

# The CSAI: An Expatriate On-field Adjustment Index to Measure Intercultural Intelligence

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## Abstract

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With expanded numbers of global expatriates, the ability of sending agencies or companies to sensitively monitor adjustment and expected intercultural performance is critical. High rates of failed overseas experiences testify to the need to capture cultural or personal stressors as expatriates encounter them in the host culture experience. While the past 25 years of research uncovered thorough and insightful theories regarding culture, cultural communication, and cultural sensitivity, these data typically do not include questions that focus on expatriate adjustment in the host culture. The research presented here represents a ten-year developmentally processed study involving factor analysis and reliability testing yielding 20 significant subscales, which collectively constitute the CernySmith Adjustment Index (CSAI). The online scale and its high predictive qualities explain cultural, personal, organizational, psychological, and relational adjustment factors within the milieu of on-field intercultural stressors.

*Key words: expatriate adjustment, intercultural stress, culture shock, intercultural adjustment, intercultural adjustment measurement, intercultural tests and measures, intercultural performance, intercultural intelligence*

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### Introduction

Integrative questions, which measure stressors, adjustment, and performance after expatriates begin to engage the host culture, have proven illusive. Although there is a growing body of predictive sets to assess pre-departure variables, expatriates rely on imprecise indicators to know how they are performing once in their host culture assignment. A reliable and valid measure of on-field adjustment can offer assigning agencies, expatriates, and their families an improved monitoring process. Furthermore, common personality indicators do not consistently indicate intercultural adaptation issues (Caligiuri, 2000), thus requiring researchers to seek additional variables related to onsite support and monitoring. The purpose of this study is to present the results of a ten-year study to design and test an instrument to significantly predict on-field adjustment among expatriates.

Harris, Moran, and Moran (2004) indicate a four-stage model of the expatriate cycle: pre-departure assessment, pre-departure training, on-field support and monitoring, and repatriation. To facilitate on-field support and monitoring, they recommend periodic use of “an adjustment survey” for the employee and other family members (p. 155). The need to assess personal, social, and intercultural competencies of stress-related performance during the on-field monitoring stage is critical in light of increasing difficulty with early return rates and failed overseas experiences. In accordance with their recommendation, this research presents the results of over ten years of investigation culminating in a predictive scale to assess on-field adjustment among expatriates, the CSAI. In the process of discovery, the research introduces a new metaphor, intercultural intelligence (ICI).

### Background Literature to Intercultural Adjustment

Adjustment has been linked with intercultural competence (Imahori & Lanigan, 1989; Kim, 1988), cognitive and behavioral competencies (Brinkmann & Weerdenurg, 2003; Kim, 1991), social skills and behavioral activities (Bhawuk, 1998), and situational effectiveness (Lustig & Koester, 2006) among other concepts.

Early on in the expatriate adjustment, researchers sought to determine the most important adjustment factors influencing on-field adjustment. Mendall and Oddou's (1985) seminal and highly influential research indicated four dimensions: (1) self-orientation (reinforcement substitution, stress reduction, and technical competence), (2) other-orientation (relationship development, willingness to communicate), and (3) perceptual dimension (understanding and correct attributions, nonjudgmentalness, non-rigid), and (4) cultural-toughness dimension. Other researchers (Hammer, 1987; Hawes & Kealey, 1981; Harris, Moran, & Moran, 2004) indicated three dimensions of intercultural effectiveness: (1) intercultural relationship effectiveness, (2) cultural adjustment (including family adjustment), and (3) task/job performance. Lee (2005) offered a rigorous test of the Black, Mendenhall and Oddou model (1991 cited in Lee, 2005) representing a more comprehensive on-field framework: job satisfaction, family support, learning orientation, organizational socialization, and cross-cultural training. Lee's consequent regression/prediction analysis revealed that job satisfaction was the most important of these dimensions while confirming the Black, Mendenhall, and Oddou model. Other studies offer confirmation of these dependent factors of expatriate adjustment (Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005, Van Vianen, De pater, Kristof-Brown, & Johnson, 2004; confirmed a similar pattern of outcomes including cultural adjustment, interaction adjustment, work adjustment, and job performance.

Building on these dependent variables, a wide variety of variables have been correlated with adjustment and overseas success in various organizations. In many respects, these adjustment correlates represent individual and group variables linked with expatriate success. The long set includes sojourner expectations (Tucker & Baier, 1982; Weissman & Furnham, 1987), openmindedness (Tucker & Baier, 1982), respect for other beliefs (Tucker & Baier, 1982; Wiseman, Hammer, & Nishida, 1989), trust in people (Tucker & Baier, 1982), tolerance (Tucker & Baier, 1982), personal control (Tucker & Baier, 1982; Meyers, 1990; Dodd, 1998), flexibility, patience, adaptability, self-confidence/initiative, interpersonal interest, and interpersonal harmony (Tucker & Baier, 1982). Other predictors include ethnocentrism

(Brinkmann and Weerdenburg, 2003; Wiseman, Hammer, & Nishida, 1989), empathy (Dodd, 1987), self-efficacy, and self-monitoring ((Harrison, Chadwick, & Scales, 1996; Dodd, 1987).

Appropriate interpersonal relationship development has been a central factor in studies of intercultural effectiveness/competence and adjustment. Kealey (1989), Abe and Wiseman (1983), Chen (1989), Hammer (1987), Martin and Hammer (1989), Norton (1984), Throngprayoon (1988), and Lakey and Hill (1991) all find strong predictive values for interpersonal involvement regarding sojourner adjustment. Such overwhelming support has been found for interpersonal involvement that most intercultural effectiveness researchers assume interpersonal involvement to be a measure of their model (Hawes and Kealey, 1981; Chen, 1989; Abe and Wiseman, 1983; Hammer, 1987; Hammer, Nishida, and Wiseman, 1996; Imahori and Lanigan, 1989; Kim, 1991; Martin, 1987; Martin and Hammer, 1989; Meyers, 1990; Anderson, 1994; Spitzberg, 1989).

In addition to interpersonal skills, related constructs embrace empathy, language skills, and listening. Hawes and Kealey (1981) included interpersonal variables such as interpersonal flexibility, respect, relationship building, self-control under stress, and sensitivity to host country issues. Kealey later (1989) measured interpersonal skills along the lines of caring, self-centeredness, and activity. Chen (1989) identified self-disclosure, message skills, social skills, and interaction management and later relationship and ritual management, contact initiating, decision-making, and assertiveness (Chen, 1991). Abe and Wiseman's (1983) focused dealing with differences in communication systems, educational systems, communication misunderstanding, meaningful dialogue, and resolving unforeseen problems. Norton (1984) identified interpersonal comfort to predict effectiveness. Brinkmann and Weerdenburg (2003) referred to sustaining interaction ability, such as working short term as in customer service or long-term such as in team building in specific cultures.

Fontaine (1993) the motivational aspects of travel such as career, getting away from home, recreation, exploration, and a chance to seek out identity. In his view, expatriates must be able to adjust personally and with their families (if applicable) as a part of an effectiveness model (Bradford, Allen, & Beisser, 1998). Support for this point emerges from a sample of sources. Harris, Moran, and Moran (2004) offer an extensive list including cultural flexibility, patience, adaptability, self-confidence/initiative, and cultural curiosity. Cultural adjustment also expands to include spouse/family communication (Tucker & Baier, 1982; Hammer & Clarke, 1987; Dodd, 1998; Dodd, 2005). In addition, Brinkmann and van Weerdenburg (2003) identify emotional stability (as mapped in their MPQ instrument), cultural empathy, sensitivity, managing uncertainty, and building commitment (these are also found in their IRC Intercultural Readiness Check found in table 1).

Adjustment to a new cultural also depends on cultural distance (Wiseman, Hammer, & Nishida, 1989), knowledge of the specific culture (Wiseman, Hammer, & Nishida, 1989), personal attributes, cultural awareness (Chen, 1989), ability to understand others, and ability to deal with different social systems (Abe and Wiseman, 1983). In addition, the reasons for the length of the sojourn assignment contribute to adjustment (Hawes & Kealey, 1981; Kealey, 1989; Chen, 1989; Hammer, 1987; Dunbar, 1992; Tanaka, Takai, Kohyama, & Fujihara, 1994; Searle & Ward, 1990; Harrison, Chadwick, & Scales, 1996; Hsiao-Ying, 1995). The adjustment goals also affect acculturation, as in the case of student sojourners who may not work at creating a type of third culture (Dodd, 1998), but rather focus on learning and sometimes survival and homesickness.

Violation of expectations can result in poor sojourner adjustment (Tucker and Baier, 1982). Martin, Bradford, and Rohrlich (1995) found that the location of a sojourn has a strong effect on whether a student's expectations are fulfilled or violated. Their study showed that sojourners to England had their expectations affected most negatively of the sample. Students expected that England was not too culturally distant from the United States and found their expectations violated. Martin et al. suggested, "that it is not just the cultural difference or similarity between the host and home culture that influences how sojourns are experienced, but also corresponding expectations" (p. 103).

Similarly, other predictive factors include contact with host nationals (Zimmerman, 1995; Stephan & Stephan, 1992; Lakey & Hill, 1991), positive interaction with host nationals to reduce uncertainty (Gudykunst & Hammer, 1988) and decreases anxiety (Stephan & Stephan, 1992). This need for positive interaction also stresses the necessity of language skills (Fantini, 1995; Brown, 1998).

The Overseas Assessment Inventory (OAI), a candidate pre-field assessment, first presented in Tucker and Baier (1982), presented evidence that the set of 14 variables when correlated with the performance of expatriates in their studies predicted 42% of the variance ( $R$ -squared = .65).

Competence and effectiveness constructs form a foundation for moving toward an important next step, a model and paradigm of assessing adjustment and effectiveness for expatriates. This step raises the question of instrumentation that assesses intercultural adjustment along with personal and social effectiveness in the field. By such an assessment model, intercultural education and training can focus on identifying specific needs and applying targeted coaching to enhance performance.

### **The Need for Expanding Expatriate Assessment**

Intercultural researchers and practitioners recognize the multi-faceted nature of intercultural adjustment underscored by this extensive sample of variables presented above. Consequently, attention has been focused on predictive sets of variables for understanding and predicting adjustment as well as performance. The resulting instruments can be grouped into two categories. First, pre-field instruments are given to potential expatriates (and sometimes their families) to indicate strengths and weakness prior to departure and in anticipation of corrective training. A second category of instruments relates to the discovery of on-field adjustment. This category has very few instruments designed to holistically, validly, and reliably to measure this dynamic, second stage of the expatriate cycle, despite the rationale for intercultural coaches and trainers to identify and intervene in significant cases of cultural and personal stress related to expatriate experiences (Cerny & Smith, 2005; Dodd, 2006). Therefore, just as there is a “selection technology” applied to expatriate research that best predicts intercultural performance (Dodd, 2005), this study opens a search to robust on-field intercultural instrumentation that demonstrates high internal reliability and predictive validity associated with maximum intercultural expatriate adjustment.

Advancing an organization’s global goals also presents accelerated expatriate failure risks. Such limits and risks include poor cultural contacts, loss of face, poor managerial performance, a collapse of goals and assignments, lost negotiations, loss of organizational morale, early return rates, and a negative impact on a trailing spouse or family members. In response, intercultural specialists and expatriate sending organizations continue to request assistance with pre-departure assessment and training as intervention strategies to curb such losses (Dodd, 2006).

Early return or failed overseas performance occurs from 37% to 61% as classic studies and recent training company interviews suggest (Dodd, 2005; Harris, Moran, & Moran, 2004; Dodd, 2006). The losses include immediate costs of moving, relocation, and initial training, as well as the stunning long-term costs related to productivity loss, morale loss, loss of organizational face, loss of future markets, hostility and conflict, and the vast human costs to spouses and family. Most organizations indicate a desire to recruit, assess, and develop a higher level of expatriate candidates for their overseas operations and short-term deployments (gmacglobalrelocation.com). Research indicates that 50% of organizations seek a better ROI regarding their human capital in overseas environments and respond with a serious interest in intercultural assessment and training (Harris, Moran, & Moran, 2004). Furthermore, research from Cendant International Assignment Services and the American Training and Development Society report that two-thirds failed their foreign assignments. Harris, Moran, & Moran (2004) report relocation studies indicating a 40% higher divorce rate among expatriates and their children having a 50% higher high school dropout rate than children who are not expatriates.

Researchers who investigate intercultural relations indicate the importance of selection and training to improve intercultural performance for employees and managers. A decade trend analysis from GMAC Services surveying large numbers of companies in their annual Global and Global Relocation Trends, along with the National Foreign Trade Council, revealed the 2005 results (noted in gmacglobalrelocation.com, 2006):

- 60% of firms offer formal intercultural training, but only 20% make it mandatory
- 73% of the respondents indicates these programs had great or high value
- 21% of expatriate employees left their companies in the midst of international assignments and an additional 23% left within one year of returning from one
- 67% of respondents cited family concerns as the main cause for assignment failure
- 47% reported an increase in the size of their current expatriate population compared to 31% for 2004

Despite documented efforts at pre-departure training, very little assessment and adjustment training/coaching occurs on-field in the host culture with the goal of reducing high losses and improving performance once the expatriate is in the assignment.

## Current Intercultural On-field Training and Consulting Tools

It is not easy to determine exactly what instruments exist and which are well researched, since individual practitioners and/or organizations may not discuss their research findings, use assessments only occasionally, or have propriety instruments owned by larger consulting organizations. A very good listing for current cultural training and consulting tools is the Online Documentation Centre provided by the Sietar-Euruopa (2007). The majority of assessments and instruments identified appear to be used for cultural awareness and education. Table 1 identifies those tools that assess cultural style and sensitivity. Table 2 identifies pre-field assessment instruments although a more recent highly predictive tool developed by one of the authors in this paper is absent (the IRA predicting 75% effectiveness of business as well as educational and military expatriates, Dodd, 2005).

**Table 1** Cultural Style and Sensitivity Assessments

Name	Brief Description - Reference
Behavioral Assessment Scale for Intercultural Communication (BASIC)	Eight scales; validated with 263 university students. - <i>Intercultural Communication. International Journal of Intercultural Relations</i> , 13(3), 333-347.
Counseling Inventory: A self-report measure of multicultural competencies	Developed for the counseling milieu. Emphasizes behaviors. Four factors. Large sample. - <i>Journal of Counseling Psychology</i> , 41(2), 137-148.
The Cross-Cultural Assessor	Build your own cultural profile, discover your strengths and challenges and get advice on adapting. - <a href="http://www.promentor.fi/cca/">http://www.promentor.fi/cca/</a>
Cross-Cultural Counseling Inventory	Developed for the counseling milieu. - LaFromboise, T. D., Coleman, H. L., & Hernandez, A. (1991). "Development and factor structure of the Cross-Cultural Counseling Inventory-- Revised." <i>Professional Psychology: Research and Practice</i> , 22(5), 380-388.
Cross-Cultural Sensitivity Scale (CCSS)	Designed for Canadian context. Normed on undergraduate students. - Pruegger, V. J., & Rogers, T. B. (1993). "Development of a scale to measure cross- cultural sensitivity in the Canadian context." <i>Canadian Journal of Behavioural Science</i> , 25(4), 615-621.
Cultural Competence Self-Assessment Questionnaire (CCSAQ)	Instrument designed to assist service agencies working with children with disabilities and their families in self- evaluation of their cross-cultural competence. Intended for US domestic use. - Mason, J. L. (1995). <i>Portland State University</i> .
The Cultural Orientations Indicator® (COI®)	TMC's COI® is a web-based cross-cultural assessment tool that allows individuals to assess their personal cultural preferences and compare them with generalized profiles of other cultures. The COI® provides respondents with a personal cultural profile based on ten dimensions that have particular application in the business world. - <a href="http://www.tmc Corp.com">http://www.tmc Corp.com</a>
The Culture in the Workplace Questionnaire™	Derived from the work of G.Hofstede, and enables you to learn your own cultural profile and how that might compare to others. - <a href="http://www.itapintl.com/ITAPCWQuestionnaire.htm">http://www.itapintl.com/ITAPCWQuestionnaire.htm</a>
GAP Test: Global Awareness Profile	Measures how much world knowledge a person has concerning selected items about international politics, economics, geography, culture, etc. - <i>Intercultural Press</i>
Intercultural Development Inventory (IDI)	Uses a 44-item inventory based on the Developmental Model of Intercultural Sensitivity (DMIS) to assess the extent of an individual's intercultural development along a continuum that ranges from extreme ethnocentrism to what Bennett calls "ethnorelativism." - +1 (503) 297-4622 <a href="http://www.intercultural.org">http://www.intercultural.org</a>
Intercultural Sensitivity Inventory (ICSI)	Validated with 46 undergraduate and 93 graduate students. Focuses on sensitivity to individualism versus collectivism differences. - Bhawuk, D. P. S., & Brislin, R. W. (1992). "The measurement of intercultural sensitivity using the concepts of individualism and collectivism." <i>International Journal of Intercultural Relations</i> , 16(4), 413-436.
Intercultural Sensitivity Survey	Validated with students. - Towers, K. L. (1991). <i>Intercultural sensitivity survey: Construction and initial validation. Unpublished Doctoral Dissertation, University of Iowa</i> .
Multicultural Counseling Awareness Scale (MCAS)	Developed for the counseling milieu. Emphasizes beliefs. - J. G. Ponterotto et al. (1991)
Multicultural Counseling Inventory (MCI)	Sodowsky, G. R., Taffe, R. C., Gutkin, T. B., & Wise, S. L. (1994).
PCAT: Peterson Cultural Awareness	Highly reliable and valid instruments for measuring cross-cultural effectiveness and awareness of cultural differences (i.e. individualism versus group oriented cultures). - Dr.

Test PCSI: Peterson Cultural Style Indicator	<i>Brooks Peterson, Owner/President of Across Cultures, Inc.</i>
Trompenaar's Seven Dimensions of Culture and Corporate Culture Profiles	By means of a questionnaire developed by Dr Alfons Trompenaars, individuals receive their own cultural profile on each of seven dimensions of culture that then can be compared with the cultural profile of any other group or individual in an expanding database of over 35,000 managers. - <a href="http://www.globalinterface.com.au/how_we_do_it.html">http://www.globalinterface.com.au/how_we_do_it.html</a>
Test of Intercultural Sensitivity (TICS)	- <i>David E. Weldon, D. E. Carlston, A. K. Rissman, L. Slobodin, Harry C. Triandis (1975)</i>

**Table 2** Pre-field Assessments

Name	Brief Description - Reference
Cross-Cultural Adaptability Inventory (CCAI)	Enhance cross-cultural effectiveness, become self-aware, decide whether to work in a culturally-diverse company and whether to live abroad, and prepare to enter another culture. Measures 4 variables: Emotional Resilience, Flexibility and Openness, Perceptual Acuity, and Personal Autonomy. - <a href="http://www.interculturalpress.com">Intercultural Press</a> 1.800.370.2665
Intercultural Readiness Check (IRC©)	The IRC is an ideal tool for assessing participants' intercultural skills in the areas of intercultural sensitivity, communication, leadership and management of uncertainty. Clients can fill in the IRC online to prepare for an assignment, a project or a training. - <a href="http://www.ibinet.nl">http://www.ibinet.nl</a>
Living and Working Overseas Predeparture Questionnaire	Explaining and predicting cross-cultural adjustment and effectiveness: A study of Canadian technical advisors overseas. Developed for the Canadian International Development Agency. - <i>Kealey, D. J. (1988).</i>
Personal Orientation Inventory (POI)	Validated with 92 Peace Corps trainees. - <i>Uhes, M. J., &amp; Shybut, J. (1971). "Personal orientation inventory as a predictor of success in Peace Corps training. Journal of Applied Psychology, 55(5), 498-499.</i>
Overseas Assignment Inventory (OAI),	A self-response questionnaire that examines 14 attitudes and attributes correlated with successful cross-cultural adjustment and performance. Used together with a behavioural interview, the OAI provides essential input to the expatriate selection process and helps expatriates raise their awareness of a number of important adaptation issues. - +1-800-257-4092 <a href="http://www.oaionline.com">www.oaionline.com</a> , <a href="http://www.prudential.com/prm">www.prudential.com/prm</a> , <a href="http://www.globalinterface.com.au/how_we_do_it.html">http://www.globalinterface.com.au/how_we_do_it.html</a>
International Assignment Exercise (IAE),	Self-assessment tool, Analysis of situational readiness - <a href="http://www.sri-2000.com">www.sri-2000.com</a>
The OAI (Overseas Assignment Inventory)	a validated assessment which predicts expatriate candidates potential for success if sent on an international assignment. - <a href="http://www.tuckerintl.com">www.tuckerintl.com</a>
The ICE (International Candidate Evaluation)	a validated assessment which takes the expatriate selection process to a higher level by involving the candidates supervisor. - <a href="http://www.tuckerintl.com">www.tuckerintl.com</a>
Expatriate Profile Inventory (EPS)	Self-selection tool; Personality analysis - <a href="http://www.windowontheworldinc.com">www.windowontheworldinc.com</a>

Unfortunately, the needs of expatriates for interculturally appropriate instruments developed specifically for on-field assessment has largely been ignored despite the recommendation by Harris, Moran, and Moran (2004). As Table 3 demonstrates only two on-field assessments and instruments were found in the Sietar-Europa Online Documentation Center.

**Table 3** On-field Assessments

Name	Brief Description - Reference
Intercultural Competency Scale	Designed with missionaries and foreign students. - <i>Elmer, M. I. (1987). Intercultural effectiveness: "Development of an intercultural competency scale." Unpublished Doctoral Dissertation, Michigan State University, MI.</i>
The EED (Evaluation of Expatriate Development) and the SEED (Supervisory Evaluation of Expatriate Development)	The EED and SEED are used to evaluate expatriate adjustment to living and working in the country of assignment. Their results are incorporated into an Expatriate Evaluation and Development Guide which is given to the expatriate to provide feedback and use as a tool to enhance their ongoing international experience. - <a href="http://www.tuckerintl.com">www.tuckerintl.com</a>

Although useful, this paucity appears to lack comprehensive focus as field instrumentation to gauge broader facets of adjustment. Overall, it appears that few if any instruments measure adjustment indicators from a psychological viewpoint that give significant indication of adjustment issues developing.

Comprehensive on-field psychosocial assessment has been largely left to standardized monocultural clinical and coaching instruments, which have been applied to intercultural personnel. Personality and adjustment clinical scales such as the Symptom Checklist – 90 Revised (SCL-90R) (Derogatis, 2006), Minnesota Multiphasic Personality Inventory – 2 (Hathaway & McKinley, 2006), Millon Clinical Multiaxial-III (Millon, Millon, David & Grossman, 2006), or the Taylor-Johnson Temperament Analysis (Taylor & Morrison, 2004) are for clinical and psychological use. Typically, their use as Level C instruments is authorized only for clinicians who hold an advanced degree in a profession that provides specialized training in the interpretation of psychological assessments. Instrument such as these can be very helpful in evaluating current adjustment, but are pathologically oriented and tend to be normed on United States population samples living within their own culture and country. Moreover, these personality-based instruments for intercultural adjustment reveal limitations. As one example, Caliguiri's (2000) analyzed big five personality characteristics as predictors of expatriate desire to terminate and job performance. The data were limited in predictability to a regression of only 9% and 11% predictability. Conscientiousness and openness/intellect were not significant while extroversion, agreeableness, and emotional stability were negatively correlated with expatriates' desire to terminate. Conscientiousness was positively associated with supervisor-rate performance. However, all correlations were low (ranging from .22 to .34) in addition to the low regression predictions.

Instruments such as the Myers-Briggs Type Indicator® Step II - Form Q (Myers & Myers, 2003), FIRO-B® (CPP, 2003), and the CPI-260 (Gough & Bradley, 2006) are commonly used by life and business coaches, counselors, and trainers in identifying current styles and facilitating higher functioning. Interestingly, while they are more widely used internationally, they tend to have been normed on United States population samples living within their own culture and country. To purchase Level B instruments for use the coach or trainer must have either taken and passed a qualification workshop, or hold a bachelor's degree and have satisfactorily completed a course in the interpretation of psychological assessments and measurement at an accredited college or university.

The BarOn EQ-I (BarOn, 1997) is a Level B coaching instrument that has interesting intercultural and clinical features. It is based on the author's 20 years of research in 12 countries. As an Israeli psychologist with a positive psychology orientation BarOn has provided consultation for a number of governmental, military, and private institutions and organizations in Israel. Furthermore, the coaching instrument has some clinical features such reality testing, stress tolerance, impulse control, and mood scales.

Of the above clinical and coaching scales, the two having greatest background affinity to the assessment being researched are the SCL-90, a well researched clinical screening scale, and the BarOn EQ-I, a coaching instrument with multi-cultural features.

### **Intercultural Intelligence: A Descriptive Metaphor**

Given these gaps in the on-field assessments, the present researchers engaged a long-term study to produce a comprehensive, valid, and reliable instrument. Adding to this effort is a model borrowing from the metaphor Cultural Intelligence expanded to Intercultural Intelligence (ICI) to illustrate the benefits of such an instrument.

Rooted in the early work of Goleman's Emotional Intelligence or EI (1995, 1998) cultural intelligence also identifies significant personal and social competencies. "“Emotional Intelligence” refers to *the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships.*” (p. 317) He identified five basic emotional and social competencies: Self-awareness, Self-regulation, Motivation, Empathy, and Social Skills.

Bar-On, developer of the BarOn Emotional Quotient –Inventory (Baron EQ-I), was especially interested in the cross-cultural aspects of emotional intelligence. He defined EI in a broad manner that especially highlights the individual's interaction with environment and therefore is of special interest to intercultural adjustment (Bar-On, 1997).

Besides emotional intelligence, other streams of conceptualization and research relating to and supporting the development of the intercultural intelligence metaphor are those of spiritual intelligence, cultural intelligence, and current uses of the phrase, intercultural intelligence. Spiritual Intelligence (SQ) according to Howell (2006) is about personal growth focusing on the “why” rather than the “what” or “how” of what we do. He suggests that exploring awareness, evaluation, and meaning helps one become centered in their true self. Cultural Intelligence (CQ) as reported by Van Dyne & Ang (2005) is a person's

capability to function effectively in situations characterized by cultural diversity. Earley and Mosakowski (2005) further define cultural intelligence (CQ) as “the ability to make sense of unfamiliar contexts and then blend in. It has three components--cognitive, physical, and emotional/motivational. Although it shares many of the properties of emotional intelligence, CQ goes one step further by equipping a person to distinguish behaviors produced by the culture in question from behaviors that are peculiar to particular individuals and those found in all human beings.” Authors have operationalized and popularized concepts of CQ for the intercultural use of sojourners and global business (Earley & Ang, 2003; Thomas and Inkson, 2004; Peterson, 2004).

The term “intercultural intelligence” is currently primarily being used in the diversity context of race relations. In her book *Intercultural Communication* (2005) Eckert lists three survival skills that comprise her conception of intercultural intelligence: (1) understanding of culture, (2) self-awareness about one’s own culture, (3) ability to communicate and resolve conflict inter-culturally. Relating to the context of race relations within the United States, in an online article, Eckert (2007) links the following competencies with intercultural intelligence: (1) Understanding that intercultural skills are necessary and important for personal and professional effectiveness, (2) Understanding of and ability to identify the influence of culture – our own and those of others, (3) Willingness and ability to develop effective communication skills (e.g. active listening, inquiry), (4) Willingness and ability to develop transcendent conflict resolution and collaborative negotiation skills, (5) Willingness and ability to develop social and emotional skills, and (6) Willingness and ability to develop constructive feedback skills.

It should be noted, however, that Sietar Europa, (The Society for International Education, Training, and Research, 2005) announced the development of a new e-magazine in 2005 entitled, *Intercultural Intelligence Service*. As used within this context, intercultural intelligence refers to the world of intercultural studies.

As detailed above, the term emotional intelligence (EI) is used to describe personal and social competencies. The terms cultural intelligence (CQ) and intercultural intelligence are used generally to describe cross-cultural competencies. The authors will propose use of the metaphor, Intercultural Intelligence (ICI), to describe expatriate adjustment and performance with EI, SQ, and CQ being component features. Thus ICI, as hypothesized, is composed of personal, spiritual, social, and cultural competencies interacting with environmental (social, organizational, and intercultural) demands.

### **Research Focus**

Humanitarian and missionary expatriates comprise a community of international workers and their families about whom much has been written historically regarding intercultural stress and adjustment. Several authors have written at length on the subject including: Dye, W. (1974), Dye, S. (1974), Gish (1983), Foyle, (1987), Williams (1988), O’Donnell & O’Donnell (1992), Cerny & Smith (1994), Cerny & Smith (1995), Cerny & Smith (2002), and Kotesky (2004). O’Donnell & O’Donnell (1992) proposed a stress management model for missionary expatriates termed CHOPSS. The model identified seven stress areas of expatriate stress: cultural, human, organizational, physical, psychological, support, and spiritual; and further listed typical stressors associated with each area. Later O’Donnell (1993) provided Cerny with a list of ten intercultural stress areas: cultural, occupational, spiritual, relational, historical, crisis, organizational, support, psychological, and physical.

In response to attrition problems and adjustment difficulties observed in the field, in 1995 Cerny (1996) developed a 100-item screening instrument called the CHOPS 100 Stress Inventory. This paper and pencil assessment objectively applied the 10 cross-cultural stressor categories identified by O’Donnell & O’Donnell (1992, 1993). Using a Likert scale with a similar format to the SCL-90R (Derogatis, 2006), the CHOPS 100 Stress Inventory rated the degree of distress being experienced over the past month for 100 items, ten within each of O’Donnell’s ten intercultural stress categories. Cerny and Smith did periodic revisions of CHOPS 100 Stress Inventory items during the next five years, gaining substantial field experience by using it regularly. They and member care colleagues used the instrument with hundreds of expatriates while coaching field teams in over 30 different countries. The instrument was also freely shared informally with other coaches and counselors who used it in many parts of the world. Ritschard provided research support for two pilot studies on the instrument in 1997 and 1999 (Cerny, 1999).

The CernySmith Adjustment Index (CSAI) project began in 2000 when Cerny and Smith determined to develop and norm an intercultural adjustment and performance instrument on the Internet. Starting with the 4/98 version of the CHOPS 100 Stress Inventory they made major changes in item content

and wording. In consultation with Hans Ritschard, a United States Air Force child psychologist, they changed the direction of the new instrument to positive adjustment screening rather than negative stress evaluation by reversing the values of the distress ratings. By individualizing occupational/organizational terminology for eight questions of the 100, four different English language versions of the CSAI were developed for the norming process addressing different occupational groups of intercultural workers and their families: BC (Business/Corporate), CG(Civil/Government), HR (Humanitarian/Relief), and M (Military). Then they randomized the items and made the research versions available on the Internet at [www.crossculturaladjustment.com](http://www.crossculturaladjustment.com) for 19 months from February 2003 to August 2004. During that 19-month period 1695 persons took the CSAI online and of those 1133 (528 males, 605 females) qualified for the cross-cultural research. Those 1133 expatriate workers and family members were living and working in 130 host countries and were from 46 passport countries.

## **Method**

### *Variables Comprising the CSAI: Face Validity for Testing*

The items chosen for the CSAI model were constructed based on theories and results indicated in the review of literature, and from 5 years of CHOPS 100 data collected among hundreds of expatriates in over 30 countries during consulting and coaching. The clinical and coaching experiences provided important personal face-to-face evidence for the face validity of the then paper pencil items. Input items were distilled into the previously listed 10 expatriate stress categories identified by O'Donnell (1993) out of which, the 100 items were submitted to factor analysis and reliability testing.

A unique aspect of the CSAI, which increases face validity, is that it contains both objective and subjective data. Of the 97 items for 87 the testee is asked to objectively rate the distress experienced for the item during this past month selecting a Likert scale rating choice from: Not at All, A Little Bit, Moderately, Quite a Bit, or Extremely. In addition, for ten possible stressor categories identified by O'Donnell (1993), testees were invited to identify and type in an issue of concern to them and rate the level of distress they have been experiencing. There is very high face validity to issues identified, typed in using their own words, and rated by testees.

### *Respondents*

The study represents a composite of 1133 individuals, 47 % males and 53% females, ages 13 - 77 with an average age of 42. Their current term on the field ranged from 1 year to 52 years with an average of 5 years. Their total field experience ranged from 1 year to 56 years with an average of 13 years. Participants reported the following educational levels: 2% Grade School, 8% High School, 7% AA Degree, 38% Bachelors Degree, 36% Masters Degree, and 8% Doctors Degree. The marital status of the sample was: 33% single, 65% married, and 2% divorced, separated or widowed. They reported the following number of children: 40% none, 6% one, 21% two, 18% three, 11% four, and 4% five or more.

The expatriate sample was composed of the following occupations: 7 % business, 1% diplomatic, 87 % humanitarian, and 4 % student study abroad sojourners. No participants in the norming sample completed the military version of the CSAI. Collectively, participants lived and worked in some 130 different countries on all continents except Antarctica. These English reading expatriates were from a total of 46 different passport countries: 1% Hong Kong&Singapore, 2% Germany, 1% Netherlands&Switzerland, 3% United Kingdom, 1% Afghanistan&South Africa, 10% Canada, 76% United States of America, 1% Australia&New Zealand, and 6% thirty-four other countries.

### *Procedures\**

CSAI norming data was collected online at [www.crossculturaladjustment.com](http://www.crossculturaladjustment.com) between February 2003 and August 2004. The site was advertised as a Free Online Cross-Cultural Adjustment Test with research participants providing research consent and being provided with immediate face validity feedback in a brief online report of results they could download or print out. A total of 1695 people logged onto the site during that period with 1133 records being suitable for the study. The first 183 records were deleted because it was discovered that the site programmer erroneously defaulted blank answers to the "Not at all"

Three items of the 100 were omitted from the research because their factor correlations with the total CSAI score were less than .30. Those items and correlations were: difficulty meeting financial obligations .27, physical or sexual abuse .26, and legal problems .24. With this omission, Chronbach's Alpha coefficient of reliability for the total CSAI score using the remaining 97 items was .96.

Researchers then submitted the 97 items to the first series of analysis, a factor analysis using a Principle Component Analysis extraction method and a Promax with Kaiser Normalization rotation method. With a correlation cutoff of .40 the analysis yielded 22 significant factors.

The second series of analyses focused on internal reliabilities across the 22 CSAI factors. If the factors were relatively consistent and stable for the total, we expected to see significant Chronbach Alpha coefficients. The number of factors was reduced from 22 to 20 as Factors 18 and 21 were removed based on a Chronbach's Alpha cutoff of .65. Of the remaining 20 factors 13 had Chronbach's Alpha above .80. The 7 with Chronbach's Alpha between .65 and .80 were initially designated as "Indicators". The factors were labeled based on the contribution of thematic item content. Table 4 provides a listing of the 20 factors in order of strength with variance of meaning and Chronbach alpha reliability.

**Table 4** CSAI Factors, Labels, Variance, and Chronbach Alpha Reliability

Factor	Label	Variance	Alpha Coefficient
1	Organizational Relationship	22.34%	.87
2	Spiritual Resources	3.95%	.88
3	Personal Well-Being	3.67%	.94
4	Psychological Functioning	2.67%	.88
5	Cross-Cultural Skills	2.57%	.81
6	Situational Crisis	2.09%	.74
7	Personal Habits	1.97%	.81
8	Work Load	1.91%	.77
9	Cognitive Clarity	1.77%	.84
10	Living Transitions	1.73%	.92
11	Organizational Support	1.56%	.86
12	Physical Health	1.53%	.78
13	Cross-Cultural Relationships	1.45%	.92
14	Family Adjustment	1.31%	.68
15	Extended Family/Friends	1.27%	.68
16	Psychological Mood	1.20%	.93
17	Historical Trauma	1.16%	.69
19	Relationship Support	1.11%	.85
20	Effective Relationships*	1.10%	.82
22	Emotional Connection	1.04%	.78

\*Previously termed "Relationship Intimacy"

**57.48% with 20 factors using principal components**

Brief high and low score descriptors were developed from a further analysis of item content and factor loading. Table 5 presents high and low score descriptors for each factor developed from thematic item content. A t-test for male and female average total CSAI scores showed them to be significantly different at a confidence level of .95 as is presented in Table 6.

Because of the significant mean gender difference both male and female norms were developed for the instrument. Male and female distribution outliers were also identified for the total CSAI scores identifying the extreme high and low 1-2 % of score ranges and appropriate validity statements developed for questioning the validity of those results. No other demographic variables were found to have statistically significant differences with the exception that both men and women above age 55 rated their adjustment more positively than younger participants.

**Table 5** CSAI Factors with High and Low Score Descriptors

Factor Name	High Score Descriptors	Low Score Descriptors
1. Organizational Relationship	Positive experiences with leadership, harmonious team adjustment, good organizational fit	Leadership concerns, dissatisfied with organizational culture, feeling misunderstood
2. Spiritual Resources	Fulfilling spiritual relationships and practices, meaningful and purposeful existence	Spiritual emptiness, lethargic in devotional practices, lacking vital relationships, discouraged
3. Personal Well-Being	Generally satisfied with personal experience, evidence of personal connections and understanding, expressive and optimistic	Important personal concerns, may be lonely, not feeling heard and understood, inner sadness
4. Psychological Functioning	Positive coping, clear balanced thinking, confident, resourceful, feelings are appropriate for current circumstances	Vulnerable to troubling intrusive thoughts, disturbed by uncomfortable negative feelings, fearful
5. Cross-Cultural Skills	Adapting positively to unfamiliar language, foods and customs; acquiring cultural competency, enjoying aspects of cultural experience	Significantly stressed in adjusting to unfamiliar culture, not fitting in, uncomfortable feelings of helplessness and frustration, language acquisition likely difficult
6. Situational Crisis	Feeling safe in reasonably stable environment, not personally threatened by violent or potentially traumatic experiences	Dangerous aspects of current situation, safety threatened by hostile environment, potentially traumatic event
7. Personal Habits	Comfortable with personal choices, expressing freedom from unwanted compulsions, self accepting, or in denial	Troubled by unwanted habits, guilty, conflicted
8. Work Load	Managing time well, positive balance of work and personal focus, managing email well, maintaining correspondence	Feeling overloaded with work, stressed by email and correspondence, possibly poor time and priorities management
9. Cognitive Clarity	Clear thinking with an ability to maintain the focus and remember accurately, optimistic, energetic	Cloudy thinking with a scattered focus and difficulty remembering, feeling down, difficulty making decisions
10. Living Transitions	Adequate housing, supportive and stable living environment, adapting to transitions and able to meet personal needs, optimistic	Stressful transitions and living disruptions, difficult housing situation, unable to relax, tired, lacking needed privacy
11. Organizational Support	Active organizational support, realistic expectations and thoughtful organizational policies, clarity of direction	Lacking needed organizational support and direction, unhelpful organizational expectations
12. Physical Health	Generally good health, adequate medical resources, energetic	Health concerns for self or family, concerns reg. health or injury, possible weight loss or gain.
13. Cross-Cultural Relationships	Comfortable with role expectations, positive relationships with nationals, optimistic social perspective	Not fitting in, social discomfort, lacking supportive cross-cultural connections, feeling sad
14. Family Adjustment	Harmonious relationships, supportive parenting, children doing well	Poor communication, parental disagreements, parent child concerns, poor adjustment by family member
15. Extended Family/Friends	Supportive relationship with distant friends and family, no major medical concerns for extended family.	Worrying about loved ones back home, missing family and friends
16. Psychological Mood	Lighthearted, easygoing, meaningful relationships, hopeful, optimistic	Depressed and anxious, isolated and worrying, low energy, concerned about functioning, may be feeling hopeless, possible signs of biological depression
17. Historical Trauma	Generally neutral or positive childhood experience and memories	Disturbing memories about painful issues from the past
19. Relationship Support	Supportive family, friends, and colleagues, energy for relationships, emotionally connected, realistic expectations,	Relationship disappointments, emotionally isolated, not feeling understood, discouraged, lacking energy
20. Effective Relationships	Positive relationship skills, sensitive, handles conflict constructively	Feels misunderstood, tends not to trust and maybe argue, does not feel supported, possible sexual concerns
22. Emotional Connection	Enjoying emotional support and nurturance, feeling emotionally connected within meaningful relationships	Lonely, lacking desired emotional support, missing meaningful, stable emotional and social connections

**Table 6** t-test for Mean Gender Differences

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
97CSAI Variables	Male	528	292.5876	40.58234	1.76612
	Female	605	282.8998	43.58458	1.77196

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
97CSAI Variables	Equal variances assumed	3.861	.050	3.854	1131	.000	9.68776	2.51396	4.75521	14.62032
	Equal variances not assumed			3.872	1126.252	.000	9.68776	2.50181	4.77904	14.59649

The 20 factors were then subjected to a 2<sup>nd</sup> order factor analysis using a .40 correlation cutoff to determine and develop factor groupings. To better derive the meaning of 2<sup>nd</sup> order factors two adjustments were made: 1) only 1<sup>st</sup> order factors with loading of .55 or above were retained, and 2) the two 1<sup>st</sup> order factors which had been omitted because alpha reliabilities were below .65 were dropped. This resulted in 2<sup>nd</sup> order factor #7 being omitted. As a result of content and loading analysis the remaining 6 factors were labeled as well-being groupings or domains composed of adjustment factors. Factor analysis showed that only two 1<sup>st</sup> order factors were present in three 2<sup>nd</sup> order factors: 1) Personal Well-Being (alpha .94) and 2) Living Transitions (alpha .92). The following five 1<sup>st</sup> order factors were present in two 2<sup>nd</sup> order factors: 1) Cross-Cultural Relationships (alpha .92), 2) Psychological Functioning (alpha .88), 3) Psychological Mood (alpha .93), 4) Emotional Connections (alpha .78), and 5) Relational Support (alpha .85). Of the remaining fourteen 1<sup>st</sup> order factors, twelve were found only in a single 2<sup>nd</sup> order factor and only two were not found in any 2<sup>nd</sup> order factor. Those two were both indicators: 1) Workload (alpha .77), and 2) Historical Trauma (alpha .69). On the basis of further analysis and theoretical reasoning, the six 2<sup>nd</sup> order factors were collapsed into five groupings containing all 1<sup>st</sup> order adjustment factors. The 1<sup>st</sup> order factors were then designated as adjustment scales and the 2<sup>nd</sup> order groupings as adjustment domains. Table 7 illustrates the final configuration of adjustment domains and scales. Adjustment domains are scored based on the average scores of the adjustment scales contained therein.

**Table 7** CSAI Adjustment Domains and Scales

Adjustment Domains	Adjustment Scales (Alpha) (Indicator)
<b>1. ORGANIZATIONAL</b>	
	ORGANIZATIONAL RELATIONSHIP (.87)
	ORGANIZATIONAL SUPPORT (.86)
	WORK LOAD (.77) (Indicator)
<b>2. CULTURAL</b>	
	CROSS-CULTURAL SKILLS (.81)
	LIVING TRANSITIONS (.92)
	CROSS-CULTURAL RELATIONSHIPS (.92)
	SITUATIONAL CRISIS (.74) (Indicator)
<b>3. PERSONAL</b>	
	SPIRITUAL RESOURCES (.88)
	PERSONAL WELL-BEING (.94)
	PERSONAL HABITS (.81)
	PHYSICAL HEALTH (.78) (Indicator)
	HISTORICAL TRAUMA (.69) (Indicator)
<b>4. PSYCHOLOGICAL</b>	
	PSYCHOLOGICAL FUNCTIONING (.88)
	COGNITIVE CLARITY (.84)
	PSYCHOLOGICAL MOOD (.93)
	EMOTIONAL CONNECTIONS (.78) (Indicator)
<b>5. RELATIONAL</b>	
	RELATIONAL SUPPORT (.85)
	EFFECTIVE RELATIONSHIPS* (.82)
	FAMILY ADJUSTMENT (.68) (Indicator)
	EXTENDED FAMILY/FRIENDS (.68) (Indicator)

### Results and Discussion

The 100-item, Likert scale, expatriate adjustment instrument called the CernySmith Adjustment Index (CSAI) evolved from 5 years experience for Cerny, Smith and colleagues providing expatriate coaching in over 30 countries with hundreds of expatriates using an unpublished paper pencil cross-cultural stress instrument called the CHOPS 100 (Cerny, 1996,1999). Development began on the CSAI in 2000 and the instrument was normed on the Internet March 2003 – August 2004 with a largely humanitarian sample of expatriates that also included business people, diplomats, and students. The sample was composed of 1,133 expatriate workers and family members living and working in 130 host countries who were from 46 passport countries. For analysis three items were dropped because their correlation with the total instrument was less than .30 reducing the instrument to 97 items and still providing a Chronbach alpha reliability of .96 for the total CSAI score.

The 97 items were subjected to factor analysis using a Principle Component Analysis extraction method and a Promax with Kaiser Normalization rotation method. With a correlation cutoff of .40 the analysis yielded 22 significant factors. Internal reliabilities for the factors were calculated using Chronbach

alpha. Two factors were eliminated using a .65 cutoff reducing the number of factors to 20. Of those 20 factors fourteen had alpha reliabilities above .80. The six with lower alpha reliabilities between .65 and .80 were termed “indicators”. Factors were labeled based on item content and strength analysis.

A unique aspect of the CSAI, which contributes positively to its high face validity, is that for 10 of the 97 items, expatriates are invited to identify, type in using their own words, and rate issues of concern for them. Statistically it was a great curiosity of how this subjective feature would impact the factor analysis. With some relief, the researchers found that all ten of the subjective questions grouped within a broad factor, which was labeled Personal Well-Being.

A t-test of mean gender differences results in a positive result at the .05 level on significance. Therefore separate male and female norms were developed. Also, male and female outliers were analyzed on the 1-2% high and low extremes to identify interpretive validity issues of results. No other demographic differences were noted except that both male and female expatriates >55 years reported generally higher overall adjustment.

Factor grouping into adjustment domains was accomplished through a combination of 2<sup>nd</sup> order factor analysis and theoretical consideration. The study resulted in the norming development of 20 highly reliable expatriate adjustment content scales with high face validity grouped into 5 adjustment domains: Organizational, Cultural, Personal, Psychological, and Relational.

While the CSAI was originally developed as a Level A instrument with a self-interpretive coaching report, it became obvious after an initial trial that maximum benefit comes through coaching the results. Therefore, it was raised to a Level B instrument in November 2005, which means that qualified coaching is required and only coaches can purchase the instrument for their clients.

This study documents first generation norming research for the CSAI, which students (age 13+) participated in using adult versions of the instrument. Because of the expressed need for a student friendly version of the CSAI for expatriates, in October 2005 the norming was extended to a student friendly version for which talks about “school” instead of “organization” and “study” instead of “work”. Second generation norming research will provide separate norms for each CSAI version.

A metaphor of Intercultural Intelligence (ICI) was introduced and developed in the literature review as indicated above. An analysis of the 97 CSAI items results in the finding that 38 items address personal competencies, 25 items address social and cultural skills, and 34 items address environmental demands. Therefore, the CSAI research formula conceptualization is: Intercultural Intelligence (ICI) = Personal Competencies + Social & Cultural Skills – Environmental Demands. The adjustment domains developed from the 20 content scales conceptualized as ICI domains: Organizational, Cultural, Personal, Psychological, and Relational.

The CSAI is currently available online at [www.CernySmith.com](http://www.CernySmith.com) for the clients of expatriate coaches, counselors and other professionals in 5 versions: CSAI-BC (Business/Corporate), CSAI-CG (Civil/Government), CSAI-M (Military Peacekeeping), CSAI-H (Humanitarian), and CSAI-S (Student). Coaching certification is required. It takes about 20-30 minutes to complete online and immediately calculates a 23 page client report and a 5 page coach report. Flexible team or group reports can also be generated averaging male and female group scores.

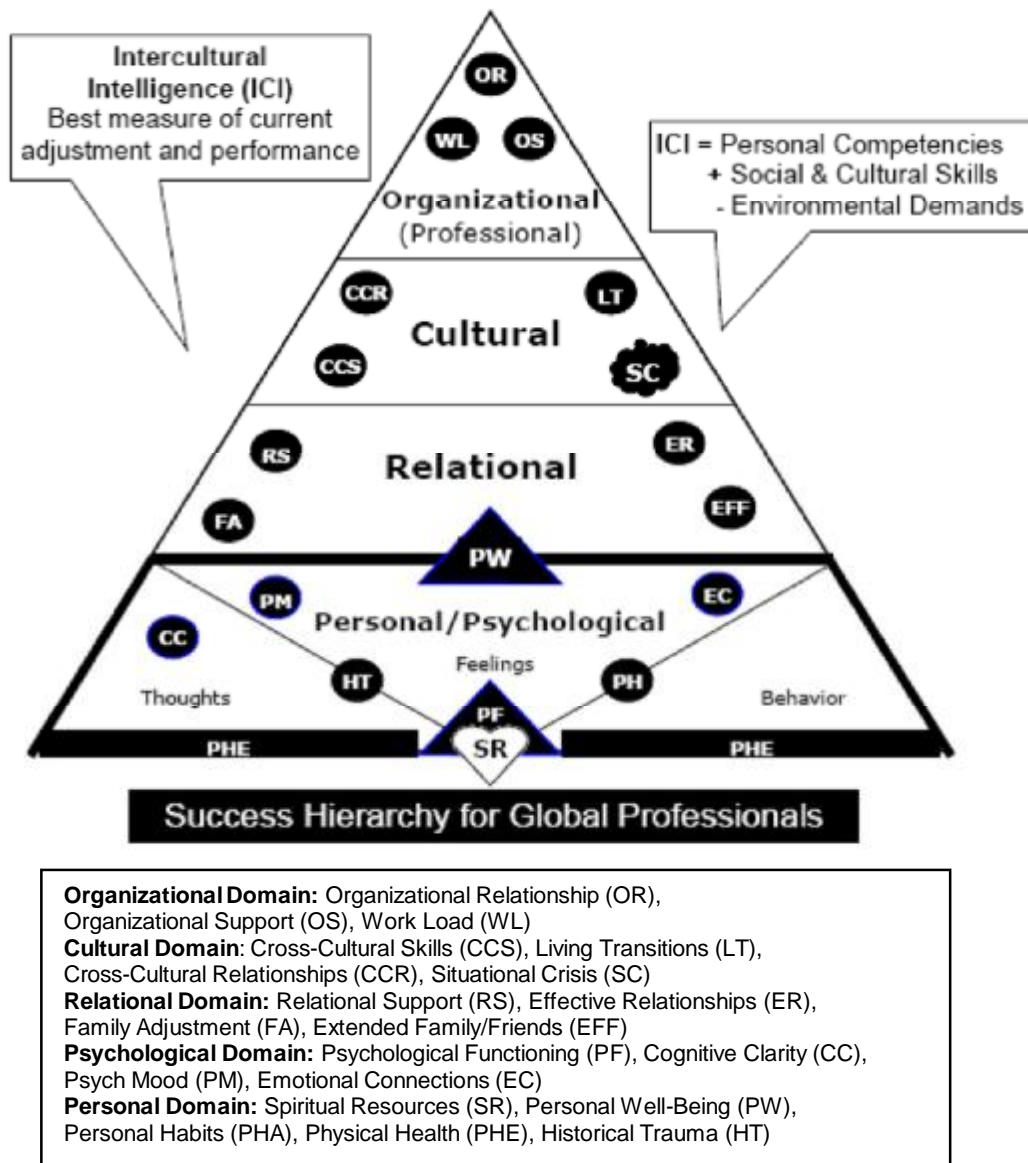
This instrument is appropriate for any expatriate who has been in the field a month or more. It is a state rather than a trait instrument in that it measures well-being for a current period of this past month. A potential benefit of this is that, after obtaining a base line, retesting can track changes in intercultural adjustment and coping skills for expatriates, which may result from change of circumstance or coaching support and intervention.

### **Conclusion**

This research presents compelling evidence that the 20 subscales explain a significant amount of variance related to intercultural adjustment for expatriates. This finding is important in several ways. First, on-field monitoring technology can be said to be more advanced with improved factors as evidenced by these findings. Second, access online is becoming a crucial ingredient in discovering efficient means to apply adjustment-screening technology.

When the entire model is pictured (Figure 1) readers can visualize the potential contribution of the Intercultural Intelligence (ICI) variables that the instrument measures to the well-being and success of expatriates in the field.

**Figure 1** CSAI Intercultural Intelligence (ICI) Model



One advantage in CSAI usage is that it promotes a healthy self-report feedback process with high face validity for expatriates, that includes coaching for growth, development, and success. It is the authors' hope that providing comprehensive field assessment technology will enable and encourage growing coaching support for expatriate employees and family members. Considering the million dollar costs associated with foreign placements, the ROI for international organizations will be extremely profitable.

Another advantage is the CSAI's ease of use, since by accessing the web site, respondents can take the instrument online in 20-30 minutes and their 23 page client report is immediately available to their coach along with a 5 page coach report. A third advantage is that the CSAI contains items not always assessed in other instruments. Various organizations and users who have taken the scale so far have especially found these content scales useful: Organizational Relationship, Cross-Cultural Skills, Cross-Cultural Relationships, Living Transitions, Situational Crisis, Personal Well-Being, Family Adjustment, and Relationship Support. A final advantage is that norms now established allow the researcher to produce online instant feedback through the extensive individual and coaching reports for each respondent. Finally,

the norms and categorizations based on this body of research allow coaches to monitor progress and improvements.

As in other studies in the ICS journal, researchers and practitioners seek an optimal experience for students, training partners, and for self. While many of these studies reveal findings linked with cultural awareness, sensitivity, boundaries, the nature of culture, and interpersonal models; intercultural communicators, coaches, counselors, and international organizations will benefit from a user-friendly instrument with high reliability and strong criterion validity like the CSAI.

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