interaction in any culture, as opposed to competencies that enable adaptation and interaction in a specific culture. This sense of the term culture-general is in line with Brislin and his colleague's use of the term to describe cultural training that focuses on covering themes that are universally important (Brislin, Cushner, Cherrie, & Yong, 1986). The term, “cultural-general,” is also sometimes used in a slightly different way, specifically, to distinguish intercultural communication competencies that are used universally from those that are used only by members of certain cultures (Arasaratnam & Doerfel, 2005).

In this article we present the results of a study that builds upon the existing literature to derive an empirically and conceptually sound model for culture-general competence. We conducted a review of the existing literature to identify a

* Corresponding author at: Global Cognition, 1771 Southview Drive, Yellow Springs, OH 45387, United States. Tel.: +1 937 528 2350. E-mail address: louise@globalcognition.org (L.J. Rasmussen).

set of hypothesized competencies. Then, using an open-ended cognitive field research methodology, data we collected data that allowed both hypothesis testing and exploratory analysis.

1.1. Culture-general competence

Previous research has provided evidence to suggest that a core set of competencies exist that enable adaptation to any culture (Hammer, 1987). A large number and variety of intercultural skills and abilities relevant to intercultural competence have been identified over the years (see Spitzberg & Chagnon, 2009 for an overview). Already in the late 80s, enough elements of intercultural competence had been suggested to prompt Martin and Hammer (1989) to note that it has become unclear what the relevant behaviors are that are associated with these skills and abilities. According to Deardorff (2009) this deficiency still stands. Deardorff nominates identification of the ways elements of intercultural competence manifest themselves in actual intercultural encounters, within different contexts and professional fields as a key area for future research.

The knowledge and skills that have been identified as relevant to culture-general competence have been derived from a variety of empirical sources. Some of these include asking sojourners to reflect on competencies (Arasaratnam & Doerfel, 2005; Hammer, 1987); researcher's personal experiences in multicultural settings (Byram, 1997); observations of specific intercultural interactions (Olebe & Koester, 1989; Ruben & Kealey, 1979), interviews with students studying in a foreign culture (King & Baxter Magolda, 2005); and interviews with scholars working in the intercultural relations field (Deardorff, 2006). Importantly, the intercultural experience base of the participants in these past studies is often either limited to a single, significant sojourn or not controlled. In the present study, we instead examine a population that has had repeated and varied intercultural experiences.

From a theoretical point of view, why might it be important to systematically study a population that has had repeated and varied intercultural experiences for the purposes of developing a model of culture-general competence? From a cognitive perspective key differences can be expected to exist between individuals who have spent significant time in a single culture and individuals who have spent time in a variety of cultures. Endicott et al. (2003) suggest that as people increase their intercultural expertise their schemas for intercultural problem solving grow in breadth and depth. However, the way in which their schemas grow may depend on the types of intercultural experiences they have had. Endicott proposes that a person who spends significant time in a single culture, likely develops a complex, highly interconnected schema for that culture. Someone who visits many cultures for shorter periods of time likely develops several, shallower schemas. Endicott found initial support for the idea that different cultural activities lead to the development of different schemas in a survey-based study of undergraduate students with varying types of intercultural experiences (Endicott et al., 2003). The results showed that, relative to breadth, depth of cultural experience was more strongly associated with both intercultural development and development of moral reasoning.

Given the cognitive differences between generalists and specialists, there is a possibility that the two types of cultural 'practitioners' enact intercultural competencies differently—and even that their performance is supported by different competencies.

1.2. Culture-general competencies suggested in the literature

In the current study, we identified a set of nine competency areas from a review of the literature related to intercultural competence. Many competencies have been suggested as contributing to intercultural adjustment and adaptation and a variety of models and frameworks have been proposed (see Spitzberg and Chagnon, 2009). In order to reduce the extensive space of competencies that have previously been proposed to a set meaningful for data collection, we culled a more manageable list from the literature. An initial list of competencies was created based on a literature review. This was reviewed by three senior members of the research team. The researchers met to discuss direct semantic as well as theoretical areas of overlap. The larger list of competencies was collaboratively collapsed thus eliminating redundancies.

The resulting smaller set of competencies therefore represents a reduction rather than a subset. The nine competency areas were: Cultural sensemaking, perspective taking, cultural knowledge, self-presentation, language proficiency, emotional self-regulation, managing affect and attitude toward difference, withholding and suspending judgment, and self-efficacy and confidence.

These nine competency areas were hypothesized to support effective performance in a high-stakes job domain that involves extensive intercultural interaction. In the following each competency is discussed in turn.

1.2.1. Cultural sensemaking

Two men are holding hands. Why? Interpreting behavior is difficult within one's own culture and even more complex across cultures. In America, men mostly do not hold hands with other men unless they are homosexual. In the Middle East, Africa, and parts of Asia it is not unusual for two male friends to hold hands. In an intercultural context, a person's first guess about what motivates a behavior is likely to be grounded in expectations based on experiences within their own culture (Archer, 1986). This means that when people are interpreting behavior in intercultural situations, they are more likely to come to the wrong conclusions (Everett & Stening, 1980; Mendenhall & Oddou, 1985).

Cultural sensemaking has been suggested as a critical intercultural competency as it encompasses a set of metacognitive processes that enable the individual to transform a possibly biased first-guess into a culturally sophisticated and more accurate behavioral explanation (Osland & Bird, 2000; Sieck, Smith, & Rasmussen, 2013). As part of the cultural sensemaking process, an individual approaches ambiguous intercultural situations like a scientist, consciously realizing that their first-guesses may be biased, and thus treating them as hypotheses (Osland & Bird, 2000). This is in line with the skill of confusion acceptance suggested by Brislin and his colleagues. Confusion acceptance is the expectation that “one will encounter specific events and behaviors in the new cultural context that will not immediately be understood. . .” (Brislin, Worthley, & MacNab, 2006, pp. 48–49).

Sieck et al. (2013) tested five metacognitive processes a sojourner may engage to develop nuanced cultural explanations for behavior. These include noticing the anomaly, instantiating a general cultural schema, inquiring as to causes, considering alternative explanations, and suspending judgment. In a think-aloud study comparing cross-cultural novices and experts, Sieck et al. found that experts were more likely than novices to engage in cultural sensemaking strategies and were more likely to attain deeper understanding when presented with ambiguous intercultural scenarios.

1.2.2. Perspective taking

In social psychology, perspective taking is defined as ‘seeing things from another’s point of view’ (Davis, 1983) and the analogy of ‘stepping into someone else’s shoes’ is often used to describe the phenomenon. A great deal of intra-cultural research has suggested that the ability to take another’s perspective is crucial to achieving social goals (see for example Epley, Keysar, Van Boven, & Gilovich, 2004; Galinsky & Moskowitz, 2000). Although not always labeled in this way, perspective taking plays a prominent role in many conceptualizations of intercultural competence. In Bennett’s theory of intercultural development, for example, the critical transition between novice and more advanced intercultural sensitivity orientations involves a shift from rigid thinking to more flexible thinking (Bennett, 1993). Flexible thinking plays a critical role in understanding and adapting to multiple cultural frameworks in Bennett’s last two stages. Specifically, change occurs as people shift from minimizing cultural differences to accepting cultural differences, and acceptance in turn requires recognition and appreciation of another cultural framework for interpreting the world.

In this way, perspective taking and the ability to appreciate multiple cultural frameworks has been identified as a critical component of intercultural competence. A related avenue of research recently undertaken investigates the intercultural advantages to ‘knowing what members of another culture know’ (see for example Fu, Chiu, Morris, & Young, 2007; Leung, Lee, & Chiu, 2013). The advantages to having cultural knowledge for intercultural interaction will be discussed in greater detail next.

1.2.3. Cultural knowledge

The claim is often made (expressed in various forms) that because culture shapes our social world (Griswold, 2008), to be socially effective across cultures it is useful to ‘know about culture’. Sometimes this idea is even taken a step further to suggest that in order to reach high levels of competence; people must be able to organize their cultural knowledge in a certain way. Bhawuk (1998) defines culture-general expertise as having “acquired the knowledge of culture theories that are relevant to a large number of behaviors so that they can organize cognitions about cultural differences more meaningfully around a theory” (p. 636).

There does not appear to be a consensus, however, on what it means to know about culture. Different suggestions have been made about the type of knowledge that enables cross-cultural success. Some have proposed that it is useful to know about norms, values, beliefs, expressive symbols (Triandis, 1994). It has also been proposed that scientific models of cross-cultural similarities and differences, such as Schwartz’ universal values (Schwartz, 1992) or the individualism collectivism typology (Triandis, 1995) provide not only useful content knowledge, but also good frameworks for organizing understanding (Bhawuk, 1998). Others suggest that knowing and understanding practices that relate to cultural processes such as decision making, perception, and collective organization are key to being effective across cultures (Lewis, 2006). Recently, researchers have examined the relative benefits of cultural meta-knowledge, that is, knowledge about what people from cultures know or prefer (Leung et al., 2013).

Both knowledge about cultural differences and knowledge about what members of a culture prefer have been shown to have a positive effect on intercultural interactions (Bhawuk, 1998; Leung et al., 2013)

1.2.4. Self-presentation

To truly be effective within intercultural situations it is important that people are able to not only make sense of what is going on around them, but translate their understanding into appropriate communication and actions (Spitzberg & Cupach, 1984). The ability to engage in behaviors that fall outside of one’s own cultural norms or rules is sometimes referred to as code switching (Molinsky, 2007).

Code switching requires that an individual: (1) Exerts conscious effort to avoid engaging in a culturally accustomed behavior (from own culture) and (2) carries out a new behavior appropriately. Code switching can occur across the entire spectrum of communicative and self-presentation levers that are available to a person, including verbal and non-verbal behavior, such as body language, including facial expressions and loudness of voice or manner, gestures, and degree and type of eye contact (Lewis, 2006).

1.2.5. Language proficiency

Language proficiency or fluency has been demonstrated to be an important predictor of overseas adjustment (Black, Mendenhall, & Oddou, 1991; Mendenhall & Oddou, 1985) and of intercultural effectiveness (Tung, 1998). Language proficiency enables a person to understand and interact with populations in specific areas.

Professional short-term sojourners are disadvantaged on the language front in two ways: (1) They have little time and likely motivation (knowing that their sojourn will be short) to engage in language learning prior to venturing abroad, (2) they have few opportunities to acquire language during their sojourns as business on a global scale is increasingly conducted in English (Neeley, 2012).

The literature does, however, suggest that some form of generalized language ability may be helpful. Deardorff's (2006) survey revealed a consensus among intercultural scholars that socio-linguistic awareness is an important component of intercultural competence. According to Deardorff, Socio-linguistic awareness entails "awareness of the relation between language and meaning in societal context" (p. 250). For example, Zaharna (2009) proposes that learning how to make small talk, i.e. what to say when and to whom enables relationship building by signaling a willingness to engage socially. Socio-linguistic awareness could entail understanding the importance of learning ritualistic communication such as greetings and expressions.

1.2.6. Emotion regulation

Having the ability to regulate emotions has been shown to be a significant predictor of intercultural adjustment (Matsumoto & LeRoux, 2003; Matsumoto et al., 2001). Matsumoto and his colleagues suggest that emotion regulation positively affects a person's intercultural adjustment because exposure to a new culture invariably involves stress and conflict. It is therefore important that individuals are able to avoid being too influenced by the negative emotions that stress and conflict provoke so that these do not stand in the way of engaging in other activities that promote adjustment.

Emotion regulation is a complex skill that allows people to exert influence over the emotions they experience at a given time, control when they experience certain emotions, as well as control how they interpret and express their emotions (Gross, 1998). Gross proposes a process model of emotion regulation in which the individual can exert cognitive control at five points. Within this model the individual can influence their emotions and emotional reactions by choosing to approach or avoid emotionally charged environments (defined here as situations, people, or objects); changing aspects of the environment; choosing which aspects of the environment to pay attention to; changing how they think about or interpret aspects of the environment; or finally, by modifying their responses.

Research addressing emotion regulation in the context of intercultural interaction has focused on a person's in the moment ability to control emotional reactions. A person's ability to change or manage their general orientation toward cultural differences has been addressed separately in the literature and is possibly associated with a distinct competency.

1.2.7. Managing affect and attitude toward difference

One component of culture-general competence that appears to have garnered agreement across various models and frameworks concerns the optimal way to orient oneself to cultural differences. Deardorff (2006) surveyed a representative sample of scholars in the field of inter- and cross-cultural relations and found agreement that showing respect for cultural others and other cultures in general is an important precondition for successful sojourns. Similarly, a consensus existed that a desirable outcome of repeated sojourns is a frame of reference, or identity shift in which a person adopts a mentality that is accepting of cultural differences.

The idea that the development of intercultural maturity, and thus the attainment of high levels of competence, presumes the ability to regard differences favorably is prevalent (King & Baxter Magolda, 2005). It is perhaps most clearly expressed by Deardorff (2009), who states that "...transcending boundaries in regard to one's identity is crucial in developing intercultural competence." Transcending boundaries in turn entails "moving beyond the traditional dichotomous in-group/out-group mentality to one that embraces and respects other's differences as well as commonalities and, in so doing, keeps the focus on the relational goals of engagement" (p. 267).

Shaffer, Harrison, Gregersen, Black, and Ferzandi (2006) showed that ethnocentrism, that is, the absence of an accepting mentality (Bennett, 1993), is a significant predictor of variance in interaction and work adjustment in expatriates.

1.2.8. Withholding/suspending judgment

Detweiler (1975, 1978) examined the influence of cognitive style on the process of making attributions for the behavior of culturally different others. In doing so he may have been the first to suggest the value of withholding judgment. Using a test designed to examine how people evaluate ambiguous stimuli, Detweiler discovered that one of two main categorization strategies are typically used; narrow and wide. Narrow categorizers required that objects had many shared features in order to categorize them as the same. Wide categorizers only required a few cues to similarity; thus displaying greater willingness to ignore dissimilarity cues. Detweiler proposed that in an intercultural context, wide categorizers would be more likely to consider multiple explanations for a novel behavior because to them conflicting information is more acceptable. Using a vignette-based survey he found that people with a wide categorization style were less likely to label "negative" behaviors as intentional, than were narrow categorizers. Wide categorizers were indeed more likely to withhold evaluation.

Triandis (2006) went a step further to suggest that withholding or suspending judgment offers the opportunity to gather more information and affords the potential to arrive at more accurate interpretations of behavior. It has since been

demonstrated that suspending judgment does play a role in cultural sensemaking. Sieck and his colleagues (2013) found that increased cross-cultural expertise is associated both with a greater propensity to suspend judgment and to consider alternative explanations for behavior.

1.2.9. Self-efficacy/confidence

People generally do better at tasks and in situations where they have a strong belief that they are able to do well. The construct of self-efficacy describes this phenomenon. Bandura defined self-efficacy as “the belief in one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet situational demands” (Wood & Bandura, 1989, p. 408). In a study of American expatriates in Europe, Harrison, Chadwick, and Scales (1996) found that high levels of self-efficacy positively influenced the likelihood of adjustment in three areas: to the new environment in general, to interacting with host nationals, and to one’s work role. The authors speculate that individuals with high levels of self-efficacy are more likely to continue trying out new behaviors and as a result receive more feedback enabling them to better hone their skills and knowledge (Black et al., 1991).

1.3. Current study

The goals of the current study were to determine whether the 9 hypothesized competencies support intercultural adaptation and interaction in a professional domain that requires repeated and varied sojourns and whether other competencies were used that were not accounted for in the hypotheses.

We used a semi-structured approach that allowed us to both center the data collection on an initial set of hypothesized competencies outlined by previous research efforts and enabled the possible exploration of competency areas that have not previously been documented.

2. Method

2.1. Participants

Twenty military professionals who had considerable experience working with members of other cultures participated in the study.

All participants had recent overseas assignments, each of more than 6 months in duration, requiring extensive interaction and contact with members of the native populations. All had worked overseas at least twice in their careers (75% of them three or more times), completing an average of 3.7 overseas assignments, with individual assignments ranging in duration from 6 months to 7 years. The range of total time spent overseas was 1.5–15.5 years, and the average was 5.1 years overseas. All had worked overseas in at least two different regions in the world. Most had worked in Iraq, Afghanistan, or both, but the final sample represented intercultural experiences all over the world including Europe, Asia, Africa, and South America. Five participants were female.

All of the participants had been assigned to jobs overseas that required daily interactions either with members of the local populations, foreign coalition partners, or both. Their responsibilities within their jobs included among others: mentoring, advising, planning for and managing provincial reconstruction, providing training, human intelligence gathering, and facilitating civil-military interaction. Certain professional groups within the military receive extensive specialized language and regional training or education prior to overseas assignments. None of the participants belonged to those groups. Therefore, the extent of the preparation the participants had received prior to their overseas assignments was limited to country-focused presentations providing them high-level overviews of local customs and basic words and phrases. A study population with varied cultural training and education backgrounds would possibly have been exposed to some of the hypothesized competencies. Sampling this way allowed us to avoid making the circular discovery that certain competencies are used frequently because they have been taught in training.

As is always the case for field studies, finding active, experienced professionals who not only meet the inclusion criteria but are willing to volunteer their time presented a challenge. A respondent-driven sampling approach, sometimes referred to as the snowball sampling method was used to reach suitable members of the target population (Atkinson & Flint, 2001). Researchers started with a small set of well-respected individuals within the community. After participating, these professionals were asked if they knew others who met the study criteria and who would likely be willing to participate. They were asked to pass information about the study along with the instruction to contact the researchers if they were interested in participating. Using this sampling approach ensured that all participants had been identified by peers or supervisors as competent within their jobs and that they were motivated to participate.

2.2. Interview method

The interviews were semi-structured and used an incident-based elicitation method that relied on recollection of challenging events (cf. Flanagan, 1954; Hoffman & Lintern, 2006; Spencer & Spencer, 1993). The focus of the interviews was on critical incidents in which the participants personally experienced challenges during their most recent overseas assignment. The participants’ own examples of recent interactions overseas were used as a point of departure for asking more

Table 1

Mapping between competency areas and specific behavioral indicators listened for in interviews.

Competency area	Behavioral indicator
1. Cultural sensemaking	Manages confusion/surprises
2. Perspective taking	Sees events as another sees them
3. Cultural knowledge	Applies cultural facts/theories
4. Self-presentation	Adapts how express themselves
5. Language proficiency	Displays knowledge of language
6. Emotional self-regulation	Controls emotional responses
7. Affect/attitude	Expresses attitude about the culture
8. Withholding/suspending judgment	Withholds moral or value judgment
9. Self-efficacy/confidence	Maintains confidence

focused questions designed to elicit information about ways specific competencies allowed participants to cope with intercultural challenges. The initial question used to elicit incidents and the competency-focused questions will be described in the following.

2.2.1. Critical incident elicitation

Eliciting the participants' personal experiences during sojourns in which cultural differences played a critical role was a key research objective. To elicit such experiences, participants were asked the following: "Please tell me about a time, during your most recent overseas assignment, when you interacted with members of the local populace (civilians, tribal leaders, local officials, partnered forces, etc.), coalition partners, or third country nationals and found the interaction particularly challenging?" If participants indicated they had more than one experience, the interviewer would ask them to provide high level descriptions of two or three experiences and then picked one for further examination.

The term 'culture' was not used as a starting point for prompting critical incidents. There was a possibility that using the term 'culture' in the initial question might bias participants to only report incidents they recalled as being 'cultural' according to their personal definitions about what culture means, rather than their most challenging interactions.

2.2.2. Competency-focused follow-up questions

We developed a set of open-ended probe questions to elicit detailed accounts of key events, judgments, and actions. These questions addressed a set of specific behaviors that represented each of the hypothesized competency areas. These follow-up questions were asked only when the associated behaviors were mentioned by participants in the context of their reported incidents. Table 1 presents a mapping between the nine competency areas and the specific behaviors interviewers listened for.

For example, if the participant made references to confusions or surprises in the context of an intercultural interaction, explicitly saying things like "I was puzzled", or "I didn't get it" the interviewer would come back to that specific part of the critical incident and ask detailed questions designed to elicit more information about the nature of the surprise and the participant's response to it:

- What was it about the situation that let you determine what was happening?
- How was it different than what you expected?
- What aspects of the situation/their behavior were you paying attention to?
- How were you interpreting the situation/their behavior?
- Why do you think they did that? . . .Made the decisions they made?

The interviews were semi-structured, so not all of the follow-up questions were asked in every interview, even if the competency area came up. Follow-up questions were only asked if they made sense in the context of the participant's experience and if the participant had not already provided the information as part of a response to a previous question.

2.3. Interview procedure

Interviews were conducted individually, and each lasted about 2 h. Six interviews were conducted face-to-face, and 14 were completed over the telephone. Two researchers were present for each interview. One led the interview and the other took notes and listened for additional opportunities to ask follow-up questions. Each interview began with a short description of the purpose of the interview and participant consent information.

The interviewers first obtained a description of the participant's background and professional history, focusing on their overseas assignments. Interviewers then asked the lead question to elicit an initial account of a critical incident. Subsequently they made additional passes through the account to elicit more detailed descriptions of the event, including the cultural others' behaviors, and the participant's thoughts and reactions during the event. The interviews were audio recorded.

3. Data analysis

Because the current study had both hypothesis testing and exploratory purposes, both qualitative and quantitative data analysis approaches were used. A quantitative analysis approach was used in which behavioral indicators of competencies were identified and coded to support frequency analyses. Qualitative thematic analysis was used to look for previously unidentified competencies. These analyses are described in the following.

3.1. Data preparation

The interviews were transcribed. The resulting interview transcripts were between 21 and 53 pages long, with an average length of 27 pages. Each transcript contained between 12,500 and 30,000 words, with an average of approximately 17,000 words.

3.2. Frequency analysis

If cultural-general competencies are tacit, as mentioned earlier, this means people do not talk about them explicitly. If this is the case, then how can they be counted? To capture tacit elements of cultural-general expertise a verbal analysis approach similar to Chi (1997) was used in which a qualitative analysis was first performed to formalize subjective impressions of what counted as verbal evidence for the presence of hypothesized culture-general competencies. Subsequently all the instances of these references were identified and coded. For example, in the case of perspective taking, references to the internal thoughts or feelings of a cultural other, such as “for him, having four children was more than having \$1M in the bank” would count as verbal evidence for that competency.

A coding scheme was developed that described behavioral indicators for each of the 9 hypothesized competencies. The coding scheme explicitly framed the nine competency areas in terms of specific activities or behaviors that coders could easily discern within the participants’ descriptions of their experiences (see Appendix 1 for full coding scheme).

3.2.1. Coding

The interview transcripts were divided among four analysts who had significant experience analyzing and coding interview data. From the interview transcripts, analysts extracted all propositions that contained applications of cultural knowledge, skills, or attitudes, along with explanations provided for why participants handled situations a certain way. We refer to these as excerpts.

To familiarize the analysts with the coding scheme, they first applied the scheme to the first half of an interview. They then met to compare their coding results, identify points of confusion or disagreement in order to refine the definitions of existing categories. The analysts discussed their individual rationales for code choices for excerpts where they were uncertain or where there was disagreement, and then came to a consensus. The first author checked the rules and codes associated with disagreements, and then refined the rules. The four analysts divided the remaining interviews and independently coded them using the updated coding scheme. Analysts were instructed to assign as many primary competency codes to each excerpt as applicable.

3.3. Thematic analysis

Following the frequency analysis a thematic analysis was conducted in an effort to achieve a better characterization of the ways in which participants were applying competencies, and to determine in a bottom-up fashion whether there were skill and knowledge elements that were not accounted for by the nine hypothesized competencies.

The researchers conducted several qualitative passes through the interview transcripts to develop and refine themes and categories. As part of a first data pass, analysts each independently reviewed large selections of the transcripts, noting emerging themes, distinct categories, and commonalities across the data set. Results of this initial pass through the data were pooled and synthesized into a comprehensive set of themes and categories for use in subsequent passes. Members of the analysis team worked independently but met frequently throughout to perform comparative examinations and identify commonalities, gaps, and discrepancies. Comparing the themes to the original nine hypothesized competencies allowed identification of potentially novel competency areas.

4. Results

In the following, we first describe the results of the overall frequency analysis examining the prevalence of the nine hypothesized competency areas. Following the overall results we provide qualitative characterizations of the competencies. Lastly, we describe two additional competency areas emerging from the qualitative analysis that appeared to be critically linked to successful intercultural performance.

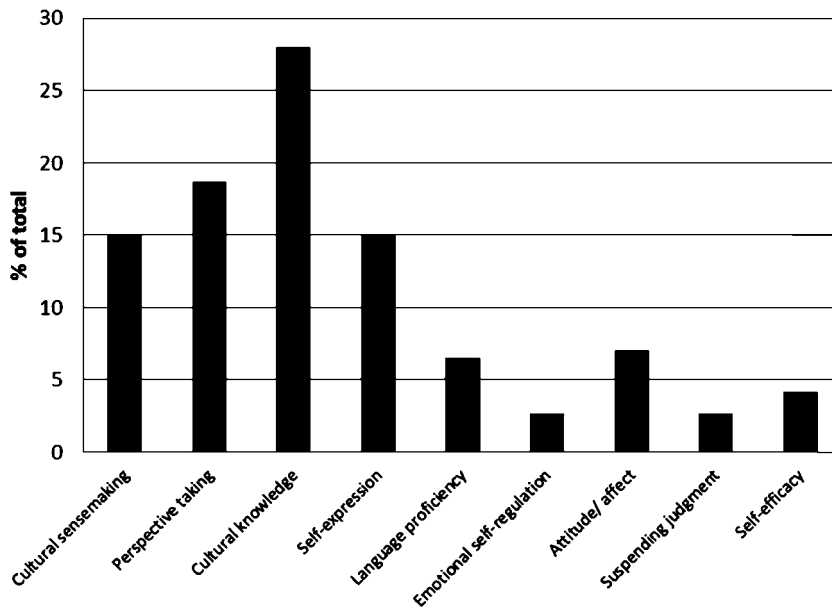


Fig. 1. Frequency of competency code applications (as a function of total number of competency codes applied, in %).

4.1. Overall results

We performed a frequency analysis in order to examine the prevalence of the nine hypothesized competency areas. We calculated frequencies and percentages for each competency code, and performed Pearson’s chi-square tests on the superordinate competency categories to determine if the observed frequencies conformed to a uniform distribution. Half of the interview excerpts were coded twice by two separate coders for the purposes of calculating inter-rater reliability. The overall reliability was .81 (Cohen’s Kappa). Kappa values exceeding .81 indicate very good agreement (see Cicchetti, 1994).

There were a total of 1324 competency code applications. Overall, the cultural-general competency codes were not applied with the same frequency $X^2(8, N = 1324) = 709.85, p < .001$. Cultural sensemaking, perspective taking, cultural knowledge, and self-expression were assigned significantly more often than the remaining five competency areas (see Fig. 1).

The number of competency codes applied per participant ranged from 22 to 109, with an average of 66.2. Examining the distribution of competency code applications revealed that the distribution of competencies was consistent across participants.

Examining the excerpts that had more than one primary cultural-general competency code assigned reveals that perspective taking, cultural sensemaking, cultural knowledge, and self-expression co-occur most frequently. The same pattern of results emerged when adjusting by the frequency of occurrence of each of the competencies involved. Thus, indicating that their level of co-occurrence could not simply be explained by their increased individual frequencies. Table 2 presents the co-occurrence data for the subset of excerpts that had multiple codes assigned.

The frequencies of co-occurrence of a large number of these competencies illustrate that the skills and knowledge underlying each are not only conceptually related, they are also practically related and likely support each other.

Table 2
Co-occurrence matrix for all excerpts with multiple competency code applications.

	Perspective taking	Cultural knowledge	Self-expression	Language proficiency	Emotional self-regulation	Attitude/affect	Suspending judgment	Self-efficacy
Cultural sensemaking	41	70	17	14	4	18	6	10
Perspective taking		83	73	15	12	32	16	11
Cultural knowledge			68	1	8	28	14	8
Self-expression				11	20	13	10	12
Language proficiency					2	4	1	1
Emotional self-regulation						2	5	3
Attitude/affect							8	6
Suspending judgment								1

4.2. Competency specific results

In the following, we present competency specific results and describe the behaviors and cognitive activities participants engaged in when they were applying competencies individually and in conjunction. After describing the results as they relate to the hypothesized competencies we discuss two distinct competency areas that emerged from the qualitative analysis, mainly cultural learning and understanding self.

4.2.1. Cultural sensemaking

A total of 199 instances, or 15% of cognitive activities or behaviors that were observed in the data were related to cultural sensemaking processes; that is noticing an anomaly, instantiating a general cultural schema, inquiring as to causes, or considering alternative explanations. Suspending judgment has been proposed as a critical component of intercultural competence in its own right and was analyzed separately. The prevalence of the above cognitive activities or behaviors indicated that cultural sensemaking processes are central to adapting to new cultural environments.

The finding that the participants regularly paid attention to and noticed unexpected behaviors and events indicated that they were attuned to cultural differences in their environment. In many cases, when the participants encountered unexpected situations, the experience of surprise appeared to motivate them to seek information to create better understanding. Their goal was to 'make sense' of the situation by modifying their initial understanding that led to the surprise, or replace it with a better one that would help them communicate or take an action. One participant described being surprised at how vividly Afghans talked about visits from adversarial elements that happened several years ago. At the same time they had noticed having difficulties communicating about time with Afghans. The need to communicate motivated the participant to seek an explanation.

I don't think they really have a good way to know how long ago that was. [...] and it took a while to kind of understand and communicate the time aspect. What I would have thought would have been like last week, actually was an event that maybe happened two years ago. It dawned on me; maybe they don't have the same concept of time. And, it really dawned on me that because of this I was frustrated in my ability to understand the intimidation factor of this village.

Some surprises came about as a result of frustrations in communicating; others resulted from violated assumptions or comparisons to American culture. In many instances, participants would try to make sense of surprises by taking the other's perspective. Other times they deliberately tested assumptions or initial explanations by asking questions or enacting alternative strategies and observing the outcomes. One participant provided a good example using both strategies in Iraq to test a hypothesis about a cultural rule that he had learned in training.

[In training] they'd tell us 'if they see the bottom of your feet, that's automatically an offense.' I thought, 'well okay, that's pretty extreme. . .'. So, I asked my interpreter: I always was told if you show the bottom of your feet it's an egregious sin. He goes, 'it depends, if your legs are tight and all that.' They know that you don't mean to be disrespectful, but just don't automatically show the bottom of your feet, if you're sitting down cross-legged.' So, I would make an effort out of it when I sat cross-legged, I would apologize, and the people would say, 'no, we know, you Americans are. . . we don't take this as an offense.' So, I inquired and I tested it out and sure enough, no big problem.

4.2.2. Suspending or withholding judgment

There were relatively few explicit examples of withholding or suspending judgment in the data, 36 total, or 2.7%. A few cases were objective descriptions of cultural differences, and most of the cases were ones in which participants analyzed their judgments. They would make statements like "that's who he was so who am I to say whether that's right or wrong for him or for her? I mean I can have my own opinions but it is what it is" or "okay, weird, but different culture. It's not going to shut me down; it's not going to stop me from doing whatever I'm doing at the time."

Interestingly it did not appear to be the case that participants would necessarily refrain from evaluating or judging the cultural behaviors they encountered. They would note that a cultural value or practice was different, that it was difficult to make sense of, that they had an opinion about it, but, even so, they would not let it get in the way. This suggests there may be a great deal of overlap with the concept of emotion regulation.

4.2.3. Perspective taking

There were 248 instances of perspective taking identified across the interviews, equaling 18.7% of all competency codes applied. References to perspective taking included mentions of the internal or psychological states of others such as their thoughts, knowledge, feelings, intentions, or values.

Perspective taking was frequently used in the context of two competencies, mainly cultural sensemaking and self-presentation. That is, often perspective taking was used in the context of efforts to develop a deeper understanding within situations that were initially experienced as surprising or confusing and to manage some aspect of self-presentation. Additionally, perspective taking was used in the context of relationship building to assess the trustworthiness of native members of a culture and to manage one's own expectations with regard to appropriate objectives within interactions and collaborations.

The following excerpt provides a good example of using perspective taking to make sense of a behavior initially perceived as surprising. The participant in this case was puzzled that an Iraqi official who appeared very westernized, and very open to Western influence, still insisted on pre-arranging his daughter's marriage.

One way to make sense of it all is if he was doing this liaising with the U.S. government, the military, and making relationships there because he saw that as the way to get ahead in Iraq, and the way to better his country, or maybe the way to get to the point where the Americans would leave.

Often perspective taking was used to figure out the best ways to present oneself, or how to present information in order to achieve desired effects. A related use of perspective taking is when it was used to figure out ways to get others to see *one's own point of view*. Finally, comparing own and other's perspectives was often used to manage expectations with regard to appropriate objectives within interactions and collaborations.

4.2.4. Cultural knowledge

The cultural knowledge code was the most frequently applied code across the dataset. Coders noted 370 instances of participants identifying, applying, or learning some fact or theory about a region or culture in which they were working, representing 28% of all competency code applications. The most common application of cultural knowledge was to explain behavior. By far the majority of facts related to history, regional geography, demographics, or religion; and the majority of the theories mentioned were ones that participants themselves had developed over the course of their careers.

In general, although there were similarities in the topics of knowledge that participants knew and cared knowing about (history, geography, demographics, and religion), there was great variety in the specific items of knowledge they had and applied. For example, one participant used knowledge of Afghan crop cycles to communicate with a group of local women.

I had a group of women that I met with and they kept asking for jobs and teachers for their daughters. And I was like, "well I can't deliver that." They set up this Economics and Education meeting for the very next day and I thought, I'm going to go in and they're going to say the same thing and I'm going to say the same thing. I have to think of something different. How am I going to help them understand how long it's going to take? Well I woke up that morning and I realized, ah. . . planting cycles, it's the seasons. So I drew a series of pictures and I called it the Garden of Hope. [. . .] And to these women, I said okay, this is your seed of the future. You HOPE you have a teacher, you HOPE you have security. This is a special seed, this is a seed that requires the whole community to plant it, and it doesn't grow over night, it takes a long time. And if, at any time, somebody in this community doesn't want it to grow, and they don't water it and help it grow, it stops growing. And they looked at me and they're like, "you've opened our eyes! What can we do to help this grow?"

Examples of applications of cultural knowledge included using knowledge within social situations to demonstrate interest in a culture; using cultural knowledge to assess risk within the work environment; and using it as a way to build confidence. Almost without exception, participants described using cultural knowledge as a foundation for building relationships with natives, many expressing the idea that it is a good strategy to "find a way to show them that you care about them enough to have learned something." Some participants also provided examples of ways they employed cultural knowledge to assess risk.

When you're first meeting your interpreters, you have to figure out where they're coming from, what they believe. [. . .] And, you can't just ask that question, 'are you Taliban?' [. . .] I know some nuggets of information that I think of as call-your-bluff-information. Like "what do you think of Massoud?" I'll just throw it out there and see what happens. Then I look for indicators, looking for any reason to doubt.

Once risk had been established, it was easier to create further learning and relationship-building opportunities, such as socializing with interpreters during down time, or accepting dinner invitations. The diversity in the specific cultural aspects participants knew about suggests that their knowledge came primarily from experience—that is, from self-directed attempts at learning and increasing understanding.

4.2.5. Language proficiency

There were 88 excerpts in which participants referred to using a foreign language in an intercultural context, or reflected on the need for language proficiency, making up 6.5% of the code applications. 40% of the language related excerpts reflected that only minimal proficiency was required to be effective in a new culture. In general, the participants had come to terms with the fact that they were unlikely to become fully proficient in the languages prevalent in the regions they would work in. They had instead developed strategies for acquiring the words and phrases they thought they needed along with schemas for when was the right time to use these to the greatest effect.

4.2.6. Self-presentation

In coding for self-presentation, we noted instances in which participants either deliberately changed or adapted some aspect of a strategy for interacting with members of local cultures; or, in which they deliberately retained aspects of their

habitual style of interaction in order to achieve some kind of effect on their audience. We noted 200 excerpts that were relevant to self-presentation, making up a total of 15% of the competence code applications. These findings suggest that the ability to be deliberate about and adapt one's self-presentation is a critical aspect of culture-general competence.

Being flexible in expression and presentation means thinking both about the content of messages and about the context in which they are communicated. We heard several examples of interactions in which participants deliberately translated or transformed the content of their communication, that is, the concepts they were trying to get across into formats more easily comprehended by their recipients.

The ability to find effective ways to present oneself also appeared to involve visualizing how one wants to be perceived by another person. For example, a participant who was called a jerk by an Afghan in a meeting with a large group of Afghans thought very carefully about how to present himself to achieve the effect he wanted.

I understood that for me to be effective I could never show that I had lost my temper. I had to remain calm, cool, and collected. If I were perceived by the Afghans in that moment to come unglued, they would probably say that 'he can't control his emotions,' and that was another thing I learned in training is that for a Pashtun man is you always keep your emotions under check. So if I could not control my emotions there, how could they trust me in a firefight? So I tried to demonstrate that not only could I remain cool but I could turn this around and show that I can kind of influence and kind of be in control. I wanted to be humorous without being crazy looking.

This example also illustrates the way emotion-regulation can support self-presentation. In this case, engaging in emotion-regulation freed the participant up to present himself in a self-deprecating, humorous way. The participant ended up responding "you are a very wise man, for my wife too thinks that I am a jerk." Importantly, the primary objective was not about showing respect, rather it was to show that he was competent and could be in control. Only sometimes did changing or adapting entail showing respect for or accommodating to local customs and expectations.

Often participants thought about which messages they wanted to communicate in order to achieve certain impressions in advance of interactions. For example, they would plan how many objectives could be achieved within specific interactions; and, sometimes they would go as far as finding other people who were better suited to deliver certain kinds of messages. As one female participant put it, "at times I would let some of the men around me talk instead of me. And that's key, I think, that sometimes you don't have to be the person who leads the conversation or is the person out front."

4.2.7. *Emotion regulation, affect, and self-efficacy*

When analyzed separately, emotional self-regulation, affect, and self-efficacy were the least frequently observed competencies. Only 36 excerpts, or 2.7% of the total number of competence code applications, were related to emotional self-regulation. Within these excerpts, participants predominantly described incidents where they controlled the outward expression of an internal emotional reaction to an event, behavior, or person. In fact, 20 of the 36 instances of emotion regulation were also ones in which participants managed their emotional responses in order to control the impression they were making (see [Table 2](#)). Emotional self-regulation therefore appears to be an important component of the ability to adapt self-presentation.

There were 92 instances of expressed attitudes toward culture, cultural groups, and individual members of different cultural groups in the data—making up 7% of the competence code applications. 74% of these expressed attitudes were positive, 12% neutral, and 14% were negative. In a few cases, the same individuals held both negative and positive attitudes. In some cases, the same individuals held positive attitudes toward some aspects of a culture and negative attitudes toward other aspects. In other cases, individuals have positive attitudes toward some cultural groups, but not others.

The participants expressed feelings about their confidence operating cross-culturally in 56 excerpts, or 4.2% of the total number of code applications. Interestingly, little more than half, 57%, expressed high efficacy. The remaining descriptions of low confidence were about low confidence in language skills, or related to earlier sojourns. There was a common recognition among the participants that the mere act of seeking to understand another culture reduced the uncertainty inherent in interacting with people who are different and, thereby, increased their confidence.

A significant finding regarding the participants' overall affective approach to their sojourns was that while participants understood the importance of building professional relationships they did so with the explicit intention to accomplish job-related tasks. As one participant put it, "Relationships allow things to happen behind the scenes." Accordingly, cultural understanding was seen as a means to accomplish job-related tasks, not as a personal enrichment outcome that was sought after. Participants' chief motivations for acquiring understanding and for building relationships were to stay safe and accomplish their tasks.

4.2.8. *Cultural learning*

The qualitative analysis of the data revealed a strong set of themes related to self-directed learning. Self-directed learning is "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" ([Knowles, 1975, p. 18](#)).

Overall, the participants were actively setting and managing expectations related to learning both language and culture. As one participant put it “you’re not going to become a historian, you’re not going to become fluent in Pashto, these are all pie-in-the-sky, hopeful things that people who are writing books, hope would happen.” The notion that one does not need complete cultural understanding to take action was a theme. Participants were able to use the words, phrases, and cultural information they did know to accomplish tasks, such as develop relationships, obtain information, or assess risk.

The self-directed strategies participants used to acquire basic language proficiency and increase their cultural understanding involved identifying reliable information sources, engaging in reflection, and seeking feedback. A common practice among the participants was to deliberately seek out experiences and relationships from which they could learn. Often, participants sought to develop these kinds of the relationships early on in their sojourn, and would use these relationships as a basis to get started, or to ‘get traction’ in the new culture. Several participants provided examples of using interpreters as cultural mentors, engaging in ongoing discussions in order to vet and improve their knowledge of a region’s history, culture, and language. At times, they even sought feedback from interpreters on how they performed in specific interactions, after the fact. Many were aware of the possibility that the information they received in such interactions was potentially biased and described how they would check up on the information by looking for a second opinion, or going online after a discussion.

The participants also directed their own learning by using personal interests as starting points for formulating their own questions about new cultures. Their motivation to learn sometimes came from long-term interests. Some had life-long curiosity about social, cultural and psychological dynamics, but, this was far from always the case. For example, one participant, keenly interested in knives, took every opportunity to discuss knife-making practices with Afghans. Often, however, motivation came instead from the realization that cultural understanding would make them more effective at their jobs.

4.2.9. *Understanding self*

A second prominent theme in the data concerned general self-awareness and own cultural membership. The participants appeared very aware of who they are, and aware of the fact that they saw the world in a particular way because of their own background, personal history, and culture. They recognized that when they interacted with cultural others; their first interpretation of a situation likely did not match theirs.

Their recognition of this mismatch came through in their explorations of commonalities and differences between themselves and cultural others—and could be seen in the personal theories they had developed about how Americans differ from other people in the world. For many, understanding how they would be viewed, as Americans was the most important item for exploration when entering a new culture. This understanding informed their approach to communication and relationship building in a fundamental way.

In summary, the data and associated analyses provide evidence to suggest a restructuring of the hypothesized competencies, with additional competencies coming to light within this professional domain.

5. Discussion

The current study aimed to determine the extent to which previously identified culture-general competencies were employed within a specific professional domain. Results confirm the use of the hypothesized competencies, though some competencies appeared in the data more frequently than others. Those that were used most frequently were cognitive strategies related to coping with cultural surprises, perspective taking, and developing cultural explanations for behavior, as well as managing self-presentation. Additional competencies emerged from the qualitative analysis, as well. These included cultural learning and understanding the self in a cultural context. The extent of co-occurrence observed among the competencies suggests that the underlying skills and knowledge elements are mutually supportive, rather than independent.

In the following we provide a summary and discussion of the competencies we found support for in the data, examine some limitations of the study, and discuss implications of the findings.

5.1. *The competencies*

Overall twelve competencies emerged from the data. We organized these into four distinct competency domains: diplomatic mindset, cultural reasoning, intercultural interaction, and cultural learning (see [Table 3](#)).

5.1.1. *Diplomatic mindset*

Because the participants’ overall orientation and affect toward culture and cultural others was practical we refer to this competency domain as diplomatic mindset. This domain includes the general understanding that building intercultural relationships can be a direct means to achieve work objectives and awareness of specific ways in which cultural knowledge and skills can be used to develop and maintain such relationships. The participants in our sample learned about culture because it helped them accomplish their jobs. They identified aspects of new cultures that interested them personally and used that as starting points for learning and developing relationships. This is a different motivational orientation than often

Table 3

Twelve culture-general competencies revealed in the data.

Competency domain	Competency
Diplomatic mindset	Maintains a mission orientation Manages attitudes toward culture Understands self in cultural context
Cultural reasoning	Copes with cultural surprises Takes perspective of others in intercultural interactions Develops cultural explanations of behavior
Intercultural interaction	Engages in disciplined self-presentation Plans intercultural communications Acts with limited cultural knowledge
Cultural learning	Is self-directed in learning about cultures Develops reliable information sources Reflects and seeks feedback on intercultural encounters

described; mainly the view that inquisitiveness along with a desire to increase understanding of people is the fuel for intercultural development (see Gregersen, Morrison, & Black, 1998).

The finding that participants were very aware of their own cultural backgrounds and their own personality attributes motivated the inclusion of a competency related to self-awareness, mainly the ability to think about oneself within a cultural context. This general competency included the abilities to appreciate that one's own way of viewing the world is a result of own unique background, personal history, and culture; to recognize that people with different backgrounds view the world differently; and to continually seek deeper understanding of the way oneself and the U.S. in general is viewed by members of other cultures.

5.1.2. Cultural reasoning

The first competency related to cultural reasoning concerned the ability to cope with cultural surprises. This encompasses a number of specific cognitive activities and behaviors which allow the individual to apply a rational/analytic approach to understanding or creating meaning from experiences that are initially surprising.

Although suspending judgment did not emerge strongly as an independent competency, it did appear to be the case that the ability to develop explanations for behavior supported both efforts to understand and to manage one's attitudes toward specific behaviors. This suggests that developing cultural explanations should be considered a competency in its own right. Finally, perspective taking, or the ability to see things from the point of view of someone from another culture, supported several other critical processes, such as cultural sensemaking, communication and self-presentation planning, as well as ongoing learning and therefore merits inclusion as a culture-general competency.

5.1.3. Intercultural interaction

Within the overall data analysis we also saw evidence to suggest that there are three competencies that are critical for being effective within intercultural interactions—regardless of the specific cultural context. The first of these competencies related to the individual's ability to be deliberate, or planful about the effects they want to achieve on an audience. Thinking about interactions ahead of time supported the ability to manage self-presentation and communication within intercultural situations effectively. Second, we found support for awareness of alternative strategies for achieving communication objectives as well as having the ability to be disciplined in the enactment of these strategies. Lastly, having the ability to act even though one's knowledge or understanding is limited also appeared critical. This seemed to be the case both in the context of cultural understanding as well as language proficiency.

5.1.4. Cultural learning

Examining the instances where participants mentioned cultural knowledge revealed that they were often about acquiring new knowledge as opposed to having or using it. The 'knowledge-getting' practices and cognitive activities that participants engaged in, both prior to and during specific sojourns, provided support for three competencies that enabled the ability to advance culture-general competence over time. In general, cultural understanding was used as a means to accomplish job-related tasks. Participants maintained practical expectations about how much they needed to learn about a culture so that they were able to learn about new cultures efficiently. Second, we found that participants were able to be self-directed both in their approaches to preparing for sojourns as well as in their strategies for learning from their experiences. This suggests that the explicit understanding that ad hoc interactions and experiences are learning opportunities is important for culture-general competence. Further, effectively learning from experiences also appeared to entail having the ability to continue to reflect on intercultural interactions and experiences after they occurred as well as deliberately seeking out experiences and relationships that could advance cultural understanding. We saw a prevalence in the data of practices around establishing informal mentoring relationships which is consistent with previous research (Osland & Bird, 2000). Therefore

we included in our final framework a competency that speaks to an individual's ability to identify reliable sources of cultural information.

5.2. Limitations

Intercultural competence has traditionally been studied in low-conflict contexts, such as those that surround anthropological research, international business, global leadership, and international student exchange. The current study participants were all military personnel who had served in high-contact assignments in conflict regions. One could argue that this attribute of the study limits the generalizability of the findings to work domains with less conflict.

First, given this difference, it is interesting to note that so many of the competencies that had been culled from the literature did appear to be applied by this set of participants. One fundamental theoretical dimension of the intercultural competence construct that did not appear salient within this population concerns the need to cultivate a positive regard for the other (Bennett, 1986; Wiseman et al., 1989). This construct was captured in our managing affect and attitude toward difference theme. When interacting with locals who not only have personal and professional goals that conflict with one's own, but may present a physical threat such as is the case in a military environment, one's fears and anxieties are likely well grounded. This makes it unusually difficult to have positive motivation and to seek out interactions with the other as is often a requirement for proficient ICC (e.g. see Morreale et al., 2006). It is important to note that, even in spite of this challenge, many of our participants did develop positive regard for locals they worked with. In the instances where they did not, they were motivated instead to seek cultural understanding and interaction as a means to complete their assignments. This strategy is captured in the diplomatic mindset competency. It is possible that "motivation to complete one's tasks" is a more appropriate competency to high conflict work domains than is, "intrinsic desire to make human connections." This issue should be investigated more directly in future research.

5.3. Implications

The current study has a number of theoretical and practical implications. The first theoretical implication concerns the role of self-regulated learning strategies in intercultural adaptation. The concept of cultural learning, although it has recently garnered attention as a competency domain, has not previously been incorporated in models of intercultural competence. References are made to cultural knowledge acquisition (see Byram, 1997), and cultural learning (Ng, Van Dyne, & Ang, 2009) in the context of intercultural ability but is rarely specified in models of intercultural competence (see Spitzberg and Chagnon, 2009 for review).

Cultural learning has instead traditionally been treated as an outcome; something has happened when people have adapted or acculturated. A possible reason for this may be that intercultural competency models are focused on *being competent*; that is, they identify skills and knowledge that support successful in-the-moment interaction. The skills, knowledge, or processes involved in *becoming competent* are often investigated and discussed instead in the context of teaching or training (see for example, Bennett, 2009).

We argue that in order to fully define the characteristics of individuals that facilitate competent interaction, aspects should be included that transcend episodes, taking into account the features of the individual that enable the continual improvement of competence over time. Specifically, the individual's skills and knowledge related to learning. Analysis of the current data suggests that this is particularly important in work domains that entail repeated and varied sojourns, thus requiring rapid development of several, perhaps shallower cultural schemas.

A second theoretical contribution concerns our understanding of the effects of different types of intercultural experiences. Previous research has pointed to the existence of cognitive differences between cultural generalists and specialists (Endicott et al., 2003). This line of work suggests that intensive immersion in a single new culture leads to greater intercultural and moral development than intensive sampling of different cultures. The current study suggests that intensive sampling of different cultures does, however, lead to a different form of cognitive development. Mainly, it suggests that seasoned multiple-culture sojourners develop important learning, reasoning, and self-management strategies that are more likely to transfer to novel cultural contexts.

A practical educational implication of the current findings rests in the possibility that promoting use of the identified strategies through instruction could accelerate intercultural adjustment and improve intercultural effectiveness. Future work should address more systematically the role of learning and reasoning strategies in qualitative schema development and adaptation in general.

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Appendix 1. Coding scheme

Competency	Behavioral indicator
Cultural sensemaking	Experiences surprise: Describes instance where they were confronted with event or behavior which they did not understand. Asks questions/seek information: Describes instance where they engaged in active framing of question, identifies gap in knowledge. Generates hypothesis/explanation: Describes instance where they framed a possible explanation for a surprising event or behavior. Challenges own assumptions: Describes seeking information to challenge assumptions underlying own explanation for events or behaviors. Changes understanding: Describes a change in understanding, and/or the characteristics of a newly adopted understanding.
Perspective taking	Provides explanation for or describes understanding of native participant behavior <i>by making reference to</i> internal/psychological constructs (e.g. knowledge, feelings, desires, values, etc.).
Cultural knowledge	Describes instance where learned fact or theory either helped the individual change or shape an interaction in a desired direction; or helped them understand or make sense of interaction or observed behavior. The fact or theory can be either formal (commonly accepted and transmitted through training or education) or self-discovered/self-developed.
Self-presentation	Doesn't adapt: Describes the adoption of a strategy for interacting which either conflicts with cultural norms for interacting or which is expected to be received negatively by the native participant. Adapts: Describes the adoption of a strategy for interacting which is different from habitual style of interacting in order to achieve a certain effect on the native participant.
Language proficiency	Knowing language is not important: Expresses belief that one can get by <i>without knowing</i> the language of a region within which one is working. Knowing a little language can be helpful/is enough: Expresses belief that one can get by <i>knowing very little</i> of the language of a region within which one is working. Need more than just a little language: Expresses belief that knowing the <i>language is an essential skill</i> , describes what would have been able to do had they had better language proficiency. Was proficient (could converse): Describes situation in which they applied understanding of language to carry on a conversation.
Emotional self-regulation	Absence of control: Describes incident in which the native participant(s) experienced their true emotional response. Presence of control: Describes incident in which the native participant(s) experienced the emotional response that the individual intended—which could be either a simulated or a true emotional response. I.e. their emotional response was filtered in some way.
Affect/attitude	Implicitly or explicitly expresses <i>negative</i> attitude about specific culture—including: at an abstract level, specific native participants as representatives of that culture, specific culturally different behaviors or values, other cultures in general or about learning about culture. Implicitly or explicitly expresses <i>detached or indifferent</i> attitude about specific culture (rest same as above). Implicitly or explicitly expresses <i>positive</i> attitude about specific culture (rest same as above).
Withholding/suspending judgment	Applies personal/moral judgment: Expresses negative value in regard to novel experiences, knowledge and points of view, either stated or observed. Value justification can either be personal preference or conflict with own cultural norms. Withholds personal/moral judgment: Expresses restraint from attaching negative value to novel experiences, knowledge and points of view, either stated or observed.
Self-efficacy	Low efficacy: Expresses dissatisfaction with own state of knowledge and/or ability to accomplish certain tasks. High efficacy: Expresses satisfaction with own state of knowledge and/or ability to accomplish certain tasks.

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