

THE CONGRUENCE EFFECTS OF CONFUCIAN AND WESTERN MANAGEMENT VALUES ON INDIVIDUAL AND ORGANIZATIONAL PERFORMANCE: EVIDENCE FROM THE KOREAN PUBLIC SECTOR

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Abstract

This study examines the effect on Korean public employees' in-role performance and organizational performance of Confucian values and of two organizational management values developed in the West, specifically collective public service motivation-oriented (PSMO) management values and entrepreneurship-oriented (EO) management values.

Using data from the Public Sector Entrepreneurship Survey the study finds that some Confucian values can enhance in-role and organizational performance in the Korean public sector, but others can have negative or no effects. The mixed results suggest that the relationship may be more complex than assumed and that some variables may mediate the effects. This has implications on how the positive effects of Confucian values on performance can be maximized while minimizing the negative effects. The collective PSMO and EO management values developed in the Western context both enhance in-role performance but only EO management values positive effects extend to organizational performance.

Lastly, the study finds that the data does not support the hypothesized positive interaction effects between Confucian values and PSMO and EO management values and both in-role and organizational performance. More investigation is required to fully understand these interaction effects.

Keywords: Confucianism, public sector motivation, entrepreneurship orientation, in-role performance, organizational performance.

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1. Introduction

Countries in East Asia, such as Korea, China, Taiwan, and Singapore have witnessed rapid economic development and increased in significance to the global economy in the last three decades. Confucian values, the cultural basis of these societies, may expedite economic development. ‘Confucian work dynamism’ is believed to improve the productivity and effectiveness of private and public organizations (Warner, 2010, p. 2058). Confucian values may influence ‘individual and organizational outcomes by providing considerable incentives for individual self-accomplishment, self-restraint, persistence, patience, integrity, and honesty’ (Huang, Zhou and Zu, 2012, p. 179).

The association between Confucian values and organizational effectiveness is well documented. However, several important questions remained unanswered. First, many of these included Confucian values featuring the distinct characteristics of an area, rather than focusing on universal Confucian values. Second, few offer theoretical hypotheses on the relationship between Confucian values and individual and organizational variables. Finally, few studies examine individual Confucian and organizational management values’ interaction effects, especially with Western values, and how these can affect an organization’s overall performance.

Korea provides a good case to study the impact of Confucian values in the public sector. The country has experienced rapid economic growth that resulted in major demographic and social transformations (e.g., Torneo and Yang, 2015). It has adapted and borrowed many ideas from the West, including political and public administration systems (Yang and Torneo, 2016). Despite these, Confucian values remain strongly embedded in Korean society and its civil service (Torneo, 2014).

This study seeks to determine if Confucian values impact performance and if so, identify the Confucian values that enhance performance in Korea’s public sector in combination with organizational and managerial values, in response to the dynamic change concept adapted from the West. It highlights the methods used to augment performance (both in-role and organizational) by combining an individual’s Confucian values with organizational management styles.

2. Literature review

2.1. *Confucian Values in the Korean public sector*

This study identified five Confucian values that incorporate the essence of the two types of Confucianism—face-saving, humility, perception of group orientation, value for the social hierarchy, and reciprocity in exchange—from previous studies relevant to our discourse (Monkhouse, Barnes and Pham, 2013). We provide an overview of these five concepts of Confucian values.

‘Face-saving’ refers to retaining individual public dignity and avoiding damage to one’s reputation; it involves maintaining pride and dignity in personal relationships and respecting obligations from societal perspectives, such as wealth, economic and

social status, occupation, and authority. It is related to one's self and to the circumstances that matter to others (Wang *et al.*, 2011).

'Humility' refers to avoiding the display of one's wealth, economic and social status, education, and knowledge to prevent resentment derived from being envied. In a Confucian society, it promotes a sense of community where everyone can be happy under different social conditions (Kumas-Tan *et al.*, 2007).

'Group orientation' pertains to harmonious coexistence with others and is in line with the group belonging theory (Wang *et al.*, 2005). It emphasizes that people do not live in isolation but are members of a group and that they need to maintain harmony by behaving in an appropriate manner.

'Hierarchy' refers to an idea similar to the principle of 'wu-lun' (five types of hierarchical human relationship) in Confucianism (Keller and Kronstedt, 2005). On the basis of hierarchy, people have a set position in society and they should behave in line with their social status.

'Reciprocity' refers to 'a golden rule that governs almost all kinds of interpersonal relationships' (Monkhouse, Barnes and Pham, 2013, p. 333); it represents the exchange of favors among people. Under the notion of reciprocity, if someone does a favor or behaves positively, they should be significantly rewarded.

Confucian values have been recognized as stimulating individual growth and effort, with followers of Confucian values pursuing empathy and forgiveness. However, this concept has changed in line with changing socio-political and economic environments in East Asian societies. In this study, we highlight Confucian values' different impacts on the relationship between an employee's job attitudes, behaviors, and HR practices.

2.2. Public employees' Confucian values and in-role and organizational performance

Confucian values may influence a person's behavior and enhance organizational performance (Kang, Matusik and Barclay, 2017). Its role in changing individual and organizational outcomes may be interpreted and examined from the perspective of social learning theory, which underscores the processes needed for modeling, and offers insights into organizational as well as social procurement and mentoring (Merriam and Caffarella, 1999).

Pun, Chin and Lau (2000) explained that Confucian ideology could enhance employee involvement and total quality management and improve organizational performance. Kang, Matusik and Barclay (2017) argued that four types of Confucian values, such as seniority orientation (Chong: 忠), relationship orientation (Guanxi: 關係), righteousness orientation (Yi: 義), and benevolence orientation (*Ren*: 仁), have a positive influence on the normative and affective motive, which in turn is related to working overtime. Confucian work climates could create voluntary behavior, loyalty, and perseverance among employees, and this makes it possible to overcome difficult tasks and obstacles.

People in Confucian societies easily learn and emulate their surrounding social norms and values, interacting with Confucian values, culture, and environments sub-consciously (Chen, Chuang and Chen, 2018). The authors propose that because of these, employees accept social norms and values, such as diligence, perseverance, a shared value of collective effort, harmonious relationships in the office, and loyalty. Thus, the congruence of these values with societal outcomes may be meaningfully influenced by individual attitudes and behaviors and organizational outcomes.

The authors hypothesize that Confucian values can improve task-related individual performance and impact organizational performance in an integrated model. Through learning and interaction with Confucian values, employees recognize diligence, perseverance, loyalty to the organization, and work value derived from jobs themselves in work circumstances. Thus, a well-designed, positive-quality culture could promote better performance and higher efficiency (Ahlstrom, 2010).

- H1a: Public employees' higher level of Confucian values will be positively associated with in-role performance.
- H1b: Public employees' higher level of Confucian values will be positively associated with organizational performance.

2.3. Organizational management values: Entrepreneurship-oriented management values and collective public service motivation-oriented management values

Public sectors coexist with various organizational management values. The authors present two distinct organizational managerial values: EO and collective PSMO management values. In other words, EO management values focus on 'productivity improvement, reinvention, process re-engineering, entrepreneurial leadership, privatization, and performance measurement', similar to New Public Management (NPM), while collective PSMO management values are associated with post-NPM (Park and Joaquin, 2012, p. 517) as stewards of public interest, rather than the economic factors of work (Clerkin and Cogburn, 2012). Considering that two types of management values were developed in the Western context, and these values have already been adapted for the Korean public sector, the adaptive effects on public employees and organizations were verified.

2.4. EO management values and organizational outcomes

In the 1990s, the idea of entrepreneurship was prevalent in public sector literature, where it was adapted to achieve more adaptable flexible, and efficient, management in competitive and tumultuous environments (Moon, 1999). In this study, EO management values included three dimensions: risk-taking, pro-activeness, and innovativeness in the Korean public sector (Covin and Slevin, 1991). The notion of EO refers to decision-making styles, organization-level processes, and strategic orientations (Wiklund and Shepherd, 2005) that promote competitive advantages and increased performance and innovation within an organization. Furthermore, EO instills

market-oriented management perspectives into public sector employees to help them succeed in dynamic environments (Baker and Sinkula, 2009) and express willingness to engage in risk-taking and radical innovation while being proactive and taking tough decisions (Fernández-Mesa and Alegre, 2015). Lisboa, Skarmeas and Lages (2011) argued that EO actively drives both exploitation and exploration capabilities. Specifically, exploration can display an employee's innovative capabilities and proactive risk-taking in the EO organization, which impact performance through exploitation (Kohtamäki, Kautonen and Kraus, 2010). EO management values are similar to NPM; the authors seek to explain EO management values as an NPM management value in the Korean public sector.

EO has been linked to innovation (Buenechea-Elberdin, Sáenz and Kianto, 2017), knowledge spillovers (Van Praag and Versloot, 2007), organizational transformation (Wischnevsky and Damanpour, 2006), and performance (Ruvio, Rosenblatt and Hertz-Lazarowitz, 2010). Consequently, EO management values are considered a key factor for supporting performance as well as innovation. Although innovation is also a consequence variable of EO, it is a path through which the organization can capture competency and transform it into performance outcomes (Silva, Styles and Lages, 2017).

- H2a: A higher level of entrepreneurship-orientation management values will be positively associated with in-role performance.
- H2b: A higher level of entrepreneurship-orientation management values will be positively associated with organizational performance.

2.5. Collective PSMO management values and organizational outcomes

To overcome the limitations of NPM values based on rational and public choice models, experts and practitioners adapted new management paradigms, such as post-NPM, which is related to organizational humanism, public interest, intrinsic job involvement (e.g., PSM, organizational commitment, and organizational civic behavior), and employee autonomy. These new management perspectives could increase the quality of work-life and the quality of life and pave the way for social change (Park and Joaquin, 2012). Moreover, PSM denotes post-NPM values and creates consequences for the role of government entities and the wishes and requirements of citizens toward the public sector (Rainey, 2009), as part of the public management style included in this study. Regarding post-NPM, the authors posit that collective PSMO management values can be explained as a post-NPM management value in the Korean public sector.

PSM is defined as 'an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations' (Perry and Wise, 1990, p. 368). PSM connotes an employee's motivation to work in the public sector and describes three main motivation types: rational (participate in public service), normative (duty toward citizens and community), and affective (compassion and self-sacrifice). Although the body of literature on PSM is growing, few studies focus on integrating

PSM into HRM practices and organizational missions and strategy at the organizational level. PSM also strongly relates to the desire to go above and beyond the call of duty for the sake of making a better organization and society (Van Loon, Kjeldsen and Lesink, 2017). Employees with higher PSM are more engaged in organizational missions, such as the pursuit of public interest and strengthening public values. Collective PSM can result in high-quality public service, and contribute to the community, harmonizing with the public sector's original values (Wright and Pandey, 2008).

Interest in PSM has increased in the last few decades along with interest in possible benefits of PSM. Recent research examines the link between in-role performance and PSM (Andersen, Heinesen and Pedersen, 2014; Bellé, 2014; Van Loon, Vandenabeele and Lesink, 2017) and organizational performance (Park and Rainey, 2012). As the authors have suggested, PSM may influence in-role and organizational performance.

- H3a: A higher level of collective PSMO management value will be positively associated with in-role performance.
- H3b: A higher level of collective PSMO management value will be positively associated with in-role organizational performance.

2.6. Public employees' Confucian values, organizational management values, and organizational outcomes

Process theory assumes that the organizational environment affects self-concept, and proposes that individuals have diverse identities and gain satisfaction from performing a role related to such identities through socialization, performance evaluation feedback, and effective organization-personal communication (Paarlberg, Perry and Hondeghem, 2008). Conversely, Confucian values will be positively associated with the organizational outcome level if organizations provide well-designed work systems for performance. An employee's values combine with organizational management systems, or with the consequences of the employee's acceptance and recognition of high-performance work systems (HPWS), in the organization. Additionally, these mechanisms show how institutional contexts affects the relationship between an employee's Confucian values and organizational management values, and how performance can be illustrated by person-environment (P-E) fit theory. An individual's perceived fit with HRM practices and values can relate more to work outcomes than actual environmental circumstances because individuals' perceptions are the basis of their reactions to a situation (Van Loon, Kjeldsen and Lesink, 2017, p. 703). Research finds that person-environment fit have a positive association with normative and affective public service motivation in studies of Korean nonprofit organizations (Kim and Torneo, 2021).

Western systems' entrepreneurial values are not deeply entrenched in Confucian culture. However, such values' principles and practices are rapidly accepted in the economic and political environments of Asian countries. Bae *et al.* (2003) showed that the HPWS type, which evolved in the U.S., could reflect other cultural settings that enhanced performance in four Southeast and East Asian countries, including

Korea. Boon *et al.* (2011) argued that certain fit types such as job, organization, and environment moderate the relationship between work outcomes and HRM practices. The authors posit that a Korean public employee’s values, which include Confucian values, integrated with Western-style management values, will increase in-role and organizational performance.

- H4a: Public employees’ Confucian values interact with collective PSMO management values to positively influence in-role performance.
- H4b: Public employees’ Confucian values interact with collective PSMO management values to positively influence organizational performance.
- H5a: Public employees’ Confucian values interact with EO management values to positively influence in-role performance.
- H5b: Public employees’ Confucian values interact with EO management values to positively influence organizational performance.

This research uses hierarchical linear modeling (HLM) to test the hypotheses (see Figure 1). HLM can resolve the limitations encountered when aggregating individual-level variables with a superordinate concept and disaggregating organization-level variables into the individual level.

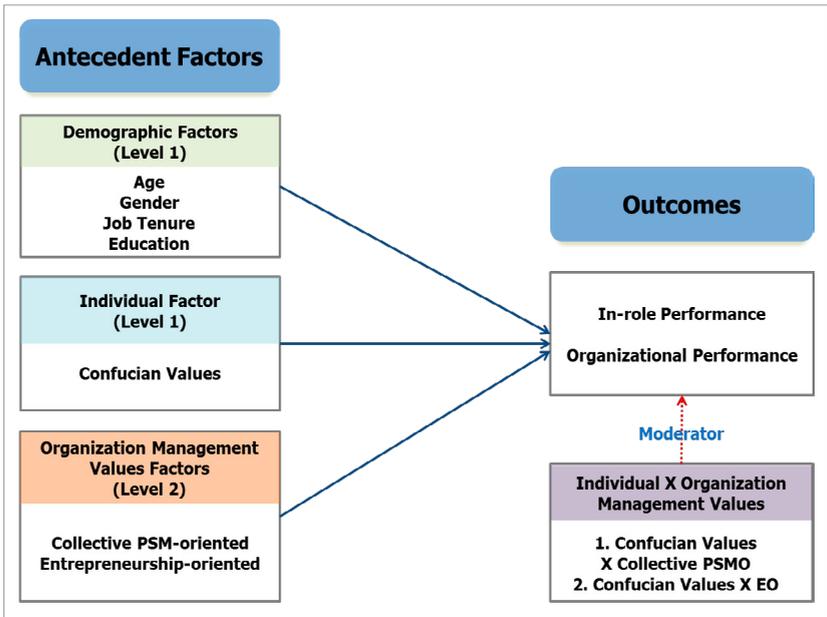


Figure 1: Research Model

Source: The authors

3. Method

3.1. Procedure and respondents

To test the hypotheses, the authors conducted the 'Public Sector Entrepreneurship Survey' from March to June 2015 to measure the perceptions of Confucian values associated with the indicators of collective PSM, entrepreneurship, and performance level. The quota sampling method was used based on gender, age, job characteristics, and rank in each public agency. The sample is comprised of 1,171 of the 1,500 invited public officials from 37 Korean public agencies, i.e., government agencies ($N = 19 / n = 512$), executive agencies ($N = 6 / n = 210$), public agencies ($N = 10 / n = 427$), or other public agencies ($N = 2 / n = 22$) (78% response rate). Males comprised 62.3% of the sample, while females accounted for 32.7%. The majority (45%) of our respondents were in their thirties and had a bachelor's degree (64.6%). For job tenure, over 15 years was the most common response (29.4%) (Mean: 3.29, SD: 1.43) (for details, see Table 1).

3.2. Measures

All the survey questions were measured using a seven-point Likert scale (from 1: strongly disagree to 7: strongly agree)¹. The authors constructed the scale using the reliability and validity command in SPSS and AMOS. Confucian values included the concepts of hierarchy, humility, face-saving, group orientation, and reciprocity, all measured using the scale developed by Monkhouse, Barnes and Stephan (2012) ($\alpha = .84$, average variance extracted [AVE] = .32, construct reliability [CR] = .80)². For the organizational level³, collective PSOM management values consisted of 14 items, such as 'I have a negative perception of politics', 'Making a difference in society means more to me than personal achievements', and 'It is difficult for me to contain my feelings when I see people in distress' that was assessed using Perry's model (1996) ($\alpha = .75$, AVE = .23, CR = .61).

EO management values were measured via the scale developed by Covin and Slevin (1989) and Diefenbach (2011) ($\alpha = .94$, AVE = .45, CR = .89), which included 11 items, such as 'My agency in its entirety is open to innovations', 'My agency in its entirety responds actively to market changes as they occur', and 'My agency in its entirety often works on projects that promote the public interest'. In-role performance

1 We applied a back-translation procedure to confirm the equivalence of the Korean and the English versions of the measures.

2 The suggested value of AVE is over .05 and the CR is over .70. Some variables, such as Confucian values and collective PSOM, did not meet the statistical criteria; however, they met the other reliability and validity values and were thus used

3 When the survey measures the organizational level variables, we applied the aggregation of individual response on team as a measurement method. This means that, group members respond to items related to group-level constructs, then, the score are aggregated to the group-level construct using mean score (Chung, Kim, Lee, Lim and Park, 2019, p. 539).

Table 1: Descriptive statistics

Variables	Valid N	Mean	Std. D.	Min.	Max.
<i>Level-1 variables</i>					
Gender ¹	1171	1.38	0.48	0	1
Age ²	1171	2.53	0.81	1	5
Education ³	1171	3.07	0.77	1	5
Job tenure ⁴	1171	3.29	1.43	1	5
Face-saving	1171	5.16	0.92	1.75	7
Humility	1171	4.22	0.94	1	7
Group orientation	1171	3.23	1.03	1	7
Hierarchy	1171	5.31	0.90	1.5	7
Reciprocity	1171	4.98	1.01	1	7
In-role performance	1171	5.06	0.93	1.75	7
Org. performance	1171	4.75	1.09	1	7
<i>Level-2 Org. Management Value</i>					
Collective PSMO	37	4.38	0.19	3.97	4.76
EO	37	4.40	0.57	2.79	5.60

- 1) 0: Male: 62.3%; 1: Female: 32.7%
 2) 1: 20s: 7.3%; 2: 30s: 45%; 3: 40s: 35.1%; 4: 50s: 12.6%; 5: Over 60's: 0.1%
 3) 1: High School: 5.2%; 2: College: 7.9%; 3: Bachelors: 64.6%; 4: Masters: 19.3%; 5: Ph.D.: 3%
 4) 1: 1 month-3 years: 16.6%; 2: 3-5 years: 13.3%; 3: 5-10 years: 23.7%; 4: 10-15 years: 17%; 5: Over 15 years: 29.4%

Source: The authors

was assessed using the scale developed by Neubert *et al.* (2008) ($\alpha = .91$, AVE = .71, CR = .80). Organizational performance was measured with the scale by Brewer and Selden (2000) ($\alpha = .80$, AVE = .45, CR = .71). This study included the following commonly used control variables: gender (male: 0/female; 1), age (categories), education (categories), and job tenure (categories).

4. Results and discussion

4.1. Common method issue

Using Harman's factor test (a post hoc test), this study confirmed the level of common method bias (CMB). A CMB test was used to settle all research variables with eigenvalues above 1 in SPSS, with the first factor explaining a total variance of 22.68%. The suggested cut-off criterion is under 50%. This means that the research variables were likely not adulterated by CMB.

4.2. Level-1 (Individual-level) model:

One-way ANCOVA model with random effects

A one-way ANCOVA model was used in the individual-level model to incorporate several covariates and analyze how these level-1 predictors influences the outcome variables. Nine covariates were included as fixed effects: age (r10), gender (r20), job tenure (r30), education (r40), face-saving (r50), humility (r60), group orientation (r70), hierarchy (r80), and reciprocity (r90).

4.3. Level-2 (Agency-level) model: Intercepts and slopes-as-outcomes model

We utilized an intercepts-and-slopes-as-outcomes model (agency-level) that assumes that intercepts and slopes have random effects for hypothesis testing. Two fixed effects were incorporated as predictors of organizational management values (at level 2): collective PSMO management (r01) and EO management (r02). Level-1 and level-2 variances were incorporated as random effects.

4.4. Hypothesis testing: Fixed and random effects

To confirm the aggregating individual Confucian value scores and collective PSMO and EO management values, the authors verified the intraclass correlations (ICC) which was 25.31%, suggesting that the Korean public sector's in-role performance can vary by about 25.31% across agencies. In terms of organizational performance, it could differ by approximately 12.75% among public agencies.

4.5. Demographic variables and in-role and organizational performance

Being male (β : -0.171, $p < 0.01$), having higher education (β : 0.105, $p < 0.05$), and long-term job tenure (β : 0.080, $p < 0.05$) had a positive outcome on in-role performance. Being male (β : -0.274, $p < 0.001$) and having a long-term job tenure (β : 0.053, $p < 0.10$) were associated with increased organizational performance.

Table 2: Hierarchical linear model (HLM) results: In-role performance

<i>In-role Performance</i>	1. An individual-level model: One-way ANCOVA model	2. An organization-level model: Intercepts-and-slopes-as-outcomes model
Reliability intercept (β_0)	0.720	0.507
Fixed effects Intercept (r_{00})	5.07***	5.05***
Level-1 individual Factors		
1. Demographic factors		
Gender (r_{10})	-0.163**(-2.903)	-0.171**(-2.989)
Age (r_{20})	0.071(1.458)	0.073 (1.470)
Education (r_{30})	0.109*(2.441)	0.105*(2.318)
Job tenure (r_{40})	0.083*(2.826)	0.080*(2.758)
2. Confucian values		
Face-saving (r_{50})	0.118***(2.691)	0.126***(3.087)
Humility (r_{60})	-0.097**(-2.866)	-0.088**(-2.772)
Group orientation (r_{70})	-0.123***(-4.814)	-0.120***(-4.271)
Hierarchy (r_{80})r	0.207****(6.142)	0.211****(6.303)
Reciprocity (r_{90})	0.040(1.157)	0.033(0.899)
Level-2 Org. Management Values Factors		
Collective PSMO (r_{01})		0.812***(3.760)
EO (r_{02})		0.197*(2.471)
Individual X Org. Management Values Factors		
Face-saving X Collective PSMO (r_{51})		-0.402*(-2.234)
Humility X Collective PSMO (r_{61})		-0.112(-0.722)
Group-orientation X Collective PSMO (r_{71})		-0.216+(-1.697)
Hierarchy X Collective PSMO (r_{81})		0.265(1.379)
Reciprocity X Collective PSMO (r_{91})		-0.008(-0.048)
Face-saving X EO (r_{52})		-0.021(-0.266)
Humility X EO (r_{62})		-0.075(-1.134)
Group orientation X EO (r_{72})		0.027(0.438)
Hierarchy X EO (r_{82})		-0.068(-1.170)
Reciprocity X EO (r_{92})		0.040(0.424)
Random effects		
Level-1 effect (r_{ij}) variance	0.072	0.639
Level-2 effect (m_{0j}) variance	0.643***	0.026***
Conditional inter-class correlation (ICC)	9.93%	25.31%
Proportion of the variance in r_{ij} explained by the model (%)	-15.6%	63.5%
Proportion of the variance in m_{0j} explained by the model (%)	18.7%	1%
Deviance	2897.18	2888.03
Number of parameters	2	2

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

Source: The authors

Table 3: HLM results: Organizational performance

Reliability intercept (β_0)	0.834	0.666
Fixed effects Intercept (r_{00})	4.68***	4.67***
Level-1 individual Factors		
1. Demographic factors		
Gender (r_{10})	-0.266***(-3.627)	-0.274***(-3.672)
Age (r_{20})	0.064(1.215)	0.061(1.131)
Education (r_{30})	0.044(1.392)	0.046(1.498)
Job tenure (r_{40})	0.056+(1.913)	0.053+(1.811)
2. Confucian values		
Face-saving (r_{50})	0.111(1.594)	0.108+(1.656)
Humility (r_{60})	-0.095*(-2.229)	-0.087*(-2.158)
Group-orientation (r_{70})	-0.107**(-3.270)	-0.102**(-2.883)
Hierarchy (r_{80})r	0.121***(2.737)	0.124***(2.712)
Reciprocity (r_{90})	0.051(1.044)	0.046(0.902)
Level-2 Org. Management Values Factors		
Collective PSMO (r_{01})		0.407(1.472)
EO (r_{02})		0.617****(7.388)
Individual X Org. Management Values Factors		
Face-saving X Collective PSMO (r_{51})		-0.163(-0.429)
Humility X Collective PSMO (r_{61})		-0.379(-1.344)
Group-orientation X Collective PSMO (r_{71})		-0.141(-0.592)
Hierarchy X Collective PSMO (r_{81})		-0.014(-0.014)
Reciprocity X Collective PSMO (r_{91})		-0.112(-0.346)
Face-saving X EO (r_{52})		0.027(0.252)
Humility X EO (r_{62})		-0.006(-0.080)
Group-orientation X EO (r_{72})		-0.002(-0.031)
Hierarchy X EO (r_{82})		0.040(0.463)
Reciprocity X EO (r_{92})		0.065(0.658)
Random effects		
Level-1 effect (r_{ij}) variance	0.899	0.897
Level-2 effect (m_{0j}) variance	0.206***	0.076***
Conditional ICC	5.36%	12.75%
Proportion of the variance in r_{ij} explained by the model (%)	-0.0%	63%
Proportion of the variance in m_{0j} explained by the model (%)	1%	0.0%
Deviance	3305.81	3291.55
Number of parameters	2	2

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

Source: The authors

4.6. Confucian values and in-role and organizational performance

The results partially support hypothesis H1a, with some Confucian values having a significant and positive effect on in-role performance. Face-saving (β : 0.126, $p < 0.01$) and hierarchy (β : 0.211, $p < 0.001$) both had a positive influence on in-role performance. However, the other Confucian values had significant effects on individual performance but in the opposite direction. Specifically, humility (β : -0.088, $p < 0.01$) and group orientation (β : -0.120, $p < 0.001$) had a negative influence on in-role performance. Reciprocity had no statistically significant effects on in-role performance.

The results also partially support hypothesis H1b with some Confucian values having a significant and positive influence on organizational performance. It confirmed that face-saving (β : 0.108, $p < 0.10$) and hierarchy (β : 0.124, $p < 0.01$) had a positive influence on organizational performance. However, humility (β : -0.087, $p < 0.05$) and group orientation (β : -0.102, $p < 0.01$) had a statistically significant negative effect on organizational performance. Reciprocity had no significant effects on in-role performance.

It is well to remember that Confucian values are not a single monolithic construct but a bundle of at least five distinct values: hierarchy, group orientation, humility, face-saving, and reciprocity. As such, it is not entirely out of the ordinary that the separate individual effects of these values that comprise Confucianism on organizational performance and in-role performance might vary.

The finding that the Confucian values face saving and hierarchy had a positive effect on both in-role performance and organizational performance were in line with the hypothesis and the findings of Pun, Chin and Lau (2000), Ahlstrom (2010), and in particular the arguments of Kang, Matusik and Barclay (2017). The non-significance of reciprocity and the significant but negative effects of humility and group orientation, on the other hand, was contrary to the hypothesis. While we cannot offer a definitive explanation of the latter, studies in Confucian settings offer some possible clues.

Yang *et al.* (2019) study of a company in China found that expressed humility by those in leadership positions can also have negative side effects. Specifically, 'expressed humility was positively and indirectly related to leaders' turnover intentions and work-to-family conflict *via* emotional exhaustion when honesty-humility was low' (p. 1). In other words, it takes a toll on non-humble leaders who were only expressing humility in line with Confucian expectations.

The non-significance of reciprocity in predicting both in-role and organizational performance may signal that it has limited or no impact on either aspects. One logical link between reciprocity and performance is through the cultivation of smooth interpersonal relationships between and among employees and management. Another is through the reciprocal alignment of effort to the difficulty of tasks since there is an expectation of matching efforts with reward. Reciprocity, however, is a double-edged sword. Good relationships within the organization may logically facilitate smooth working relationships and improve performance. However, a focus on maintaining smooth relationships by reciprocal exchange can have negative effects on the merit-based system within public organizations and negatively affect performance in the

long term. A study by Fisher *et al.* (2015) found that reciprocity has limited impact in single interaction settings and could result in superiors setting lower targets and employees responding to these with high effort and to high targets with low effort in repeated interaction settings. It also results in the setting of low targets easily achievable by employees, which could potentially lead to low-performance standards over time.

The finding of a negative relationship between group orientation and both in-role performance and group performance are similar to the findings of Jung, Susik and Baik (2002), who found that among Koreans, preference for group work was negatively correlated to performance, but among Americans, it was positively related to performance. They posit that this may be linked to the Korean group's predisposition toward socialization and excessive level of collectivistic as well as group orientation that shifted focus to social activities, which in turn may have negatively affected their performance. They also raise the possibility that the Korean notion of *woori* (we, us) and *cheong* (human affection) may negatively affect group performance. When group identity is too pervasive, minority opinions may be downplayed, which might negatively affect group performance.

4.7. Entrepreneurship-orientation management values and in-role and organizational performance

The results also support hypothesis H2a with EO (β : 0.197, $p < 0.05$) management values at the organizational level showing a significant positive effect on the in-role performance of Korean public employees. The results also confirmed hypothesis H2b that EO management values (β : 0.617, $p < 0.0001$) had a statistically significant positive effect on the Korean public organization's performance. This aligns with the arguments of various scholars that link EO management values with performance through various channels. These include, among others, exploration and exploitation (Lisboa, Skarmees and Lages, 2011), which drives the willingness to engage in risk-taking and innovative capabilities (Kohtamäki, Kautonen and Kraus, 2010), innovation (Buenechea-Elberdin, Seinz and Kianto, 2017), knowledge spillovers (Van Praag and Versloot, 2007), organizational transformation (Wischnevsky and Damanpour, 2006), and performance (Ruvio, Rosenblatt and Hertz-Lazarowitz, 2010), perspectives that help succeed in dynamic environments (Baker and Sinkula, 2009), and willingness to engage in risk-taking and radical innovation, while being proactive and taking tough decisions (Fernández-Mesa and Alegre, 2015).

4.8. Collective PSMO management values and in-role and organizational performance

The results support hypothesis H3a that collective PSMO (β : 0.812, $p < 0.01$) values at the organizational level had a significant positive effect on the in-role performance of Korean employees. The results did not support hypothesis H3b, and there is no statistically significant effect of PSMO management value on the Korean public organization's performance. The findings for PSMO only partially support the hypothesis.

Collective PSMO management values had a significant and positive effect on in-role performance but no significant effect on organizational performance. The implication of the finding, however, is that PSMO may only affect in-role performance but not the organizational performance in an integrated model.

The conceptual link between PSM and individual performance has been relatively well established by Perry and Wise (1990). Here, we have extended the PSM-performance relationship not only to in-role performance but also to organizational performance consistent with earlier research findings that employees who have strong intrinsic motivations are more likely to enhance organizational and individual performance (Andersen, Heinesen and Pedersen, 2014; Bellé, 2014; Van Loon, Vandenabeele and Leisink, 2017; Park and Rainey, 2012).

However, mixed results from various studies suggest that the link between PSM and job performance is nuanced. As Miao *et al.* (2019) notes, several studies in different jobs and across different countries found a significant and positive relationship between PSM and individual performance, while others found no relationship between the two. Schott, van Kleef and Steen (2015) posited that role-based differences in individual interpretations of what serving the public interest entails may partially account for the mixed results. Van Loon *et al.* (2018) note that PSM's relationship to individual performance is mediated by social impact potential (SIP). They note a positive association between performance and PSM when SIP is high, but it becomes weak or disappears altogether when SIP is low.

Kim's (2005) study of Korean public sector employees found a significant and positive correlation between individual PSM and organizational performance. The β , however, was only 0.073, suggesting a weak effect. While our results are in line with some of the literature, the non-significance of the relationship between PSMO and organizational performance may possibly be attributed to role-based differences as explained by Schott, van Kleef and Steen (2015) or by the mediating role of SIP as per Van Loon *et al.* (2018). The incorporation of SIP and role-based differences in future studies may be able to shed better light on this finding.

4.9. Interaction between Confucian values and collective PSMO management values to influence in-role performance

The results only partially support hypothesis H4a. Among the five concepts under Confucian values, only two had statistically significant interaction effects with collective PSMO management influence in-role performance, but the direction was the opposite of that predicted in the hypothesis. The interaction effect of face-saving (β : -0.402, $p < 0.05$), group orientation (β : -0.216, $p < 0.10$), and collective PSMO management values had a negative effect on in-role performance.

The results did not support hypothesis H4b. There is no statistically significant interaction effect of any Confucian values with collective PSMO that positively influences organizational performance. Of the five Confucian values, only face-saving and group orientation had a significant interaction effect with collective PSMO man-

agement, and the interaction effect was negative, not positive as hypothesized. No value had a statistically significant interaction effect with PSMO values to influence organizational performance. These findings run counter to Miao *et al.* (2019) study of Chinese civil servants; however, their study examined direct effects rather than interaction effects.

The negative interaction effect of group orientation and PSMO values towards in-role performance may be related to the negative relationship between group orientation and group performance of Koreans. These may be attributed to group identity in collectivistic Koreans becoming too prevalent in the group, leading to downplaying of minority opinions and stifling group performance (Jung, Sosik and Baik, 2002). Another possible explanation is that these Confucian values may conflict with PSMO values. Specifically, these are inward-looking values that may put saving face and the group at odds over public service and the larger public interest. We also raise the possibility that the non-significance of the interaction effect may result from conflicts between the variables. It is also possible that PSMO managerial values developed by Western countries still could not be absorbed into and integrated with an individual's Confucian values. We do not have data to offer a definite explanation and this needs further investigation.

4.10. Interaction between Confucian values and EO management values to influence in-role performance

The results did not support hypothesis H5a and there is no statistically significant interaction effect of Confucian values with EO management values that positively influences organizational performance. The results did not support hypothesis H5b and there is no statistically significant interaction effect of Confucian values with EO management values that positively influences organizational performance.

One possibility is EO managerial values developed by Western countries still could not be absorbed into and integrated with Korean employees' Confucian values. Another explanation is that Confucian values do not interact with EO management values to influence in-role performance and organizational performance like we expected and the relationship is more nuanced. However, we do not have data to establish conclusively, whether this is the case. The dynamics of the interaction effects may be more nuanced than we predicted. This can be investigated in future studies.

5. Conclusion

First, this study argued that Confucian values enhance in-role performance and organizational performance in the Korean public sector. Instead of treating Confucian values as one construct, we unbundled this concept into five component values, specifically face-saving, humility, group-orientation, hierarchy, and reciprocity. Individually, these values have different effects on both in-role performance and organizational performance. Face-saving and hierarchy were positively related to both in-

role performance and organizational outcomes, while humility and group orientation were negatively associated with both. Reciprocity was not statistically significant.

We posit that the negative relationship between the Confucian values of group orientation and humility is double-edged, in that they have aspects that may have positive effects on performance, but they also have aspects that may potentially negatively affect performance. We noted that employees might see humility displays as genuine or hypocritical and that forced expressions of humility to conform with expectations may take a toll on those in leadership positions. Reciprocity, which did not register as statistically significant on the other hand, also has aspects that can have negative impacts on performance in public sector settings that can potentially negate its positive impacts. In particular, we noted that an excessive focus on reciprocity within the organization might clash with the merit system expected of public organizations and come at the expense of the public interest.

Second, this study argued that EO management values are an important catalyst in enhancing both in-role and organizational performance in the Korean public sector. The results of the data support these hypotheses. These results suggest that entrepreneurship values such as pro-activeness, risk-taking, and passion must be encouraged to support performance. Furthermore, public organizations need to create an environment that supports an active administration (e.g., flexible interpretation of the law, simplified administrative procedures, and deregulation), not a centered passive administration or behavior by law. They must motivate and boost the entrepreneurial spirit of the organization. Motivation can come from rewards for performance, research, and practice related to the implementation of creative administration and training to strengthen entrepreneurship capacity.

Third, this study argued that collective PSMO management values could boost both in-role and organizational performance. The results, however, only found collective PSMO management value to have a significant and positive effect on in-role performance. The results did not show a statistically significant effect of PSMO management value on organizational performance. Our re-examination of the literature based on this finding has led us to note that our study's mixed findings are not so unusual. The relationship between PSM and performance has been mixed in the literature. This may indicate that the relationship is nuanced, with the relationship showing significant results when factors like SIP are high and disappearing altogether when it is low. The mixed findings may be attributed to role-based differences (Schott, van Kleef and Steen, 2015) or the mediating role of SIP (Van Loon *et al.*, 2018). Future studies should incorporate mediating variables.

Finally, the study argued that Confucian values interact with collective PSMO management values to positively influence both in-role and organizational performance. However, only the interaction effect of face-saving and group orientation and collective PSMO management values were statistically significant and contrary to the hypothesis had a negative rather than a positive effect on in-role performance. In finding possible explanations, we came upon the study of Jung, Sosik and Baik (2002),

who posited that group identity among collectivistic Koreans might become too pervasive, thereby redirecting energies to social activities and leading to downplaying of minority opinions, and stifling group performance. Another possible explanation is that these inward-looking Confucian values may conflict with PSMO values in instances where saving face and the group are at odds over public service and the larger public interest. We have no data to test this, and the literature is scarce on interaction effects. Future studies with better-designed controls are needed to resolve these.

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