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Culture And Innovation: Current Paradigm Shift for Quality of Work Life in Public-Sector Organizations

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Abstract

Dynamic changes in organizational culture and innovations have brought huge impacts for quality of work life in public-sector organizations nowadays. Related to previous studies, this paper addressed how organizational culture and innovations influenced the quality of work life under the moderation of smart work system participation of Korean public-sector organizations. Data was collected from Korea Institute of Public Administration (KIPA) for both central and local public employees in Korea. Results found that development culture significantly influenced organizational innovation, and simultaneously, organizational innovation also affected the quality of work life in public-sector organizations. In contrast, smart work system participation partially influenced organizational culture and innovation positively on smart work teleconference, while on smart work center seemingly there was a lack of contribution. Therefore, it was proposed to integrate group culture and hierarchical culture for further studies, and revitalize policy implementation to integrate smart work system in public services in order to improve organizational innovation for better quality of work life. Then, strong potential leadership is also required in collaborative social network system among interest groups of public sector organizations.

Keywords: Culture, innovation, employees, quality of work life.

INTRODUCTION

Information technology has become a trigger and catalyst for most public organizations of this emerging economy. Organizational innovation through the proliferation of media technology is well strategic to leverage structural resources of organizations including the integration, diversification and quality of resources (Thrasher et al. 2010; Benitez-Amado and Walczuch 2012; Wu 2014). The rapid digital development forces people and organizations to be innovative and find smarter ways to overcome challenges for relevant sustainable growth within public services. Simply, people in urban cities are challenged to be 'intelligent' for developing the capacity to produce added value information and being 'innovative knowledge society' to raise knowledgeable and creative human capital (Prakish et.al. 2016).

Information technology has changed people's work behavior and activities in various ways, like business processes and organizational structures in public sectors. In this sense, smart work is an alternative way which has great influence on how to organize work under the contribution of technological devices to allow employees undertake their activities anytime anywhere. Smart work has similar term to virtual work, flexible work, telework, telecommuting and remote work as well (Eom 2006). The assumption is also raised through the emerging impact of 4th industrial revolution in AI as the automatic era which is absolutely considered challenging for people's work life. It is driven by mechanical production process or machine learning; information technology, and automated production process (Schwab 2015; Ballantyne et.al. 2016).

South Korea is one of Asian countries which has been able to achieve national development through proliferation of digital governance in public services. It was attained just in a half century with a remarkable economic development. By now, digital technology is a way to fundamentally innovate the overall governance restructuring and operation system of the nation. Through innovation and development in public services, smart governance has become the hallmark of opportunities as well as challenges, not only to solve administrative tasks, but also to generate overall public life style.

Moreover, current human resource innovation has emerged through changes of work values on Korean public-sector organizations to transform the way they work intelligently. Therefore, it is crucially pivotal to find out the empirical influence and enrich previous studies on this issue. The shifting paradigm of organizational culture forces public employees to work through flexible conditions within organizations. Favorable organizational culture affects changes and adaptation to new environmental innovation (Van de Vrande et.al. 2009; Naqsbandi et.al. 2014). However, there is little empirical study on the effect of the smart work system towards both organizational culture and innovation in public sectors. As it is known that proliferation smart work system participation in Korean public-sectors cannot be avoided nowadays because smart technology forces organizations for changes to achieve quality of work life considering social issues including demographic aspect of aging population across the country.

Looking at the entire phenomenon, thus, putting the framework on innovation diffusion theory, we conducted the study to find out the influences of organizational culture to organizational innovation under the moderation of smart work system participation for quality of work life in South Korea public-sector organizations. The purpose is to provide a set of dynamic causal-effect relationship of organizational culture to organizational innovation that leverages quality of work life, besides the effect of smart work system participation.

Theoretical Framework

Organizational Culture

Culture is a set of shared knowledge, values, norms and believes that unite a collective group, shape cognition and motivation to approach problem solving (Chiu and Hong 2006; Leung et.al. 2008; Chiu and Kwan 2010; Moris and Leung 2010; Chua et.al. 2015). Culture and structure elements are associated with organizations to practice innovations. Key factors that influence the outcome of innovation efforts in organizations are perceived work environment in organizations, perceived significance of innovations, natures and features of organizational work culture (Pugh et al. 1969; Tidd et al. 1997; Dougherty and Cohen 1995; Potnis 2009). Culture expresses how well people and activity within community are managed. Culture is a critical factor that influences the success of an organization (Deal and Kennedy 1982; Fatima 2016). Therefore, culture integrates components of organization together.

Organizational culture is categorized into four types of subcultures namely group culture, developmental culture, hierarchical culture and rational culture (Denison and Spreitzer 1991; Park and Kim 2014). In detail, group culture is related to the empowerment, consideration and participation; while hierarchical culture is based on control, formality and stability. Both subcultures are classified as internal oriented culture.

Then, the environmental or external oriented culture is devoted to rational and development subcultures (Gozukara et.al. 2016). Rational culture is focused on task achievement which is emphasized on quality and productivity; while development culture is based on flexibility which includes change, openness, adaptability and responsiveness (Quinn 1988; Gozukara et.al. 2016). The focused of the study was mainly on effective organizational levels in accordance with culture and innovation for quality work of life. Even though moderating construct tends to be internally at individual level, we just integrated external sub-cultures as modelled in this study. Previous study stated that development culture played the role on development, adaptability, innovation and creativity which brings about positive impact on employee's satisfaction (Scott et.al. 2003; Lok et.al. 2005; Gozukara et.al. 2016).

Work environment changes under the influence of high technology in digital society which drastically affects attitude and mindset of the employees (Ahmad 2013). Organizational culture in this case, is a pattern of shared values and beliefs of how to behave and work within organization under the contribution of information technology (Mathis and Jackson 2003; Ahmad 2013).

Findings from previous studies suggested that cultural norms in public organizations could truly affect creative thinking and innovation process. Values can build social norms, but values and norms are conceptually diverse. Values are relatively fixed, stable and internal, while norms are focused on shared expectations within individual's social environments (Chua et.al 2015). In terms of organizational change, individuals from tight culture are likely to be more resistant to change because of structures promote adherence to existing norms and rules. Previous scholars recommended the use of configuration of organizational culture as a holistic view which emphasized on multiple interactions to cause any outcomes. As it was suggested that there were five organizational values (employee development, harmony, customer orientation, social responsibility and innovation (Meyer 1993; Tsui et.al. 2006; Naqsbandi et.al 2014).

Smart Work System Participation

The term 'smart or intelligent' is often directed to 'smart city' which means the diffusion of ICT in cities to improve the way every subsystem of governance operates with the aim to improve the quality of life (Batty et.al. 2012; Albino et.al. 2015). Smart city becomes magnets for creative people and allows the creation of a virtue circle that lead them constantly smarter (Padridge 2004; Albino 2015).

The concept of smart work system is community that makes a conscious decision to keep working with technology as a catalyst to overcome social needs, promote economic development, and jobs creation for better quality of life (Eger 2009; Albino et.al. 2015). The use of information technology influences habits and provides avenue for innovation in ubiquitous way. Potential benefit of smart work at individual level includes saving commuting time, the enhancement of productivity and the achievement of quality work life (Eom 2006).

People of today are facing a new paradigm of technological revolution as platform for fundamental changes in the way they work (Howcroft and Taylor 2014; Holand and Bardoel 2016). Changes recreate new interests in how works are managed as the smart side of technology in organization. Evidence of previous study also showed that smart technology investments were successfully paired with the organizational innovation (Garicano and Heaton 2010; Gil-garcia et.al. 2014).

Korean government diffused smart work in public sector into three types namely, *home-work*; smart work undertaken in the home of employees; *mobile work*; is conducted outside of fixed places using mobile devices; and *smart work teleconference* and or *smart work center* (SWC); type of work conducted in smart office remotes from the main work places, proximity spaces close to residential community (Eom 2006). Therefore, smart work is a chance to exploit human potential and promote a creative work life. This study only integrated both smart work teleconference and smart work centre participation in public sector organizations. Previous study approved that smart work system participation as a flexible work system could create opportunities to employees to interpret information, act on their knowledge and experience and make decisions in a timely way to innovate with shifting product and demand services and enable them to achieve the goal-cycle as quality of work life (Smith 1997).

Organization Innovation

Literally, bringing new things into reality is innovation. It is a novelty in action (Altschuler and Zhegans,1997; Hartley 2005) and new ideas that work in practices (Mulgan and Albury 2003; Hartley 2005). Innovation boosts quality of products and services as fundamental achievements of quality life. It is about changes that have to be done through processes, impacts and outcomes (Hartley 2005; Gil-garcia et.al. 2016). So, innovation is a key dimension characterizing smartness. It enables government to smarter by continuously integrating new trends to implementing services and operations (Gil-garcia et.al. 2016).

Organizational innovation is truly creating condition that could make organization possible to embody science and technology existing in organization into products and services with high competitiveness (Okrepilov and Leonodovich 2015). Information system innovation is an innovation through the application of information technology within organization (Tanriverdi et.al. 2010; Swanson 2010; Wu 2015). Technology boosts all components for organizational innovation.

Scholars have shown that technology gives diverse effects on work life integration. Higher use of smart technology in organization, increase employee's work autonomy and function, while simultaneously increase the relationship and communication with family (Batt & Valcour 2003; Valcour and Batt 2003b; Valcour and Hunter 2005).

Innovation Diffusion Theory

Diffusion innovation is defined as a process in which an innovation is transmitted in certain links overtime among members of social system (Rogers, 2005; Liu, et.al, 2017). Innovation diffusion is deemed as the process where new things (idea, product, technology and services) spread through digital media over time in a wide range of variety (Rice 2011; Liu et.al 2017).

The adoption and integration of innovation can be viewed as the social network where the connection takes the form of relationship. The diffusion process is particularly a networked process (Liu et.al 2017).

Quality of Work Life

The central issue in public services is how to achieve quality of work life. It is series of objective organizational conditions and practices that enables employees of an organization to perceive that they are satisfied, have better changes of growth and development as human beings (Ahmad 2013). Quality work life (QWL) is a set of methods, approaches and technology for enhancing work environment to be more productive and more satisfying (Nadler and Lawler 1983).

Quality of work life is the degree in which workers are able to satisfy important personal basic needs through experiences within organization (Suttle 1977; Ahmad 2013). Not only how can people do the work better, but also does that work itself make people live better. Thus, it is sometimes perceived as a general term of everything for betterment.

Quality work life is a degree to which employees achieve efforts to fulfill diverse individual needs through performance in work place (Davis 1983; Lee et.al. 2015). The need for quality of work life consists of health, safety, economy, family, social life, self-esteem, self-actualization, knowledge and esthetics. Key variables of quality of work life involves individual tasks, organizational factors, environments, tools and technology in their dynamic relationships (Sirgy et.al. 2001; Carayon 1997; Lee et.al. 2015).

Previous study confirmed that employees' engagement to work can be enjoyed within an organization through the improvement of quality work life (Rice et.al. 1985; Ahmad 2013). That means that based on talent, employees who are innovative and have creative potential are most likely to work in innovation when they perceive organizational support.

From background and theoretical frameworks, the following questions were discussed in the study:

1. Does the organizational culture (i.e. development and rational culture) affect organization innovation in Korean public-sector organizations?
2. Is there any moderation of smart work system participation which positively influences organization culture and organizational innovation?
3. Does the organization innovation affect the quality of work life in Korean public-sector organizations?

HYPOTHESES DEVELOPMENT

Development Culture and Organizational Innovation

Culture influences organizational structure for innovation. Development culture is dynamic because it is associated with innovative leader with visions to maintain on external environment (Denison & Spreitzer 1999; Parker and Bradley 2000) and entrepreneurship characterized by readiness for change linked to individual organizational initiatives (Zammuto and Krakower 1991; Parker and Bradley 2000).

Organizational innovation gives empirical evidence that cultural norms definitely influence creativity in terms of process and outcome (Moorman 1995; Varsakelis 2001; Khazanchi et.al. 2007; Chua et.al. 2015). Development culture enhances organization's capacity in two reasons; first, organization which applies development culture for plan attainment pays more attention to new information technology with dynamic capacities for adapting new avenues. This situation is motivated to fulfill the current and future demand and technologies that may guide research and development. Second, development culture can trigger innovation by encouraging organization to take risks and tolerate short term losses (Cao et.al. 2014).

Development culture could enable innovation process depending on whether organizational culture is favorable or not favorable. Development culture emphasizes organizational values of creativity and care for employees, customers and public to uphold high standard performance for innovation in the environment (O'reilly et.al. 1991; Tsui et.al. 2006; Naqsbandi et.al. 2015).

Rational Culture and Organization Innovation

Organization culture is the articulation of values, norms and beliefs in how people behave and things get done within the organization. Specifically, for rational culture, it provides people goal-centered on the change management that is viewed as the nature and behavior of organization (Shrimali and Shinsa 2017). Organization with sense of care to customers tends to be more flexible in relation to development towards goals (Denison and Mishra 1995; Naqsbandi et.al. 2015).

Rational culture refers to values of incentive systems adapted to attain the target of organization. This dynamic culture forces organization to struggle for excellent performance and competitive advantages (Brauncheidel et.al. 2010; Naor et.al. 2008; Zu et.al. 2010; Cao et.al. 2014). Rational cultures bring impacts on employees' professional goal as well as their personal life. Rational culture influences the way employees think, act and perceive things to achieve the objectives (Hansen and Wernerfelt 1989; Fatima 2016). Public employees are encouraged in rational culture to innovative resources for the achievement of organizational goals (McDermott and O'Dell 2001; Cao et.al. 2014). Therefore, from these two subcultures, we propose the hypotheses as follows:

Hypothesis 1a*: Organization culture (i.e. development culture) positively affects organizational innovation.*
Hypothesis 1b*: Organization culture (i.e. rational culture) positively affects organizational innovation.*

Smart work (Centre, Teleconference) participation and Development Culture

Smart work is articulated as process of strengthening technology in all aspects of social-economic life in societies through the way individuals and organization interact, learn, work and how they conduct business as well. Employee perception about new system like smart work system depends on the individual's belief, social characteristics and national cultural traits (Crites et.al. 1994; Shareef 2014).

Smart work has been profoundly deemed as trends of urbanization, climate change and innovation, with the increasing demands to work flexibly for better work life balance (Cha Sin and Cha Seub 2014). In social network theory has stated that users of smart work system must socially and organizationally develop flexible atmosphere of work which is found in smart work system (Hwang and Choi 2015). For the success of innovation in organization, there must be cultural alignment between the proposed solution and what intended audience of creative idea would find to be appropriate and acceptable (Csikszentmihalyi 1999; De Dreu 2010; Chua et.al. 2015).

Smart work (Centre, Teleconference) participation and Rational Culture

Knowledge management reform '*values'* based on the mission of NPM and Post-NPM has drawn attention to invest on human resources to help public organizations survive and attain competitive advantage. Goal oriented management is based on values which is identified through strategy, performance and knowledge management based oriented reform values in high performance work system practices (Park and Joaquin 2012; Park et.al. 2017). Thus, smart work system in knowledge management is an imperative aspect in human resource management (Park et.al. 2017).

Smart work is a new trend of working and living which is flexible based on time and place (Cha Sin and Cha Seub 2014). Smart work system, i.e. work centre and teleconference has brought great influences on the culture of how people work and live as a big driver in public service performance. Smart work as an unavoidable change in big cities is particularly built through three basic pillars namely, digital infrastructures, people and operations to be frontier in information society (Prakash et.al. 2016). So, smart work system is one of critical success factors in organizational culture and innovation. Smart work is used to refer to an arrangement of people, data and process that interacts work activities for problem solving and decision making in organization (Whitten et.al. 200; Al-Alawi et.al. 2007).

Smart work (Centre, Teleconference) participation and Organizational Innovation

Organizational members need to be flexible in smart work system and have ability to collaborate and solve problems for successful implementation of smart work system (Lewis et.al. 2002, Hwang and Choi 2015). Networking of people and things are enabled by ICT as the most powerful driver of innovation that can transform way of work within organization. Digitalization highly tied users and their digital abilities.

Human capital in ICT context is related to positive impact in economic growth. The application of sufficient ICT infrastructure helps people improve their quality of life for sustainable development through intellectual capital as growth drivers applied in innovation technology (Navarro 2016).

Innovation requires flexibility and empowerment based on the need of the organization for better quality work of life (Khanzanchi et.al 2007; Naqsbandi et.al. 2015). Organizational innovation to promote quality of work life has also tightly become problematic in Korean public employees due to the reducing working hours and its consequences on salaries (wages) cuts, as the long awaited dreams of work life balance did not meet the implementation.

Organization which implements major innovations successfully are more opened and have structures and cultures to support further innovation (Hartley 2005). Employees who work in the smart work-centre are easier to collaborate in peers and help to erode some of the resistance (Cha Sin and Cha Seub 2014). The hypothesis was depicted as:

Hypothesis 2*: Smart work system (i.e. smart work centre and teleconference) participation positively moderate organizational culture (i.e. development culture and rational culture) and organizational innovation.*

Organization Innovation and Quality of Work Life

Innovation is a critical organizational capability which is connected to sustainable competitive advantage in complex and dynamic environment that indicates market development (Gumusluoglu and Ilsev 2009; Saros et.al. 2008; Teece 2010; Li et.al. 2015). In this matter, competition in the global economy encourages modernization of public sector organizations.

Innovation is actually placed on its values that do not go for fighting with other organizations for market share, but for exploring new markets and innovate values for both customers and employees of the organization (Chan and Maugborne 2005; Randall 2015; Shafiq et.al. 2017). Organization which has capability to innovate constantly in process and products or services tends to sustain and develop competitive advantage (Chahal and Bakshi 2014). Innovation is an obligation because failing to innovate can place organizations at risk and may lead to decrease the potency to competitive advantage (France, Mott and Wagner 2007; Shanker et.al. 2016). As the consequence in Korean public services, tendency of high increase of unemployment rate becomes an obstacle for economic growth and labor markets. In the face of raising urbanization, aging populace, and increasing demand for better education and healthcare, Korean government need to squeeze out the inefficiency to maintain the trajectory quality work life of its public employees and society as well. Thus, the designed hypothesis is as follows:

Hypothesis 3*: Organizational innovation positively affects the quality of work life through the influence of organizational culture and moderation of smart work system participation.*

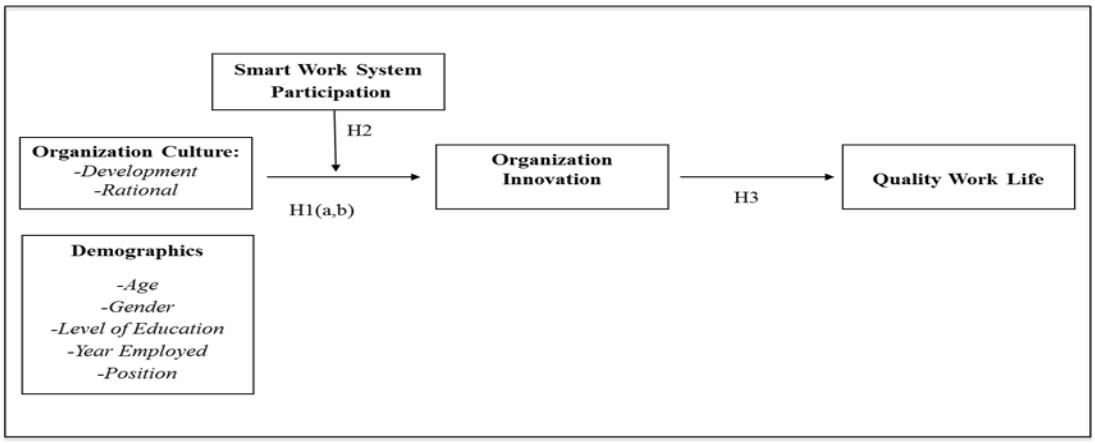

Figure 1: Conceptual model

METHODS

The objective of the study is to get causal effect relationship of organizational culture (i.e. development culture, rational culture), organization innovation and moderation of smart work system participation to quality work of life.

Therefore, we have developed a model supposed that organizational culture positively has relationship to organizational innovation, while both are positively affected by smart work system participation. At the end, all of them give direct and indirect impacts on quality of work life.

The study was conducted based on Public Employment Perception Survey (PEPS) of Korean Institute of Public Administration data August 2016. The survey was applied to 42 administrative agencies included 17 local administration to 2070 participants as respondents. Nevertheless, the study considered only those who had experience at smart work center and teleconference, while excluded those who did not participate. So, a total of 411 valid responses were used in the study which consisted of 329 (80.0%) from the central administrative agencies and 82 (20.0%) civil servants from the local government. The survey questionnaire included 11 Items which covered development culture, rational culture, organizational innovation, smart work system participation (i.e. smart work center and teleconference), and quality of work life. Those survey items were sent via email to the respondents for completion. Questionnaires were classified into two types, for demographics variables which include gender, education, work experience and rank. Then, those scale items which covered organizational culture, organizational innovation, smart work systems participation and quality of work life.

There was 72.5% as male and 27.5% female were as general administrative officers who worked as public servants in both central and local administration in Korea. The majority of respondents' education levels were mostly hold bachelor's degree (69.1%) and master's degree (23.6%). The age of respondents was 40 years in average, 81.3 percent of the respondents were married, while 18.2 percent were single. Based on the grade, respondents were mostly belonged to civil service grade 5 (32.6%) and grade 6 (32.8). Table 1 provided in detail sample characteristics (n = 411) of the study.

Variables	%
Gender	
Male	72.5
Female	27.5
Age (years)	
20-29	3.4
30-39	40.9
40-49	42.1
50 and above	13.6
Marital Status	
Single	18.2
Married	81.3
Separated	.5
Current Position	
Grade 9	2.7
Grade 8	4.9
Grade 7	15.8
Grade 6	32.8
Grade 5	32.6
Grade 4	8.3
Grade 3	2.9
Grade 2	0
Grade 1	0
Current Educational Attainment	
High School or less	1.6
College (2-3 years)	3.6
Bachelor's Degree	69.1
Master's Degree	23.6
Doctorate	2.2
Type of Organization	
Central	80.0
Local	20.0

Organization culture (i.e. development culture and rational culture) was measured using a 5 points Likert-scale (1= strongly disagree; 5 strongly agree) instrument which included 4 items for both development culture and rational culture (e.g. *Development culture*: Our agency stresses on innovation and creativity; Our organization values the employee`s perception of new challenges, growth, and acquisition of resources. *Rational cultur*e: Our agency values competitiveness, achievement and performance; Our organization emphasizes planning, establishing goals, and achieving goals). The reliability of the overall original coefficient scale was .818 (*rational cultur*e) and .837(*Development culture).*

Organizational innovation was measured through instrument with 3 items. It was a 5 points Likert-scale (1= strongly disagree; 5 strongly agree); Those items are: Our organization is flexible and responsive to change; Our agencies allow us to take some risks to innovate; The change in our organization generally produces positive effects. The reliability of the original coefficient scale was .833.

Quality of work life was measured using the instrument with 2 items as measured in a 5 points Likert-scale (1= strongly disagree; 5 strongly agree), i.e.: "I am satisfied with my work life; I am happy compared to other people around me." The reliability of the overall original coefficient scale was .798.

RESULTS

The survey responses collected in the study were analyzed through statistical counting (SPSS and AMOS). The availability of 5 scales for exploratory factor analysis was analyzed and AMOS was applied to count confirmatory factor analysis as well as to make the path analysis to develop structural equation modeling.

Measurement Model

In terms of measurement model, the factor loading ranges from .784 to .918 above the threshold .60. Then we conducted confirmatory factor analysis to perform the differences of constructs from the model and result a proper fit among the constructed model through hypotheses and the data. The result found in comparative fit index (CFI) was .993 (>.95); standard root mean residual (SRMR) was 0.028(<.08); and root mean square of approximation (RMSEA) was .037(<.06) and then, PClose was .805(>.05) which overall were interpreted as excellent and which was greater than each minimum threshold. Measurement on convergent validity of constructs model found if construct reliability (CR) was greater than .900; and the average variance extracted (AVE) was above .752.

Table 2 addressed the result of factor analysis, reliability and validity of the measurement.

Items	Factors				Reliability and Validity Measures		
	Org. Inv.	Rat Cult.	QoL	Dev Cult.	Cronbach's α	CR	AVE
OrgInnov_1	.805				.833	.900	.752
OrgInnov_2	.871						
OrgInnov_3	.784						
RatCult_1		.870			.818	.913	.841
RatCult_2		.909					
QoL_1			.891		.798	.907	.836
QoL_2			.918				
DevCult_3				.804	.837	.909	.833
DevCult_4				.868			

The correlation coefficient based on the descriptive statistics (mean and standard deviation) between constructs of the model delineated that the correlations among variables are relatively strong (p<.001). Simply, development culture is strongly correlated with organizational innovation. Then, the degree of mean value for rational culture was found lower to organizational innovation for achieving high quality of work life. Those are stated on the following table:

Table 3. Descriptive statistics and correlations of variables

	Mean	*SD*	OrgInnov	RatCult	QoL	DevCult
OrgInnov	3.59	.61	-			
RatCult	3.29	.67	.291**	-		
QoL	3.15	.64	.238**	.116*	-	
DevCult	3.30	.67	.586**	.480**	.096	-

** Correlation is significant at the 0.01 level (1-tailed).

Hypotheses Testing

The regression estimation and fit indices of the model were measured by applying structural equation modeling (SEM). The overall models were presented great fit index like CFI = .991; RMSEA= .026; CMIN/DF = 1.280; thus, the model was suitable to the data. Therefore, the analysis found positive relationships between development culture and organizational innovation, which was supporting hypothesis 1a. In contrary, there was no significant relationship between rational culture and organizational innovation. So, hypothesis 1b, was not supported.

Subsequently, the result revealed that organizational innovation significantly had great influence on quality of work life. Therefore, it supported hypothesis 3.

The Moderation of Smart Work System Participation

We analyzed the moderating variable of smart work system participation to both organizational culture (i.e. development and rational culture) and organizational innovation which was designed in hypothesis 2 of our model. The result was found that smart work system (teleconference participation) highly has positive effect on both development culture and organization innovation (B=.06; p<.01); then, it was the same finding to smart work (teleconference participation) which also gave positive relationship to rational culture and organizational innovation (B= .10; p<.001). Nevertheless, smart work (center participation) did not show any moderation effect on development culture and organizational innovation (B=.02, p>.05); while in the same token, it was also found that smart work center participation did not show any effect on rational culture and organizational innovation (B=.07, p>.05). Therefore, it was confirmed that hypothesis 2 was partially supported in this finding.

Table 4. SEM and Moderation results

Description of Path		Path Coefficient (Standardized β)	Estimate	S.E.	C.R.	P
Rational Cult.	→	Org. Innovation	-.049	.067	-.735	.462
Development Cult.	→	Org. Innovation	.737	.075	9.869	***
Org. Innovation	→	Quality Work Life	.215	.064	3.354	***
Position now	→	Quality Work Life	-.007	.020	-.338	.735
Gender	→	Quality Work Life	.024	.052	.457	.648
Age	→	Quality Work Life	.000	.003	-.027	.979
Educ. Now	→	Quality Work Life	-.002	.036	-.066	.948
Rational x SWC	→	Org. Innovation	$.07^{ns}$	(p>.05)		
Rational x Tele	→	Org. Innovation	$.10^{***}$	(p<.001)		
Development x SWC	→	Org. Innovation	$.02^{ns}$	(p>.05)		
Development x Tele	→	Org. Innovation	$.06^{*}$	(p<.01)		

DISCUSSION

The result of the study performed some pivotal points to be discussed. The first finding addressed the relationships of development culture and rational culture to organizational innovation, as assumed in hypotheses 1(a, b). More specifically, as it was found that development culture in hypothesis 1a, greatly delivered positive relationship to organizational innovation.

It means that organizations from both central and local administration in Korean public-sector organizations had values of creativity and sense of innovation to dedicate better organizational innovation for quality of work life. Instead, rational culture did not show any effects on organizational innovation, in which hypothesis 1b was not supported at all. It can be assumed that public sector employees in both central and local administrations did not merely perform just on rational culture in the sense of goal orientation to organization innovation. Instead, they have transformed the paradigm of work pattern to be public value-oriented servants in relation to humanity based on confusion culture and the mission of Post NPM in public administration as well.

The second finding indicated the moderation effect of smart work system participation to organizational culture (i.e. development and rational culture) and to organizational innovation, as assumed in hypotheses 2. Based on findings here smart work system (teleconference participation) positively influenced both development culture and rational culture, as which had the same influence to organizational innovation. It could be implied that smart work (teleconference participation) brought public employees flexible working conditions which could influence their work values to change through creativity and innovation to the goal of the organization. Nevertheless, as it was found that smart work (center) did not show any influence to the organizational culture and organizational innovation, which could be implied that smart work (center participation) was not the choice to be attractive, and possibly, did not present flexible working conditions on public employees based on the culture of collectivism in Asia in general.

The third finding indicated the influence of organizational innovation to quality of work life as assumed in hypotheses 3. It showed that organizational innovation is significantly and positively associated to quality of work life. The result indicated that among Korean public-sector employees, organizational innovation devoted high optimism and commitment to constantly develop novel things for better quality of work life.

CONCLUSION

Based on findings and discussions, there are some important elements drawn from this study. It could be generalized that:

First, development culture highly has great relationship to organizational innovation; while on contrary, rational culture did not dedicate great relationship to organizational innovation in Korean public sector organization.

Second, smart work (teleconference participation) greatly has influence on both organization culture and organizational innovation; while smart work (center participation) did not have any influence on organizational culture and organizational innovation.

Third, organizational innovation positively has great influence on quality of work life in Korean public sector organization. So, organization culture and organization innovation definitely bring about impacts on better quality of work life in both central and local officers in Korean public sector organizations.

Theoretical Implication

First; Development culture affects employees of the organization to develop creativity in dynamic organization innovation. The different status, social and cultural context of organization may influence employees' integration through organization innovation. This study is in agreement with Turro et.al (2013) who stated that individuals would be more likely creative and become entrepreneurs when they are involved in an innovative culture.

Second; The influence of smart work system participation partially impacted on both organizational culture (i.e. development and rational culture) and organizational innovation. The finding was in line with Moore and Benbasat (1991; Shareef et.al. 2014) who stated based on 'innovation diffusion theory' that accepting any innovation is based on the image and values of the users which influenced the attitude to innovate and perceive the innovation. It was also stated by Park (2013) that the core business strategy of the organization to work in smart work system (IT management) should be clearly aligned and integrated as well.

Third; The mediating effect of organizational innovation bolstered huge impact on better quality of work life in organization. It was related to France, Mott and Wagner who suggested that the success to

innovate may bring the organization to get success and can increase the ability to achieve quality work life of employees in the organization (2007; Shanker et.al. 2016).

Practical implication

These findings practically contribute more on the development of organization culture and innovation through the effect of smart work system participation for quality work life in Korean public-sector organizations. At least there are some practical impacts of the study:

First; the study brought contribution to understand deeply about values of the organization through development culture and rational culture which perform impacts on organizational innovation for better quality of work life. Understanding these environment cultures could dedicate ultimate benefits to react on how organization works well and objectively.

Second; the influence of smart work system participation on the organization would practically bring susceptible effects on cultural values in this case, development culture and its effects on the mission to innovate the organization. Smart work system is an employees' trend as way of work of the organization which gives huge impacts on the development of the organization.

Finally, based on the study, organization culture and innovation greatly deliver better improvement and development to Korean public organizations. Moreover, organization innovation presents new horizons to sustainable employee's better quality of work life.

LIMITATION AND SUGGESTION FOR FURTHER RESEARCH

Still, the study encountered some aspects as shortcoming on the scope of study. Therefore, there are some suggestions for better development as follows:

First; this study found negative effect on the relationship of rational culture and organizational innovation. So, it is recommended to reinvestigate this finding at other locus of study that might be considered positively give great impact on the goal of organizational innovation. Furthermore, this study only applied two types subcultures, thus, further studies are required to extend the view on both group culture and hierarchical culture as internal aspects of the organization culture. Then, the study was still limited in method and instrument items based on the data set, so, it is recommended to be extended for further studies.

Second, the moderation of smart work system participation of the study just included smart work center and smart work teleconference participation. It is suggested to integrate other aspects of smart work system in coming studies. In relation to the level of participation in smart work system, the implementation program of smart work center needs to be revised because culturally, it had not fit the interest of employees to work better in flexible situations and circumstances. Smart work revitalization policy evaluation is required to increase the access to smart work. Then, strong leadership commitment for implementation of this smart work system should cover the values of the organization culture, like considering the hierarchical culture which is dominant sometimes in Korean public sector organizations.

Third, the better the organization innovation is, the higher the quality of work life would be. Therefore, further studies are recommended to integrate other supporting aspects besides cultures and information technology to develop better competitive advantage of organizational innovation for quality of work life.

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