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The Relationship of Cultural Intelligence with Task and Contextual Performance: 
A Study in a Hyper-diverse Work Environment

Abstract

The relationship of global cultural Intelligence (CQ) and its facets with job performance was investigated in 182 expatriate employees in Abu Dhabi. Job performance was viewed in terms of helping (OCB-H) and voice (OCB-V) organizational citizenship behaviours and in-role behaviours (IRB). The effects of trait Emotional Intelligence (EI) were also taken into account. Preliminary analysis show support for most hypotheses.
Cultural intelligence (CQ) refers to the ability to reason, function, and operate effectively in culturally diverse settings (Ang et al., 2007; Earley & Ang, 2003). CQ is conceptualized as a multi-faceted construct with four facets: meta-cognitive (MCQ), cognitive (CCQ), motivational (MoCQ), and behavioural (BCQ). MCQ reflects conscious awareness of one’s cultural assumptions and control over the thought processes that underline acquisition, understanding and calibration of cultural knowledge; CCQ reflects actual knowledge of cultural facts; MoCQ focuses on the desire, belief in and capability to expend effort towards the acquisition of knowledge about cross-cultural functioning; and BCQ refers to the actual capacity to adopt behaviours that are appropriate in cross-cultural situations (Earley & Ang, 2003).

Albeit a relatively new construct, CQ has attracted substantial attention because of its promise to predict outcomes in culturally diverse environments (Fang, Schei & Selart, 2018). However, knowledge about how CQ and its facets relate to the critical outcome of job performance in multi-cultural settings remains incomplete. Job performance is multidimensional, two major dimensions being task performance or in-role behaviours (IRB) (performance in formally prescribed tasks and roles), and contextual performance or organizational citizenship behaviours (OCB) (these benefit the group but do not explicitly form part of the job) (Borman & Motowidlo, 1997; Organ, 1997). Research on how CQ relates to contextual performance is still too scant to provide a basis for conclusions. Furthermore, though more voluminous, empirical literature on CQ and task performance is by no means exhaustive or consistent in its findings, studies are needed to create a substantial mass of coefficients for definite conclusions (Bettis, Helfat & Shaver, 2016). In addition, some empirical research on CQ and job performance, though valuable, has been conducted in
settings that are not unequivocally culturally diverse, such as workplaces with individuals from the same ethnicity (e.g., Jyoti & Kour, 2017).

In light of the above, this study investigated the relationship of global CQ and its facets with contextual and task performance in arguably one of the most culturally diverse work environments in the world, the United Arab Emirates (UAE). Contextual performance was considered in terms of helping OCB (OCB-H) – behaviours of support towards others - and voice (OCB-V) – behaviours that relate to making suggestions for improvements to existing practices (Van Dyne & LePine, 1998).

**Hypotheses**

There is reason to expect that both global CQ and its facets facilitate job performance (e.g., Ang et al., 2007; Malek & Padhwar, 2013). For example, MCQ should enable individuals to monitor, revise and re-adapt their cultural assumptions and mental models of country and ethnic cultural norms according to the setting, which should facilitate understanding of requirements and needs of others, hence, IRB and OCB. High CCQ means more knowledge about differences in norms, mentalities and expectations between cultures, which should enhance adaptation and capacity to act in culturally diverse work environments, which should also strengthen IRB and OCB. MoCQ should render the individual interested in emerging oneself in tasks and roles that require cultural learning and adaptation, which should also increase the likelihood to perform IRB well and to engage in OCB. Moreover, high BCQ should enable choosing from the inter-cultural behavioural repertoire those behaviours that are most appropriate for each culturally diverse work situation, which should also help in prescribed tasks but also in offering voice and assistance when this is not formally demanded. Finally, CQ relates to expatriate cross-cultural adjustment (Shu, McAbee & Ayman, 2017), and people who are better adapted to the host country should be more
willing to help others and should feel more comfortable voicing their views about changes and improvements, that is, to engage in helping and voice OCBs.

In testing the relationship of CQ with job performance, emotional intelligence (EI, Salovey & Mayer, 1990) should be taken into account: First, CQ, like EI, has a large emotional component (Westby, 2007) and both are geared towards how individuals act in social situations. Second, both CQ and EI relate to outcomes in culturally diverse settings, such as cross-cultural adjustment (e.g., Koveshnikov, Wechtler & Dejoux, 2014; Malek & Budhwar, 2013; Shu et al., 2017). Third, their relationship is of considerable strength (Crowne, 2013). Considering that EI has been around for much longer than CQ, for CQ to be of substantive importance it should explain job performance beyond EI.

**Hypothesis 1**: Global CQ will be related to OCB-H (H1a), OCB-V (H1b) and IRB (H1c), after EI is taken into account.

**Hypothesis 2**: The facets of CQ, namely MCQ, CCQ, MoCQ and BCQ will be positively related to OCB-H (H2a, H2b, H2c, H2d), OCB-V (H2e, H2f, H2g, H2h), and IRB (H2i, H2j, H2k, H2l), after EI is taken into account.

We anticipate that CQ and its facets play a stronger role in contextual than in task performance. Contextual performance is discretionary and largely relates to how individuals operate at social and interpersonal level (e.g., whether the individual judges that colleagues need and are willing to accept help, or whether the individual is disposed to approach others to talk about needs for changes). In this respect, the capacity to function interpersonally in culturally diverse settings, which is the essence of CQ, should play a key role. In contrast, task performance is oriented towards prescribed and technical tasks that do not always contain interpersonal elements.

**Hypothesis 3**: Global CQ and its facets will be more strongly related to OCB-H and OCB-V than to IRB (H3a through H3j).
It has been theorized that the facets of CQ interact (Earley & Ang, 2003). This is assumed especially for MCQ with the other facets, because of MCQ’s self-regulatory properties that should enhance the individual’s capability to focus on those aspects of cross-cultural knowledge, skills and behaviours that need improvement or are of importance according to situational contingencies (Chua & Ng, 2017). However, apart from a single study so far, where Chua & Ng (2017) looked at how the interaction between MCQ and CCQ related to creativity in a student sample, the interactive effects of CQ facets have not been empirically tested as yet. Considering the self-regulatory properties of MCQ:

**Hypothesis 4**: MCQ will moderate the relationships of CCQ, MoCQ and BCQ with OCB-H (H4a, H4b, H4c), OCB-V (H4d, H4e, H4f) and IRB (H4g, H4h, H4i) in a way that the relationships will be strongest for high values of MCQ.

**Method**

**Setting and Participants**

Participants were 182 (134 men and 48 women, Table 1 for demographics) expatriates working full-time in a variety of industries in Abu Dhabi, which is part of the UAE. Their supervisors (age \( M = 40.4, \ SD = 9.48 \) years, organizational tenure \( M = 5.62, \ SD = 4.23 \) years) rated them on job performance. The population of UAE is composed of nearly 90% expatriates (De Bel-Air, 2018). These people must interact on an everyday basis with individuals from different cultural backgrounds within a host country, and must perform successfully in their work. Hence, the sample and setting were ideal for the study. Participants were from every continent, including Africa, Australia, Asia, Europe, the Middle East, North, Central and South America, and the UAE (excluding Abu Dhabi) itself.

**Measures**

Measures utilized a 1 (strongly disagree) to 7 (strongly agree) response format.
Cultural intelligence was measured with 14 items from Ang et al.’s (2007) scale: three items for MCQ ($\alpha = .78$), four for CCQ ($\alpha = .87$), three for MCQ ($\alpha = .80$), and four for BCQ ($\alpha = .85$). A CFA with global CQ modelled as second-order factor and the four facets as first-order factors indicated satisfactory data fit ($\chi^2 = 123.05, p < .001; \text{CFI} = .960; \text{TLI} = .947; \text{RMSEA} = .067; \text{SRMR} = .049$) to utilize the scale as measure of both global CQ and its facets separately.

OCB-H, OCB-V and IRB were assessed by supervisors on five, five and three items respectively from Van Dyne and LePine’s (1998) scale. Cronbach alphas were .88, .81 and .77, respectively. A CFA with the items loading on their respective constructs indicated satisfactory data fit ($\chi^2 = 115.33, p < .001; \text{CFI} = .953; \text{TLI} = .938; \text{RMSEA} = .071; \text{SRMR} = .048$).

EI was measured as trait EI using 14 items from Wong and Law (2002): three for self-emotional appraisal ($\alpha = .83$), three for other’s emotional appraisal ($\alpha = .79$), four for regulation of emotion ($\alpha = .79$) and four for use of emotion ($\alpha = .82$). A CFA with EI modelled as higher-order factor suggested satisfactory fit ($\chi^2 = 130.42, p < .001; \text{CFI} = .952; \text{TLI} = .937; \text{RMSEA} = .069; \text{SRMR} = .054$). The global factor was utilized in the analysis. A CFA treating CQ and EI as second-order factors with their facets as first-order factors showed respectable data fit ($\chi^2 [249, N = 182] = 530.25, p < .001; \text{CFI} = .916; \text{TLI} = .899; \text{RMSEA} = .067, 90\% \text{SRMR} = .64$), suggesting that the two scales measured different constructs.

Other controls included biological sex (male: 1, female: 2), age, organizational tenure, educational attainment (1: secondary school to 4: graduate degree), organizational grade (1: subordinate to 5: senior management) and area of origin (UAE: 1, non-UAE: 2).

Results
Structural equation modelling (SEM) with MPlus is utilized for hypotheses testing. The data analytic strategy is to treat global CQ and its facets as second and first-order latent variables and the rest of the variables as manifest because of the large number of items involved in the estimations of latent factors that could deduct from statistical power. EI is to be included in all equations. Otherwise, only those controls that demonstrated significant relationships with criteria were included in each model. Preliminary results show general support for most parts of the Hypotheses.

**Discussion**

A detailed discussion will be presented once the analysis is complete. Nevertheless, the preliminary results advocate the value of cultural intelligence (CQ) for job performance in culturally diverse settings. Global CQ seems to related to both task performance and to two key expressions of contextual performance. And that pattern appears to generally hold across CQ dimensions, suggesting that all facets of CQ play distinctive yet complementary roles. That testing took into account the effect of emotional intelligence further strengthens the argument made by the results.
References


Wong, C-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence
Table 1

Descriptive Statistics and Inter-correlations (N = 182).

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† p < .1 * p < .05. ** p < .01. *** p < .001.