

**THE RELATIONSHIP BETWEEN ISLAMIC WORK ETHICS AND INNOVATION CAPABILITY
AND KNOWLEDGE SHARING PLAYS MODERATION ROLE.**

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ABSTRACT

The purpose of this paper is to demonstrate the impact of Islamic work ethic (IWE) on innovation capability (IC) and sharing knowledge (SK) playing moderate role between their relationships in the Public sectors' organizations in Pakistan. The valid and reliable scales were used for measuring the IWE, IC and SK. 150 questionnaires were distributed among the officers of grade 17, grade 18, grade 19 and grade 20 in different public sectors' organizations and 102 officers responded among them. The results (Adjusted R square = 0.48) founded that there was significantly positive relationship between Islamic work ethics on innovation capability and when sharing knowledge enter as moderator between their relationships the result (Adjusted R square = 0.57) was also positively significant on Innovation capability and this results (R square change 0.09) shown that knowledge sharing was played moderate role, hence all the hypothesized of this study were significantly confirmed at p value ($p < 0.001$). While the study was limited to the Pakistani public sectors' organizations and sample size is too short, it has considerable implications for the development of a bright workforce in other cultures and multinational organizations. An interpreting of the commitment of the manpower to the IWE and it's on innovativeness by sharing knowledge as well as helps HR managers in designing the intervention, and implementation of this intervention to bring changes in public sector organizations for development of the employees and organizational effectiveness. In the results there is very strong necessary for the public sectors' organizations in Pakistan as well as other non-western countries that examine the link of IWE and innovation capability by creating flexible environment among employees to share their innovative knowledge with the bosses, colleagues and subordinates. This paper emphasizes on IWE to improve the innovation capability by creating knowledge sharing environment among employees in public sector organizations.

Keywords: *Public sector Organizations, Islamic Work ethic, Knowledge Sharing and Innovation capability, Human resource management, Islam, Pakistan*

1. INTRODUCTION

There are number of studies that recognized the actual information on human behaviors, values and attitudes at workplace. However, the volume of research pertaining to work ethic and different organization and individual outcomes has been carried out in the western locale centered on the protestant work ethic (PWE).

In response to the significant need to study IWE and the workplace outcomes in non-western environment consequently in this paper describes the degree to which IWE persuades innovation capability among the Pakistani Public Sector organizations. Pakistan is an Islamic country with a multicultural society; hence it is an excellent setting for performing and reporting such study. Both scholars and practitioners will get the present study more precious. Scholars are able to increase their knowledge sharing among employees in non-western public sector context. It is anticipate that this will encourage more scholarly research. On the hand, the practitioners, HR professionals and top level officers in the public sector, will find the information in this paper helpful in their effort towards crafting an innovation workforce by creating knowledge sharing environment among them.

In spite of its substance, very few studies have been committed to Islamic work ethic (IWE) and its impact upon workplace outcomes such for instance organizational innovation capabilities (Ali, 2005; Ali & Al-Qwaihah, 2008; Rizk, 2008; Yousef, 2000; Ali and Al-Qwaihah, 2008). Knowledge sharing creates opportunities to make best use of organization ability to fulfill those needs and provide efficient solutions for increase the growth and value of business and gain competitive advantage in the market (Reid, 2003).

Organizations can successfully establish a culture in which people share their knowledge with each other and it coordinating and integrating the knowledge for designing and formulating the strategy for the success of business as well as also for changing the attitudes and behaviors of employees who do effort willingly to support and keep maintain the knowledge sharing culture in the business (Lin and Lee, 2004; Kelloway and Connelly, 2003).

Additionally, a variety of studies paying attention to examine the relationship between knowledge sharing enablers and knowledge sharing process (Yeh et al., 2006; Bock et al., 2005; Van den Hooff and Van Weenen, 2004), whether very few studies has been focused to determination of the relationship between innovation capability and enablers shares the knowledge (Calatone et al., 2002; Syed Ikhsam and Rowland, 2004).

However researchers, HR professionals and consultants didn't try to develop an integrative theoretical framework in which searches the effectiveness of knowledge sharing from a functional relation between part and whole perspective. In this study was tried to examine the relationship among Islamic work ethics, innovation capability and knowledge sharing of the public sector officers in Pakistan. In this empirical research try to describe the moderate relationship of knowledge sharing between Islamic work ethics and innovation capability can enhance the capabilities of individual employees as well as organization also. For individual employees, knowledge sharing is dialoguing to colleagues to help them get to some extent made better, more rapidly, and effectively. If the officers share their appropriating, coordinating, reprocessing, and transmitting experienced based knowledge with each other that inhabits within the organization and building that knowledge existing to others in the business.

The various studies have verified that knowledge sharing is necessary because it enables organizations to improve innovation performance and increase the appropriate and useful learning efforts (Scarborough, 2003; Calantone et al., 2002).

2. REVIEW OF LITERATURE

2.1. Innovation Capability

The obvious definition of Innovation is complicated as it can contain just about any organizational or managerial transform, whether that involves new products, processes, ventures, systems, production methods, commercial preparations or services (Trott, 1998).

In array to investigate the key issues of public sector innovation, in this research innovation capability is described as the scale of conviction that the public sector is truly providing original or practical thoughts to increase the stipulation of public services or manufacture of new products (Lee and Choi, 2003).

Study concerning to innovation is multi-programming application to identify and employ hopeful ideas to fashion products, services or place of work practices (Tether, 2003; Ven, 1986). Definitely the innovation capabilities totally differ between highly developed countries and emergent economics (Kim, 1997). It is obvious that ever more scholars are pertained about analyzing innovation capabilities which strongly exacted to carry the public sector competitiveness. Nonetheless there is broad arrangement of approaches to gain knowledge of the fundamental drivers of innovation capability and it has covered the ways for various definitions documented in the management literature.

The capability to remain the well work standards provides the momentum for the long run endurance of unit within the public sector (Brown and Osborn, 2005; Tether, 2003). Definitely Individual attributes in the direction of work and career are one of the fundamental factors sustaining innovation in public sector services. It is defined as the innovation capability of the public sector organizations is understudied rater than the notable information acknowledges on innovation in the private sector organizations (Borins, 2001; Brown and Osborne, 2005; Osborne and Gaebler, 1992). There are many studies in which elaborated the significantly conclusion about innovation capability for modern organizations (Calantone et al., 2002; Daroach and McNaughton, 2002; Evangelou and Karacapilidis, 2005; Woodman et al., 1993; Scabrough, 2003; Syed Ikhsan and Rowland, 2004; Koh, 2000; Lin and Lee, 2004; Van den Hoff and Van Weenen, 2004; Yeh et al., 2006; Troilo and Vicari,

2000). These are some researchers who did explain about the innovation capabilities of the modern organizations.

The Islamic Work ethics is independent variable and Knowledge sharing is moderate variable in this study. In which elaborated the impact IWE on innovation capability of the public sector organization, the innovation capability increases of employee and organization when the organizational environment would be cooperative and employees, managers, bosses and subordinates as well to share their specific experiences & knowledge to each other.

2.2. Islamic Work Ethics

The IWE Analogous to the concept of Islam Hadhari that emphasizes cooperation in work, and consultation is seen as way of overcoming obstacles and avoiding mistakes to meet one's needs and establish equilibrium in one's individual social life. The IWE I oriented more towards life fulfillment than life denial and holds business motives in the highest regard (Ali, 1992, 2005).

The higher work ethics such as the IWE provides a stage and strong point for the whole employees in spite of the suddenly marvelous challenge that lies to be front. Moreover it provides the labor force with standards to grip as they attempt to become the attractive public service providers. The study was originated that managers who are jobbing in the public sectors scored much higher on IWE than those who are jobbing in the Private sectors (Ali & Al-Qwaihah, 2008). The employees who are jobbing in the public sector organizations represented more substantial support of IWE (Yousef, 2001).

The study on work ethic and its links with individual and organizational factors has received significant attentiveness in the literature (Ali and Al Qwaihah, 2008; Ali, 2005; Yousef, 2001, 2000; Furnham and Rajamanickam, 1992; Congleton, 1991; Zubbof, 1983). Definitely the logical implications of the work ethic which revealed an individual's attitudes and behavior towards his/her work for organizational successes have been widely investigated possibly it has filtered leadership and management views. On the other hand, a great deal of study on work values has been conceded out in the west and has focused on the Protestant Work Ethic (PWE) (Weber, 1958). Weber focused the PWE to be at the origin of the western idea that an individual has "duty" to work, and verified the survival of a relationship between Protestantism and progress of modern capitalism (Rose, 1985). Nonetheless, the idea of IWE has its basis in the Quraane-E-Kareem. The Hadith and Sunnah of Prophet Hazrat Mohammad peace be upon him and early Islamic Scholars who prophesized that hard work stimulated sins to be justified and eats better food than which he eats out his work (Ali, 1992).

A Muslim is also expectant to carry out all responsibilities skillfully and carefully. This is an evidence of one of the Prophet Mouahmmad's sayings which is clearly compulsory for every Muslim to obey properly. The researcher distinguished some of work related saying of Prophet Mohammad that occupation is the best form of worship, ethical and rightful fundamentals must be innate in economics tricks, regulation and obligation must be spirit of work and work maintains confidence and self reliance (Ali, 2005).

The early study on the link between IWE and workplace attitudes is highly esteemed (Ali,1988, 1992). Whenever very few studies have been described on the relationship between the IWE and Individual and organizational variables, all that literature is very hopeful and started to magnetize more investigate in many regions of the world (Ali and Al Qwaihah, 2008). The high relationship between IWE and individualism (Ali, 1992). The researchers originated the PWE, work involvement and work measures interrelated with IWE in their studies of the work ethic in the USA and Canada (Ali et al., 1995). The high relationships between IWE and role ambiguity and locus of control scales progressively determined and also IWE raises the job satisfaction and organizational commitment (Yousef, 2000, 2001). A person with high level of securitized of IWE would have to tendency to increase a sentimental organizational commitment (Rehman et al., 2006). There is dissimilarity of western work ethics; IWE outstandingly fascinated the importance of one's involvement to community and society and obligations of the organization to its employees (Abu Saad, 2003). The IWE highly related to loyalty evaluate (Ali and Al Kazmi, 2007). IWE entails that carrying on business in an energetic environment will consequence in higher performance and extensive success (Ali and Al Qwaihah, 2008). In more recent study that examining the link between IWE and innovation capability and conclusion of this study the IWE is highly adapted in the public sector, the respondents collectively declared that innovation strength in Malaysian public sector mounting. The IWE measure was found to be significant with moderate correlation and positive relationship with the innovation capability scale (Naresh Kumar and Raduan Che Rose, 2010).

2.3. Knowledge Sharing

Knowledge sharing can be define as social interaction culture, involving the exchange of employee knowledge, experiences, and skills through the whole department or organization. Knowledge sharing comprises a set of shared understandings related to providing employees access to relevant information and building and using knowledge networks within organizations (Hogel et al., 2003).

An Organization can effectively endorse a knowledge sharing background not only by straightforwardly incorporating knowledge in its business strategy, but also by altering worker's attitudes and behaviors to support willing and reliable (Connely and Kelloway, 2003; Lin and Lee, 2004). Additionally, many researches addressed on the link between knowledge sharing enablers and processes (Van den Hooff and Van Weenen, 2004a, 2004b; Bock et al., 2005; Yeh et al., 2006), whereas others have addressed on the link between knowledge sharing enablers and innovation performance (Calantone et al., 2002; Syed Ikhsan and Rowland, 2004).

The Knowledge sharing processes measurement mentions to how organization's workers share their job related knowledge, skills, expertise, know how, and relative information with colleagues means knowledge donating and energetically discuss with colleagues to gain knowledge from them means knowledge collecting. Lastly the organizational endorsement of knowledge sharing shifting conventional thoughts about managing rational resources and workers job styles by producing new processes, bailiwicks and cultures, thus establishing an organizational innovation (Darroch and McNaughton, 2002).

The outcomes width reveals the impacts of the extent of knowledge sharing successfully achieved on organization innovation capability. The literature realizes the subsistence of different influences on employees' knowledge sharing procedures, such as individual. Organizational, and technology factors (Taylor and Wright, 2004; Lee and Choi, 2003; Connelly and Kelloway, 2003).

Concerning to the individual element, most researchers consent that knowledge sharing depends on individual characteristics, including experience, values, standards, morals, motivation, inspiration, and beliefs as well as perceptions. The individual motivators may permit worker inspiration to share knowledge (Wasko and Faraj, 2005). Workers are motivated when they feel that knowledge sharing behaviors will be significance attempt and capable to facilitate others.

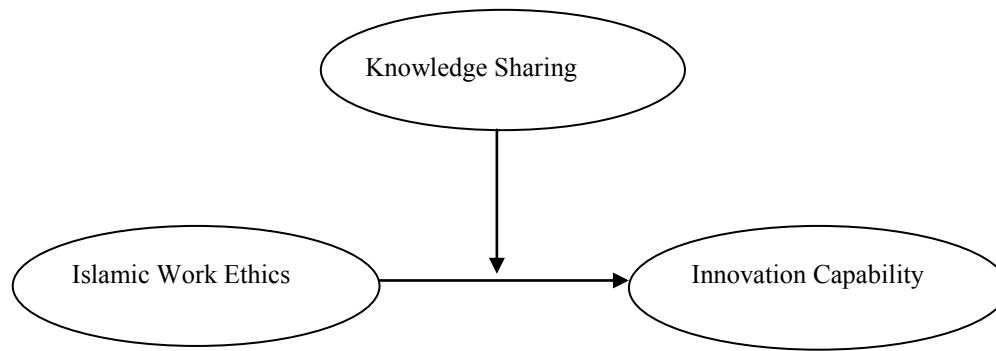
Consequently, the anticipation of individual benefits can encourage employees to share knowledge with their colleagues. Moreover concerning to the organizational dimension, organizational environment is generally prepared to appropriate efficiently the benefits of innovation encouraging culture (Saleh and Wang, 1993). In the perspective of knowledge sharing the dissimilar aspects of organizational environment are serious drivers of knowledge sharing, such as reward and compensation systems related to knowledge sharing (Bartol and Srivastava, 2002); release leadership environment (Taylor and Wright, 2004), and top management hold up (MacNeil, 2003; MacNeil, 2004).

Knowledge sharing procedure can be conceptualized as the processes throughout which workers commonly substitute knowledge and mutually produce new knowledge (Van den Hooff and Van Weenen, 2004a). The knowledge sharing since concerning both provide and require for new knowledge (Ardichvill et al., 2003). There are two types of knowledge sharing process that comprises of Knowledge donating and knowledge collecting (Van den Hooff and Van Weenen, 2004b). Knowledge donating means the process of individuals communicating their personal cerebral wealth to others, whereas knowledge collecting can be described as the process of referring colleagues to promote them to share their cerebral wealth. Moreover a significant challenge for organizations is which motivations persuade both knowledge donating and knowledge collecting and pilot to advocate organization innovation capability (Jantunen, 2005). Recent study that the interaction between knowledge sharing enablers (Individual, organizational, and technology factors) and organization innovation capability by complicating on the implication of knowledge sharing processes (Knowledge donating and collecting) (Hisu Fen Lin, 2007).

3. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

- Islamic Work Ethics is the independent variables in this study.
- Knowledge sharing is moderate variable in this study.
- Innovation Capability of both (firms and individual) is the dependent variable or primary focused variable.
- There is positive relationship between independent variables (Islamic work ethics), moderate variable (Knowledge Sharing) and dependent variable (Innovation capability).

3.1. Research Modal



3.2. Hypothesis

- H1: There is positive relationship between Islamic work ethics and innovation capability.
- H2: The positive relationship between Islamic work ethics and innovation capability is moderated by knowledge sharing of officers (employees).

4. RESEARCH DESIGN AND METHODOLOGY

4.1. Design

The nature of this study was explanatory study in which try to draw a conclusion about the public sector organizations in Pakistan that the Islamic work ethics of the employees who were officers of grade-17 to grade-20 and they can increase their knowledge and innovation capabilities of when they will share their positive knowledge for doing work effectively and efficiently as well as to improve their interpersonal and intrapersonal skills. This study try to examine the cause and effect of the variables on each other also it is correlational study. The cause and effect relationship between Islamic work ethics and innovation capability is positive, and its effect on the environment of the organization that employees would be to share their knowledge positively to each other for enhancing their innovation capabilities. This study actually conducted in the field in which was surveyed in the different public sector organizations and collect the data from public sector population (officers of grade-17, grade-18, grad-19, and grade-20) in Islamabad, Pakistan. So the environment of this study is non-contrived because have no control the allocation of treatments from the experimental unit. The study was cross sectional because it was conducted first time in Pakistan and data were collected form different public sectors' organizations.

4.2. Method

The population was the officers of grade17, grade18, grade19, and grade20 who were working in the public sector organizations in Islamabad, Pakistan. Convenience non probability sampling technique is used for data collection from the public sector organizations' officers in Islamabad. 150 questionnaires were distributed among the officers of different public sector organizations and 102 officers responded and responded rate was 68%. Data were collected from officers of Air University, Pakistan Air force, Pakistan Telecommunication Limited, Ministry of Defense and National Bank of Pakistan. So number of samples was 5 and sample size was 150 employees. There was short sample size for this research due shortage of time and most of the employees do not respond properly and it was very difficult to collect data in Pakistan about any research purpose due to un-willingly response from the Pakistani people.

4.3. Measure

The data was collected by using some valid and reliable instruments for measuring the Islamic work Ethics, 17 items scale (short version) was used for Islamic work ethics which developed by Ali in 1988 and the Cronbach's reliability coefficient for Islamic work ethic scale was 0.80 and for measuring the innovation capability used 5 items scale which developed by Lee and Choie in 2003 and the Cronbach's reliability coefficient for innovation capability of scale was 0.72 and this scale was well developed by Lee and Choie in 2003. And for measuring the Knowledge sharing to 8 items (short version) scale was used which developed by Andersen and Gabering in 1992 and the psychometric properties of eight construct and indicators were evaluated according to convergent validity and discrimination validity constructed by Joreskog and Sorbom in 1996 and the reliability of this scale was 0.85 in this study. The composite reliability of all constructs exceeded the benchmark of 0.7 suggested by Nuanny and Brenstein in 1994. The all question arranged by using the 5 points strongly disagree to strongly agree Likert scales in which assigned 1 for strongly disagree, 2 for disagree, 3 for neither agree and nor disagree (neutral), 4 for agree, and 5 for strongly agree.

4.3.1. Table I the Cronbach's Coefficient Reliability of this study

According to the using of these scales for this study and checked its reliability test by using the SPSS version 15. The under table shows the detail of reliability tests results, in which use the Cronbach's coefficient for assessing the reliability of these multi scales. The all shows the adequate range of the reliability which is from 0.72 to 0.85.

Variables	Alpha
Islamic Work ethics (17 items)	0.80
Innovation Capability (5 items)	0.72
Knowledge Sharing (8 items)	0.85

5. RESULTS AND DISCUSSIONS

The results of this study were analyzed by using the SPSS 15.0 software and examined the (demographical profile) one way ANOVA test (table II), (M) mean, (SD) standard deviation, (SE) standard error (table III), (correlation) strength of relationship among the variables (table IV), (regression) variation between independent and dependent variables, (t values and F value) accepting and rejecting region of hypothesis, (Beta) regression coefficients which mean how much units effected On the dependent variable when increase one unit of independent variable, and (p value) significance level of the results (table V) for interpretation of study's hypothesis confirmation.

5.1. Table II Responders' profiles and one way ANOVA analysis

Variables Statistics	Islamic Work Ethics		Innovation Capability		Knowledge Sharing	
	n	%	Mean	F-Statistics	Mean	F-statistics
Gender					8.59*	17.38**
8.50*						
Male	85	83%	4.34			3.53
3.53						
Female	17	17%	4.13			2.98
3.18						
Age					7.10*	5.57*
8.65**						
Below 25 years	26	25%	4.14			3.16
3.17						
25-40 years	49	48%	4.34			3.57
3.58						
Above 40 years	27	27%	4.41			3.52
3.58						
Education					4.81*	2.81
3.05						
Graduation	26	25%	4.29			3.64
3.63						
Master	70	69%	4.29			3.37
3.40						

PHD 3.69	6	6%	4.65	3.60
Experience 1.45			10.68**	3.98*
0-5 years 3.36	41	40%	4.18	3.24
6-10 years 3.52	32	31%	4.30	3.62
11-15 years 3.57	13	13%	4.44	3.52
Above 16 years 3.60	16	16%	4.57	3.60
Working Area 2.76*			3.93*	5.19*
Finance 3.31	36	35%	4.19	3.18
HRM 3.59	33	32%	4.35	3.60
G. Management 3.48	17	17%	4.45	3.56
Others 3.61	16	16%	4.33	3.62
Managerial Grade 1.08			3.49*	0.98
Grade 17 officers 3.39	42	41%	4.21	3.34
Grade 18 officers 3.58	28	27%	4.35	3.53
Grade 19 officers 3.43	13	13%	4.39	3.52
Grade 20 officers 3.55	19	19%	4.41	3.54

Note: * p < 0.05, **p < 0.01

Table II shown the demographically profile of responders. The percentage rate of the officers was in gender (male 83% and female 17%), the percentage rate of the officers was in age (25% below 25 years, 48% between 25 and 40 years, 27% and above 40 years), percentage rate of the officers in education level (25% graduation, 69% master, and 6% PhD), percentage rate of the officers in experience level (40% of 0-5 years, 31% of 6-10 years, 13% of 11-15 years, and 16% above 16 years), percentage rate of the officers in working area (35% working in finance, 32% in human resource management, 17% in general management and 16% in others area),

percentage rate of the officers in Officers' Grade level (41% of grade 17, 27% of grade 18, 13% of grade 19, and 19% of grade 20) were responded on study's questionnaire during survey (table II).

The table II represents ANOVA results of the study's variables. The ANOVA results elaborated the significantly combination of study's independent variable (Islamic work ethics) differs according to the gender ($F = 8.59, p < 0.05$), age ($F = 7.10, p < 0.05$), education level ($F = 4.81, p < 0.05$), experience level ($F = 10.68, p < 0.01$), working area ($F = 3.93, p < 0.05$) and officers' grade level ($F = 3.49, p < 0.05$) (position) where as dependent variable (innovation capability) differ according to the gender ($F = 17.38, p < 0.01$), age ($F = 5.57, p < 0.05$), experiences ($F = 3.98, p < 0.05$), and working areas ($F = 5.19, p < 0.05$) and moderate variable (knowledge sharing) differ according to the gender ($F = 8.50, p < 0.05$), age ($F = 8.65, p < 0.01$), and working areas ($F = 2.76, p < 0.05$) of the officers (table II).

Results shown the male ($M = 4.34$) officers of public sector organizations were stronger and significant support than female ($M = 4.13$) of Islamic work ethics, much support of male ($M = 3.53$) than female ($M = 3.13$) of innovation capability and also male ($M = 3.53$) support of knowledge sharing than female ($M = 3.18$) officers (table II). These results of male and female explained that male officers than female officers were doing much work in the perspective of Islamic ethically and sharing their positive knowledge with each other for the development of services and organization, ultimately purpose was to increase the innovation capability of themselves and organization by promoting new ideas for their cooperatively upgrading (table II). The officers with age (25-40 years) and (above 40 years) groups' results shown there was stronger support of Islamic work ethics, innovation capability and knowledge sharing than the age group (below 25 years). The results found that the officers who have higher education level (PhD) were more and significant related to the Islamic work ethics ($M = 4.65$) it means when education increases of the officers the score on Islamic work ethics will also increase (table II). The officers who have more than 16 years experiences in these public sector organizations were scored higher on Islamic work ethics ($M = 4.57$) and innovation capability ($M = 3.60$) than the other officers who have less than 10 years experiences (table II). This study results also found that officers who were working in the general management were highly and significantly scored on Islamic work ethics ($M = 4.45$) and officers working in other areas beside Finance, HRM, GM were significant and highly scored on Innovation capability ($M = 3.62$) and knowledge sharing ($M = 3.61$). The results found that the officers who have higher grade level (grade 20 officers) were more and significant related to the Islamic work ethics ($M = 4.41$). On the other hand there were not significantly differentiate according to the education ($F = 2.81$) and official grade ($F = 0.98$) level on innovation capability and according to the education ($F = 3.05$), experience ($F = 1.45$) and official grade ($F = 1.08$) level on knowledge sharing (table II).

The past studies shown there was significantly no differentiate between gender and dedicated to Islamic work ethics (Israelowitz and Abu-Shad, 1997; Yousaf, 2000). It shows that male and female officers have clear information about the policies, rules, and tasks so they were doing effort to achieve responsible works. The previous studies also found the significant relationship between age, education level, experience level and dedication to Islamic work ethics (Abboushi, 1990; Ali et al., 1995; Yousaf, 2001; Ali and Al-Kazemi, 2002; Abu-Saad, 2003). Further more there was significant relationship between officers' grade level and Islamic work ethics (Al-Kazemi and Ali, 2002).

5.3. Table III Mean, SD and SE in mean of responders on variables scale

Variables	N	M	SD	SE
Islamic work Ethics	102	4.31	0.28	0.03
Knowledge sharing	102	3.48	0.47	0.05
Innovation capability	102	3.45	0.54	0.05

Note: Islamic work ethics, knowledge sharing and innovation capability rating by using the 5 point likert scale 1 to 5

Table III shows the mean, standard deviation and standard error in mean of study's variables N denoted numbers of observations (No. of responders), M denoted the mean, SD denoted the standard deviation and SE denoted standard error in mean that elaborated the responders' score on scales of study's variables. The mean score of responders on Islamic work ethics scale was 4.31, standard deviation in the score was 0.28 and standard

error in the mean score was 0.03, mean score of knowledge sharing scale was 3.48, standard deviation was 0.47 and standard error in the mean score was 0.05, and mean of innovation capability was 3.45, standard deviation was 0.54 and standard error in the mean score was 0.05 (table III).

5.3. Table IV Pearson's Correlations among demographical and study's variables

Measure	Gender	Age	EL	Exp	WA	MGL	IWE	INC	KNS
Gender	1								
Age	-0.079	1							
EL	0.12	0.26***	1						
Exp	-0.11	0.25*	0.20*	1					
WA	-0.28**	-0.05	-0.08	0.17	1				
MGL	-0.08	0.05	0.08	0.08	0.14	1			
IWE	-0.28**	0.33**	0.16	0.49**	0.23*	0.29**	1		
INC	-0.38***	0.23*	-0.14	0.24*	0.29**	0.14	0.64***	1	
KNS	-0.28**	-0.32**	-0.11	0.19	0.20*	0.11	0.49***	0.66***	-

Note: n = 102, * p < 0.05, **p < 0.01, ***p < 0.001, EL = Education level, Exp = Experience level, WA = Working area, MGL = Management grade level, IWE = Islamic work ethics, KNS = Knowledge sharing, and INC = Innovation capability

Table IV shows the relationship among demographical, independent, moderate and dependent variables with each other and this relationship call *Pearson's correlation* of the variables it means to measure the strength of relationship among the variables. There were positive and significant relationships among independent variable (Islamic work ethics); moderate variable (knowledge sharing) and dependent variable (innovation capability) of this study (table IV). The Islamic work ethics was significantly positive correlated (r = 0.64, p < 0.001) with the innovation capability, and also significantly positive correlated (r = 0.49, p < 0.001) with the knowledge sharing capability (table IV). The knowledge sharing capability was significantly positive highly correlated (r = 0.66, p < 0.001) with innovation capability (table IV). According to the Kenny's and Barron (1986) there should be significant correlation among all the variables for moderation and mediation analysis. Hence this study did meet the all requirements for the moderation analyses of knowledge sharing because there were positive and significant relationships among (Islamic work ethics, knowledge sharing and innovation capability) all variables (table IV).

5.4. Table V Regression Analysis of Islamic work ethics and innovation capability

Variables	Adjusted		Change in		Significance	
	Beta	R square	R square	t value	p value	F
Islamic work ethics and						
Innovation capability	0.64***	0.40		-	8.29	0.000
						68.68***

Note: *p < 0.05, **p < 0.01, ***p < 0.001

Table V shown the regression analysis of two (Islamic work ethics and innovation capability) variables in which Beta value (Beta = 0.64, $p < 0.001$) of these two variables were interpreted that if one unit increase in Islamic work ethics then 0.64 unit increase the innovation capability at highly significant p value. Adjusted R square (0.40) explained the significant variation between Islamic work ethics and innovation capability was 40% and t value ($t = 8.29$, $p < 0.001$) and F value ($F=68.68$, $p < 0.001$) which shows significant true relationship between these two variables, because t value (8.29) was greater than t tabular standard value (± 1.96). According to the Sobel (1982) this t value (8.29) is normally distributed, that for large samples it will lead to accept the study hypothesis at $p < 0.05$ because it exceeds ± 1.96 which is standard normal distribution for small samples. So this study first hypothesis (H1) is significantly confirmed that "There is positive relationship between Islamic work ethics and innovation capability".

In the previous studies Islamic work ethics measure was found to be significant moderately correlation and positive relationship with the innovation capability scale (Naresh Kumar and Raduan Che Rose, 2010).

Table VI shown the hierarchical regression analysis of demographical variables (gender, age, education level, experience, working area and management grade level), independent variable (Islamic work ethics) and moderate variable (knowledge sharing) with the dependent variable (innovation capability).

5.5. Table VI Hierarchical Regression for Moderation Analysis

Variables	Step 1	Step 2	Step 3	Step 4
Gender	-0.27**	-0.16*	-0.12*	-0.12
Age	0.23*	0.10	0.07	0.02
Education	-0.20*	-0.23**	-0.14*	-0.16
Experience	0.15	-0.08*	-0.05	-0.06
Working Area	0.18	0.11	0.08	0.08
MGT Grade Level	0.09	-0.05	-0.04	-0.04
Islamic work ethics		0.62***	0.45***	0.32***
Knowledge Sharing			0.38***	0.000
IWExKNS				0.45***
Adjusted R Square	0.24	0.48	0.48	0.57
Change in Adj. R square	0.24	0.24	0.00	0.09
F value		6.42***	14.60***	18.69***
				17.60***

Note: The standardized regression coefficients are shown in table, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.5.1. Moderation Analysis for Hypothesis test

Kenny and Barron (1986) stated when three paths conditions (path a, path b and path c) are fulfilled then it is supported the moderation impact. In first path (path a), the independent (Islamic work ethics) variable must be

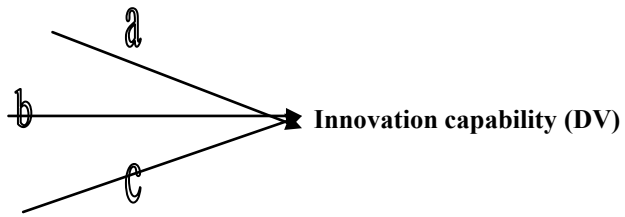
significantly {according to Sobel, (1982) t value, $p < 0.05$ } related to the dependent variable (innovation capability) then first condition (path a) would be satisfactory meet in step 2 of hierarchical regression analysis.

Islamic Work Ethics (Independent variable)

Knowledge Sharing (Moderate variable)

IWExKNS

(Interaction variable)



In second condition (path b), Barron and Kenny (1986) described that there also must be significant relationship {according to Sobel, (1982) t value, $p < 0.05$ } between moderate variable (knowledge sharing) and dependent variable (innovation capability) directly in hierarchical regression analysis. In third and last condition (path c), Barron and Kenny (1986) explained when added the interaction or production of independent (islamic work ethics) variable and moderate (knowledge sharing) variable (IWExKNS) in hierarchical regression analysis and there also must be significant relationship {according to Sobel, (1982) (t value, $p < 0.05$)} between the relationship of interaction (IWExKNS) variable and dependent (innovation capability) variables, the Beta value of interaction (IWExKNS) variable should be significant and be statistically significant [(R square change) and t value, $p < 0.05$ {Sobel, (1982)}], it means there would be significant moderation (knowledge sharing) exist between independent (Islamic work ethics) and dependent (innovation capability) variables.

5.5.2. Islamic work ethics and innovation capability moderated by knowledge sharing

Table VI shown the hierarchical regression analysis of all demographic (gender, age, education, experiences, working area and management grade level) and study's variables (Islamic work ethics, innovation capability and knowledge sharing) and in hierarchical regression analysis divided into 4 steps. Step 1 analyzed the hierarchical regression analysis of demographical variables (gender, age, education, experiences, working area and management grade level) with the innovation capability and table shown the standardized regression coefficients (table VI). Adjusted R square (0.24) explained the variation between these demographical variables and dependent variable (innovation capability) was 24% and it was significant relationship at ($F = 6.42, p < 0.001$) (table VI). In next step 2 the regression analysis of independent variable (Islamic work ethics) was added and the regression coefficient was (Beta = 0.62, $p < 0.001$) of Islamic work ethics and innovation capability relationship, F value ($F = 14.60, p < 0.001$) and t value ($t = 6.75, p < 0.001$) which shows significant (for large samples) true relationship between these two variables in step 2 (table VI), because t value (6.75) was greater than t normally distributed standard value (± 1.96) for small samples (Sobel, 1982). So according to Barron and Kenny (1986) first condition (path a) in which (Islamic work ethics positively affect the innovation capability) was met (can see also first hypothesis's results). The moderate variable (knowledge sharing) was added in next step 3 and the regression coefficient was (Beta = 0.38, $p < 0.001$) and t value ($t = 4.81, p < 0.001$) and F value ($F = 18.69, p < 0.001$) of knowledge sharing and innovation capability relationship which shown it was also significant positive relationship between knowledge sharing and innovation capability. In step 4 when added the interaction (IWE*KNS) variable as moderator, it was played significant moderation role between islamic work ethics and innovation capability because when production of islamic work ethics and innovation capability was added in step 4 then there was highly significant value of Beta (Beta = 0.45, $p < 0.001$) and t value ($t = 4.36, p < 0.001$), and F value ($F = 17.60, p < 0.001$) and was adjusted R square was (0.57) of interaction variable (IWE*KNS). Where as Beta value (Beta = 0.62, $p < 0.001$) and t value (6.75, $p < 0.001$) and F value ($F = 14.60, p < 0.001$), and adjusted R square (0.48) of Islamic work ethics and innovation capability was significant in step 2 but when knowledge sharing variable added as moderator in step 4 there was also significant relationship between Islamic work ethics and innovation capability at value of Beta (Beta = 0.32, $p < 0.001$) and value of t ($t = 2.86, p < 0.01$). So second hypothesis was also accepted that "there was positive relationship between Islamic work ethics and innovation capability when knowledge sharing plays moderate role between their relationship" because 9 percent adjusted R square (Change in Adjusted R square = 0.09) was significantly changed between independent variable Islamic work ethics (Adjusted R square = 0.48) on innovation capability and interaction variable IWExKNS (Adjusted R square = 0.57) on innovation capability (table VI).

Past study results shown the significant challenge for organizations is which motivations persuade both knowledge donating and knowledge collecting and pilot to advocate organization innovation capability (Jantunen, 2005). Previous study that was the interaction between knowledge sharing enablers (Individual,

organizational, and technology factors) and organization innovation capability by complicating on the implication of knowledge sharing processes (Knowledge donating and collecting).

6. CONCLUSION AND IMPLICATION

6.1. Conclusion

The study's results shown there was significant relationships of all variables with the Islamic work ethics and officers of the public sector organizations in Pakistan were strongly dedicated with the Islamic work ethic. Although Pakistan is a Muslim country and majority officers were Muslims who working in the public sector organizations but non Muslims officers were also highly dedicated to the Islamic work ethics scale and they have full knowledge about their religious requirement for the management and sustainable development of organizational justices at work place. There was observed positive attitude of officers (Muslims and non Muslims) about Islamic work ethics in the public sector organizations which have so many benefits like dedication and commitment to work, take responsibilities for success, hard work, honesty, cooperation and liaison, compositeness fairly, creativity, effective performance and creating the knowledge sharing environment among the employees. Due to the establishment of knowledge sharing environment leads to invent new ideas for bringing the affective change in the workplace for sustainable development of the public sector organizations services, tasks and works. This study examined the link between Islamic work ethics, knowledge sharing capability and innovation capability and there were significantly supported all study's hypothesizes. The Islamic work ethics is useful for the both individual and organization as a whole effectively management and sustainable development. Hence the human resource management and development departments of the public sector organizations in Pakistan should be focus on examining the outcomes, attitude and behavior of the employees due to Islamic work ethics mechanisms and they should try to ensure and implementation of Islamic work ethic rules and codes of conduct at all levels of public services.

6.2. Implications

This study helps to the human resource professional officers of public sector organizations in Pakistan to appreciative the concept of employees' delegation to Islamic work ethics for designing, formulating and implementation of change programs in the organizations by developing the national policies. Islamic work ethics mainly focus on hard working, achieving wok in time effectively and consistency in work in future. It shows that diagnosing the problems, planning, designing, formulating, implementing and evaluating the interventions by clarification of goals and responsibilities of the employees which are primarily necessary for the success of interventions and change management. Islamic work ethics not only focus the work and task completion it also dedicated the establishment of social relations because IWE maintains the work life balance. Islamic work ethics dedicated the teamwork and illuminated the concept to do work cooperatively and collectively rather than individualism. In this point of view to build groups and teams of the employees who do work collectively by sharing their innovative knowledge and ideas with each other for bringing the successful and sustainable intervention in the public sector organizations. Islamic work ethics committed to the innovative work as a virtuous. Islamic work ethics also emphasized the fair justices and kindness with societies these justices and charities are essential for the social welfare and human development. The practitioners of human resource management must be focus on basic desires and needs of the employees willing and motivate the employees to do work for the humanity for human development. Especially officers who are working in human resource management departments of the public sector organizations to do much effort for creating innovative environment as change agent of the organizations in which environment people will share their ideas and knowledge for bringing and managing the effective change. This study proved that Islamic work ethics and knowledge sharing capability to increase the innovation capability but the results was not moderately not strongly it means there other factors like human capital, organizational structures, employees motivation and knowledge, employees commitment and satisfaction with the job may influence on innovation capability.

7. LIMITATIONS AND FUTURE RESEARCH

7.1. Limitations

There were many limitations in this study but we highlighted the three which are essential to eliminate in next studies. First limitation of the study was only focus on public sector organizations and it was cross sectional study conducted in one nation only at first time, it could be included other Muslim nations for generalization of this study. Second limitation that sample size and number of samples (102 officers) and only focused on grade 17 to grade20 officers, there were other cities of the Pakistan could be also included as large sample size and examining the accuracy of results in this study. Third limitations that there was focused on only two variables (Islamic work ethic, knowledge sharing) to examine the relationship with the innovation capability there could also be included some other important variable which influence on innovation capability.

7.2. Further studies

Further study may be conducted in public sector organizations and include all level of employees as sample which supports the generalization of study's results. The Islamic work ethics may also influence on other important variables such as "organizational commitment, organizational citizenship of behavior, employees work performance, employees' motivation, organizational justices and learning, job insecurity and satisfaction, and human talent development". The further should be examining the relationship of Islamic work ethics, knowledge sharing capability and innovation capability in other non Muslim countries. There should be also determining the relationship of innovation capability and knowledge sharing capability with other work ethics like PWE, Japanese, Hindus, and Buddhism etc. Further studies should also comparison between the IWE and PWE on innovation capability, job satisfaction, commitment, employees' performance, outcome and motivation etc.

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