Importance of Organizational Citizenship Behaviour for Overall Performance Evaluation: Comparing the Role of Task Interdependence in China and the USA

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ABSTRACT In a cross-cultural experiment, we examined how task interdependence influences the importance of organizational citizenship behaviour (OCB) in employee performance evaluations in China and the USA. A total of 150 graduate students in China and 154 in the USA (a total of 304), who serve as evaluators, participated in the experiment. Participants were exposed to a task interdependence manipulation and then rated the importance of OCB in their overall performance evaluations of employees. Results support the moderating effects of national culture (both using a country proxy and as a measure of collectivism) on the affects of task interdependence. Although among evaluators from the USA perceptions of the importance of OCB increased as task interdependence increased, the effects of task interdependence were significantly attenuated among evaluators from China. Implications of these results for research and practice are discussed.

KEYWORDS collectivism, cross-cultural test, organizational citizenship behaviour, overall performance evaluation, performance attributions, task interdependence

INTRODUCTION

Research on international issues (Earley and Singh, 1995; Hofstede, 1980), particularly country differences in microlevel issues such as work attitudes (Ronen and Shenkar, 1985) affecting work productivity and the performance appraisal process (Hui et al., 2000; Lam et al., 1999) has steadily filtered into the organizational citizenship behaviour (OCB) domain. Organ (1988) defined OCB as ‘individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in aggregate promotes the effective functioning of the organization’ (p. 4). OCB as valuable behaviour for organizational members is well
established in Western societies such as the USA. Empirical evidence consistently shows that OCB is correlated with formal performance evaluation among US employees (Podsakoff et al., 2000). Although there has been increasing interest in defining and measuring the concept of OCB in the Chinese context in recent years (Farh et al., 1997, 2004), whether OCB is a valued employee behaviour in China remains an open question. Is it possible that managers in different cultures do not place similar value on OCB? Specifically, would Chinese managers consider OCB to be more or less important in their formal evaluation of employee performance than US managers?

A contingent factor influencing the importance of OCB in Western societies (Bachrach et al., 2006; Van Der Vegt et al., 2003) is task interdependence (Wageman, 1995). In their discussion of contextual moderators of the relationship between OCB and unit-level performance, Podsakoff and his colleagues (Podsakoff et al., 1997, 2000) argued that task interdependence may account for the inconsistent relationship observed between OCB and performance outcomes (Podsakoff and MacKenzie, 1994). Bachrach et al. (2006) examined managerial awareness of the apparent bounded utility of OCB in a laboratory study using a sample of managers from the USA. They reported task interdependence as having direct effects on the importance attributed to OCB in performance evaluations. However, these authors noted that, ‘In more collectivistic settings (Triandis, 1989) strong normative expectations of cooperation (Earley, 1989) could outweigh salience information about task relationships (Wagner et al., 1997), leading to a diminished sensitivity of contextual moderators of the utility of OCB and subsequent misalignments in the performance evaluation process . . . ’ (p. 16). Would national culture moderate the effect of task interdependence on the importance attributed to OCB in employee performance evaluations? We sought answers to this question by conducting a cross-cultural experiment using a sample from China and another from the USA.

**THEORETICAL BACKGROUND**

Organizational citizenship behaviours are employee supra-role contributions that tend to manifest as a consequence of feelings of reciprocal obligation toward the organization (Organ, 1988). These behaviours are typically not included in ‘formal’ definitions of employee role responsibility, yet have a substantive impact on employee and unit-level performance (Koys, 2001; Podsakoff and MacKenzie, 1994, 1997; Podsakoff et al., 1997), as well as significant effects on performance appraisal (Podsakoff and MacKenzie, 1994; Werner, 1994). Several forms of OCB (e.g., sportsmanship, courtesy, interpersonal harmony, protecting company resources) have been identified as emic culturally (Farh et al., 1997, 2004). Two dimensions of OCB have been identified as etic (universal), i.e., generalizable across cultural contexts, at least between China and the USA. They are ‘helping’
and ‘civic virtue’ (Farh et al., 1997; Lam et al., 1999). ‘Helping’ captures actions taken by employees to help coworkers with work-related problems. ‘Civic virtue’ is defined as behaviour indicating an employee responsibly participates in the life of the organization (Podsakoff et al., 1997). However, the utility of OCB for achieving unit-level and individual performance goals may be affected by task interdependence.

**Task Interdependence**

Broadly, task interdependence is defined as the extent to which employees depend on other members of their team to carry out their work effectively (Kiggundu, 1983; Van der Vegt and Janssen, 2003) and has been shown to increase communication, helping and information sharing (Crawford and Haaland, 1972; Johnson, 1973) as well as OCB (Pearce and Gregersen, 1991). Task interdependence also may influence the development of norms of cooperation (Shaw, 1981) that emerge in groups to influence the frequency of behaviours that contribute to group success (Feldman, 1984). Task interdependence makes mutual helping and other cooperative behaviours such as OCB more important in the completion of tasks (Organ, 1988; Wageman, 1995), and also enhances expectations of help from other group members (Spilerman, 1971). Thus task interdependence may result in the development of norms of cooperation, including organizational citizenship behaviour, that make these behaviours more likely to be demonstrated, expected and valued by performance evaluators (Bachrach et al., 2006).

**National Culture**

Hofstede (1980) defined ‘culture’ as the collective programming of the mind that distinguishes the members of one group from another. He argued that culture is a property of groups and that countries’ boundaries are typically coincident with cultural boundaries. National culture influences how members of groups think about what is proper, civilized behaviour and influences how one acts toward strangers and colleagues, how one addresses others and how one interacts socially. Hofstede (1980) identified four dimensions of national culture. Power distance is a measure of the inequality between leaders and followers and the extent to which this inequality is accepted. Uncertainty avoidance characterizes the extent to which ambiguity and uncertainty are tolerable. Masculinity vs. femininity (e.g., achievement vs. relationship orientation) is a measure of the extent to which achievement and success are valued rather than caring for others and quality of life. Finally, individualism vs. collectivism (IC) is the degree to which members of a group tend to think first of others vs. oneself, and the value placed on membership in groups. IC is the relevant cultural variable in analyzing the research question of the current study for two reasons. First, the OCB construct is explicitly group-focused – these
behaviours have their impact in the aggregate as they facilitate group-level processes and the performance of coworkers. Second, the demonstration of OCB manifests as a consequence of feelings of reciprocal obligation toward the group or the organization.

Individualism-collectivism (IC) reflects the level of social interconnectedness among individuals (Earley and Gibson, 1998; Hofstede, 1980). An important attribute of contexts characterized by a collectivistic character is that individuals within those contexts view and identify themselves through membership in in-groups (Triandis, 1988), which tends to have systematic effects on social behaviour within team settings (Earley, 1989, 1993). The defining distinction between contexts that vary along the IC continuum is that for individualists, personal interests are more important than the interests of the in-group, as are the attainment of individual (as opposed to group) goals. In contrast, for collectivists the interests of the in-group are paramount (Triandis, 1989) and, as noted by Earley (1989), ‘a driving force within a collectivistic culture is cooperation so as to attain group goals and safeguard welfare’ (p. 567). Empirical research, dealing with the moderating effects of IC on social loafing (Earley, 1989), and on OCB (Moorman and Blakely, 1995), supports these characterizations of individuals within individualistic or collectivistic cultures. Moorman and Blakely (1995) reported significant relationships between collectivistic values and the OCB dimensions of interpersonal helping, loyal boosterism and individual initiative.

**Importance Attributed to OCB by Managers in Overall Performance Evaluation**

Among the most consistent empirical findings in the OCB domain has been the positive relationship between OCB and managers’ performance evaluation of employees (Podsakoff et al., 2000). Across 24 samples including petrochemical salespeople, pharmaceutical sales managers (MacKenzie et al., 1993), insurance agents (Podsakoff and MacKenzie, 1994) and university supervisors (Werner, 1994), OCB has had a consistent, positive impact on manager’s overall evaluation of employees. It was at least as important as employee’s basic task performance (Podsakoff et al., 2000). This relationship has been reported in both field settings and laboratory contexts (Allen and Rush, 1998; Werner, 1994).

Building on previous work (Podsakoff and MacKenzie, 1994; Podsakoff et al., 1997, 2000), Bachrach et al. (2006) reported that task interdependence may affect the perceptions of US managers regarding the importance of OCB in their evaluations of employees. Specifically, they found that at higher levels of task interdependence, the managers in their study reported OCB to be significantly more important in their evaluation of employees than at lower levels of task interdependence. This effect, however, may reflect a cultural contingency. In an individualistic culture like the US, managers may find it necessary to emphasize OCB to
employees in order for them to motivate cooperative behaviours necessary for employee completion of interdependent tasks. We argue that norms of cooperation among collectivists mitigate the salience of information about task interdependence in the decisions made by evaluators, such that task interdependence has only negligible effects on the perceived importance of OCB for overall performance evaluation.

Specifically, in collectivistic contexts ‘in-group’ membership defines a person’s self-identity (Markus and Kitayama, 1991). Feelings of social interconnectedness and mutual dependence among members of the in-group predominate (Triandis, 1988) and members feel bound to one another by common goals, interests and mutual commitment (Earley and Gibson, 1998). Because the effects of task interdependence on self-definition are temporally bounded (Wagner et al., 1997), culture should play a stronger role in the self-definitions and values held by managers than information about task interdependence. As a consequence, culture should influence the manner in which evaluators both perceive and respond to information about task relationships among employees in evaluation contexts.

More specifically, managers not only develop views of reality that reflect their underlying value orientation (Geletanyecz, 1997), they also make decisions that are consistent with those values (Hambrick and Brandon, 1988). Given the strong normative expectations of cooperation among members of the in-group in collectivistic contexts (Earley, 1989) and the predisposition to value cooperative behaviours (Wagner and Moch, 1986), managers may be likely both to expect and value cooperative behaviours such as OCB among employees. Given their depth, these culturally informed expectations and values should outweigh otherwise salient information about task relationships (Breer and Locke, 1965; Wagner et al., 1997), such that it is reasonable to expect little or no difference in the perceived value of OCB among managers in collectivistic contexts characterized by high or low levels of task interdependence. Based on the above, we propose a general hypothesis.

There is a positive relationship between the level of task interdependence and the importance attributed to OCB among US evaluators, but a weak relationship between task interdependence and importance of OCB among evaluators from China.

METHOD
Design and Participants

Following Chen et al.’s (1998) caution regarding appropriate designs when individualism/collectivism is employed as an exogenous factor, we used a ‘2 × 2 factorial experimental design, with IC having the status of an independent variable, crossed with a second independent variable’ (p. 299) – in this case, with task interdependence which was a manipulated factor (high vs. low). The design of the experiment in the current study is modeled on the approach that Bachrach et al.
(2006) used in their study. Participants from China and the USA were second year MBA students in highly selective business programs with stringent entrance requirements. Students in both samples also had been exposed to very similar core curricula over the course of their first year studies.

In the US sample, participants were 154 MBA students from one university, 28.87 years of age (SD = 2.79); 79 percent were male, 91 percent were born in the USA, and English was the first language of 89 percent of the sample. Participants had 6.04 years of full time work experience (SD = 3.49), 3.35 years with their immediately previous organizations (SD = 2.29) and 2.03 years in their most recent positions (SD = 1.24). They had been direct supervisors of 4.55 (SD = 6.77) and indirect supervisors of 10.55 employees (SD = 17.59). In the Chinese sample, participants were 150 MBA students from one university, 29.15 years of age (SD = 2.44); 67 percent were male, 99 percent were born in China, and Chinese was the first language of 98 percent. Participants had 6.05 years of full time work experience (SD = 2.46), 4.31 years with their immediately previous organizations (SD = 2.59) and 2.10 years in their most recent positions (SD = 1.33). They had been direct supervisors of 6.85 (SD = 10.60) and indirect supervisors of 25.71 employees (SD = 53.89). An analysis of the demographic characteristics of the two samples was conducted to identify any potential confounds to the study design. The results from an independent samples t-test revealed significant differences across the two samples with respect to gender, years with most recent organization, number of direct reports and number of indirect reports (all at p < 0.05). In order to remove the effect of these individual differences variables, we included them as covariates in the analysis.

**Procedure**

Subjects were randomly assigned to a task interdependence condition (high or low) through the use of a written case (Bachrach et al., 2006). Once assigned, participants were asked not to communicate with one another, and were read a set of instructions wherein they were informed that they were participating in a decision-making task, the goal of which was to examine how managers form impressions of employees in production settings. Participants were asked, as supervisors of the production unit, to indicate the extent to which several behaviours were important in providing overall performance evaluations of these employees, were exposed to the manipulations, provided ratings, were debriefed and released.

**Experimental Manipulations**

Participants were exposed to a description of a production process in a cellular telephone factory. To ensure the manipulation had its intended effect, we conducted pilot studies in both China and the USA to test it. The results from both
pilot studies indicated that the manipulation produced the intended effects on perceptions of interdependence. In the high task interdependence condition the activities of employees are depicted as requiring coordination of effort in order to achieve successful job completion. In contrast, in the low task interdependence condition, the activities of employees are depicted as requiring less coordination. Before conducting the experiment in China, all study materials were translated into Chinese using accepted methods of translation and back-translation (Brislin, 1980). Below are the two conditions of the task interdependence manipulation used in the study.

High task interdependence. ‘A production unit in a small factory produces several cellular phone models for Nokia. The 10 members of the production unit rotate responsibility for each of 10 sequential operations. Factory policy allows no buffer stocks of work in process to be maintained between operations. Although the unit’s members are required to work eight hours each day, they must work together to determine the work schedule because of the buffer stock policy. Workers at this factory have to communicate information regarding colour, stock and equipment to each other because the phone that they make leaves the factory in five colours and cabinet styles with ten functionality packages. Because half of the workers at this factory share equipment, they have to coordinate their use of production facilities. Over the last several years, both the design of the product and the production process has changed extensively’.

Low task interdependence. ‘A production unit in a small factory produces a single cellular phone model for Nokia. Each of the ten members of the production unit is responsible for one of ten sequential operations. Factory policy allows large buffer stocks of work-in-process to be maintained between operations. Although all ten individuals are required to work eight hours each day, they can begin and end their activities according to a flexible work schedule because of the buffer-stock policy. Workers at this factory do not have to communicate information regarding colour, stock, or equipment to each other because the phone that they make leaves the factory in only one colour, cabinet style and functionality package. All of the workers at this factory have their own equipment and so do not have to coordinate their use of production facilities. Over the last several years, neither the product design nor the production process has changed’.

Dependent Variables

We chose the two etic (universal) dimensions of civic virtue (Organ, 1988) and helping (Smith et al., 1983) identified by Farh and his colleagues (Farh et al., 1997, 2004). Civic virtue was measured by three items and helping behaviour was measured by seven items. The reliability of the helping scale was $\alpha = 0.81$ and the
reliability of the civic virtue scale was \( \alpha = 0.73 \). The participants were asked to indicate their agreement with the statement: ‘In providing overall performance evaluations for the employees in this work unit, it is important that these employees (insert item).’ As a baseline comparison, we also included task performance. Task performance was measured with five items from Williams and Anderson (1991) (e.g., Allen and Rush, 1998). The reliability of the task performance scale was \( \alpha = 0.79 \). Responses were based on a seven-point scale ranging from one (highly disagree) to seven (highly agree) and scores were averaged across items to form a scale score. The OCB and task performance items are included in the Appendix.

**Manipulation Checks**

We used Van der Vegt and Janssen’s (2003) five-item task interdependence measure for the manipulation check. These items are included in the Appendix. The reliability of the scale was \( \alpha = 0.92 \) for the US sample and \( \alpha = 0.90 \) for the Chinese sample. To determine the manipulation effectiveness, independent sample t-tests were conducted. For the Chinese sample, interdependence reported for the high (6.01, SD = 1.03) and low (4.79, SD = 1.67) conditions was significantly different, \( t(148) = 5.39, p < 0.001 \) and in the expected direction. For the US sample, interdependence for the high (6.33, SD = 0.62) and low (3.67, SD = 1.56) conditions also was significantly different, \( t(152) = 13.78, p < 0.001 \) and in the expected direction.

Collectivism was measured with Wagner and Moch’s (1986) five-item values scale, which measures specific prescriptions for the behaviour of work group members. These items are listed in the Appendix. The scale’s reliability for the Chinese sample is \( \alpha = 0.78 \) and for the US sample is \( \alpha = 0.88 \). An independent-group t-test indicated that the collectivism scores for the US (4.73, SD = 1.06) and the Chinese samples (5.23, SD = 1.09) were significantly different, \( t(302) = 4.05, p < 0.001 \), and in the expected direction.

**Construct Validity and Measurement Equivalence**

Confirmatory factor analysis was conducted on the three performance variables to ensure that a three factor solution (e.g., helping, civic virtue and task performance) was warranted. This structural analysis was first conducted for the combined sample, and then for the country specific samples independently. Results from this analysis for the combined countries sample indicated that the three factor solution fit the data well and significantly better than two alternative models. The first is a one factor solution in which helping, civic virtue and task performance were forced to load on a single factor, and the second is a two factor solution, in which helping and civic virtue were forced to load on one
factor and task performance another. The NFI for the three factor model was 0.98, the CFI was 0.99 and the RMSEA was 0.07, all indicative of an acceptable fit (Bentler and Bonnett, 1980). Confirmatory factor analysis was then conducted for the two samples separately. Results of the three factor model for the Chinese sample indicated an NFI of 0.97, a CFI of 0.97 and an RMSEA of 0.08. Results for the US sample indicated an NFI of 0.97, a CFI of 0.98 and an RMSEA of 0.09. These results indicate configural equivalence across the two samples.

To determine metric equivalence between the two samples, we performed a multi-group SEM described by Cheung and Rensvold (2002). Constraining 12 item loadings across the two groups (e.g., 15 items, three mechanically constrained to ‘1’, the remaining 12 constrained to equivalence) resulted in a non-significant $\Delta \chi^2 = 11.72$. Further, the standard root mean square residual (SRMR) was unchanged for the USA (0.07) and resulted in a $\Delta$ SRMR = 0.006 for China (0.089 vs. 0.095). Finally, the constrained NFI was unchanged, $\Delta$ NFI = 0, and the constrained CFI resulted in a $\Delta$ CFI = 0.01. The results from this series of tests suggest metric equivalence across the two samples and that a three factor model with helping, civic virtue and task performance as independent performance dimensions was warranted for both samples.

**Analyses for Hypothesis Testing**

Hypothesis testing was conducted at two levels of analysis – one at the group level and another at the individual level. For the group-level analysis, analysis of covariance (ANCOVA) was conducted, using sample dummy codes for both the culture variable (US = 1, China = 0) and the task interdependence manipulation (high = 1, low = 0).

We used hierarchical moderated regression analysis (HMRA; Cohen and Cohen, 1983) to test the hypothesis at the individual level, using the two measured variables: collectivism and task interdependence. In the first step, the control variables were entered, along with measured and centered collectivism and task interdependence (Aiken and West, 1991). The interaction term between centered collectivism and task interdependence was entered in the second step.

**RESULTS**

Means, standard deviations, reliability estimates and correlations for all study variables are reported in Table 1. As shown, task interdependence was significantly and positively related to the importance attributed to both helping and civic virtue for overall performance evaluation.

**Hypothesis Tests**

The means and standard deviations of OCB and task performance for both samples, across the two interdependence conditions, are presented in Table 2.
Table 1. Means, standard deviations, internal consistency reliabilities and correlations

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<th>Variable</th>
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<tbody>
<tr>
<td>1. Gender</td>
<td>0.73</td>
<td>0.44</td>
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<tr>
<td>2. Age</td>
<td>29.01</td>
<td>2.62</td>
<td>0.19**</td>
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<td>3. Education</td>
<td>1.04</td>
<td>0.52</td>
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<td>-0.11</td>
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<td>4. Full time work</td>
<td>6.04</td>
<td>3.02</td>
<td>0.11*</td>
<td>0.62**</td>
<td>-0.03</td>
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<td>5. Organization tenure</td>
<td>3.82</td>
<td>2.49</td>
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<td>0.05</td>
<td>0.30**</td>
<td>-0.02</td>
<td>0.36**</td>
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<tr>
<td>6. Years in position</td>
<td>2.06</td>
<td>1.29</td>
<td>-0.05</td>
<td>0.15**</td>
<td>-0.05</td>
<td>0.18**</td>
<td>0.43**</td>
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<tr>
<td>7. No. of direct subordinates</td>
<td>5.69</td>
<td>8.93</td>
<td></td>
<td>0.10</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.23**</td>
<td>-0.00</td>
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<tr>
<td>8. No. of indirect subordinates</td>
<td>18.08</td>
<td>40.62</td>
<td>-0.01</td>
<td>0.09</td>
<td>0.01</td>
<td>0.15*</td>
<td>0.24**</td>
<td>0.06</td>
<td>0.26**</td>
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<tr>
<td>9. Country (USA = 1, China = 0)</td>
<td>0.51</td>
<td>0.50</td>
<td>0.13*</td>
<td>-0.05</td>
<td>0.02</td>
<td>-0.00</td>
<td>-0.19**</td>
<td>-0.03</td>
<td>-0.13*</td>
<td>-0.19**</td>
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<tr>
<td>10. Task interdependence condition</td>
<td>0.50</td>
<td>0.50</td>
<td>0.07</td>
<td>0.11*</td>
<td>-0.06</td>
<td>0.09</td>
<td>-0.00</td>
<td>0.01</td>
<td>0.12*</td>
<td>-0.01</td>
<td>-0.01</td>
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<tr>
<td>11. Collectivism (measured)</td>
<td>4.98</td>
<td>1.10</td>
<td>0.00</td>
<td>0.04</td>
<td>-0.07</td>
<td>0.01</td>
<td>0.04</td>
<td>0.02</td>
<td>0.08</td>
<td>0.09</td>
<td>-0.22**</td>
<td>0.18**</td>
<td>0.83/0.71</td>
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<tr>
<td>12. Task interdependence (measured)</td>
<td>5.19</td>
<td>1.67</td>
<td>0.00</td>
<td>0.06</td>
<td>0.04</td>
<td>0.06</td>
<td>0.00</td>
<td>-0.04</td>
<td>0.10</td>
<td>0.08</td>
<td>-0.13*</td>
<td>0.59**</td>
<td>0.34**</td>
<td>0.92/0.84</td>
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<tr>
<td>13. Helping</td>
<td>5.27</td>
<td>0.97</td>
<td>-0.00</td>
<td>0.12*</td>
<td>0.08</td>
<td>0.08</td>
<td>-0.03</td>
<td>-0.05</td>
<td>0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.23**</td>
<td>0.39**</td>
<td>0.43**</td>
<td>0.81/0.58</td>
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<tr>
<td>14. Civic virtue</td>
<td>5.63</td>
<td>1.07</td>
<td>0.09</td>
<td>0.13*</td>
<td>0.05</td>
<td>0.13*</td>
<td>0.05</td>
<td>-0.03</td>
<td>0.07</td>
<td>0.10</td>
<td>0.07</td>
<td>0.18**</td>
<td>0.47**</td>
<td>0.39**</td>
<td>0.63**</td>
<td>0.73/0.69</td>
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</tr>
<tr>
<td>15. Task performance</td>
<td>5.81</td>
<td>0.99</td>
<td>0.06</td>
<td>-0.06</td>
<td>0.04</td>
<td>-0.13*</td>
<td>-0.15*</td>
<td>-0.06</td>
<td>-0.08</td>
<td>-0.08</td>
<td>0.39**</td>
<td>-0.05</td>
<td>0.06</td>
<td>0.00</td>
<td>0.21**</td>
<td>0.35**</td>
<td>0.79/0.67</td>
</tr>
</tbody>
</table>

Notes:
Reliability estimates appear in parenthesis along the diagonal. The first entry inside the parenthesis is Cronbach’s $\alpha$, and the second is Fornell and Larcker’s (1981) rho; * $p < 0.05$; ** $p < 0.01$, two-tailed.
These condition means were used to conduct multivariate analysis of covariance (MANCOVA) with eight individual level demographic variables as covariates. Results from the MANCOVA showed significant group-level effects of task interdependence and national culture on perceptions of the importance of OCB and task performance for overall performance (interdependence, Hotelling’s approximate $F_{3,271} = 4.28, p < 0.01$ and national culture, $F_{3,271} = 15.58, p < 0.001$). The multivariate interaction effect of interdependence and national culture is also significant (Hotelling’s approximate $F_{3,271} = 4.80, p < 0.005$).

Univariate analyses of covariance (ANCOVA) were executed to examine the effects of interdependence and national culture on helping, civic virtue, and task performance separately. Results from these analyses are in Table 3. The one-way analyses of covariance indicated significant univariate main effects of the interdependence condition for civic virtue, $F_{1,273} = 5.94$, $p < 0.05$ and helping, $F_{1,273} = 8.76$, $p < 0.005$, and of country for task performance, $F_{1,273} = 45.48$, $p < 0.001$). In support of the study hypothesis, this analysis also revealed a significant interaction effect of the interdependence condition and country on the importance attributed to helping, $F_{1,273} = 7.54$, $p < 0.005$. No univariate interaction effects were found for civic virtue, $F_{1,273} = 0.29$, n.s. Marginally significant interaction effects on the interdependence condition and country were found for task performance, $F_{1,273} = 2.83$, $p = 0.09$. In order to determine whether the nature of

<table>
<thead>
<tr>
<th>Interdependence condition</th>
<th>USA</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>High interdependence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>5.64 (SD = 0.64)</td>
<td>5.34 (SD = 0.92)</td>
</tr>
<tr>
<td>Civic virtue</td>
<td>5.90 (SD = 0.75)</td>
<td>5.74 (SD = 0.99)</td>
</tr>
<tr>
<td>Task performance</td>
<td>6.05 (SD = 0.81)</td>
<td>5.49 (SD = 0.96)</td>
</tr>
<tr>
<td>Low interdependence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>4.93 (SD = 1.20)</td>
<td>5.17 (SD = 0.95)</td>
</tr>
<tr>
<td>Civic virtue</td>
<td>5.51 (SD = 1.32)</td>
<td>5.37 (SD = 1.10)</td>
</tr>
<tr>
<td>Task performance</td>
<td>6.34 (SD = 0.74)</td>
<td>5.35 (SD = 1.07)</td>
</tr>
</tbody>
</table>

Table 2. Means and standard deviations of OCB and task performance by country and task interdependence condition
Table 3. Analysis of covariance of task interdependence condition and country on OCB importance in overall evaluations – group level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Helping</th>
<th>Civic virtue</th>
<th>Task performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sum of squares</td>
<td>F</td>
<td>Sum of squares</td>
</tr>
<tr>
<td>Gender</td>
<td>0.037</td>
<td>0.04</td>
<td>1.45</td>
</tr>
<tr>
<td>Age</td>
<td>0.79</td>
<td>0.96</td>
<td>0.01</td>
</tr>
<tr>
<td>Education</td>
<td>1.35</td>
<td>1.59</td>
<td>1.39</td>
</tr>
<tr>
<td>Years of full-time work</td>
<td>0.04</td>
<td>0.04</td>
<td>1.17</td>
</tr>
<tr>
<td>Organization tenure</td>
<td>0.21</td>
<td>0.25</td>
<td>0.01</td>
</tr>
<tr>
<td>Years in position</td>
<td>0.02</td>
<td>0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>No. of direct subordinates</td>
<td>0.25</td>
<td>0.31</td>
<td>0.12</td>
</tr>
<tr>
<td>No. of indirect subordinates</td>
<td>0.01</td>
<td>0.01</td>
<td>2.42</td>
</tr>
<tr>
<td>Country (0 = USA, 1 = China)</td>
<td>0.37</td>
<td>0.44</td>
<td>2.28</td>
</tr>
<tr>
<td>Interdependence condition</td>
<td>7.27</td>
<td>8.76**</td>
<td>6.45</td>
</tr>
<tr>
<td>Country x interdependence condition</td>
<td>6.26</td>
<td>7.54**</td>
<td>0.32</td>
</tr>
<tr>
<td>Error</td>
<td>226.52</td>
<td>273</td>
<td>296.31</td>
</tr>
<tr>
<td>Total</td>
<td>8,236.82</td>
<td>285</td>
<td>9,479.33</td>
</tr>
</tbody>
</table>

Notes:

† p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001 two-tailed; N = 304.
the interaction between interdependence condition and country on attributions of the importance of citizenship behaviour are consistent with the study hypothesis, the helping and task performance condition means are plotted in Figure 1.

As one can see in Figure 1, it appears that there are differences in the perceived importance of helping for overall performance across the two interdependence conditions that depend on country. Consistent with the study hypothesis, the US respondents appear to value helping less in the low task interdependence condition than in the high interdependence condition, while there appears to be little difference in the perceived importance of helping for overall performance among Chinese evaluators across the two interdependence conditions. The results presented in Figure 1 also appear to suggest differences in the perceptions of the importance of task performance across the interdependence conditions that depend on country. First, there appear to be clear mean differences across the two
country conditions, with the US respondents attributing more importance to task performance than the respondents from China. Further, while the value attached to task performance by the respondents from China appears to increase as task interdependence increases, the opposite is the case for evaluators from the USA who appear to value task performance less as task interdependence increases.

Results from the hierarchical regression analysis conducted to test the hypotheses at the individual level are in Table 4. As shown in the table, task interdependence and collectivism had a significant interaction effect on the importance attributed to both helping ($\beta = -0.12$, $\Delta R^2 = 0.02$, $p < 0.05$) and civic virtue ($\beta = -0.17$, $\Delta R^2 = 0.03$, $p < 0.01$). These analyses revealed no culture-task interdependence interaction effects for task performance ($\beta = -0.04$, $\Delta R^2 = 0.00$, ns.).

We graphed the significant results of these individual-level analyses using a procedure similar to that used by Stone and Hollenbeck (1989), by plotting two slopes: one at one standard deviation below the mean and one at one standard deviation above the mean of the collectivism variable. This plot is shown in Figure 2. As shown, the relationship between task interdependence and both helping and civic virtue is stronger among people with a low collectivism score than among those with a high collectivism score. These results provide additional support for the

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Table 4. Hierarchical regression analysis of task interdependence and collectivism on OCB importance in overall performance evaluations – individual level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Helping Step 1</th>
<th>Helping Step 2</th>
<th>Civic virtue Step 1</th>
<th>Civic virtue Step 2</th>
<th>Task performance Step 1</th>
<th>Task performance Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.01</td>
<td>-0.00</td>
<td>0.08</td>
<td>0.09</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Age</td>
<td>0.07</td>
<td>0.06</td>
<td>-0.00</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Education</td>
<td>0.07</td>
<td>0.06</td>
<td>0.08</td>
<td>0.07</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Years of full-time work</td>
<td>0.05</td>
<td>0.06</td>
<td>0.11</td>
<td>0.12</td>
<td>-0.11</td>
<td>-0.11</td>
</tr>
<tr>
<td>Organization tenure</td>
<td>-0.06</td>
<td>-0.06</td>
<td>-0.00</td>
<td>-0.01</td>
<td>-0.09</td>
<td>-0.09</td>
</tr>
<tr>
<td>Years in position</td>
<td>0.00</td>
<td>0.01</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>No. of direct subordinates</td>
<td>0.00</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.00</td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td>No. of indirect subordinates</td>
<td>-0.04</td>
<td>-0.05</td>
<td>0.03</td>
<td>0.03</td>
<td>-0.03</td>
<td>-0.03</td>
</tr>
<tr>
<td>Collectivism</td>
<td>0.28***</td>
<td>0.27***</td>
<td>0.37***</td>
<td>0.36***</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Task interdependence</td>
<td>0.31***</td>
<td>0.29***</td>
<td>0.26***</td>
<td>0.24***</td>
<td>0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td>Collectivism x task interdependence interaction</td>
<td>-0.12*</td>
<td>-0.17**</td>
<td>-0.17**</td>
<td>-0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.24</td>
<td>0.26</td>
<td>0.30</td>
<td>0.33</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>F</td>
<td>9.25</td>
<td>9.00</td>
<td>12.32</td>
<td>12.61</td>
<td>1.38</td>
<td>1.31</td>
</tr>
<tr>
<td>$\Delta$ R², step 2</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F for $\Delta$ R²</td>
<td>4.85</td>
<td>11.07</td>
<td>11.07</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Entries are standardized regression coefficients. * p < 0.05; ** p < 0.01; *** p < 0.001.
† Degrees of freedom for model 1 = (10, 280); degrees of freedom for model 2 = (11, 279).
study hypothesis, and suggest the effect of task interdependence on the importance of both helping and civic virtue is moderated by collectivism measured at the individual level.

DISCUSSION

The goal of this exploratory study was to determine whether there were differences between cultures in the extent to which task interdependence influenced evaluators’ attributions of the importance of organizational citizenship behaviour for overall performance evaluation. It was argued that, because of the strong influence of national culture on the value attributed to cooperation within in-groups in collectivistic contexts, the influence of task interdependence would be mitigated within the Chinese context. The current results provide support for this hypothesis. As expected, in the Chinese sample there was no effect of task interdependence on the importance attributed to helping behaviour for overall performance at either the group or the individual level of analysis.

However, inconsistent with the current study’s hypothesis, national culture did not moderate the effects of task interdependence on the perceived importance of civic virtue. There are two possible reasons. First, it may be a function of the focus of civic virtue behaviour. Specifically, while the focus of helping behaviour is on members of the in-group, the focus of civic virtue extends somewhat more broadly.
to encompass the unit as a whole. It may be that the broader focus of civic virtue behaviours diminishes the primacy of cultural information in favor of competing contextual information (Wagner et al., 1997). The question of the breadth of behavioural focus in examinations of the moderating effects of national culture on perceptions of behavioural importance for overall performance would appear to be an important area for future research to explore.

Second, although civic virtue is theoretically (Podsakoff and MacKenzie, 1997) and empirically (Podsakoff and MacKenzie, 1994) related to unit functioning, the nature of the behaviour may be disruptive to the interpersonal harmony of the in-group (Leung et al., 1992). Specifically, civic virtue is measured with such items as ‘willing[ness] to risk disapproval to express . . . beliefs about what’s best for the unit’, and thus encompasses behaviours that put the demonstrating employee at direct risk of disapproval from members of the in-group (Podsakoff et al., 1997). Given collectivists’ emphasis on interpersonal harmony and solidarity (Earley and Gibson, 1998), the possibility of inciting conflict (even while contributing positively to group performance outcomes) might be perceived unfavourably. Given the tendency for events of negative character to be weighted more heavily in judgment tasks than those of positive character (Kahneman and Tversky, 1984), it would be reasonable to expect greater contextual selectivity among evaluators from China when ascribing value to a potentially harmony disrupting behaviour such as civic virtue. Future studies on the effects of potential disruptions to interpersonal harmony on the weight given to OCB in overall evaluations may shed light on the mechanisms used by Chinese evaluators in their evaluations of employees.

Although we found no group-level interaction effects of national culture, we found individual level cultural orientation to moderate the effects of task interdependence on the perceived importance of civic virtue. Variance in individual cultural orientation within groups has received explicit attention in the literature (Markus and Kitayama, 1991). At the individual level, people may be described as idiocentric vs. allocentric. As noted by Earley and Gibson (1998), ‘The utility of this distinction across levels is the explicit realization that people from a collectivistic culture may, on a person to person basis, be quite idiocentric and vice versa’ (p. 271). Thus although there are recognized mean differences in the character of national cultures and as a consequence predictable mean differences in perceptions and behaviours of individuals influenced by national culture, there is also individual-level variation in the extent to which the ‘national culture’ shapes the experience of individuals.

Finally, among evaluators in the USA, as task interdependence increases evaluators report task performance to be less important. Thus, as tasks become more interdependent, and the relative importance of OCB increases, the relative importance of task behaviours should decrease, assuming these two categories of behaviour contribute differential variance to the accomplishment of overall performance (Motowidlo and Van Scotter, 1994). However, this relationship is reversed among
evaluators in China for whom task interdependence appears to have a positive effect on perceptions of the importance of task performance. It appears that although the value attributed to helping behaviours by Chinese evaluators does not change as task interdependence increases, the perceived necessity for all parts of a set of interrelated tasks to be completed correctly should be expected to increase among evaluators for whom group goals are paramount.

Implicit in our arguments is that OCB would be perceived to be more important by evaluators in the Chinese sample than by evaluators from the USA in general. From Table 2 and Figure 1, it is clear that this implicit assumption was not met. One reason may have to do with the nature of the baseline expectations of evaluators across cultures (Lam et al., 1999). Specifically, in contexts characterized by collectivistic values, cooperative behaviours among members of the in-group may be a taken for granted condition, such that these evaluators will have had a higher baseline expectation for their demonstration than evaluators from contexts characterized by individualistic values. Because these behaviours become expected by evaluators, they may as a result be more likely to be demonstrated by employees (Morrison, 1994), leading evaluators to perceive them as ubiquitous. If cooperative behaviours are indeed ubiquitous in in-groups in collective contexts, these behaviours would be perceived as less scarce by evaluators and, as a result, less important or valuable for overall performance evaluation (Barney, 1991). In contrast, US subjects perceive task performance to be very important for overall performance evaluation. This is consistent with cultural expectations. In individualistic contexts, people are not expected to engage in behaviour benefiting others, relative to those in collectivistic contexts. Future research could examine whether evaluators perceive cooperation to be ubiquitous in in-groups in collective contexts. It also would be interesting to compare the actual level of OCB between employees in individualistic and collectivistic countries. Finally, would higher levels of OCB in collectivistic countries translate into higher levels of firm performance and hence improve the competitiveness of firms from collectivistic cultures in the global economy? It would be both interesting and challenging to explore this cross-level and cross-cultural question.

Limitations

The current research has several limitations. First, the results reported in the current study are based on evaluators’ responses to an experimental procedure in a laboratory setting. Thus, questions regarding the generalizability of these results must be addressed in future research in field settings. Second, the nature of the sample used in this research is also a limitation. Specifically, MBA students are still fairly rare in China. Thus, it is unclear whether they are representative of all managers in China. Future research addressing these issues should use samples that capture a potentially more representative perspective. In addition, the participants...
in the current study were not randomly selected from their respective populations. Conclusions based on data from convenience samples further limit generalizability. Finally, the OCB dimensions in the current study were two ‘etic’ dimensions identified in the literature. Thus, the conclusions are limited to the subset of behaviours examined. Future research will benefit by exploring a broader range of these supra-role behaviours.

**Implications for Future Research**

The current study focuses on the importance of organizational citizenship behaviour for the formal evaluation of employee performance as a function of task interdependence and the cultural value of collectivism. A logical next step would be to explore the effects of culture and task interdependence on unit performance. In addition, future research may explore the moderating effects of other dimensions of national culture on these perceptions. For example, Smith et al. (1996) refer to what they call a ‘universalistic’ vs. ‘particularistic’ cultural orientation. In general, the USA is high on universalism where rules and contracts are developed and applied in any situation. In contrast, China is more diffuse or particularistic. Particularistic cultures avoid rigid or standardized systems and the preference is to leave room to make changes depending on the context. Accordingly, one might expect that managers in the USA would have specific expectations of OCB depending on the level of task interdependence in a situation, while for more particularistic Chinese managers all situations would share communalities (i.e., not distinguishing among situations in the same way as would managers from the USA).

**CONCLUSION**

As the marketplace in China continues to expand, managerial insight into the boundaries on the utility of performance enhancing behaviours such as OCB may facilitate organizational performance. The consistent, positive relationship between OCB and overall performance evaluations reported in the empirical literature unmistakably points to a human resource practice that promotes these behaviours among employees. Results from the current study suggest that cultural influences may mitigate the salience of important contextual cues.

**NOTE**

The authors would like to thank Xiaoping Chen for her insightful comments on an earlier draft of this manuscript. Her help and encouragement in the completion of this project was invaluable to us.
APPENDIX

Helping (items 1–7) and civic virtue (items 8–10) (Podsakoff et al., 1997)

1. Help other employees out if someone falls behind in his/her work.
2. Willingly share expertise with other members of the unit.
3. Try to act like a peacemaker when other unit members have disagreements.
4. Take steps to try to prevent problems with other unit members.
5. Willingly give time to help unit members who have work-related problems.
6. ‘Touch base’ with other unit members before initiating actions that might affect them.
7. Encourage other unit members when someone is down.
8. Provide constructive suggestions about how the unit can improve its effectiveness.
9. Be willing to risk disapproval to express beliefs about what’s best for the unit.
10. Attend and actively participate in team meetings.

Task performance (Williams and Anderson, 1991)

1. Adequately complete assigned duties.
2. Fulfill responsibilities specified in the job description.
3. Perform tasks that are expected.
4. Meet formal performance requirements of the job.
5. Complete obligatory aspects of the job.

Task interdependence (Van der Vegt and Janssen, 2003)

1. Employees in this unit need information and advice from their colleagues to perform their jobs well.
2. Employees in this unit have a one-person job; it is not necessary for them to coordinate or cooperate with others (reverse-coded).
3. Employees in this unit need to collaborate with colleagues to perform their jobs well.
4. Employees in this unit need information and advice from one another to perform their jobs well.
5. Employees in this unit regularly have to communicate with colleagues about work-related issues.

Collectivism (Wagner and Moch, 1986)

1. People in my work group should be willing to make sacrifices for the sake of the work group (such as working late now and then; going out of their way to help, etc.).
2. People in my work group should realize that they sometimes are going to have to make sacrifices for the sake of the work group as a whole.
3. People in my work group should recognize that they are not always going to get what they want.
4. People should be made aware that if they are going to be a part of the work group, they are sometimes going to have to do things they don’t want to do.
5. People in my work group should do their best to cooperate with each other instead of trying to work things out on their own.

Note: The Chinese versions of these scales are available on the MOR website.
REFERENCES


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