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The Effect of Explicit Knowledge Sharing on Human Resource Performance Efficiency: Moderating Role of Human Capacity Development

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Abstract

There are numerous causes responsible for attaining performance efficiency of human resource within the organizations. In this pursuit, the current research has been aimed to further evaluate the relationship exists between Explicit Knowledge Sharing (EKS) within organizations and performance efficiency of the human resources. A quantitative study for the said purpose has been undertaken to ascertain the impact of EKS on performance of human resources while considering the moderating effect of Human Capacity Development (HCD). Quantitative study approach was adopted, and a structured questionnaire was developed based on the relevant studies already conducted in this field. The questionnaires were distributed among 500 respondents, out of which 345 responded, which provided the researcher with 69% response rate. Population of the study comprises wide range of organizations such as Government, Non-Government, International & Private Sector, which were consulted for the primary data collection across the province of Khyber Pakhtunkhwa & Capital Territory of Islamabad by adopting Simple Random Sampling technique. Analysis were drawn through the application of statistical software tools i.e. Amos for factor analysis & SPSS for statistical analysis.The analysis of the data revealed that organizations with EKS practices, subsequently accomplishes efficiency in the performance of their human resources through a positive moderating effect of Human Capacity Development. The usefulness of findings has been endorsed through numerous studies by the local and international scholars of the area.

Keywords: *Explicit Knowledge Sharing, Human Resource Performance Efficiency, Knowledge Management, Knowledge Sharing*

While considering in view the historic perspective of Knowledge Sharing (KS), in early stages, sharing of information begins through exchange of communication through pictures. Later with the advancement of world, print media was introduced and knowledge centric outlets in shape of libraries were established. The time further protrudes, and a quick and convenient modes of communication were adopted through inventions of electronic mediums. At present, knowledge can be acquired by merely a single click on computer while surfing websites such as Google, Wikipedia, Encyclopedia etc.

Tracing the historic perspective of KS reveals its existence even in mid of 17th century. In the iron industry of UK during 1850-1870 it has been observed that information regarding new techniques and plant designs were shared openly which has led to the establishment of innovative products (Allen, 1983). These innovations which came out of information sharing were terms as “collective invention” by Allen. Ample of researchers have termed KS a self-explanatory & a simple concept which accommodates any sort of KS within organizations (Reijo, 2017). Yet other authors have termed the KS as process of complex nature and an integral part of knowledge management which is executed by individuals among each other (Sara, Bushra, Mamoona& Nazir, 2019).

The competitive advantage knowledge-based theory states that knowledge management practices which comprises knowledge acquisition, knowledge storage, knowledge creation, KS and knowledge implementation, comprehends a critical role in attainment of high level of productivity, performance in both financial and human resources and enhancing sustainable competitive advantage (Soderberg & Holden, 2002; Spender, 1996). Keeping the significance importance of KS in achieving performance efficiency, this study strives to foreground the moderating role of HR capacity development in this regard. Sharing of knowledge within organizations has been termed as central activity of the knowledge management process which accommodates an assorted implications and enormous welfares for those organizations who have established knowledge sharing (KS) system (Lee, 2018). The concept of knowledge management was initially introduced in 80's. It is evident that sharing knowledge pertaining to research findings brings about a requisite qualitative innovation in the services and products of organizations and it is indispensable for innovation (Kremer, Villamor & Aguinis, 2019). In 1980s, scholars realized that knowledge sharing plays significant role in bringing innovations within organization (James, 2011; Sajjad et al.,2017), specifically in organizational processes (Ahmad, Easa & Mostapha, 2020). Tracing the historic perspective of knowledge sharing reveals its existence even in mid of 17th century. In the iron industry of UK during 1850-1870 it has been observed that information regarding new techniques and plant designs were shared openly which has led to the establishment of innovative products (Allen, 1983). These innovations which came out of information sharing were terms as "collective invention" by Allen. Apparently, innovation is one of the important features of organizations to attain and sustain competitive advantage over the long term (Castaneda & Cuellar,2020).

The literature supports that Knowledge Management (KM) is ineffective without keeping into consideration the important phase of knowledge sharing (Kasharia & Taheri, 2019). Most of the organizations performs well in terms of creating and storing knowledge but fail to share the knowledge within organizations and ultimately confronts failure in their outcomes. Moreover, apart from other factors it is evident from studies (Jackson et al., 2006) that effective knowledge sharing within organizations is so important that it has persuaded attainment of competitive advantage for the organizations in terms of employee's and organizational performance (Kipkosgei, Kang & Choi, 2020).

There have been numerous researches undertaken on KM while paying less consideration to its important constituent i.e. EKS, without which KM cannot be materialized. Further, it has been observed that there is considerably confined literature available which has considered the moderating role of the latent variables. Similarly, studies in this specified area of research is limited (Chong et al., 2014) which furnishes the scholar the opportunity to conduct research in this area. Moreover, seconding the study, Ramjeawon and Rowley (2017) have also emphasized upon further studies in the similar research areas, which further persuade the scholar to undertake this study in order to highlight the underlining role of knowledge sharing on enhancing the efficiency in employee's performance while considering the significant effect of outlined moderating variables of Human Capacity Development, Organizational

Learning, Human Resource Trust, Human Resource Motivation, and Innovations.

Rational of the Study

This study has been intended to highlight the importance of EKS as one of the significant tools for attaining Human Resource Performance Efficiency (HRPE) for the organizations. Explicit knowledge sharing is the most significant component of knowledge management without which knowledge management cannot be effectuated. Knowledge sharing is exercised at various levels of the organizations and it cannot be easily comprehended. Knowledge sharing is the phenomena which can observed various levels comprising organizational level, a group level, and at individual tiers (Jackson, Chuang, Harden & Jiang, 2006). KS has been termed an effective means of accomplishing strategic competitive benefits for the organization on sustainable grounds (Ahmad et al., 2020) therefore further research in this area in extremely important.

It is concerning that adequate literature on KS is available merely after the year 2000 (Kremer et al, 2019). Moreover, KS is being considered a potentially growing topic of the modern era. It has been termed as intellectual capital and significant source for attaining organizational competitiveness in future (Dess & Shaw, 2001) further KS has been linked and considered a potential source for attaining numerous social benefits (Mohajan, 2019). Keeping numerous benefits of KS, further research in this area is strongly suggested (Bechina & Bommen, 2006). The research focuses on means of achieving a HRPE within organizations through establishment of knowledge sharing culture while considering the important moderating variable of HCD, which is considerably lacking in the previous research conducted in this context.

Literature Review and Hypothesis Development

Knowledge Sharing and its Importance

Sharing of knowledge is such an important factor that it has played a key role in different phases of developmental revolution and it has been considered influential source for the betterment of organizations (Mohajan, 2019). The Industrial Revolution which has brought enormous developmental change in the world has been also influenced through KS (James, 2011).

While associating KS with classical industries of nineteenth century, the American Industries have been found practicing sharing of information widely (James, 2011). Moreover, the paper making industries of the similar era use to take care of information sharing. Such information sharing was usually accented towards introduction of new technology and its effective and efficient utilization. This extensive information sharing brought considerable industrial revolution in the region (McGaw, 1987). Similarly tracing the existence of KS in past eras reflects that sharing of knowledge even existed in 1890s. It has not only benefited the industrial revolution era but has also influenced the agricultural sector.

Explicit knowledge sharing has been defined in various terms, one of the definitions has been acquired through literature by Szulanski, (2000) that

knowledge sharing prevails in those organizations that persistently vary their day to day activities having difficult nature of understanding. KS has also been termed as the process of communication between knowledge suppliers and acquirers (Lin & KaiHuang, 2020). Moreover, sharing of knowledge within organizations has been termed as central activity of the knowledge management process which accommodates an assorted implications and enormous welfares for those organizations who have established KS system (Lee, 2018). Wang and Hu (2018) has termed KS a significant means of boosting organizational performance. KS is being considered one of the main phases of Knowledge Management (KM), whereupon the success of the systems is measured, and thorough explanation of KM can fetch drastic advancement in sharing of knowledge in both of its forms i.e. implicit and explicit (Ngoc-Tan & Gregar, 2018). Knowledge is basically the experiences that humans have encountered in their daily life, the values they have given to things, and the inner perceptions that they have developed, and a mixture of these tends to bring a new experience in shape of innovation (Davenport & Prusak, 1998). There are numerous resources which can be indulged for sharing of knowledge, however one of the potential and essential sources which heightens the sharing of knowledge within organizations are the development teams working in that specific organization (Sara et al., 2019).

Apparently, there are two features associated with sharing of knowledge, firstly, know how or the importance of KS recognition in the management of organization. Secondly, the presence of any efficient reward system associated with KS. As stated by Radwan (2007) that if the staff and management both have clear recognition and importance then there is very much possible that KS within organization will take place. He further pledged that the motivating factor such as any reward associated with sharing of knowledge is subsided then subsequently the sharing of knowledge will fade away. Similarly, Bartol and Srivastava (2002) studied the various mechanisms of sharing knowledge and observed affirmative association between the financial reward systems within organization with that of sharing of knowledge and it has been termed instrumental for economic development of the organization (Welter, Baker & Wirsching, 2019), in addition to achievement of social benefits (Mohajan, 2019).

Knowledge and Its Types

In view of the perplex nature of knowledge, it has been defined in a multifaceted manner by various research scholars such as Nonaka, Hansen et al., Jasimuddin &Wiig etc. Knowledge is considered to be link with the historical development of human being. It is deemed that the knowledge is the product of experiences that people avail during their life and is strongly associated to their passed cultures and cannot be easily transferred (Stenmark, 2002). Similarly, knowledge is also considered as the information-based solution to address the multifaceted problems of the human society, evolved through common practice.

Likewise, Blacker (1995) identified the five types of knowledge that comprises Embrained Knowledge, Embodied Knowledge, Encultured Knowledge, Embedded Knowledge and Encoded Knowledge and it has been

observed that KS in all its forms positively influence the environment and promotes the culture of learning (Kasharia & Taheri, 2019).

Tacit vs Explicit Knowledge

There are mainly two types of knowledge reflected in research one as Explicit Knowledge and other as Tacit Knowledge. Nonaka (1991) expressed that Explicit Knowledge is that knowledge which can be communicated in terms of words and mathematical figures and is shared in terms of data, scientific formula, stipulations, study and operational manuals while on the other end Tacit knowledge, is that knowledge that encompasses subjective views, instinctive knowing, is considerably personal in nature and is subtle to be comprehend and shared with people. He further contented that Tacit knowledge is profoundly imbedded in personal actions and experiences including ideas, perceptions or self-feelings that people accommodate individually. Authors such as Castaneda and Cuellar (2020) have termed KS as process of transforming tacit into explicit knowledge which is supported through managing the knowledge (Ngoc-Tan & Gregar, 2018).

Relationship between Implicit & Explicit Knowledge

Edwards (2009), has also elucidate through examples the difference that exist between the Tacit & Explicit Knowledge. He has given the example of riding a bicycle which is implicit in nature and can merely be acquired through physical experience or practice. It is evident that the implicit knowledge is pragmatic in nature and which requires practical exposure in order to comprehend the hidden phenomena. Similarly, he has furnished the example of processing financial claims in the office as Explicit knowledge. Since, it is a process and can be easily communicated to others while explaining the Standard Operating Procedures (SoPs) of processing claims. The example of explicit knowledge does not require pragmatic approach but the adequate knowledge of following standard procedure is necessary. Similarly, he has given the example of making a piece of furniture requires both the implicit as well as explicit knowledge. It is a skill and can be acquired through practice in the work of world. You can learn the basics of producing the piece of furniture however there is an implicit knowledge associated with it i.e. quality of the product can only be achieved through years of experience. Worth mentioning, the tacit knowledge can be transformed into explicit knowledge through adoption of KS that also pursue innovation (Castaneda & Cuellar, 2020).

Knowledge Sharing Influence on Human Capacity Development

KM if viewed from cultural point of view reveals that the employees if working as team group and where there is a system of KS within the organization, such setup encourages staff to pursue learning (Alavi & Leidner, 1999) and due to this, organizations are investing in KM (Usman et al., 2020). Organizations are managed by employees, and synergy among employees is one of the significant features of organizational success which is achieved through mutual sharing and understanding of official affairs. Similarly, it has been observed that KS encourages enhanced learning by the employees within organization (Collison & Cook, 2004).

Staff training and development programmes are organized by the organizations for collective enhancement of skills among employees. This obviously is one of the effective tools of employee's interactions and thus fetches KS. Such KS promotes individual learning to a considerable level (Kowta & Chitale, 2010). This phenomenal interaction among individuals is always a source of benefit and such exchange of knowledge provides platform to capitalize on prevailing potential opportunities (Mckeen et al., 2006). Employees do get multiple chances to interact with each other, such as meetings, trainings, group works etc. Such interactions are the means to exchange information and work-related knowledge. This experience sharing among employees who are working on a project makes it easier for them to execute the assigned responsibilities as per the intended expectations (Julia, 2012).

Knowledge Sharing Enhancing Performance Efficiency of HR

It is pertinent to mention that those organizations which are enjoying the competitive advantage accommodate excellent human resources in terms of performance. Subsequently, such an effective human resource achieves sustainable competitive advantage for the organizations. Similarly, to further strengthen the aforementioned argument, Dess and Shaw (2001) states that, in order to foster the performance of employee or a team collectively within organization, KS environment can play a considerably significant role and subsequently the organization attains competitiveness. The productivity of employees is measured in terms of contribution which he/she is making towards achievement of organizational goals. This contribution on individual basis is termed as performance of the employee. This nomenclature of performance determines the efficiency and effectiveness of the endeavors which each employee is making for the organizational betterment (Neely, 1994).

Since KS has been observe a continuous process within organization however, sharing of knowledge by professionally sound and experiences employees have certain other advantages such the increase in the performance of employees among whom KS takes place (Nonaka, 1994). Similarly, the internal sharing of information serves a good source for employees to attain their designated tasks in a prompt manner, but it does have an impact on the customers outside the organization in terms of alluring their attention toward organizational products or services (Nick, 2011). Further, internal KS is significantly associated with arousing the performance of virtual teams, who are operating from distance (Faizuniah & Joon, 2014). The preceding era emphatically is the era of knowledge management to survive productively in this world. Information sharing is playing pivotal role in the development of various sections of the organizations. KS has allured the attention of much of the people due to the positive impact that it is making in bringing about innovation, leaning within organizations and in the developing needed competencies in enhancing the performance of the organizations and keeping it alive in the prevailing competitive environment (Eisenhardt & Santos, 2002). Thus, a considerable literature supports that the sharing of knowledge and adopting learning practices among employees have healthy contribution towards better performance of the organizations (Chuck & Eric, 2008).

Influence of Human Capacity Development on HRPE

Human Capacity Development (HCD) is the integral part of HRM processes for the development of organizational human resources. HCD usually takes place through training and the programs pertaining to the development of HR. This capacity development of HR is focused on the nature of duties that each staff has been assigned to perform. HRM has been declared one of the effective management tools that not only foster the level of motivation of the employees, but it plays significant part in substantiating enhanced performance of staff to a considerable level (Esmael., Nasser & Mohammad, 2016). Likewise, Guest and Conway (2011) have opined that practices within organizations for the management of employees have been observed to have better out comes for the organization in terms of HR effectiveness and their anticipated performance.

Organizations in order to meet their intended long-term goals and evaluate the performance of staff, establishes objectives for each department. Similarly, a plan of action is devised to attain those objectives, which also embeds the HR plan of performance. Kinnie, Hutchinson, Purcell and Swart,. (2006) have contended that HR practices adopted by the organization pursue accomplishment of designated departmental objectives and also facilitated enhancement of employee motivation toward better performance. As stated earlier, theories pertaining to HR behavior suggest that the employee's performance is also associated with the expected reward. It is human nature by all that an individual performs well in view of the fact that he/she expects a similar good return from the organization in respect of the better performed task. Cropanzano and Mitchell (2005) have also opined that HCD practices motivate the employees to respond in similar manner toward the organizational investments by performing in accordance with the expectation of organizational management. Jackson and Schuler (1995) contended similarly, that the capacity development programs that are executed to build the capabilities of employees do arouse their motivational level as well as commitment towards higher performance for achievement of the designated tasks.

Moderating Role of Human Capacity Development on Performance

The body of knowledge evidences that there is numerous research work undertaken to ascertain the moderation relationship of various variables. Similarly, the moderation of variables considered in this study have been considerably supported by the literature. Study conducted for the moderating role of human capacity development is pledged through a research finding of Ifa and Siti (2017), which states that organizations where capacity building of the organizational resources including HR fetches sustainable and competitive outcomes, which subsequently enhances organizational performance. Similarly, Faiza, Longbao, Tamás, Mohammad and Qazi (2019) also contended that the relationship between HR practices and performance is significantly moderated by the capacity building of HR that subsequently fosters the performance of HR on sustainable basis.

Conceptual Framework

This research endeavor focuses on measuring the effect of independent variable such as EKS on dependent variable of HRPE and considering moderating role of Human Capacity Development (HCD). It is evident from the aforementioned literature depicted at various sections that EKS plays a very significant role in bringing about sustainable performance efficiency within HR.

KS and open communication within organizations not only achieves tangible outputs but it brings about behavioral changes within individuals. It is pertinent to mention that studying the communication pattern of organization can play a significant role in comprehending the behavior of individuals (Rogers, Everett & Rekha, 1976). Organizational identification enhances with the appropriate information that is being supplied to the employees regarding their company. Information sharing not only enhances the knowledge, but it also pursues strategically aligned behaviors of the individuals as it furnishes employees with future directions of what to perform (Riel, Guido & Majorie, 2005).

This research further elucidates the association embedded among predicting, moderating and dependent variables i.e. EKS, HCD & HRPE. The primary data collected through a questionnaire accommodates Likert scale approach. Further, the effect of the aforementioned variables on that of enhanced performance efficiency of HR have been analyzed through Statistical Package for the Social Sciences (SPSS). Figure 1 shows the conceptual modeling of EKS effect on HRPE through influence of moderating variable of HCD.

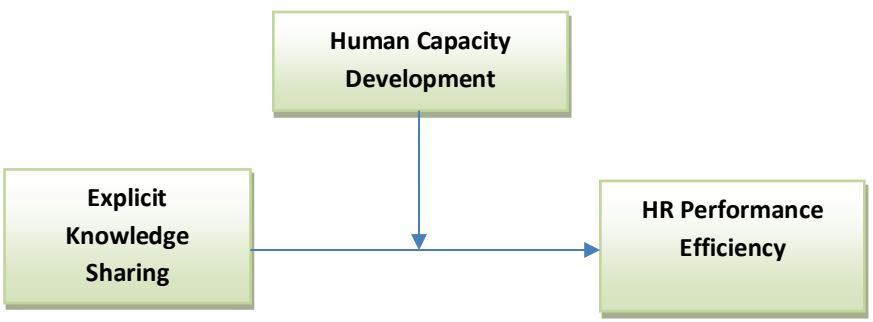

Figure 1. Conceptual Framework Model

H_1: *Explicit Knowledge Sharing (EKS) has a positive effect on Human Resources Performance Efficiency (HRPE).*

H_2: *Human Capacity Development (HCD) positively moderates the relationship between EKS and Human Resources Performance Efficiency (HRPE).*

Research Methodology

Research Design

The research design focuses on appropriate integration of multifaceted constituents of the research in an organized and logical way. It facilitates the researcher in addressing the problem of the study adequately. It is pattern of research which reflects upon the various processes of research such as collection of the data, measurement of the data and the analysis of

data (De Vaus, 2001). The basic feature of research design is that it elucidates the research problem has been efficaciously and genuinely addressed without adopting any prejudice approach (Robson, 2002; Saunders et al., 2009). The research design does have certain desirable attributes which includes but are not limited to clear identification/justification of the problem, substantial review of literature in the relevant field of study, formulation of clear hypothesis/research questions, the type of data to be gathered and valid statistical tools to be applied for analysis.

In compliance to the attributes mentioned above, the author has made it convenient to justify the research design while keeping its linkage with addressing research questions and in consistent with over all research approach.

Population of the study

Population constitute one of the significant and integral part of every research. The determination of appropriate size of population and adequate pattern of respondents plays a pivotal role in extracting evidence based logical conclusions (Sekaran, 2000). The population adopted for this study by the author accommodates respondents from various parts of the country's capital i.e. Islamabad Capital Territory (ICT) and provincial capital of Khyber Pakhtunkhwa (KPK) i.e. Peshawar and its nearby populated cities such as Nowshera, Mardan, Kohat, Charsadda, Bannu, D.I.Khan, Swat etc. The idea behind opting the country's capital city and provincial capital is based on the fact that, it embeds nearly all types of organizations comprising but not limited to Government, Non-Government, International Non-Government and Private Organizations. The population has been selected based on the fact that recently, many government, semi government, private universities and international organizations have adopted digitization of their systems for the purpose of sharing of knowledge (Ittefaq & Iqbal, 2018; Metz, Marquardt, Golowko, Kompalla & Hell, 2018; Rafiq & Ameen, 2013). Further, to ensure the diversification of data, varied organizations have been taken as target population.

Sampling and Techniques

The sample size depends on the population of study taken under consideration, through the sample size may varies, however it is considered appropriate between 30 to 500 (Sekaran, 2003). A sample size of 200 respondents is considered sufficient in the adopting Structure Equation Model(SEM) approach as suggested by Hair, Anderson, Tatham and Black(1998) and Snoj, Korda and Mumel (2004). An adequate population sample of 329 was considered from the target population based on the findings of Comrey and Lee (1992), who have termed the figure of 300 as a good sample size for the similar research. Moreover, Robert and Daniel (2010) have also contended that the sample size of 300 is adequate for achieving good results for the models. The details of the population and the sample size is depicted in the tables 1 & 2 for Khyber Paktukhwa & Islamabad Capital Territory, respectively.

Table 1. *Sample from Khyber Pakhtunkhwa*

Type of Organization	Population(Employees)	Valid Sample Size
Public Sector Organizations	900	125
Private Sector Organization	700	110
NGO/INGO	110	20
Total	1710	255

Table 2. *Sample from Islamabad Capital Territory*

Type of Organization	Population(Employees)	Valid Sample Size
Public Sector Organizations	300	40
Private Sector Organization	200	20
NGO/INGO	70	14
Total	570	74

Sources: PBoS (2013), PDMA (2017), Arsh et al. (2019)

Keeping the above population in view, the researcher floated 500 questionnaires among the selected sample of population, accommodating 21 relevant items. The author received 345 responses from the respondents thereby achieving the response rate of 69% which is good response as the response rates have been classified as very good, good and adequate if it is 70%, 60% and 50% respectively (Babbie, 1998). Out of 345 filled questionnaires 16 were reject based on non-conformity to the standard questionnaire filling requirements and the remaining 329 were considered for analysis.

The sampling technique adopted by the researcher for the current study is Simple Random Sampling. This sampling technique is simple and widely used and reliable technique for collection of data purpose. This technique encompasses equal chance for every respondent to be selected by acquiring the approach of randomness from amongst the heavy size of population. One of the significant features of technique is that, it is time efficient and allows the researcher to identify the respondents in convenient and easeful manner (Sekaran, 2000).

Statistical Techniques Selected for Data Analysis and Interpretation

The author has opted the simple regression analysis for evaluating the value of r which is termed as Pearson Correlation Coefficient to analyze the relationship between dependent and independent variables. The value of r is used in order to determine the extent of relation (strength and power) that exist between the variables (Sekaran, 2000). The author has also run the moderation analysis to reveal the moderating effect of HCD by adopting

Preacher and Hayes (2012) model-1. The author has used AMOS statistical analysis software for conducting Confirmatory Factor Analysis (CFA).

Content Validity

Content validity is the term which is referred to assessing the extent to which the instruments is measuring the actual concept of the researcher. Content validity of the questionnaire was achieved by appropriate operationalization of the latent type of variables, to that scope which is possible in the real context of the setting and was duly supported by the literature. Moreover, discussions with the analysts of the field, subsequently enhanced the content validity of the survey tool as contended by Agarwal (2011). The literature also furnishes a good support in establishing Content Validity of the questionnaire in addition to consulting relevant experts of the field (Straub, Boudreau & Gefen, 2004). Moreover, as mentioned earlier the author has mostly extracted the items from the already established research of academicians in the relevant field of study which further testify the authenticity of content validity.

Face Validity

Face validity of the survey tool has been used to measure the satisfaction of the respondents while acquiring their opinions. This type of validity of the questionnaire is one of the weakest forms and cannot be verified through numerical measurement. Face validity of the survey questionnaire was duly acquired in the pilot testing phase. Two academicians were consultant to advise upon the face validity of the survey tool. Necessary amendments pertaining to wording and phrasing of items were duly considered and incorporated in the survey tool for enhanced face validity.

Construct Validity

This is the step which is performed post collection of data for the research. It entails to verify that the items which have been utilized for the measurement of the constructs are in real sense measuring that specified construct or not. The construct validity comprises of both, Convergent and Discriminant validities together. Construct validity for the latent/unobservable variable was examined by making clusters of the correlations extracted from the responses by aligning items in the survey tool as per the dimensions observed from the literature review. Those items which attained factor of higher loadings were opted i.e. items having 0.5 or above, to attain convergent validity of higher nature (Hair et al., 2006). The same author contended that, convergent validity is examined by evaluating the loadings of factors attained and difference in the item's extraction. The results revealed that nearly above 90% of the standardized loadings of factors were above the threshold of 0.5. Moreover, all the loadings of factor were statistically significant at $p < 0.001$.

Data Analysis and Results

Descriptive Statistics

The Mean scores suggests the average of responses by the respondent about various variables of the study. Further, the Standard Deviation

foregrounds the existence of variation the data compiled for analysis and suggests the data variations that persists while comparing with the mean (Blumberg, Cooper & Schindler, 2005). The minimum and maximum values of variables depict the information as regards the end limits.

The different frequencies, their distribution and descriptive statistics pertaining to the demographic variables are presented below. The first descriptive statistics depicts the mean and standard deviation of each item as shown in table 3.

Table 3. *Descriptive Statistics of Respondents*

	N	Minimum	Maximum	Mean	Std. Deviation
EKS1	329	1.00	4.00	2.1824	1.07502
EKS2	329	1.00	5.00	2.1550	1.06367
EKS3	329	1.00	5.00	2.5106	1.14792
HCD1	329	1.00	4.00	2.4802	.80418
HCD2	329	1.00	5.00	3.3070	1.18424
HCD3	329	1.00	5.00	3.8693	1.16266
HRPE1	329	2.00	5.00	3.4164	.82630
HRPE2	329	1.00	5.00	2.9392	1.17492
HRPE3	329	1.00	5.00	2.9605	1.42547
Valid N (listwise)	329				

Reliability Analysis

Reliability measures the internal consistency of the results. The researcher ran Cronbach Alpha (CA) reliability analysis to assess the internal consistency for all the items of the study for each scale. Blumberg et al. (2005) pledged that the reliable scales shows consistency and reliability in the results over the period of different time frame. The CA for the research has been found 0.753, which reflects a good internal consistency among all the items. The combine results of all items are reflected in table 4.

Table 4. *Reliability Analysis*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.745	.753	9

The data was also run on SPSS in order to ascertain the individual figures of CA for each item. The results of item-wise CA are depicted in table 5.

Table 5. *Item-Total Statistics*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EKS1	23.6383	26.390	.479	.518	.712
EKS2	23.6657	27.504	.377	.545	.729
EKS3	23.3100	26.751	.402	.386	.725
HCD1	23.3404	28.036	.488	.408	.717
HCD2	22.5137	24.897	.553	.557	.701
HCD3	21.9514	27.187	.355	.365	.733
HRPE1	22.4043	28.729	.387	.211	.728
HRPE2	22.8815	26.343	.424	.327	.721
HRPE3	22.8602	25.121	.398	.374	.730

Christmann and Aelst (2006) has reflected that the value of CA (α) i.e. 0.7 or higher is considered as a highly reliable. The above table clearly depicts that the CA values for all the items of the study is above 0.7 which is an acceptable level as regard reliability of the data.

Confirmatory Factor Analysis (CFA)

In order to attain a model-fit, certain statistical tests are executed, and their results are analyzed against the standard values to ascertain the model fitness. The data was duly standardized to address the issue of missing values. While conducting CFA the standard acceptable values for model fitness such as goodness of fit index (GFI) value of 0.90, Ahire, Golhar and Waller (1996), non normed fit (NNFI), comparative fit (CFI) indices values greater than 0.90 and root mean squared approximation of error (RMSEA) values ranging from 0.05 to 0.08 (Green,Wu, Whitten, & Medlin,2006) were duly considered during the analysis.

Two Factor Analysis

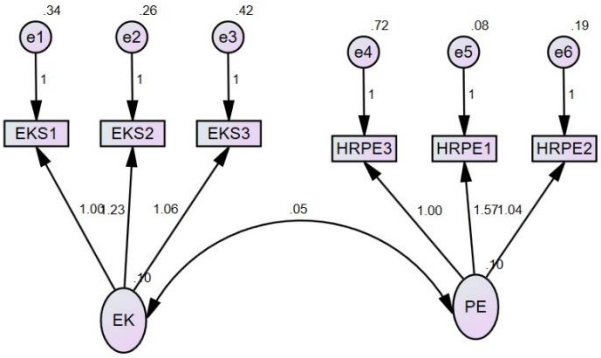

Figure 2. Two Factor Analysis

Table 6. *Two Factor Analysis*

Factor	**Values**	**Factor**	**Values**
Chi-square	19.2	Df	8
Chi-square/df	2.4	P-value	0.01
AGFI	0.94	GFI	0.98
TLI	0.91	CFI	0.95
RMSEA	0.06		

The above table 6 contains the model fitness dimensions and the values excerpted by applying two factor CFA between independent variable and dependent variable i.e. Employees Knowledge Sharing & Human Resource Performance Efficiency, respectively. The value of CMIN/DF attained 2.4 that is smaller than 5 and shows the goodness of model fit of the variable. Similarly, the rest of the values of model fitness criteria are such as AGFI is 0.94, GFI is 0.98, TLI is 0.91, CFI is 0.95 and RMSEA is 0.06 which falls in the acceptable range of model fitness. The P-value of this model is 0.01 depicting high significance. There were total of six items used in the factor analysis.

Full measurement Factor Analysis

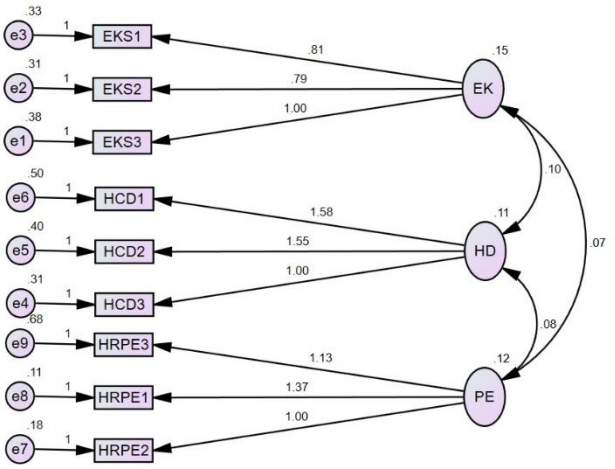

Figure 3. Full Measurement CFA

Table 7. *Full Measurement CFA*

Factor	Values	Factor	Values
Chi-square	83.4	Df	24
Chi-square/df	3.4	P-value	0.00
AGFI	0.89	GFI	0.94
TLI	0.82	CFI	0.88
RMSEA	0.08		

The above table 7 contains the model fitness dimensions and the values excerpted by applying full factor CFA among three variables i.e. Employees Knowledge Sharing (EKS), Human Capacity Development (HCD), & Human Resource Performance Efficiency (HRPE). The value of CMIN/DF attained is 3.4 that is up to the required level of 5 and shows the goodness of model fitness. Similarly, the rest of the values of model fitness criteria are such as AGFI is 0.89, GFI is 0.94, TLI is 0.82, CFI is 0.88 and RMSEA is 0.08, which falls in the acceptable range of model fitness. Worth to mention that the P-value of this model is 0.00 depicting the high significance of model. There were total of nine items used in the factor analysis.

Correlations

The values of correlation have been standardized by Tian and Wilding (2008), who have contended that values of correlation ranging from 0.10 - 0.30 are termed as weak but positive relationships, values ranging from 0.40 - 0.60 as moderate and values of correlations which are above 0.70 as high positive

relations. The correlation values of all the three constructs are presented in the Table 8 which reflects upon the correlation matrix of various dimensions i.e. EKS, HCD & HRPE. The correlations analysis reveals that the relations among EKS, HCD & HRPE ranges from weak positive to moderated positive relationship.

Table 8. *Correlations*

	EKS1	EKS2	EKS3	HCD1	HCD2	HCD3	HRPE1	HRPE2	HRPE3
EKS1	1								
EKS2	.588**	1							
EKS3	0.085	0.025	1						
HCD1	.318**	.216**	.160**	1					
HCD2	.346**	0.064	.499**	.485**	1				
HCD3	.180**	0.024	.452**	.116*	.501**	1			
HRPE1	.247**	.297**	.135*	.148**	.168**	.257**	1		
HRPE2	.301**	0.093	.328**	.425**	.290**	.155**	.227**	1	
HRPE3	.214**	.479**	.152**	.349**	.208**	0.021	.317**	.228**	1

**.Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Hypothesis Testing

H_1: Explicit Knowledge Sharing (EKS) has a positive effect on Human Resources Performance Efficiency (HRPE).

A linear regression was performed to the test the first hypothesis which is to analyses the relationship between EKS and HRPE. The results depicted in table revealed that there is a strong positive relationship between EKS and HRPE. The regression reflects that the model is significant statistically i.e. significance at 95% confidence is $p < .05$. The R-square has been observed as 0.257 which implies that nearly 26% of the variance in HRPE is positively influenced by EKS. The coefficient for EKS is depicted as $\beta = 0.44$, illustrates that one unit increase in EKS would expect to cause 44% increase in HRPE. The above results imply that the $H_0 = 0$ is rejected in favour of $H_1 \neq 0$, at a 95% confidence interval. Thus H_1 i.e. ESK has positive effect on HRPE has been accepted as depicted in table 9.

Table 9. *EKS has Positive Effect on HRPE*

Variable	R_2 (Adjusted) Value	B Value	P Value	Hypothesis
EKS→ HRPE				
Step 1	0.257			

Simple Regression			
EKS	0.44	0.000 *	Accepted*

p * p < .05, ** p < .01, *** p < .001

H_2: Human Capacity Development (HCD) positively moderates the relationship between EKS and Human Resources Performance Efficiency (HRPE).

Model Summary:

$F(3,325)=57.66, p< .001, R^2=0.35$ (0.07 is the interaction)

Main Effect:

EKS b= -.0.70, t(325)=-3.3,P< .001 is a significant predictor of HRPE

HCD b=-0.44,t(325)=-3.6, p< .001 is a significant predictor of HRPE

Interaction Effect:

b= 0.354,t(325)=5.6, p<.001 predicts that interaction term is significant predictor of high HRPE with positive effect.

Addition of the interaction was a significant change to the model $F(1,325)=31.6$, $p <.001$ $R^2= 0.07$

Simple Slopes

-1SD below mean (HCD=2.33) b=0.12,t(325)=1.51, p=0.13

For lower HCD, the ESK is not a significant predictor

Average (HCD=3.66)b=0.59,t(325)=9.79, p < .001

For average HCD, EKS is a significant predictor of HRPE

+1SD above mean (HCD=4.00)b=0.71,t(325)=9.88, p < .001

For higher HCD, the EKS is a significant predictor of HRPE

The slope effects for HCD as a moderator is reflected in figure 4.

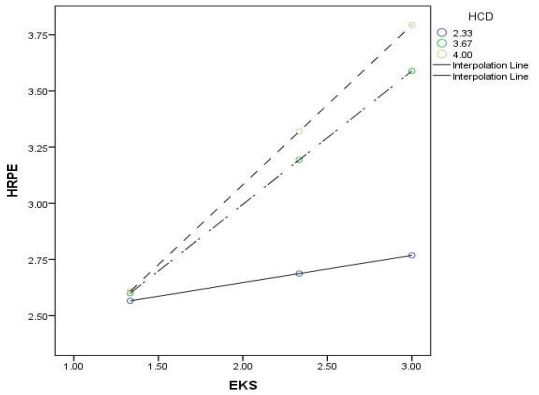

Figure 4. Slopes of HCD as Moderator

Discussion and Implications

The study is addressing the relationship between the EKS and HRPE in order to second the hypothesis. The study has revealed that the EKS has positive effect on achieving the HRPE within organizations which is line with the studies conducted previously (Dess & Shaw, 2001; Nonaka, 1994; Faizuniah & Joon, 2014; Wang & Hu, 2018) that clearly points out the positive relationship of EKS on HRPE. That means in those organizations where a culture of sharing the explicit knowledge prevails tends to achieve greater enhanced HR performance efficiency than those where it lacks such EKS environment also includes female's entrepreneurship performance inefficacy (Raheem et al.,2019). The same has been manifested by Kasharia and Taheri (2019) and Lin and KaiHuang (2020).

Initially, the influence of EKS on HCD has been observed through literature that KS is having a positive influence on HCD, which is seconded by the studies of Kipkosgei, Kang and Choi (2020). The interpretation of results reveals that those organizations where the capacities of HR is persistently built, will subsequently achieve better performance of their staff members. Later, the relationship between EKS and HRPE has been evaluated in presence of HCD that has clearly identified that in presence of HCD the effect of EKS on HRPE is greater, which is also seconded through the studies conducted by Ahmad et al. (2020). Thus, HCD has been observed positively moderating the relationship between EKS and HRPE which is in line with the studies of similar nature (Esmael et al., 2016; Ifa & Siti, 2017; Faiza et al., 2019) that clearly indicates positive moderating role of HCD on HRPE.

This study is paving a good role in highlighting the significant importance if EKS within organizations. The EKS subsequently pursue accomplishment of motivation among employees on one side and on the other side it also enhances the trust level (Kipkosgei et al., 2020). Due to the study results the management should take into consideration the fact that merely focusing on KS activities will not serve the purpose of high HR performance, but capacity development interventions should be duly coupled with EKS for positive moderating effect. Similarly, the EKS has been observed an agent which serves a good purpose of bringing the people of organization together (Reijo, 2017; Lin & KaiHuang, 2020).

Status of Hypothesis Testing

Based on the empirical testing of hypothesis, the status of acceptance or rejection is depicted in the table 10 below.

Table 10. *Status of Hypothesis Testing*

Hypothesis	Interaction Effect (*b*)	Status
H_1: Explicit Knowledge Sharing (EKS) has a positive effect on Human Resources Performance Efficiency (HRPE).	0.44	Supported***
H_2: Human Capacity Development (HCD) Positively moderates the relationship between EKS and Human Resources Performance Efficiency (HRPE).	0.35	Supported***

p * p < .05, ** p < .01, *** p < .001

Conclusion and Future Research Directions

The study was undertaken to address and fill the existing gap in the literature as regards employee's EKS within organization and its impact upon the performance efficiency of human resources. The author has predicted the relevant associated moderating variable by consulting enormous literature in the field. The moderating variable of HCD has been found influencing the behavior of HRPE to a considerable manner. The findings inferred from the research study revealed that by capacitating the HR, the organizations can lead positive results in terms of their performance efficiency (Kipkosgei et al., 2020). Further those organizations which have established a good culture of learning through sharing has been observed with stronger HRPE, which is also seconded by Kim and Park (2020). Thus those organizations which believes on working through sharing will sufficiently promote efficiency in their HR.

The findings inferred from the research study revealed that by capacitating the HR of organizations can lead positive results in terms of their performance efficiency. The study has already confirmed a positive influence of KS on HRPE, however the presence of HCD makes it more efficient and effective, which is seconded through the studies conducted by Lin and KaiHuang (2020). The findings inferred from the research suggests that the management of the organizations should prioritized investment in building capacities of the HR, establishing an environment of trust, furnishes opportunities for learning, facilitate motivation of their HR and bring innovations for accommodating higher performance of the HR. The moderating role of HCD within organizations should be given due diligence while ascertaining the performance efficiencies of their HR while conducting future research in areas pertaining to knowledge management.

The researcher has considered explicit nature of knowledge, it will be of high significance that the future researchers may also evaluate the effects of implicit KS on HRPE. The study may be extended to other parts of the country for the attainment of more enriched diversified opinions to further strengthen the research findings.

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