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KNOWLEDGE SHARING TOOLS AND KNOWLEDGE TRANSFER: A MEDIATING ROLE OF MOTIVATION

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Abstract
Knowledge sharing is an important aspect of knowledge management and it is important and progressively recognized for international business management. The aim of this study to examine the impact of knowledge sharing tools (technology and organization rewards) on knowledge transfer in the education sector of Pakistan Punjab. The survey method is used to collect the data from public and private university employees from Punjab, Pakistan. By Using the cluster random sampling method, the results of the structural equation model (SEM) and inter reliability reveals the existence of internal reliability and validity of construct with a sample of 750. Results of the research work indicate that knowledge-sharing tools organization rewards and technology have a significant impact on knowledge transfer. The results of the study also confirm that motivation mediates the relationship among organization reward, technology, and knowledge transfer. Furthermore, the organization reward and technology along with motivation endorse the knowledge transfer to individuals and organizations. This study work contributed in managerial and theatrical by considering technology and organization reward is knowledge sharing tool effect on knowledge transfer with mediation analysis of motivation which improves the organization effectiveness. The comparative study may be conducted in the future or in another region of the country.
Keywords: organization rewards, technology, knowledge sharing tool, knowledge transfer, motivation,

INTRODUCTION

Knowledge sharing is the most essential and critical element of the knowledge management process. In the competitive era, knowledge must be shared because these organizations can be successful in a market that can up to date of employee knowledge in the areas of their business(Asrar-ul-Haq & Anwar, 2016).The organization faces many problems due to globalization, digital revolution, and competition which force them for many challenges that initiative them to adopt an important strategy for creativity, innovation for performance continuity, and survival. (Aljawarneh, 2020). These strategies are based on the knowledge management system which works to discover the knowledge related environment of the organization. So different knowledge sharing tools are used for knowledge sharing with employees and organizations e.g. Trust. Knowledge sharing more likely to increase when they are focused and develop the trust to knowledge share with employees and organization to improve the organization effectivenesss (Mian & Nasir, 2020). In prior research claim that it depends on the organization to place formal and informal knowledge sharing tools because it's difficult to distinguish the tools (Cho, zheng Li, & Su, 2007). Prior research empirical identify

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that Organization rewards have a significant influence the employees' behavior and organization (Ahmad, Danish, Ali, Ali, &Humayon, 2019; Javaid, Soroya, & Mahmood, 2020). So, application of Knowledge management is also essential for universities for an academic point of view and for business aspect at knowledge-intensive organization technology is an important knowledge sharing tool for knowledge management which is helped in to, staff development, quality, and productivity of research, creating a competitive edge of higher education ((Eftekharzade, Mohammadi, & 2011; Fernandes, 2018).According to the Delphi research group universities at university level knowledge management is weaker, statistically proved that 42 % data saved in mind 25% in paper document 13% on the electronic system. When employees left the university, his knowledge was also lost along with his service. So, these conditions indicate that knowledge sharing is an important aspect of knowledge transfer for improvement at organizational effectiveness. This shows that knowledge sharing does not function properly Therefore, this research tries to answer that tool that fosters employees to transfer the knowledge within the organization which leads to improving the effectiveness. The originality of this paper identifies the impact of organization rewards and technology on motivation and its effect on knowledge transfer.

LITERATURE REVIEW

Organizational rewards system and knowledge transfer:

Rewards systems play an important role and provide assistance and encouragement to share their knowledge with individuals and organization (Bartol & Srivastava, 2002; Durmusoglu et al., 2014; Nguyen, Malik, & Management., 2020).Meanwhile, reward system consists of compensation benefits leanings and development and the work environment(Supriyanto, 2018). Furthermore, workplace stimuli comprise of monetary and non – monetary incentives and rewards give motivation to employees to voluntarily transfer their knowledge(S. A. Raza et al., 2018).Therefore, the Rewards system is a tool for making a baseline commitment towards the organization because employees must satisfy their financial needs for a good quality of life. They will be more productive and ready to transfer their knowledge to others (Bibi & Ali, 2017; Cruz, Pérez, & Cantero, 2009). After literature review following hypothesis has been developed.

H1: Organizational reward is positively related to knowledge transfer.

Technology and knowledge transfer:

Information technology is playing an important role in inter-organizational knowledge transfer. It is necessary to spread the knowledge and make a learning environment to share their knowledge (Durmusoglu et al., 2014; Goh, 2002). During the last era, technological change rapidly occurred and increasing extreme competition carried by globalization which is imposed the radical changes on the organization and their work system as well as on the approach of the entrepreneur that manage their business. All these changes have been determined the information communication technology that changing the technique of their market to identify new methods how to deal with customers and streamline your strategically approaches to maintain the competitiveness (Yiu & Law, 2016). Basically, knowledge transfer is the process to exchange the knowledge between knowledge recipients and knowledge provider. It is the different ways of knowledge to boost the knowledge transfer (He & Wei, 2009; Yuan et al., 2017). Similarly,Technology can promote the exposure to derive resources of knowledge and accelerate the knowledge transfer process(Sun, Wang, & Jeyaraj, 2020). After literature review following hypothesis has been developed.

H2: Technology is positively related to knowledge transfer.

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Motivation: Relationship of technology and knowledge transfer

Knowledge is considereda strategic resource which is needed to be protected and to sustain competitive advantage(Islam, Jasimuddin, & Hasan, 2015). So, creating such an environment in which knowledge is accumulated and can be shared with others at a low cost. Therefore, technology is a tool of knowledge sharing process and provide facilitation between individuals with various kind of knowledge to enhance the organization ability make them innovate elsewhere what any single employee can accomplish (Cohen & Levinthal, 1990; Rafique, Hameed, & Agha, 2018). Moreover, knowledge management can be improved through knowledge sharing and transferring among individuals by using technology (Liao, Chen, Hu, Chung, & Yang, 2017). The use of technology is allowed individuals or organizations to carry out various kinds of information accurately, timely, and in quality.it also helps the organization to empower the employees and make data, information, and data and make it knowledge available in the organization (Fernandes, 2018). Henceforth The common motivation to acquaint with these technologies is that they may enable the individual employees by providing the tools to support and foster knowledge-sharing skills (I. Raza & Awang, 2020). After literature review following hypothesis has been developed.

H3: Motivation is playing mediating role between technology and knowledge transfer.

Motivation: relationship of organization reward and knowledge transfer

Knowledge sharing is the most crucial activity of the knowledge management and rewards system considers is one of another tool of knowledge sharing to encourage workers to best of their interest in their firms(Javaid et al., 2020). The rewards system encourages to get motivated to transfer knowledge within the organization. Different kinds of rewards motivate the employee and get enable them to generate and transfer knowledge. Moreover, it depends on the nature of the organization what kind of rewards motive their employees. For competitive advantage and sustainability of firm, it is necessary to generate and transfer the knowledge (Hua, Cheng, Hou, & Luo, 2020; Osterloh & Frey, 2000). Similarly, rewards, team-based work, and compensation system with HR practices encourage the employees to focus on the organizational goal (Collins & Smith, 2006; Shao & Ariss, 2020). Moreover, the achievement of knowledge transfer in any organization is relied upon employee's motivation (Feet & Næss, 2015). Employee motivation improves the personal attitude and willingness to share acceptance and courage to apply the transferred knowledge in the working environment (Wang & Hou, 2015; Zhang, De Pablos, & Xu, 2014). Meanwhile, knowledge transfer related to two theories which is namely social exchange theory and economic exchange theory (Alhalhouli, Hassan, & Der, 2014; Feet & Næss, 2015). So, it is necessary to address and apply the motivational factors to motivate the knowledge sources and involve the recipients in knowledge transfer which mainly improves the organization effectiveness(Moronfolu & Adewunmi, 2017). After literature review following hypothesis has been developed.

H4: Motivation is playing mediating role between organizational reward and knowledge transfer.

METHODOLOGY

Data collection:

This study work uses the survey method questionnaire as an instrument to collect the data from public and private universities of Punjab. This survey collects the data from 750 university employees by using the cluster sampling method. The education sector is one of the knowledge-based sectors where employees are working. Therefore, knowledge-sharing tools keep them

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updated and innovative for the sustainable performance of educational institutes. As such knowledge-sharing tools also added value to the human capital efficiency of employees.

Instrument:

This research work measures the items of the survey were adapted the instrument from prior research work to ensure the internal validity and consistency of the instrument. This research using (Ridder & Aukeme, 2004)5point Likert scale which is range of 1 to 5, strong disagree leads to strongly agree. Gender age and experience of the teachers are used as control variables in this research. This study adapts 4 items of technology from (Issa & Haddad, 2008). Four items of organizational rewards adapt from(Lin, 2007). Two items of motivation were adapted from (Gould-Williams & Davies, 2005). Five items of knowledge transfer adapted from Victor (Martin-Perez & Martin-Cruz, 2015).

Table 1:Reliability and validity

Construct	Items	Loading items	Cronbatch Alpha	Average variance extracted
Organizational reward	OR1	.927	.961	.946
	OR2	.950		
	OR3	.950		
	OR4	.957		
Technology	TEC1	.881	.946	.927
	Tec2	.940		
	Tec3	.949		
	Tec4	.940		
Motivation	M1	.925	.830	.925
	M2	.925		
Knowledge transfer	Kt1	.702	.87.8	.819
	Kt2	.882		
	Kt3	.894		
	KT4	.875		
	Kt5	.746		

Table 1 represents the results of reliability and validity of item which is used in empirical model. Moreover, Cronbach Alpha test is used to check the internal consistency of the data which is meet the minimum criteria Value 0.70. table 1 used the loading value which should be significant and not more than 0.60. So, loading value is used to assess the value of average variance extraction AVE. therefore, table 1 shows the value of Cronbach Alpha and loading item which represent the measurement of model establishment and validity and reliability of the construct.

Table 2:Structural Equation Model

Fit Indices	Scores	Standardized Value	Cut-off
Absolute Fit Measures			
$\chi 2/df$	4.710	$\leq 2^a; \leq 5^b$	
GFI	0.836	$\geq 0.90^a; \geq 0.80^b$	
RMSEA	0.079	$< 0.08^a; < 0.10^b$	
Incremental Fit Measures			

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NFI normed fit indexed	.867	$\geq 0.90^a$
AGFI adjusted good fit	.891	$\geq 0.90^a$; $\geq 0.80^b$
CFI	.873	$\geq 0.90^a$
Parsimonious Fit Measures		
PGFI	0.546	The higher value is the better value of PGFI
PNFI	0.645	The higher value is the better value of PNFI

The results of structural modal equation SEM indicate in table 02 . The standardized path coefficient of structural coefficient represents the relationship among hypothesized variables. The results highlight the direct relation of organizational rewards and knowledge transfer is positive β, and statistical significant p< thus support hypothesis 1. Secondly results in support hypothesis H2, technology is positive β, and statistically significantly p<0.001 related to the knowledge transfer. Similarly, the results of hypothesis 3 and 4 have a positive relationship among construct.

Table 3: Inter-Correlation Among construct

Table 4:Direct effect of Reward and Technology on knowledge Transfer

Variables	Beta estimates	SE	CR	p	results
Knwtra….orewrd	.444	0.38	11.602	000	significant
Knwtra…..tec	.307	.042	7.248	000	significant

Variables	Organizational reward	Technology	Motivation	Knowledge Transfer
Organizational rewards	.972			
Technology	.812	.962		
Motivation	.714	.638	.961	
Knowledge transfer	.810	.729	.825	.904

Table 33 represents the inter-correlation among construction, Table 04 represents the direct significant effect of organizational rewards and technology on knowledge transfer that means if organization establish rewards system and used up to dated technology that may helped the employee to perform well at organization level and easily share their knowledge with others.

Table 5:Mediation Effect of Motivation

Variables	Beta Estimates	SE	CR	p
Moti <-- tech	.286	.055	5.209	***
moti<-- orewrd	.440	.046	9.537	***
Knwtra<-- orewrd	.159	.030	5.290	***
Knwtra<-- techno	.094	.032	2.900	.004
Knwtra<-- Moti	.606	.046	13.225	***

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Table 5 represents the motivation as the mediator between organization rewards and knowledge transfer, technology, and knowledge transfer. The results of this table represent that motivation fully mediates with technology and partially mediates with organization rewards. However, organization rewards provide d motivation to the employee to share their knowledge with an organization which may enhance the productivity of the organization. Another knowledge-sharing tool also encourages the employee to share knowledge with others. This study has similar result with (Fernandes, 2018).

IMPLICATION AND DELIMITATION

This empirical research represents the implication of research both theoretical and managerial level to develop the literature of the effect of organizational rewards and technology on knowledge transfer and mediating analysis of the motivation. Meanwhile, managerial implication derives from empirical results of the study which confirm that organizational rewards and technology which is knowledge sharing tools enhance the motivation level of employees to share the knowledge with the organization. Therefore, future research may conduct by using the comparative study and in another region of Pakistan. Moreover, future research conducted by using another knowledge-sharing tool to measure the factors of an organization's effectiveness**.**

CONCLUSION

This study work examines the effect of knowledge sharing tools on knowledge transfer with mediating role of motivation among teachers. The study notes that organization reward and technology have a positive and significant impact on knowledge transfer. Our contribution in literature is that tools of knowledge sharing motivate the employees to share and invest the knowledge with their employees and organization for organization effectiveness. Meanwhile, organization rewards encourage the employees to share their knowledge for the improvement of the organization. The study reveals that technology is a source that helps them to exchange their information outside the organization and empowers the human resource to carry different activities. Furthermore, the Organization reward system is a strategic tool that increases the performance of the employees at grouped based or individual based. Henceforth this research represents that technology and organization reward as knowledge sharing tool which motivate the employees to share their knowledge with their colleagues and organization.

REFERENCES

Ahmad, I., Danish, R. Q., Ali, S. A., Ali, H. F., & Humayon, A. A. (2019). A comparative study of banking industry based on appraisal system, rewards and employee performance. *SEISENSE Journal of Management, 2*(1), 1-11.

Alhalhouli, Z. T., Hassan, Z., & Der, C. S. (2014). Factors affecting knowledge sharing behavior among stakeholders in Jordanian hospitals using social networks. *International Journal of Computer and Information Technology, 3*(5), 919-928.

Asrar-ul-Haq, M., & Anwar, S. (2016). A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. *Cogent Business & Management, 3*(1), 1127744.

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.061

Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of leadership & organizational studies, 9*(1), 64-76.

Bibi, S., & Ali, A. (2017). Knowledge sharing behavior of academics in higher education. *Journal of Applied Research in Higher Education*.

Cho, N., zheng Li, G., & Su, C.-J. (2007). An empirical study on the effect of individual factors on knowledge sharing by knowledge type. *Journal of Global Business & Technology, 3*(2).

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative science quarterly*, 128-152.

Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of management journal, 49*(3), 544-560.

Cruz, N. M., Pérez, V. M., & Cantero, C. T. (2009). The influence of employee motivation on knowledge transfer. *Journal of Knowledge Management*.

Durmusoglu, S., Jacobs, M., Nayir, D. Z., Khilji, S., Wang, X., & gained., T. q.-m. r. o. o. c. i. t. r. b. r. a. k. s. a. (2014). The quasi-moderating role of organizational culture in the relationship between rewards and knowledge shared and gained. *Journal of Knowledge Management*.

.

Eftekharzade, S. F., Mohammadi, B., & (2011). The presentation of a suitable model for creating knowledge management in educational institutes (higher education). *Procedia-Social and Behavioral Sciences, 29*(12), 1001-1011.

Feet, V., & Næss, A. F. (2015). *A Qualitative Study of Improvement and Knowledge Transfer in Norwegian Public Hospitals.* NTNU,

Fernandes, A. A. R. (2018). The effect of organization culture and technology on motivation, knowledge asset and knowledge management. *International journal of Law and Management*.

Goh, S. C. (2002). Managing effective knowledge transfer: an integrative framework and some practice implications. *Journal of knowledge management*.

.

Gould-Williams, J., & Davies, F. (2005). Using social exchange theory to predict the effects of HRM practice on employee outcomes: An analysis of public sector workers. *Public management review, 7*(1), 1-24.

He, W., & Wei, K. K. (2009). What drives continued knowledge sharing? An investigation of knowledge-contribution and-seeking beliefs. *Decision support systems, 46*(4), 826-838.

Hua, Y., Cheng, X., Hou, T., & Luo, R. (2020). Monetary rewards, intrinsic motivators, and work engagement in the IT-enabled sharing economy: A mixed-methods investigation of Internet taxi drivers. *Decision Sciences, 51*(3), 755-785.

Islam, M. Z., Jasimuddin, S. M., & Hasan, I. (2015). Organizational culture, structure, technology infrastructure and knowledge sharing. *Vine*.

Issa, R. R., & Haddad, J. (2008). Perceptions of the impacts of organizational culture and information technology on knowledge sharing in construction. *Construction Innovation*.

Javaid, J., Soroya, S., & Mahmood, K. (2020). Impact of personal and organizational factors on knowledge sharing attitude of university teachers in Pakistan. *The Electronic Library*.

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.061

Liao, S.-H., Chen, C.-C., Hu, D.-C., Chung, Y.-c., & Yang, M.-J. (2017). Developing a sustainable competitive advantage: absorptive capacity, knowledge transfer and organizational learning. *The Journal of Technology Transfer, 42*(6), 1431-1450.

Lin, H. F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of manpower*.

Martin-Perez, V., & Martin-Cruz, N. (2015). The mediating role of affective commitment in the rewards–knowledge transfer relation. *Journal of Knowledge Management*.

Mian, R., & Nasir, N. (2020). KNOWLEDGE SHARING TOOLS IN HIGHER EDUCATION SECTOR OF PAKISTAN: THE ROLE OF JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT AS MEDIATOR. *International Journal of Management Research and Emerging Sciences*.

Moronfolu, R., & Adewunmi, C. (2017). Influence of leadership and rewards system on team performance in Nigeria premier league (NPL). *European Journal of Physical Education and Sport Science*.

Nguyen, T. M., Malik, A., & Management., J. o. K. (2020). Cognitive processes, rewards and online knowledge sharing behaviour: the moderating effect of organisational innovation. *Journal of Knowledge Management*.

Osterloh, M., & Frey, B. S. (2000). Motivation, knowledge transfer, and organizational forms. *Organization science, 11*(5), 538-550.

Rafique, M., Hameed, S., & Agha, M. H. (2018). Impact of knowledge sharing, learning adaptability and organizational commitment on absorptive capacity in pharmaceutical firms based in Pakistan. *Journal of Knowledge Management*.

Raza, I., & Awang, Z. (2020). Knowledge-sharing practices in higher educational institutes of Islamabad, Pakistan: an empirical study based on theory of planned behavior. *Journal of Applied Research in Higher Education*.

Raza, S. A., Abidi, M., Arsalan, G. M., Shairf, A., Qureshi, M. A., & (2018). The impact of student attitude, trust, subjective norms, motivation and rewards on knowledge sharing attitudes among university students. International Journal of Knowledge and Learning. *12*(4), 287-304.

Ridder, H. B., & Aukeme, E. (2004). Exploring the eagerness to share knowledge: the role of social capital and ICT in knowledge sharing in social capital and information technology, edited by M. *Huysman and V. Wulf*.

Shao, J. J., & Ariss, A. A. (2020). Knowledge transfer between self-initiated expatriates and their organizations: Research propositions for managing SIEs. *International Business Review, 29*(1), 101634.

Sun, Y., Wang, C., & Jeyaraj, A. (2020). Enterprise social media affordances as enablers of knowledge transfer and creative performance: An empirical study. *Telematics and Informatics, 51*.

Supriyanto, S. (2018). Compensation effects on job satisfaction and performance. *Human Systems Management, 37*(3), 281-285.

Wang, W.-T., & Hou, Y.-P. (2015). Motivations of employees' knowledge sharing behaviors: A self-determination perspective. *Information and Organization, 25*(1), 1-26.

Yiu, M., & Law, R. (2016). Technological impacts on knowledge sharing: a case study of three travel agencies in Hong Kong. *ourism Recreation Research, 411*(1), 2-15.

P-ISSN: 2204-1990; E-ISSN: 1323-6903
DOI: 10.47750/cibg.2021.27.05.061

Yuan, Y. H., Tsai, S. B., Dai, C. Y., Chen, H. M., Chen, W. F., Wu, C. H., & Wang, J. (2017). An empirical research on relationships between subjective judgement, technology acceptance tendency and knowledge transfer. *PloS one, 12*(9).

Zhang, X., De Pablos, P. O., & Xu, Q. (2014). Culture effects on the knowledge sharing in multi-national virtual classes: A mixed method. *Computers in Human behavior, 31*, 491-498.