

CCAI Research Bibliography

Alon, I. and Higgins, J.M. (2005). Global leadership success through emotional and cultural intelligences. *Business Horizons* 48: 501-512.

The CCAI is mentioned as one instrument showing some promise in predicting the ability of the test taker to adapt to different cultural settings and interact with people from other cultures, indicating one's cross-cultural strengths and weaknesses. These skills are important for foreign assignments or leadership success in a cross-national setting. This article primarily focuses on the development of successful, culturally attuned global leaders, and how the construct of CQ may clarify particular adaptations that need to be implemented in leadership development programs for companies interacting across cultures.

Anderson, P.H., Lawton, L., Rexeisen, R., and Hubbard, A.C. (2006). Short-term study abroad and intercultural sensitivity: A pilot study. *International Journal of Intercultural Relations* 30: 457-469.

The purpose of this article is to examine the development of cross-cultural sensitivity through the impact of a short-term study abroad program. The CCAI was mentioned as one of the most widely known instruments to measure some aspect of intercultural sensitivity, however was not actually used in this study. The study provided preliminary evidence that short-term, non-language based study abroad programs can have a positive impact on intercultural sensitivity.

Ang, S., et al. (2007). Cultural Intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation, and task performance. *Management and Organization Review* 3(3): 335-371.

The CCAI was cited as one of the most widely used scales for assessing cross-cultural competency. It was used in testing one construct of CQ, also known as Cultural Intelligence, which related positively to cultural adaptation, an equivalent of Motivational CQ. People with high Motivational CQ have an intrinsic interest in other cultures and might expect to be successful in culturally diverse situations. The authors define CQ as an individual's capability to function and manage effectively in culturally diverse settings. They tested a model that posits differential relationships between the four CQ dimensions: metacognitive, cognitive, motivational, and behavioral, and three intercultural effectiveness outcomes: cultural judgment and decision making, cultural adaptation, and task performance.

Berry, J.W. and Ward, C. (2006). Commentary on “Redefining Interactions Across Cultures and Organizations.” *Group Organization Management* 2006; 31; 64.

The concept of CQ, Cultural Intelligence, was discussed by Earley and Ang as a way to redefine interactions across cultural and explain the process of acculturation. The authors questioned the usefulness of their model, and how its measurement would differ from other assessment tools such as the CCAI. The authors opined that the theory may just be a simplification of the existing research on intercultural effectiveness. The authors also question whether the notion of CQ offers anything additional to the already existing research on acculturation. However they do believe that cognitive and motivational factors, once neglected on this topic, are now being taken into account.

Breiden, O., Mohr, A.T., and Mirza, H.R. (2006). An empirical test of correspondence model of expatriate managers’ work adjustment. *International Journal of Human Resources Management* 17:11 November 2006 1907-1925.

The authors developed a questionnaire based on their model of expatriate managers’ work adjustment. They hypothesized that work adjustment and emotional satisfaction of expatriate managers’ depends on a correspondence between abilities and job requirements and needs and reinforcements. Their evaluation included an assessment of cross-cultural management skills in the adjustment process. They relied on the research on the CCAI and adapted the concepts. Questions tapped emotional resilience, flexibility and openness, perceptual acuity and personal autonomy. Their hypotheses were validated.

Davis, S.L. and Finney, S. J. (2006). A factor analytic study of the Cross-Cultural Adaptability Inventory. *Educational and Psychological Measurement* 66: 318-330.

The purpose of the study is to evaluate the psychometric properties of the CCAI scores, specifically its proposed four-factor structure. The authors discussed the use of the CCAI in applied research and studies. They also gave a description of the development of the CCAI, nevertheless stating that the manual gives a “vague,” “limited description of the developmental history of the instrument,” with “minimal construct-related validity evidence.” The CCAI was administered to participants. Results from factor analysis indicate “poor fit of the four-factor structure,” and “fail[ing] to reveal an interpretable structure.” The authors recommended more research and work at the construct and item level. However, they used only undergraduate students with no cross-culture motivation and did not orient subjects to the nature of the evaluation This calls into question the reliability of their research.

Goldstein, D.L., (1992). A comparison of the effects of experimental training on sojourners' cross-cultural adaptability. Unpublished doctoral dissertation, Florida International University.

The cross-cultural adaptability of international student sojourners who received cross-cultural training was compared with those who received no training. Statistical analysis concluded that the week-long training program was successful in increasing the cross-cultural adaptability, as measured by the CCAI.

Hoffman, E. (2002). Psychological testing at work. McGraw-Hill Companies.

The purpose of this book is to acquaint readers with psychological assessment in global business. The CCAI , “among the most intriguing,” offers considerable conceptual relevance concerning expatriate success, despite it “just beginning to generate significant research.” Hoffman believes that while the CCAI total score is the most reliable indicator of an individual’s cross-cultural adaptability, it is “too global for training purposes,” and therefore sees the four specific scale scores to be more important for predicting adjustment. Hoffman developed the Hoffman Cultural Adaptability Scale to predict expatriate success, as he believes psychological assessment will play a vital role in assuring that entrepreneurs and expatriates are successful globally.

Kitsantas, A. (2004). Studying Abroad: The role of college students’ goals on the development of cross-cultural skills and global understanding. *College Student Journal* , 441-452.

This study examined the impact that study abroad programs have on students’ cross-cultural skills and global understanding, as well as the role that goals have on the development of such skills. Two hundred and thirty two (N=232) study-abroad college students were queried regarding their cross-cultural skills prior to and at completion of the program. The findings of the present study revealed that study abroad programs enhance students’ cross-cultural skills and global understanding. Cross-cultural effectiveness was measured by pre and post-testing using the CCAI.

Kitsantas, A., and Meyers, J. (2002). Studying Abroad: Does it enhance college student cross-cultural awareness? Education Resources Information Center, ED 456-648.

A study measured the outcome of a study abroad program in regard to cross- cultural effectiveness. The CCAI was used pre and post-testing. Results provided preliminary evidence that studying abroad enhances students’ cross-cultural skills.

Kitsantas, A. (2004). Studying Abroad: The role of college students' goals on the development of cross-cultural skills and global understanding. *College Student Journal*, George Mason University: 441-452.

The purpose of this study was to examine the impact that study abroad programs have on students' cross-cultural skills and global understanding. The CCAI was administered to participants in this study, both before and after the study abroad program, to assess their cross-cultural effectiveness and self-awareness. For the total CCAI score and for each of the four subscales, overall students scored higher on the second assessment CCAI, following completion of the program, than during the first assessment before the program. All scores except the perceptual acuity subscale were significantly different, indicating that cross-cultural competence from study abroad programs enhance students' cross-cultural skills and global understanding.

Kraemer, T.J., and Beckstead, J. (2003). Establishing the reliability of using the Cross Cultural Adaptability Inventory with physical therapist students. Journal of Physical Therapy Education, Spring.

The purpose of this study was to establish the reliability of using the Cross-Cultural Adaptability Inventory (CCAI). The sample consisted of 288 entry-level master's degree PT students. Data were analyzed and the reliability was estimated using the Cronbach alpha coefficient of internal consistency. The total score had an estimated reliability of .90. The data supported the hypothesis that the CCAI is a reliable instrument for use with PT students.

Majumdar, B., Keystone, J.S., and Cuttress, L.A. (Eds.). (1999). Cultural sensitivity training among foreign medical graduates. Medical Education, 33(3):177-184.

Residency trainees were to participate in a 15-hour course on cultural sensitivity. Both groups completed The Cross-Cultural Adaptability Inventory at the beginning and then again at the end of the study. The experimental group demonstrated significantly higher scores along three dimensions of the CCAI (openness/flexibility, emotional resilience, and perceptual acuity) as compared to the control group, indicating that cultural sensitivity training was beneficial to foreign trained medical students.

Montagliani, A., and Giacalone, R.A., (1998). Impression management and cross-cultural adaption. Journal of Social Psychology, v138, n 5(598).

The researchers wanted to determine whether “impression management tendencies may be related to the ability to adapt cross-culturally.” Results indicate that the two are related. The researchers used a sample of 112 people: 77 students and 35 employees of a U.S.-based corporation. Each study member was required to take the Self-Monitoring Scale (Synder 1974), The Balanced Inventory of Desirable Responding (Pallhus 1988), The Cross-Cultural Adaptability Inventory (Kelley and Meyers 1992) and The Cross-Cultural Interaction Inventory (Yellen and Mumford 1975). Results indicated that the scores on the two impression management measures were significantly correlated with the responses on the two cross-cultural adaptability measures, affirming the researchers’ hypothesis. This also indicates the concurrent validity of the CCAI.

Stanhope, V., Soloman, P., Pernell-Arnold, A., Sands, R.G., and Bourjolly, J.N. (2005). Evaluating cultural competence among behavioral health professionals. *Psychiatric Rehabilitation Journal* 28(3): 225-233.

This article focuses on the need for culturally competent behavioral health professionals, and on the evaluation of education and training programs in order to ensure improved cultural competence (CC) of providers and promote recovery for mentally ill individuals. The CCAI is mentioned as a measure for cultural competence. The article further states that the CCAI has been used to evaluate intercultural effectiveness in settings such as the Peace Corps and business, demonstrating the use of CC measures in other fields besides behavioral health. It described the purpose for which Kelley and Meyers developed the CCAI; “a tool to help trainees develop self-understanding about their cross-cultural ability and for trainers to connect theoretical awareness to practical application.” Limitations to existing CC measures were given, such as the reliance on self-report measures, whether they rely too heavily on race and ethnicity, and how relevant or appropriate they are to behavioral health agencies.

Tang, J.M., (2001). Towards Understanding the Role of Emotional Intelligence in Cross-Cultural Adaptability In Adults. Unpublished doctoral dissertation, Alliant International University, Los Angeles, CA.

Emotional intelligence is the level of development and sophistication in social interaction, particularly regulation of emotions, expression of emotions, and empathy. It was hypothesized that emotional intelligence was an important factor in cross-cultural interactions. The CCAI was used as the measure for cross-cultural adaptability, the dependant variable. The predictor variables were measures of emotional intelligence (empathy, emotional expression, and emotional regulation). The study confirmed a correlation between emotional intelligence skills and cross-cultural adaptability.

Tett, R.P., Fox, K.E., and Wang, A. (2005). Development and Validation of a Self-Report Measure of Emotional Intelligence as a Multidimensional Trait Domain. *Personality and Social Psychology Bulletin* 2005; 31: 859.

Psychometric review of 33 peer reviewed studies of six self-report emotional intelligence (EI) measures supports a multidimensional conceptualization. The CCAI was used as a measure of cross-cultural adaptability. The four cross-cultural adaptability subtests of the CCAI were predicted by nine of the ten proposed subscales controlling for other variables such as social desirability.

Thomas, D.C., et al. (2008). Cultural Intelligence: Domain and assessment. *International Journal of Cross Cultural Management* 8(2): 123-143.

Although the CCAI is not mentioned specifically here, it is implied through its reference to another article, which included the CCAI in its particular study. Thomas et al. indirectly refers to the CCAI when stating that there are “a number of self-report instruments that assess individuals’ perceptions about their ability to behave effectively in cross cultural interactions.” This reinforces the idea that the CCAI is the standard self-report instrument that measures people’s beliefs about their cross-cultural competency. This article defines CQ as “a system of interacting knowledge and skills, linked by cultural metacognition, that allows people to adapt to, select, and shape the cultural aspects of their environment.” Important elements include cultural knowledge, cross-cultural skills, and cultural metacognition.

Thomas, D. Development of the Cultural Intelligence Assessment. Grant from the Social Science and Humanities Research Council of Canada, Simon Fraser University.

The authors reviewed instruments that are believed to measure skills associated with cross-cultural effectiveness, and items were drawn from many scales, one of which was the CCAI.

Tsai, D.C. (1995). Reliability of the Cross-Cultural Adaptability Inventory. Unpublished doctoral dissertation, Rosemead School of Psychology, La Mirada, CA.

This study confirmed the test retest reliability of the CCAI. The CCAI was administered to 96 students twice over a one month interval. The results indicated a significant positive correlation ($r = .77$, $p > .001$), suggesting that it is fairly stable over an intermediate period.

Vaughan, G. (2006). Book Review: Understanding Social Psychology Across Cultures: Living and Working in a Changing World. *Journal of Cross-Cultural Psychology* 37: 590-592.

(No mention of CCAI...)

Ward, C., Berno, T., and Main, A. (2000, July). 'Can the Cross-cultural Adaptability Inventory (CCAI) predict cross-cultural adjustment?' Paper presented at the XV International Congress of the International Association for Cross-cultural Psychology, Pultusk, Poland.

This paper includes the results of two studies, each of which “explore(s) the concurrent and predictive validity of the CCAI with international students.” The first study revealed that emotional resilience and flexibility were related to fewer psychological and sociocultural adaptation problems; perceptual acuity and personal autonomy were associated with fewer sociocultural difficulties. Study 2 demonstrated that all four dimensions of the CCAI were found to be significantly related to the students’ psychological and sociocultural distress overseas; emotional resilience was found to be the strongest predictor of psychological wellbeing and perceptual acuity was the key factor in sociocultural adaptation. The authors concluded that the CCAI is a reliable and valid instrument “for assessing personality, behavior, and skills required for cross-cultural adaptation.”

Ward, C., et al. (2008). The convergent, discriminant, and incremental validity of scores on a self-report measure of cultural intelligence. *Educational and Psychological Measurement* 69:85.

Ward, C., Leong, C., and Low, M. (2004). Personality and Sojourner Adjustment: An exploration of the Big Five and the Cultural Fit Proposition. *Journal of Cross-Cultural Psychology* 35: 137-151.

(No reference to CCAI?)...The purpose of this article is to explore the relationship between the Big Five personality dimensions and cross-cultural adjustment, and to test the “cultural fit” hypothesis. Research demonstrated that four of the Big Five personality factors are significantly related to cross-cultural adjustment, however there was no support for the cultural fit proposition.

Wells, K.H. (2004). Emotional intelligence as an ability and its relationship with openness to difference. Unpublished doctoral dissertation, Alliant International University, San Diego, CA.

This study posited a correlation between Emotional Intelligence (EI) and openness to difference as indicated by self-perceived flexibility to difference and self-reported receptiveness to difference. The Mayer/Salovey/Caruso Emotional Intelligence Test was used to assess EI. The Flexibility/Openness Scale of the CCAI assessed self-perceived flexibility to difference. The RTD Scale was a self-report measure. The total score of the MSCEIT correlated positively and significantly with the scores on the Flexibility/Openness Scale of the CCAI ($r = .39, p = .01$), as well as with the scores on the RTD Scale ($r = .37, p = .01$). Additionally, the CCAI correlated with the scores from the RTD Scale ($r = .51, p = .01$).