

CROSS-CULTURAL PSYCHOLOGICAL CAPITAL: A VALIDATION STUDY

MAREN DOLLWET

Claremont Graduate University, CA
123 E 8th St, Claremont, CA, 91711

REBECCA J. REICHARD

Claremont Graduate University

INTRODUCTION

Due to economic, political, and market force expansion, increasing globalization has led to a search for organizational strategies that focus on identifying and developing leaders who are effective in cross-cultural work settings (Ang & Inkpen, 2006). Even within an organization situated in its home country, the workforce has also become increasingly diverse in terms of race, ethnicity, and nationality (Cox, 1991). Thus, globalization and 'at home' growth in workforce diversity highlight the importance of fostering leaders' cross-cultural skills even if they are not going on international assignments.

As an alternative to traditional cultural training, a strategy that focuses on building leaders' psychological resources is argued to broaden the impact of developmental efforts. Research by Kealey and Protheroe (1996) indicates that in order to effectively foster cross-cultural skills within a workforce, merely equipping employees with country-specific factual knowledge (e.g., language, policies) is not enough. Instead, these authors assert that strategies aimed at building psychological resources such as the ability to cope with stress, build relationships, and adapt to novel situations are important in ensuring successful international interactions across multiple cultural contexts. Congruent with this line of research, this paper defines a new construct of cross-cultural positive psychological capital (or cross-cultural PsyCap) that can be used to assess cross-cultural competencies. This proposed construct is intended to capture competencies that are generalizable across cultural boundaries and therefore facilitate successful interactions with members of multiple cultures. By developing these generalizable competencies, organizations can gain a competitive advantage in an increasingly global and diverse economy. The purpose of this study is therefore to a) define and develop a measure of cross-cultural PsyCap, and b) test its hypothesized factor structure and reliability.

Cross-Cultural PsyCap

Gertsen (1990) refers to cross-cultural competence as the ability to function effectively in another culture. Cross-cultural PsyCap, more specifically, builds upon Luthans and colleagues definition of workplace PsyCap, which is a multidimensional construct referring to an individual's positive psychological state of development and is characterized by self-efficacy, hope, optimism, and resilience and is anchored to the context of the workplace (Luthans, Youssef, & Avolio, 2007). Workplace PsyCap can be validly and reliably measured (Luthans, Avolio, Avey, & Norman, 2007), developed in micro-interventions in-person and on-line (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans, Avey, & Patera, 2008; Luthans & Youssef, 2004), and has a significant impact on performance (Luthans, Avey, Avolio, &

Peterson, 2010) and other important attitudinal work outcomes (Avey, Reichard, Luthans, & Mhatre, 2011) above and beyond employee traits (Avey, Luthans, & Youssef, 2009).

With regard to the current study, we argue that a person high in cross-cultural PsyCap has high self-efficacy, hope, optimism, and resilience when it comes to interacting with people from different cultures. Thus, cross-cultural PsyCap is a form of positive psychological capital that is anchored to the context of cross-cultural interactions, rather than the work environment. Similar to workplace PsyCap, cross-cultural PsyCap is argued to be state-like, measurable, have an impact on performance, and is grounded in theory and research (Luthans et al., 2007). The individual dimensions of the higher-order construct of cross-cultural PsyCap are discussed next.

Cross-Cultural Self-Efficacy. Self-efficacy refers to an individual's belief in their ability to achieve a particular task (Bandura, 1997) and is domain-specific and variable, meaning that it depends on the context and can vary by situation (e.g., Luthans et al., 2007). Cross-cultural efficacy, specifically, implies that individuals do not merely possess discrete knowledge about different cultures, but that they are confident in their effectiveness to interact with people from other cultures and to use multiple skills in diverse settings (Nunez, 2000). Self-efficacy is based on practice or mastery, can be influenced by others, and can be developed. Individuals with high cross-cultural efficacy are characterized as setting high goals for themselves, welcoming challenges, overcoming obstacles, and being highly self-motivated when it comes to cross-cultural interactions. A study by Luthans, Zhu, and Avolio (2006) revealed that self-efficacy is related to work attitudes across cultures. We, therefore, argue that it is an important attribute for successfully working in international and diverse settings as one component of cross-cultural PsyCap.

Cross-Cultural Hope. Hope, another component of PsyCap, appears to be a relevant psychological resource in the context of cross-cultural interactions. According to Snyder, Irving, and Anderson (1991), hope refers to a cognitive and motivational state that enables people to set realistic goals that are attained through self-directed behavior (agency) and the capability of generating alternative ways to reach those goals when encountering barriers (pathways). Thus, people who have high levels of hope regarding cross-cultural interactions can be described as pursuing and meeting goals related to working with people from different cultures, even when encountering problems. Studies show that hope is related to multiple positive outcomes including autonomy, independent thinking, and resourcefulness (Luthans et al., 2007). These positive outcomes are particularly relevant for global leaders as they frequently have to make decisions based on insufficient information as well as find and make use of available resources (Lobel, 1990). Thus, it is expected that hope is also an important psychological resource when working across cultures.

Cross-Cultural Optimism. The next cross-cultural PsyCap component, optimism, focuses on how events, both positive and negative, are interpreted. In other words, optimism is an attributional style in which positive events are attributed to permanent internal/personal factors and negative events are attributed to temporary external/situational factors (Seligman, 1998). In addition to this attributional style, optimism has also been defined as an expectancy of positive outcomes (Scheier & Carver, 1992). Taken together, because optimistic individuals put forth continuous effort to attain a goal even in light of difficulties (Peterson, 2000), we argue that people who are high in cross-cultural optimism are likely to attribute a successful cross-cultural

interaction to their own effective communication and negotiation skills and usually expect the best when interacting with people from different cultures. According to Jokinen (2005), optimism is an important mental state for global leaders as it has been found to relate to the ability to handle ambiguity, take risks and learn from mistakes - all characteristics that represent the cross-cultural context. Thus, optimism has important implications for remaining motivated when working in a cross-cultural context that is oftentimes characterized by ambiguities and setbacks (Risberg, 1997).

Cross-Cultural Resilience. The final component of cross-cultural PsyCap, resilience (Masten, 2001), is seen as the capacity to adapt and bounce back from events, both negative (e.g., adversity, conflict, failure) as well as positive (e.g., increased responsibility). Resilience addresses the cumulative and interactive nature of both individual assets (e.g., relationships, independence, initiative) and the frequency and exposure to risk factors (e.g., destructive experiences, trauma, stress; Luthans et al., 2007). Cross-cultural interactions are fraught with setbacks and confusion and resilient individuals acknowledge setbacks, strive to overcome them and even go beyond the normal point of equilibrium (Luthans, 2002). In addition to enabling individuals to cope with negative events, resilience can increase performance in cross-cultural interactions as it promotes proactive learning and problem-solving coping strategies even in times of hardship (Dumont & Provost, 1999; Luthans et al., 2007).

Taken together, cross-cultural PsyCap is defined as one's motivational propensity when interacting across cultures. In the present study, we test this hypothesized higher-order factor structure for cross-cultural PsyCap with the four sub-factors cross-cultural self-efficacy, hope, optimism, and resilience and assess the newly developed measure's reliability.

METHODS

Participants and Procedures

The participants were recruited using the Mturk online recruitment database. In this initial study, 140 participants completed a survey containing the newly developed cross-cultural PsyCap items. All participants were over the age of 18 and 66.4% had either a 4-year college degree or a graduate degree. The participants were mostly male (66.4%) and were fairly ethnically diverse, in that 67.9% were Asian/Pacific Islanders, 27.9% were Caucasian, 2.1% were Hispanic, 1.4% were Native American, and 0.7% were African American. The majority of participants have never lived outside their country of citizenship (56.4%). After the completion of the 15-minute survey, all participants were debriefed and awarded \$0.60 for their participation.

Cross-Cultural PsyCap Measure

Initially, 34 items were developed by changing the reference of the items contained in the original PsyCap measure from work contexts to cross-cultural contexts. Adaptation of items from the workplace PsyCap measure was utilized because this original measure has demonstrated strong reliability and validity (Luthans et al., 2007) and because PsyCap is considered context specific. The preliminary content validity of the new measure was assessed using the Q-sort method (Nahm, Solis-Galvan, & Subba Rao, 2002). Specifically, four doctoral

students in Psychology, trained in PsyCap and unaware of intended subscale sorted the items into the four categories of cross-cultural PsyCap (self-efficacy, hope, optimism, resilience). The accuracy of the Q-sort was 84.6% for the initial 34 items. Four of the items were categorized incorrectly by at least three of the research assistants. These four items were, therefore, excluded so that the final scale used in this study consisted of a total of 30 items. All items are rated on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item from the 10-item self-efficacy subscale is “I feel confident when interacting with individuals from different cultures.” The 6-item hope subscale contains items such as “I can think of many ways to reach my goals when interacting with individuals from different cultures.” An example item from the 7-item optimism subscale is “I always look on the bright side of things regarding cross-cultural interactions.” Finally, an example from the 7-item resilience subscale is “Even when things are tough, I can interact quite well with people from different cultures.”

RESULTS

There was no missing data in this study nor were there any outliers or data entry errors. The skew (range from -.79 to .89) and kurtosis (range from of -1.96 to 1.11) for all variables was acceptable.

Validation of the New Cross-Cultural PsyCap Measure

To confirm the higher-order structure of cross-cultural PsyCap, a confirmatory factor analysis was conducted using AMOS 19 software. Specifically, we examined whether overall cross-cultural PsyCap exists as a second-order factor and whether it explains the relationships among the four lower order factors, namely cross-cultural hope, optimism, self-efficacy, and resilience using the AMOS maximum likelihood procedure (Arbuckle & Wothke, 1999). In doing so, the hypothesized higher-order factor model, in which all items first load on their respective subscales and then on the higher-order factor cross-cultural PsyCap, was compared to a one factor comparison model with all items loading on the factor cross-cultural PsyCap. Several criteria (Hu & Bentler, 1999) were used to evaluate overall fit of the tested models: a) chi-square (χ^2), and the ratio of the differences in chi-square to the differences in degrees of freedom (χ^2/df), b) comparative fit index (CFI) and incremental fit index (IFI) with values ranging from 0.00 to 1.00, where low values indicate poor fit and values close to 1.00 indicate superior fit, and c) root mean square error of approximation (RMSEA) value, where values of .08 and below are indicative of good fit and values greater than .10 are indicative of a poor fitting model.

Hypothesized Model. Based on theory and research, the hypothesized model was represented by the four factors of cross-cultural hope, efficacy, optimism, and resilience loading on to a higher order factor of PsyCap. The results of a confirmatory factor analysis yielded a significant chi-square fit index, $\chi^2 = 933.72$, $df = 373$, $p < .001$, suggesting that the hypothesized model is not a good fit for the data. However, chi-square results are highly sensitive to sample size, which is why the fit index of χ^2/df is the preferred way to test the goodness of fit because it controls for sample size (Marsh, Balla, & McDonald, 1988). In this model, this fit index ($\chi^2/df = 2.50$) was lower than 5. While the former low χ^2/df index supports an adequate fitting model, the

low IFI and CFI indices (IFI = .77, CFI = .77) and relatively high RMSEA index (RMSEA = .10, 90% CI: .01 to .11) are not indicative of a good fitting model. Thus, findings suggest that the initial hypothesized model was not a good fit for the data. To shed light on these findings, we examined the standardized regression coefficients between the indicators and their respective factor. In general, standardized regression weights of the size .60 or higher are desired. In this model the size of the standardized regression weights ranged widely (ranged from $\beta = -.18$ to $\beta = .98$) with four out of the 30 indicators not having significant regression weights at the $p = .05$ level of significance and several regression weights being below the desired value of .60. These findings indicate that some of the items are not functioning as expected and should be removed to improve model fit.

Revised Model. In the revised model, all non-significant indicators and all indicators that had low standardized regression weights ($\beta < .60$) were excluded. The revised model contained 20 items in total with four items measuring cross-cultural hope, nine items measuring cross-cultural self-efficacy, four items measuring cross-cultural optimism, and three items measuring cross-cultural resilience. The fit indices for the revised model were much better than for the original model. Specifically, the chi-square fit index, while still significant, was lower than in the previous model ($\chi^2 = 299.43$, $df = 166$, $p < .001$). Taken together, all four fit indices point to a good fitting model including the index of $\chi^2/df = 1.80$ being well below five, the high IFI and CFI indices (IFI = .93, CFI = .93), and the acceptable RMSEA index (RMSEA = .07, 90% CI: .06 to .90).

All standardized regression weights for the indicators loading on the four sub-factors hope, self-efficacy, optimism, and resilience ranged from $\beta = .59$ to $\beta = .98$ and were all significant at the $p = .001$ level of significance. Furthermore, in support of the hypothesized higher order structure of cross-cultural PsyCap, the four sub-factors also had significant standardized regression weights (hope: $\beta = .73$, $p < .001$; self-efficacy: $\beta = .98$, $p < .001$; optimism: $\beta = .93$, $p < .001$; resilience: $\beta = .87$, $p < .001$). Thus, the examined fit indices and standardized regression weights suggest that the revised model with 20 items is a good fit for the data.

In addition, we compared this revised model to a comparison one-factor model, in which all items load on cross-cultural PsyCap. As the two models were not nested, the Akaike's informational criteria (AIC) values of the models were compared, with a smaller AIC value being indicative of a better fit (Akaike, 1978; Kumar & Sharma, 1999). The one-factor comparison model had a significant chi-square fit index ($\chi^2 = 424.54$, $df = 170$, $p < .001$) and a χ^2/df of 2.50. The IFI and CFI indices were low (.86 and .86, respectively) and the RMSEA index was high (RMSEA = .10, 90% CI: .09 to .12). Taken together, these fit indices do not support a good fitting one-factor model. Furthermore, the AIC index for this model is 504.54, while it was only 387.43 for the revised hypothesized model. Thus, this data shows that the hypothesized and revised model was a better fit for the data than the one-factor comparison model and this provides further support for the higher order structure of cross-cultural PsyCap and its four sub-factors cross-cultural hope, self-efficacy, optimism, and resilience.

Reliability Analysis of the New Cross-Cultural PsyCap Measure

Lastly, reliability analyses for the final 20-item scale of cross-cultural PsyCap were conducted. Specifically, the Cronbach's α value for each subscale as well as the overall scale

was calculated. The results show very good reliabilities: cross-cultural self-efficacy $\alpha = .92$, cross-cultural hope $\alpha = .83$, cross-cultural optimism $\alpha = .82$, and cross-cultural resilience $\alpha = .86$. Finally, the overall scale of cross-cultural PsyCap had a Cronbach's α of .95.

DISCUSSION

In the context of globalization and workforce diversity, we expect the importance of cross-culturally competent leaders and employees to only continue to increase. Traditionally, the emphasis on cultural competence has been on knowledge of a specific culture. However, we sought to expand the understanding of cross-cultural competence to include psychological skills. Building upon the theoretical foundations of workplace psychological capital (Luthans et al., 2007), the purpose of this study was to provide a clear construct definition of cross-cultural PsyCap, develop and test a new measure of this new construct, and set an agenda for future construct validation.

Cross-cultural PsyCap was defined as one's motivational propensity when interacting across cultures. We demonstrated through confirmatory factor analysis that cross-cultural PsyCap is a higher-order construct composed of four lower-order constructs: (1) cross-cultural self-efficacy, or one's confidence in his/her ability to interact with those from different cultures; (2) cross-cultural hope, or one's agentic capacity to set and pursue cross-cultural goals and maintain motivation toward those goals through the possession of multiple pathways for success; (3) cross-cultural optimism, or one's positive expectancy for success in his/her future cross-cultural interactions; and (4) cross-cultural resilience, or one's ability to rebound or 'bounce back' quickly from setbacks or successes in cross-cultural interactions.

Specifically, upon removal of low loading items, the findings of this study support the hypothesized higher-order structure of cross-cultural PsyCap. The model was superior to a comparison one-factor model without the four subscales and had good fit indices as well as significant standardized regression weights. Furthermore, the newly developed scale of cross-cultural PsyCap demonstrates strong reliability indices. Thus, this research adds to the theoretical foundations of positive psychological capital (Luthans et al. 2007) as well as the literature on international/cross-cultural work assignments. The developed and tested measure of cross-cultural PsyCap therefore has important implications for future research and practical applications.

LIMITATIONS & FUTURE DIRECTIONS

A potential limitation of this study is that it makes use of correlational survey data, thus the relationships between the constructs may be artificially increased due to common method bias (Lindell & Whitney, 2001), especially as all behavior was assessed using a survey format. A direction for future research would therefore be use experimental and longitudinal designs with more measurement times as well as longer time lapses so that causal statements about the relationship between the studies variables can be made. Additionally, the next step for research is to now test the measure's convergent, discriminant, and predictive validity by assessing how the construct of cross-cultural PsyCap relates to other constructs in the cross-cultural arena.

REFERENCES AVAILABLE FROM THE AUTHORS