Cross-Cultural Competence in the U.S. Air Force: Roles, Challenges and Skills in the Contemporary Operating Environment

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ABSTRACT

As the forces that shape globalization and asymmetric warfare continue to influence how we think about and engage our adversaries, the US Air Force (USAF) must adapt its doctrine, training, and leader development to prepare Airmen for new challenges. To work in this new environment, Airmen of all ranks and disciplines must prepare for cross-cultural interactions. Recent studies have concentrated on the ground forces due to current operations that highlight the role of cultural competence in mission success. Our study examines the challenges to the Air Force that must underlie efforts to build education and training for cross-cultural competence (3C). We employed in-depth interviews to examine experiences in diverse international settings of a range of enlisted and officers at the diverse schools forming the Air University at Maxwell Air Force Base. Our goal was to understand the existing and changing nature of Air Force deployments and the concomitant challenges. Our findings revealed a number of settings and missions requiring a high degree of 3C and other missions and assignments for which a low degree of competence is suitable. We also analyzed the nature of the knowledge, skills and abilities being developed in the field as revealed in actual challenging situations for the Air Force in recent deployments.

ABOUT THE AUTHORS

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INTRODUCTION

As the forces that shape globalization and asymmetric warfare continue to influence how we think about and engage our adversaries, the US Air Force (USAF) must adapt its doctrine, training, and leader development to prepare Airmen for Irregular Warfare challenges. The emerging operational contexts will require a highly skilled and adaptive Air Force Team that must think about how to engage adversaries and influence civilian populations across the gamut of operations. This focus requires Airmen of all ranks and disciplines to prepare themselves for mission requirements that involve cross-cultural interactions. More and more, the Air Force will call upon its members to operate in multiple, simultaneous, lesser regional contingencies where the Land Components have engaged the civil populations.

The need for cross-cultural competence has come under study in recent years; especially by researchers working with the ground forces (see for example, Abbe, Gulick, & Herman, 2007; Thornson, Ross, & Arrastia, 2009). Cross-cultural competence (3C) is defined as

> The ability to quickly and accurately comprehend, then appropriately and effectively act in a culturally complex environment in order to achieve the desired effect, without necessarily having prior exposure to a particular group, region, or language.
>
> Selmeski, 2007, p. 12

Study of the challenges to the Air Force has not received the same concentration as the ground forces; and therefore, our community has not as fully developed the basis for understanding the challenges and requirements for training and education for Airmen as for the ground forces. We did identify one recent study conducted by the Rand Corporation (Hardison, et al., 2009) that also looks at 3C in the Air Force. The Rand study identified a number of 3C categories of performance and surveyed a sample of diverse Air Force personnel as to the importance of these skills to their jobs.

The purpose of our effort was to examine experiences of Airmen to understand the current roles and challenges to the Air Force in the contemporary operating environment that require cross-cultural competence. In addition, we examined the skill base needed to meet these challenges. In contrast to the Rand survey-based study, we conducted in-depth interviews with a range of personnel who had a variety of experiences in different cultural settings to determine what challenges and skills were involved.

This initial study examined the experiences of a range of enlisted and officer interview participants in diverse international settings. We recruited our sample of interview participants at the diverse schools forming the Air University at Maxwell Air Force base. The interview participation criterion was primarily military experience in a range of countries, not only in the current war zones in Iraq and Afghanistan. We sought to sample different experiences and roles across ranks, military specialties, assignments, and locations. Our goal was to get information about the most diverse roles, tasks, and missions across the ranks of E6 to Colonel that we could possibly obtain. While the resulting set of interviews is not a random or completely representative sample, we found the diversity of experiences rich and informative, yielding

an insightful initial report on current challenges, roles and required KSAAs for cross-cultural success.

METHOD

Participants

The proposed sample consisted of 24 Airmen was to be four each from the following ranks: Lieutenant Colonel, Major, Captain, Senior Master Sergeant, Master Sergeant, and Technical Sergeant. The Air Force Culture and Language Center at the Maxwell Air Force Base supported the recruitment of participants. A pre-screening survey was constructed and administered online to allow volunteers to self-assess whether they met the criteria for participation and allow the researchers to anticipate how the sampling plan was progressing. We conducted 27 interviews and 25 interviews were usable and transcribed. While we achieved a sample size consistent with our plan, we did not get the exact numbers desired for each rank. The final sample consisted of one Colonel, five Lieutenant Colonels, four Majors, two Captains, three Senior Master Sergeants, four Master Sergeants, five Technical Sergeants, and one Navy Lieutenant Commander. The majority of the participants were students at the Air University at the Maxwell Air Force Base at the time of the interviews.

Table 1. Expected Sample versus Actual Sample

Rank	Planned Sample	Actual Sample
Colonel	0	1
Lieutenant Colonel	4	5
Major	4	4
Captain	4	2
Senior Master Sergeant	4	3
Master Sergeant	4	4
Technical Sergeant	4	5
Navy Lieutenant Commander	0	1
Total	24	25

Procedure

We conducted two data collection trips in the months of December 2008 and January 2009 to conduct 27 interviews at the Maxwell Air Force Base and the Gunter Annex. The interview procedure included demographic information, task diagrams, team ranking, and critical incident elicitation. The task diagram helped the Airmen characterize their jobs as they were actually done, not in how the doctrine or other guidance prescribes the job is to be done. We used the TD to understand what parts of the mission required the participant to make the most assessments and decisions based on culturally-based knowledge and experience. The team ranking task was developed in previous 3C research (McCloskey, Grandjean, & Ross, in publication). The team ranking task allowed us to elicit factors that comprise cross-cultural competence (or lack of competence) and to guide the identification and elicitation of relevant critical incidents at later stages of the interview.

Analysis

The analysis of the interviews consisted of two parts. First the interviews were transcribed to avoid biases in recall or notes taken. Secondly, researchers made several sweeps through the data in order to answer several research questions. The first pass through the data was to identify the current roles and challenges in the Air Force today with special attention given to those requiring 3C. Second, we complied the cultural-related training that participants reported. The third sweep was to conduct a thematic analysis to identify if the same the 3C competence factors identified during our ongoing Army 3C research (McCloskey, et al., in publication) existed in this data set. The analysts coded the number of times the knowledge, skills, attitudes and abilities factors (under the categories of cognitive, attitudinal, and behavioral) occurred in the experience and observations of the participants while deployed and working with another culture. Before the beginning of the thematic analysis, the analysts met to agree on the themes to look for by 1) reviewing the definitions of the factors and 2) team review of two transcripts to calibrate the analysis. Other factors, trends and insights gained as a result of the interviews that may be unique to the Air Force were also noted, coded, and counted during the thematic analysis. Researchers gathered examples during the analysis to illustrate different aspects of the interactions and provide the reader with a flavor of the interview data.

FINDINGS

Demographics

Lieutenant Colonels (20%) and Technical Sergeants (20%) were the most represented ranks in the sample with Majors and Senior Master Sergeants each at 16% respectively (see Table 1 above). Officers (48%) and Enlisted Airmen (48%) almost equally made up the

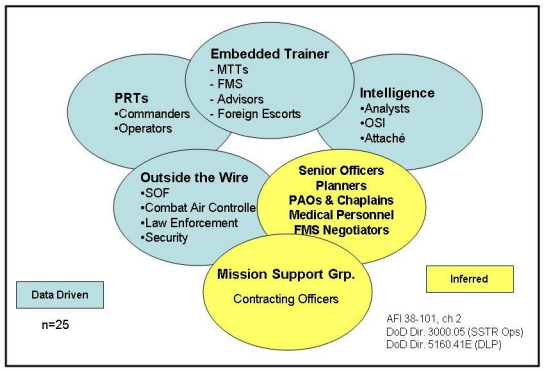
sample with the addition of the Navy Lieutenant Commander. The majority of the sample was male (80%). The age of the participants ranged from 28-46 years of age with the average age being 34 years old. The number of years in the service for the participants ranged from eight to 27 years with an average of 16 years in the service.

Roles and Challenges

The Expeditionary Air Force will require a uniquely capable team that is prepared to assume new roles in new and novel ways—whether as a part of a Provincial Reconstruction Team (PRT), members of a Coalition Humanitarian Aid Agency, or part of a Joint Task Force. Airmen drawn from a broad cross-section of Air Force Specialty Codes (AFSCs) are already filling these new roles. In about half the instances, an Airman's technical skills are augmented to some degree by pre-deployment training and in some cases by individual preparation. These pre-deployment activities are intended to accelerate the process of integration with a mission team and connecting with context. However, rarely were these pre-deployment activities reported as sufficient and comprehensive. A good deal of learning takes place on the job.

Through these interviews, we segmented the respondents based on how frequently and significantly cultural interactions occurred on the job and whether the roles required the ability to work with or through the other culture to achieve successful mission outcomes. In addition, we evaluated the requirements in Air Force Instructions as well as Department of Defense Directives to determine what other roles might require cross-cultural abilities. These assessments are summarized in Figure 1.

Figure 1. Roles in Which the Application of 3C is Important



We grouped the respondents based on their narratives in which they described their principal duties and the level of interaction with the foreign force or other culture. Three groups emerged:

1. Significant incidence of contact and collaboration with the foreign forces or the civilian population in order to accomplish mission goals.
2. Some need for coordination and communication with the foreign forces or the civilian population in order to accomplish mission goals.
3. Limited need for coordination and communication with the foreign forces or the civilian population in order to accomplish mission goals.

Group 1. Highly Significant Interaction

The roles that make up this group are Trainers, Advisors, Intelligence, and Provincial Reconstruction Team members, and many roles that are routinely performed "outside the wire" like SOF teams and Security Forces. We also include members of the Mission Support Group like contracting officers as well Senior Officers and special staff members like the Public Affairs Officer, the Chaplain, and specific medical personnel who run clinics and provide humanitarian aid and services.

Airmen who develop the ability to train, deliver instruction or advise foreign military support a range of Foreign Internal Defense (FID) objectives and missions. They described a need for cultural "know-how" to improve the quality of their training and instruction. People in this group are selected for their assignments based upon individual goals and interests—they often volunteer. Others within this group are called upon to fulfill a need and are selected based on qualifications and availability. They are also subject to nomination for the deployment by their Command or unit. Of the participants in this preliminary research effort, this group experienced and described a need to engage with another culture routinely and used these interactions to accomplish mission objectives. Their roles are outlined in Table 2.

Table 2. Roles in Which Airmen Reported a Significant and High Frequency of Contact and Collaboration with Foreign Forces and Other Cultures

AFSC	Role	Cultural Training
62E3A Air-Space R & D Engineer	Embedded Trainer	1 Week Middle Eat Orientation Course at Hurlbert Field

AFSC	Role	Cultural Training
11F3F Fighter Pilot	Embedded Trainer who worked with to mentor or train officer personnel and prepare them for flight training.	None
1A171 Flight Engineer	Embedded Trainer who worked with enlisted personnel 6preparing to serve on rotary wing aircraft.	A few hours of Arabic and a 1 week Middle East Orientation course at Hulbert Field
14N Intelligence	Embedded Trainer/MTT Chief	Some language/culture as part of a 2 week training at Lackland
11R Reconnaissance Pilot	Command a PRT-OEF	None
21R Logistics Readiness	Command a PRT-OEF	None
7SO91 OSI Special Agent	OSI Special Agent/Security Advisor	Contingency Response Group briefing only
4E Public Health	Embedded Trainer who worked within a depot complex mentoring Iraqi officers on food storage and handling.	1 day at an Army Reserve Base in IN
3P0X1A Law Enforcement/Dog Handler	Law Enforcement	Some culture/language as part of a 4 week training in Ft. Carson
13S Space Missiles Nuclear Operations	Humanitarian Aid Planner who worked in the "Green Zone" to plan for post-war activities and contingencies.	None
3E271 Heavy Equipment Operator	Advise Army NCO Technicians	None
2E1X1 Satellite Wideband and Telemetry Systems	Advise Army NCO Technicians	Powerpoint slides and some hours of Arabic at FT. Riley, KS
3PO91 Security Forces	Train and Advise IDF Security Forces	Some language/culture as part of a 12 day CAFTT (Coalition Air Transition Team Training

Placing Airmen in non-traditional roles and expecting them to excel has become the norm. This challenge is further exacerbated when the Airman is a female.

> *"… actually my deployment almost got cancelled because I was a woman, and I was going to fill an Army billet… and I was to mentor a male, Iraqi officer… I didn't go in with any negative things and once I got there I found the stereotypes of me and them were untrue…"*

This Airman suspended her suspicions and behaved in a fair and objective manner towards her protégé as well as her male counterparts. She quickly demonstrated the ability to build relationships and recognized that cultural boundaries would not limit her effectiveness.

Finally, members of this group may lead small unit operations that provide direct support to the operational commander responsible for the FID mission. In two cases, we interviewed Airmen (a pilot and a logistics readiness officer) who trained, led and deployed as part of Provincial Reconstruction Teams. These teams operate in conjunction with the Land Forces along five lines of effort: 1) governance, 2) economics, 3) infrastructure, 4) rule of law and 5) public diplomacy. They operate on the leading edge of stability operations to provide a transparent and sustainable capability that promotes stability through increased security and the rule of law.

> *…Nothing quite prepares you for the PRT role. From an intelligence perspective, no one had a realistic expectation that the Afghani Brigadier from the frontier Corp would be speaking the Queen's English. We were caught off guard. So much of our training introduced errors into our thought processes, which we corrected once on the ground.*

The majority of this group reported success and a progression in their understanding of regional cultures. Except for PRTs, the preparation included a period of instruction at Ft. Riley, Camp Bolus, and Lackland AFB where the Airmen received Combat Skills Training (marksmanship, first aid and convoy operations), limited language training and job aids, and courtesy and customs overviews. Many also attended

the Mid East Orientation training, which is offered by the Joint Special Operations University. All but the latter course was considered inadequate for preparing for the deployment. Finally, there was often a handoff of information and lessons learned between cohorts. The knowledge management was spotty; however, several participants reported that a good handover reduced the time needed to assume the role.

Group 2. High Levels of Coordination and Communications

The roles that make up this group include several roles that involve short duration deployments where interactions with a limited number of foreign nationals or officials are required. We include Planners who require knowledge of other cultures to anticipate actions and their consequences, Law Enforcement roles where individuals may be detained and questioned, as well as Foreign Military Sales roles that involve negotiations. In addition we have included Combat Air Controllers who worked as part of Joint and Coalition teams where they worked alongside other cultures to coordinate and manage air operations in support of Land Force tactical operations. Each of these roles involved working through and with interpreters. The group members were highly specialized and were frequently deployed. Their roles are outlined in Table 3.

Table 3. Roles in Which Airmen Reported It Was Important to Coordinate and Communicate with Foreign Forces and Cultures

AFSC	Role	Cultural Training
1C271 Senior Combat Controller	Senior Combat Controller/SOF who worked with Allied Forces to plan and direct air power.	Computer-based training
1C491 Combat Air Controller	Combat Air Controller who trained with Allied Forces on the Korean peninsula.	Computer-based training
21R Logistics Readiness	Site Survey/Assessment through sub-Saharan Africa.	None
Naval Aviator	Advisor/Logistics	Some language/culture as part of a 8-9 Week Training in Ft. Riley, KS
11TX KC 135 Pilot	Command a Contingency Response Element (CRE) for Exec Branch; airbase surveys	None

Airmen whose roles involve combat air control functions operated with the supported maneuver force. We interviewed two individuals with extensive experience in roles where they planned, coordinated and conducted air missions for the maneuver force. Both participated in Joint Operations where they worked within Army units and were often required to exchange information with Allied commanders. They recognized the need to work with other cultures, but their primary roles were grounded in doctrine as well as procedures. They depended on the intelligence analyst and the information contained in the Intelligence Estimate to give them what they needed to know about culture and history within a region. They could easily work around cultural obstacles or barriers.

> *" …Our job is basically close air support of the Army and other maneuver forces up to special operating forces.…we rely on our intelligence folks to give us a good cultural background, cultural history and intelligence about the areas we're going into. That's pretty much all we need and use in our roles."*

As Expeditionary Air requirements become defined or are projected, Air Planners develop an inventory of information requirements. These include extensive background information needed to plan for air insertions and the establishment of air bridges into under-developed regions. To provide this information, site and airfield surveys are conducted to assess what might be needed. These interactions are multi-cultural and often involve social and technical meetings with local officials.

> *"… The guys who come in that have never been overseas are my biggest problems. They don't get it… zero cultural awareness and…that's insulting in some cultures. We don't have enough 'loggies' to specialize. Cultural awareness has to be more generalized."*

The typical response to another culture was that it was not difficult to adapt and learn what you need to know about another culture. The Air Force provides many opportunities to learn and practice the skills needed to work in unfamiliar settings where many of the airfield

assessments must be conducted. This individual went on to describe one technique for fitting in to a situation.

> *"…You walk in with a little bit of humility. When I sit across the table from somebody from a foreign country and don't know how they act, I mirror their body language. When I meet with a counterpart, I will sit and watch his entire body language and if he's talking and gesturing, I get a sense of what to do. You have to be a sponge and gather things up.*

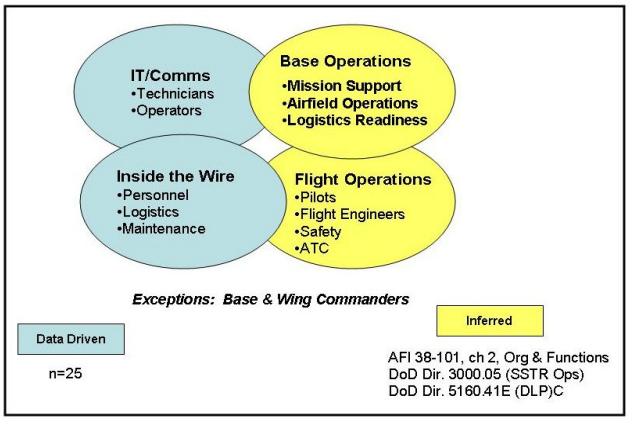
Finally, Airmen were at home in and around the airfield environment. Within this group, participants' training was limited in content to country briefs that were short and detailed. Knowledge of airfield operations was second nature and did not require considerable direct communication or coordination. Nevertheless, they were sufficiently well prepared to seek out information and work with personnel who managed these facilities. There was both a business and social component to each assessment.

Air Controller personnel were able to train with the supported force or similar organizations before their deployments. Because they frequently supported SOF requirements, both were able to attend the Mid East Orientation Course at Hurlburt Field. For the remaining individuals within the sample, intelligence summaries, pre-deployment introductory language and cultural instruction were sufficient. Unlike the Advisors and Mentors discussed earlier, they were not required to attend specialized training courses. Many members of this group were guided to learn about the culture. With the exception of the Air Controllers who had extended overseas deployments, each participant reported numerous, short duration deployments where they interacted with another culture. This rapid rotation cycle meant that only essential information about the new setting was available and used to prepare for and perform mission tasks. This group also tended to be multi-cultural in their attitudes and beliefs.

Group 3. Limited Need for Coordination and Communications

The roles that make up our Group 3 include several roles "inside the wire" where interactions with foreign nationals or Coalition partners are limited. We include those responsible for base and flight operations that involved mission support and logistics readiness. Most pilots and flight engineers were also included unless they were assigned roles as Trainers or Advisors. The functional areas of personnel, logistics, maintenance, communications and information management also fit into this group. We have summarized roles where cultural competence is not a direct contributor to mission success in Figure 2 below.

Figure 2. Roles in Which the Application of Cross-Cultural Competence Does Not Directly Contribute to Success



In this group, the required level of competency would be quite low and would not directly contribute to mission goals and objectives. When we interviewed members of this group, they reported cross-cultural competence was necessary but seldom leveraged these abilities on-base.

Among those who did report contacts, the role was limited to foreign escort or maintaining vigilance over foreign nationals who had been contracted to provide support services. The general rule was there were many levels of separation between the role and other culture. Their roles are outlined in Table 4.

Table 4. Roles in Which Airmen Reported It Was Not Important to Coordinate and Communicate with Foreign Forces andCultures

AFSC	Role	Cultural Training
B1 Bomber Pilot	Coalition Air Staff Officer	None
41A Health Care Administrator	Medical Logistics Officer	1 Hour Computer-based training specific to the Middle East
8T Computer Systems Administrator	Computer Systems Administrator	None

Surveillance and Radar Maintenance	Surveillance and Radar Maintenance who served on an AWACS.	None
Personnel Management	Personnel Manager for a PRT	2 Hours at Ft. Bragg, NC
11F4Y Fighter Pilot/Flight Safety	Flight Safety	None
11S SOF Rotary Wing Pilot	SOF Pilot who planned and conducted missions in support of multi-service SOF.	None

Even in a climate of rapid change where Air Expeditionary Forces will be deployed, the establishment and operations of air bases will require operational staffs. These Base Operations organizations will be staffed to keep air frames in operations. The information and logistics support will contribute to mission performance but not likely depend on cultural competence. We believe that Base and Wing Commanders will be exceptions because their duties have both operational and political implications that will require them to interact with local leaders and military counterparts. Because of their rank and positions, military training and education will prepare them for their roles. It was also anticipated that these two roles would be performed by highly experienced and seasoned individuals who have developmental assignments that required this type of cultural competence.

"*…except for augmenting the Security Force during the Saddam trial, I didn't get out much.…the interaction stuff is difficult for the Air Force because we typically don't do much outside the wire.*"

The attitudes expressed by this group suggested that the perceived need for interaction with another culture was constrained by the "wire." Their expectations were that only limited contact was necessary and little effort had to be placed on developing the knowledge, skills or abilities for dealing with another culture.

One B1 pilot we interviewed served as an Air Liaison Officer for the Multi-national Force, where he supported the dynamic re-tasking of aircraft supporting ground forces. His mission involved working as part of a Coalition headquarters where his principal interactions involved coordination with Allied officers and staffs. He commented on his performance in the following way.

"*…Had I possessed a better understanding of how the civilian populace and our enemy would have reacted to given situation, that would have helped me get the appropriate asset or decide not to support that situation. So having some cultural history there would have been a huge benefit, I think.*"

This finding was consistent with other roles where the required job performance was rule-based, time-pressured and could be defined by a set of procedures. The pre-deployment training was reported as a compressed version of the Mid East Orientation Course as well as distance learning modules that were accessed before deployments. Within this group, individuals were willing to learn about regional cultures, but little of this knowledge was directly applicable in a mission setting in terms of interactions.

Summary: In What Roles Do Airmen Use Cross-Cultural Competence?

The most recent experiences reported by the participants indicate that skilled Airmen matter more than any other factor in successful mission outcomes. Other dimensions including Air Power and technology are important but rarely prove decisive in accomplishing FID objectives. The demonstrated ability to understand the perspective of others in terms of a region's history, politics, culture and people amplifies individual performance within specific roles.

The range of duties spanned from tactical, hands-on problem solving to strategic planning for post-war large-scale humanitarian aid scenarios. This range of duties points out the vast differences in roles and responsibilities which are likely to be performed by Airmen in the future. Across the AFSCs represented in our sample, many had roles involved support and sustainment of FID. Most of the Airmen reported that they had significant and frequent contact with foreign nationals as part of their normal duties. Significant contact involved communication, negotiation and fact finding related to an assigned role. Frequent contact involved interactions that routinely involved daily meeting and communications with the other cultures. The interview data indicate these contacts contributed to mission success. The participants generally had a perception of what constituted a good interaction as well as when these interactions were compromised by an Airman's attitudes, beliefs or behaviors.

Within the group likely to have the greater need for cross-cultural abilities, we found a set of attributes that were operating in day-to-day operations that help to describe how individuals used their abilities and experiences. Three participants grew up in a multi-cultural setting here or abroad. These individuals possessed knowledge of other cultures, had some language ability, and generally accepted that cultural differences were not a barrier to them. They were able to use their understanding early in their deployment to establish relationships and build rapport needed to accomplish mission objectives. Working with another culture was "natural" to them and knowledge of different customs and traditions was beneficial. The remaining members of the group reported that they had limited preparation for the assignment but were willing to learn as they went. Most often they entered the situation with the benefit of 1-2 hour instruction on culture or in some cases attended a course through the Special Operations University, Hurlburt Field. One exception was PRT members who trained as a team for several months. PRT members generally received more extensive training at Ft. Bragg before assuming their duties. Even within these intact PRTs, there were broad differences in how cultural awareness was acquired, used or acted out to accomplish their duties.

In initial analysis of the Air Force domain, as we began this project, we learned that Airmen operated in, at, or outside the wire. And, it was suggested that all but those in-the-wire had to apply their cross cultural competence as part of the mission requirement. We did not find this characterization to be consistent with the experiences we collected. The most notable exception involved the 25 percent of the group who served as embedded trainers. In this duty position, the Airmen were seldom required to operate on- or outside the wire. They operated in a sort of "in the wire" situation where they had significant cultural interactions. They carried out their mission within secure facilities where they could train, mentor and advise their students. Effective performance by this group was directly tied to their ability to interact with other cultures through verbal, non-verbal and interpreter-facilitated means.

Content Analysis of Competence Factors

All the transcribed interviews were analyzed for the factors of competence that had previously been identified during our work with the Army (McCloskey, et al., in publication). The analysis was based on the KSAA were grouped by cognitive, affective/attitudinal, and behavioral factors. Some additional factors were added by the analysts. This effort was a preliminary, exploratory analysis to identify trends and not an effort to establish an unequivocal coding scheme and obtain inter-rater reliability. One session was conducted to calibrate the three analysts across the categories. Our goal was to identify trends and any new findings not previously documented in the Army study. Raw frequencies for different factors should not be compared directly to the frequencies for Army findings, because a much larger number of interviews were used in the Army content analysis. Table 5 provides a list of factors and frequencies across the interviews as an initial look at trends in the data. Factors not identified in the Air Force data are still included in the table to facilitate comparison with the Army findings. Shaded cells indicate refinement or addition of new categories.

Table 5. KSAAs identified in the content analysis of Air Force interview data

Cognitive (knowledge, skills, and abilities)	
Perspective-taking	23
Anticipate/Predict	7
Diagnose nature of resistance	4
Self awareness/Self-monitoring	7
"Big picture" mentality	18
Interpretation (of cultural cues)	0
Frame shifting	18
Awareness of cultural differences	29
Planning	5
Leveraging expertise in team to reach people	5
Understand local social and organizational dynamics	20
Knowledge of human terrain – what types of people are where in the area	3
Understand local capacity to do or maintain development efforts	2
Understand effect of history on local people's perceptions	11
Ability to quickly assemble and synthesize knowledge about a region/local situation	2
Affective/Attitude (abilities, attitudes, and motivation)	
Willingness to engage	28
Orientation to action/mission focused	8
Cultural openness/openness to new experiences/accepting/appreciate other cultures	18
Withhold on closure	0
Self/Emotional Regulation	12

Dedication (Above and Beyond)	8
Open-mindedness/Non-judgmental, respectful attitude/humility	16
Patience	19
Emotional empathy	6
Emotional endurance	0
Tolerance for ambiguity	4
Resilience (dealing with failure)	7
Self-efficacy	12
Genuine, sincere ("the down home factor"); honest, direct	7
Not arrogant or aggressive (opposite of respect)	1
Understand typical emotional expression in a culture vary (so you can gauge your own reaction or express yourself carefully); body language	4
Behavioral (observable skills and abilities)	
Self-presentation	20
Team presentation: Present expertise and status of your team	2
Interpersonal skills	4
Relationship building (trust)	20
Rapport-building (trust)	31
Manipulate/persuade/negotiate	7
Flexibility (Rapidly change COA; find options; adapt to unexpected events)	3
Communication skills/Language	28
Leveraging own personality attributes	2
Networking	5
Leadership	5
Make actions belong to local people	6

Cognitive – Knowledge, Skills and Abilities

The first category of factors is cognitive. Perspective-taking (the ability to see events as another person sees them) was a large factor as it was in the Army findings. Simple awareness of cultural differences was the other largest factor for the Air Force, but much less so for the Army relatively speaking. This is perhaps because the Air Force sample contained many more people who had low or medium levels of interaction and for whom simple awareness was sufficient for performance. The Army sample was generally in high contact roles and awareness was quickly surpassed as other more complex skills and knowledge were attained and valued in their missions. The analysts added several factors to the cognitive category that seem to reflect the challenging jobs some of the interview participants had and the high level of education and experience of some participants. These additional factors included leveraging the expertise of one's team in order to "reach" people as needed. This is also a fairly typical skill in the U.S. Army, especially in the Civil Affairs teams and Provincial Reconstruction Teams (PRTs) which leverage team member expertise with less regard for rank than typical operational units. The Air Force interviewees who brought up this factor were in training/teaching roles and one was a PRT Commander.

Four other categories were added because they reflected a nuanced cognitive perspective that might be labeled "systems thinking" and related to a Big Picture Mentality. These factors are not just indicative of awareness but an active process to identify and understand "drivers" in the situation. These respondents talked about understanding the social dynamics and organizational dynamics of the situation. They described things like taking steps and observing to understand family and community dynamics in terms of who is afraid of whom, who is looked at as a leader, informal rank structure, local power structure and family functioning. One participant described the complete breakdown of many families in Iraq who had been subjected to intense brainwashing and scrutiny. By this, we mean that families were terrified to take down posters of Saddam Hussein because they had, in effect, placed him in a position as the head of the family, and families had been split to spy on each other and on neighbors to insure compliance with this attitude. Understanding this family breakdown helped the interviewee take the perspective of the Iraqis he came in contact with in a very specific manner. The same fear dynamics and breakdowns occurred organizationally in Iraq.

The remainder of the four categories added also reflects Big Picture Mentality and Perspective-taking, but were not lumped under perspective-taking because they provided nuanced views of how these skills are carried out. These skills are 1) making an assessment of the human terrain to learn what factions, tribes or other important groupings of people are physically located where; 2) understanding the capacity of people to locally undertake or maintain reconstruction projects ("skill and will assessment"); and 3) understanding how local history affects individual perceptions. Several of the interviewees were historians in some capacity and found the lens of history to be valuable in understanding local populations.

The final cognitive skill added was the ability to identify and synthesize a lot of information quickly to prepare for deployment or to begin a successful deployment. Much of our current research is based on people who have deep and rich experiences in Afghanistan and/or Iraq. The ability to prepare for a variety of assignments is key, however, to actual cross-cultural competence and not just to obtaining competence in one region where current conflicts demand it. In prior research conducted by our team, preparation activities vary greatly and at times are nonexistent due to time constraints. However, as our military grows into future challenges, the ability to prepare for a variety of locations (either immediately before or after deployment) will be required of more and more of the force and not just of a limited number of specialty professions. The ability to prepare rapidly for a new location is a skill we have not yet thoroughly investigated.

Affective/Attitude - Abilities, Attitudes, and Motivation

Willingness to engage was the primary attitude identified in the Air Force sample as it was in the Army sample. Simply being willing to go out and spend time with people and talk to them as long as needed to get the job done is the primary factor in success. Obviously, this attitude must be backed up with the interpersonal skills and cultural knowledge or the ability to observe and gain the knowledge. However, no amount of knowledge or interpersonal training will suffice unless the person has the attitude that nothing will dissuade them from interacting with others to get the job done. Our interviewees reported how some people were unwilling or did not understand that this was critical to the mission, while others tried but were easily overcome by the interactions and quit trying (for example, if fellow military members laughed at their attempts to speak the language). Cross-cultural competence is a "contact sport" and requires constant interaction to grow and to succeed in many current roles and missions. We added two categories because they further clarified this kind of openness to interaction. They are 1) genuine sincerity, honesty and directness and 2) a lack of arrogance and aggression in interactions.

The second most important attitude components were an openness and appreciation of new cultural experiences and general openness and respect for people. Cultural openness was also the second most important attitude in the Army findings and general open-mindedness was also highly discussed by the Army participants. Cultural openness and open-mindedness was described as being non-judgmental toward people doing things differently than we would do them which includes respect for those people—for their experience and position in life, regardless of their illiteracy, poverty or other current circumstances. As one person said, you simply cannot recoil at local customs, at the life of the person you are trying to engage. You must be open to their lifestyle and treat people "as adults" when you are trying to train them. In line with this openness to cultural experiences, many people expressed a kind of pride that they would try any kind of food. This element seemed to be a kind of mark of the successful person, as simple as it seems. At least, this is a behavior they use to judge each other. It was reported that many people just would not try any foods out of the ordinary, and it was believed this was an important barrier to success.

Patience was ranked as highly as openness. This constellation of attitudes seemed to be central to describing the successful person. Self-efficacy (confidence, rating one's efforts as successful) and emotional self-regulation were also valuable to success. Self/emotional regulation was described as the ability to "calm oneself" and to "slow things down" during interactions. Interactions are not always successful or smooth only because of a willingness to engage, but required emotional skills beyond that motivation. And, at times devastating emotional experiences overcame any willingness to engage. The abilities to deal with one's own emotions and to try again and again to succeed are important in frustrating situations or when trauma is part of a deployment.

Behavioral - Observable Skills and Abilities

Self-presentation, rapport and relationship building, and communication skills were the primary elements discussed that fell in this category. We added a category for team presentation that is related to the cognitive ability to know how to leverage expertise in your team to reach people in another culture. Team presentation was discussed by the PRT Commander. While it was not a key factor in the sample, this commander made a compelling argument for the importance of not only understanding how you are presenting yourself to others, but consciously presenting your team members in the most favorable light to encourage trust and relationships.

This commander helped us highlight how leadership is a key element of cross-cultural competence. We had previously talked to many people in our Army 3C research who related that their commander determined the quality of their cultural preparation and of the interaction in country by setting the example of behavior. The Air Force sample provided us with a

clear message that the commander's actions can determine the tone of interactions, establish common ground with local leaders, demonstrate what should be done, involve subordinates, and maintain boundaries on acceptable behavior. Likewise, one example was given of a commander whose arrogance and lack of skill was imitated.

A few people that provided deeper insight into the skill set discussed two other factors. One was to take actions to make local development or reconstruction belong to the local people. It is not enough simply to understand, at a cognitive level, what the local people are willing and able to do. One must work to encourage and set the conditions for local participation and ownership and use of local expertise to insure success. We are calling the second factor of these additional factors "networking." The ability to go out and visit widely and learn who is in charge of what and how they function is not exactly the same as building relationships. Instead, networking is gaining an understanding the network of agencies, government officials and others who must be taken into consideration and must be identified for future reference, and is an early activity in a deployment to establish a mental model of the situation.

The final skill is communication. While the ability to convey and receive information effectively is important, this Air Force sample seemed much more interested in learning the local language as a part of improving communication than did the overall Army sample. Many people in both samples seemed to equate the highest level of competence with language proficiency, but to us this is more reflective of local or regional competence and not *cross*-cultural competence. People are highly impressed by language skills and had examples of how language skills can create mission success even when an interpreter is present. The Air Force sample contained a number of people who believed language proficiency was the best way to succeed in the situations in which they had found themselves. Obviously several languages cannot be learned quickly as deployments take a person to a variety of places, but interviewees felt that language proficiency was very important and that those who were not adept or regional specialists should still have some language training for the places they were deployed as a key to rapport and relationship building.

CONCLUSION

In the Army study, our larger research team concluded that neither military specialty nor rank can predict levels of competence levels or competence requirements. The current environment for the Army requires broad cross-cultural training because nearly anyone can end up in a situation where cultural knowledge is important. Roles develop as mission phases are shifting in our current theater of operations. In this Air Force study, there is also a lot of variability in competence required for the job and competence obtained among a variety of specialties. This applies especially to those who are doing non-traditional missions, particularly those who are basically in Army roles. However, we were able to draw some conclusions about general Air Force roles that require high levels of interaction and competence, moderate levels of coordination and moderate competence, and low levels or no interaction and probably some cultural awareness and specific country or regional knowledge at best.

Different factors related to competence were emphasized in the interviews depending on the job the person had during the deployment discussed, such as leadership to enable one's team to perform and presentation of one's team being very important to the PRT commander. Viewpoints also differed based on experiences throughout a respondent's career. Time did not allow for an analysis of the factors mentioned by each of the roles or the groups as divided by high, medium and low/no interactions. However, the general trend we noticed was that different people value different aspects of cultural competence. This trend points to the need for a better understanding of the differential skills needed and consideration of how we provide targeted training and assessment.

Division of cross-cultural skills into categories such as interpersonal/communication; awareness of self, social and organizational factors; and more low-level general cultural awareness and knowledge may help to organize training more effectively, as will more detailed job analysis. Different things are also useful to people based on their background (such as people educated in history use it as a lens and seek educational resources in that area when they receive an assignment). Different interpersonal skills are needed for different jobs (rapport versus relationship, negotiation versus persuasion). Resources to support the personal interests of different people may be helpful, such as through a knowledge portal. However, we received a number of complaints about computer-based training which was viewed as laborious, boring, and ineffective. Any training that is computer-based must be carefully designed and delivered. Short preparation times can impede the best training plans. The role of leadership in cross-cultural competence is an area that seems to be key for mission success, but it is not receiving focused attention. Based on our findings here, we should

consider whether there is a one-size-fits-all definition of cross-cultural competence and related training and assessment.

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