Impact of Development Perspective of HRM and Lesson Learned System of Knowledge Management on Project Success Through Project Management Competency Retention

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ABSTRACT

This study was conducted to find out the impact of development perspective of Human Resource Management (HRM), and lesson learned system of knowledge management (KM) on project success with the mediation of project management competency retention (PMCR). The data was collected from 310 employees of the telecommunication industry. The results confirmed that the development perspective of HRM and lesson learned through the system of KM has a significant relationship with PMCR and project success. The intervening role of PMCR is also proved between lesson learned the system of KM and project success. The study presents new evidence to organizations for enhancing competency retention of employees and achieve project success.

JEL Classification: *J24, H4, M1*

Keywords: *Development Perspective of HRM, Lesson Learned KM, Project Management Competency Retention, Project Success*

INTRODUCTION

The success of an organization can be measured by the success of its projects. Projects play an essential role in the implementation of strategies in the organizations that represents the success of the business and create a long-term positive image of the organization (Engelbrecht, Johnston, & Hooper, 2017). The project management scholars explained project success factors, but still, there is a need to identify the managerial factors that can affect the success (Radujkovic & Sjekavica, 2017; Raziq, Borini, Malik, Ahmad, & Shabaz, 2018) as many scholars disagree on the success factors (Badewi, 2016). In the beginning, the project was considered successful if it is completed within the allocated time, the budget allocated and expected quality is achieved. But now the concept of knowledge in project management has shown that the project success does not only depend on these factors, but it is also a complicated and multidimensional approach consisting of many attributes (Ahmadabadi & Heravi, 2019; Mir, & Pinnington, 2014). Elattar, (2009) considered the project as successful if it meets its goals and expectations.

Project managers recorded their output and efforts during the projects and used it in the future when required. The project-based organization has taken a wise step by adopting a learned lesson system, but the advantage of learning has not yet received in a proper manner (Paranagamage & Carrillo, 2012). Lesson learned has enabled managers to make use of it at

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the time of need, but it is also necessary to check the reliability of time. Project-based organization need to have a system which conveys the lesson learned to the employees at the time when they are working on the project and even it is crucial for every project based organization to have a proper lesson leaned system and lesson capturing mode because it would not be problem for them when employees leave the organization as the organization is not entirely dependent on individual employees (Senaratne & Malewana, 2011). Many organizations in the field of construction found lesson learned system very useful for the management of knowledge (Caldas & Gibson, 2009).

Knowledge management (KM) is also considered as one of the most critical factors for project success and performance (Duffield, & Whitty, 2016). Knowledge is an important source which is transferred to the organization from the ability of its employees (Hoegl & Schulze, 2005). It evolves from an individual mind and differs from individual to individual and cannot be easily shared. An organization that has better KM can perform in a better way and gain strength in competitive advantage. A successful organization know the importance of KM and see the gravity of importance of KM to enhance the performance (Ferrada, Nunez, Neyem, Serpell, & Sepúlveda, 2016). Lesson learned system are seen very useful in the project-based organization, and by adopting its performance will not be affected even when an employee leaves the organization (Caldas & Gibson, 2009). Project-based organizations adopt lesson learned systems to avoid errors and mistakes; adapt things of past successful projects; get a competitive advantage; and ensure innovation in the present project as compared to the previous ones (Paranagamage & Carrillo, 2012).

Human resource development (HRD) is a function that not only deals with the improvement of organizations but also the growth of the individuals (Nguyen & Hadikusumo, 2017). Individual development is an essential part of the HRD, therefore, organizations paid more attention to improving the performance of individuals (Kuchinke, 2010). Development perspective of Human Resource Management (HRM) can provide an environment for cooperation among the employees and build trust and shared culture in the organization (Lee, Park, & Baker, 2018). HRD practitioner should be supportive and open to talk to employees and provide them coaching to increase knowledge productivity and social interaction among the employees within the organization to enhance their innovative behavior (Pak, Carden, & Kovach, 2016). Organizations use the technique to build a proper attitude in the organization to improve the knowledge and capabilities of the employees to increase the productivity and performance It is an essential process of the HRM to enable learning in the organization for the employees for the better productivity of the organization (Gubbins & Garavan, 2006). Therefore, there is a need to investigate the effect development perspective of HRM, and lesson learned the
system of KM on project success.

Project success also depends on the project management competency retention (PMCR) which in turn results in the overall business success of project-oriented companies (Crawford, 2005). PMCR plays an essential role in the survival of the organization because the knowledge, experience, and interest in work enable the managers to be successful in their job (Ekrot, Kock, & Gemunden, 2016). Today winning, and growing organizations are those that have a high level of competencies. Competency can be retained by the organization when it satisfies its employee's needs, provides a career path and a better working environment for its

employees (Kwenin, Muathe, & Nzulwa, 2013). The organization should learn to retain its competent employees at different levels, and it starts at the time when employees are hired (Kregel, Ogonek, & Matthies, 2019), it also provides the competitive edge.

Therefore, the present study focuses on the mediating role of PMCR and its importance for project-oriented companies. The current study is aimed to find out the effect of the development perspective of HRM, and lesson learned system of KM on project success through PMCR. So far, to the best of our knowledge, very few studies have investigated the intervening role of PMCR even though it plays an essential role in project success (Ekrot et al., 2016). The findings of the study will be beneficial of the academicians as well as for the managers as it highlights the importance of two management practices in the context of project management. It further specifies the significance of PMCR in achieving project success.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT
Developmental Perspectives of HRM and PMCR

In most of the organization, projects are a short-term process, so projects managers do not get a proper career path in this line as once the project completes, projects managers will no longer remain with that organization. So project managers stay at the specific position for a short period as compared to the line manager. Therefore, it is crucial to provide a career path to the project manager which should be according to their qualification and experience and comparable with the line managers of the organizations (Badewi, 2016). Most of the well-reputed organizations have not adopted this structure. Whereas, most of the studies have mentioned that providing career opportunity help with the organization to retain their employees and it has a significant positive impact on the retention of the employees (El-Sabaa, 2001). When an organization promotes its internal employees by their performance, then it enhances its own performance and retention rate as well (Chamberlin, Newton, & LePine, 2018).

When an organization provides a career opportunity to its employees, then it would indirectly put a negative impact on its employee's intention to leave the organization (Allen & Bryant, 2010) and results in high performance (Zollo & Winter, 2002). HRD put a significant impact on the performance of the employees and increase their level of commitment and knowledge. The purpose of creation and enforcement of the HRD program is to enhance the ability of the employees for getting desired outcomes (Bell & Kozlowski, 2008). All branches of HRD help organization to increase the competency of the employees and enable them to learn new knowledge and skills which ultimately improve the performance of the organization (Noe, Tews, & Dachner, 2010).

H_1: There is a significant positive relationship between development perspective of HRM and PMCR.

Development Perspective of HRM and Project Success

HRM plays a vital role in the success of an organization. HRM consists of guideline, training, and process that have an impact on the attitude, behavior, and outcome of the employees. HRM is considered as the most essential and beneficial asset of the organization. Although many organizations moved from conventional to project management, its role is still essential for both the organizations. Mostly the HRM processes are for a permanent organization where

employees have fixed position and not for a project-based organization where project managers have no specific position. In conventional organizations, employee training is arranged formally whereas, in project-based organization project manager take more responsibility and have less time for the completion of the project, so they work more to complete the project in time.

These circumstances have forced to create a new strategy of HRD for project-based organizations. It has created a new way of recruiting employees on a short-term basis for the specific project and career development as well. HRD put a significant impact on the performance of the employee and increase their level of commitment and knowledge (Hutchings, Zhu, & Cooper, 2009). Organizational support and incentive can enhance the level of commitment of the employees and employees with a high commitment level contribute more towards goal attainment (Lee et al., 2018). The adequate HRM facilitates employees to participate and performs the operations of the organization effectively and efficiently to achieve the goals and objectives of the organization (Kuchinke, 2010).

H2: There is a significant Positive relationship between Development Perspective of HRM and Project Success.

Lessons Learned Systems of KM and PMCR

The learning and knowledge sharing opportunities help in retaining competency in the organization for an extended period. Developing a culture of knowledge sharing in organizations is one of the essential factors of keeping competency and reducing turnover. Those organizations that enhance knowledge sharing culture can retain their employees for a long time (Smith & Oczkowski, 2011). According to Grant (1996), those organizations that foster learning and knowledge sharing are more able to retain competency and get a competitive advantage (Grant, 1996). When the projects complete project managers transfer to different departments without keeping the lesson learned by them but no doubt the lesson learned by them during the project enhance their competency which remains with the organization for successful completion of the future projects (Stosic, Mihic, Milutinovic, & Isljamovic, 2017). When managers share a lesson learned by them during the execution of the projects with each other their ability to deal with projects enhance and by this they would be able to deal with the future project more effectively and efficiently (Lobo, & Whyte, 2017).

Lesson learned is the process of knowledge creation based on the information collected from the previous project and stored which is then used at the start of the new project in a new way. It is a process of converting individual knowledge into organizational expertise (Hoegl & Schulze, 2005). Lesson learned is used to enhance the competency by sharing the experience of project managers which is then used for the execution of new projects to get the desired outcome (Zollo & Winter, 2002). The creation of proper storage of lesson learned system used to retain the competency of the project managers. Lesson learned is considered as a critical factor for retaining project management competency. Adoption of KM strategies add value to the organization outputs and enhance their performance (Gholami & Asli, 2013). Tseng, (2014) stated that the lesson learned system is very useful in a project-based organization and by adopting its performance will not be affected even when the employee leaves the organization. According to Paranagamage and Carrillo, (2012) there are few reason that force project-based organization to adapt lesson learned system most important is that it enables

organization not to repeat the mistake that took place in the past projects, to make sure the thing that enables past project successful has adopted or not in the present project, to get a competitive advantage and to ensure innovation in the current project as compared previous one.

H3: There is a significant Positive relationship between Lesson Learned System of KM and PMCR.

Lesson learned System of KM and Project Success

Knowledge plays an important role in getting a competitive advantage, adopting innovation and success of projects. Some argue that innovation in an organization mainly depends on the knowledge and competency of its employees. It is important to have effective management for storage, utilization, and sharing of knowledge (Gemunden, Lehner, & Kock, 2018). Knowledge transfer has seen very fruitful for those organization which is connected with each other like groups (An, Garvin, & Hall, 2017) and franchise and these organization share knowledge more effectively as compared to the independent organizations. Knowledge sharing is one of the factors which help the organization in gaining a competitive advantage (Gemunden et al., 2018). Goals and objective of the organization can be achieved in a matchless way when the learning in the organization is on a regular basis, KM is considered as one of the most important factors for the success of a project and performance of the organization. Knowledge is an important source which is transferred to organization from the ability of its employees and it is an important source of getting a competitive advantage. The methods of KM should be followed at the start of the project, and at the end of the project, all the lesson learned from that project should be collected. The value of the organization increases when knowledge is shared and distributed among the employees.

Knowledge will be useless when it is not utilized effectively and efficiently (Yusof & Bakar, 2012). KM is an important issue for getting a competitive advantage for long-term (Duffield, & Whitty, 2016). The implementation of KM strategy in the organization enables an organization with value and quality of performance. There are numerous studies has been done to find out the impact of KM on the success of a project Suraj & Ajiferuke, (2013) and Tseng, (2014). KM is an important process in enhancing the performance of the organization. Knowledge gain in term of response from the customers helps the organization to increase the performance of the project, and it helps in creating a good relationship with the customer that ultimately enhances the performance of the projects and satisfaction of the customer (Ferrada et al., 2016). From the past decade knowledge formation in the organization has become the important element of empirical and theoretical studies (Zhao, Zuo, & Deng, 2015). Knowledge formation is the method to evaluate the lesson delivered by the employees and to link and save it with organizational knowledge system (Hoegl & Schulze, 2005).

Recently a number of the organization are adopting knowledge for the successful outcome of their projects and in the recent years (Metaxiotis & Ergazakis, 2005) number of studies has been conducted on the importance of KM. Ahammad, Tarba, Liu, & Glaister, (2016) supported KM as an important branch and suggested to implement KM in the public organization for the improvement of operations in public sector and it is possible when official want it to be implemented as in the process of KM, knowledge is shared among different organization which would be proved beneficial for the involved organizations and it is

possible only when the authorities show their consent in this matter. Learning is crucial for getting a competitive edge. Today in this competitive environment every organization wants success in their projects and wants to achieve high progress which is possible only with the effective KM system (Grant, 1996). Learning has an impact on the performance of the organization especially in adopting new technology and in progress of the new product, and it is adapted to combine employees and to make them smart, innovators a better decision maker (Ferrada et al., 2016). Learning is crucial and beneficial for the newness of the project in the project based organization as learning improve the skill of the employees and enable the organization to present their project in a better form (Sammarra & Biggiero, 2008) their performance enhancement and learning to enable them to move with the market. According to (Paranagamage & Carrillo, 2012) there are few reason that force project-based organization to adapt lesson learned system most important is that it enable organization not to repeat the mistake that took place in the past projects, to make sure the thing that enables past project successful has adopted or not in the present project, to get competitive advantage and to ensure innovation in the present project as compared previous one. When there is no any proper system for managing knowledge and lesson learned system it will result in improper delivery of the project which leads to the dissatisfaction of the customer and it is very harmful to the image of the organization in the competitive environment (Duffield, & Whitty, 2016) KM has gain a lot attention of the management scholar and it has been considering as the most important factor for the success of the project based organization as well as gaining the strength in competitive advantage.

H4: There is a significant Positive relationship between Lesson Learned System of KM and Project Success.

PMCR and Project Success

Retaining competent employees is very beneficial for the organization, organization when retaining its competent employee, it enables it to fulfill its goals and objective and employer should have the ability to retain its competent employees at least longer than its competitor. The organization required competency for competitive advantage and employees need career and competency and skill development opportunity (van der Vleuten, 2015). Providing competency development chances to the employee are beneficial for both organization and employees and doing, so organization gains competitive advantage whereas employee gains a chance to enhance their competencies. The organization fails to retain competency when an organization does not provide career opportunity to its employees and organization face negative output from their employees (Ekrot et al., 2016). The organization fails to retain competency as the project managers face time pressure, stress, and conflict, such environment results in loss of competency (Turner & Keegan, 2008). Many organizations fail to retain their project managers (Holzle, 2010). Project manager faces stress and time and work burden which positively linked with quitting the job (Aitken & Crawford, 2007) and that the time when they seek for the support of the organization (Cao & Hirschi, 2014). Competency of a project manager plays an important role in delivering the project successfully, and it is mixture or knowledge and ability of the manager (Aitken & Crawford, 2007) competency needed by project managers vary and depend on the nature of the project (Muller & Turner, 2007) therefore it is an imperative work for the project manager to tackle with different situation effectively and efficiently.

The main task of project managers is to use their competency to collaborate with members and perform a task according to the project management schedule and within a specific time. To perform the task, a project manager should have a competency to fulfill the work efficiently and effectively. Project managers are required to combine their entire competence to collaborate and communicate with team members to perform the given task and to get desired results. Organizations deals with project and number of projects are being failed. Therefore (Bredillet & Tywoniak, 2015) organizations need competency for quick results which increases the demand of project managers, Fast-growing organizations demand competent project managers for sensitive issue who not only deals with projects but also collaborate and communicate to resolve unethical issues. Hence, studies have presented a series of competency retained by project managers (El-Sabaa, 2001). The project manager should possess a high-level competency to achieve success and avoid failure (Marabelli, & Galliers, 2017). Project management competency is to figure out the business operation and know-how of skills and understanding of business surroundings (Suikki & Tromstedt, 2006). For better performance, it is crucial to find out the competency of every member and tie them to a single aim to achieve high performance. Research reveals that it is fruitful for the organization to attain collective competency (Ruuska & Teigland, 2009). Competency plays a vital role in the success of a project (Jha & Iyer, 2007).

H5: There is a significant Positive relationship between PMCR and Project Success.

Mediation Role of PMCR

Most of the studies have mentioned that providing career opportunity help the organization to retain its employees and it has a significant positive impact on the retention of the employees. When an organization promotes their internal employees by their performance, then this thing enhances the performance of the employees and employees remain with the organization, and numerous studies have supported that promoting employees by performance has a negative relationship with turnover (Chamberlin et al., 2018). When an organization provides career opportunity to its employees, then it would indirectly put a negative impact on their intention to leave the organization (Allen & Bryant, 2010). In the same way, when organizations provide promotion chances to their employees, it also put a negative impact on their intention to leave the organization (Nguyen & Hadikusumo, 2017). Providing a proper career path to project managers helps the management to retain project managers in the organization (Bredin & Soderlund, 2013). Providing proper training to employees is also a substantial tool to eliminate the issue of turnover.

Formal training to employees has a positive impact on the retention of the employees, and it also enhances the competency of the employees. An et al., (2017) also supported that providing job-related training to employees have a positive impact on the retention of the employees. When an organization provides learning chances to enhance the competency of the employees, it also put a negative impact on their intention of turnover (Ng & Butts, 2009). Development perspective and training opportunities to employees have a negative impact on turnover intention of the project's managers and when they remain with the organization and deals with different projects and learn from their experience ultimately their competencies enhance which results in high performance and when these managers with such competencies promoted to top management then goals of the organization will be achieved easily (Zollo & Winter, 2002).

Organization required competency for competitive advantage and employees need career and competency and skill development opportunity. Providing competency development chances to the employee are beneficial for both organization and employees and doing, so organization gains competitive advantage whereas employee gains a chance to enhance their competencies (van der Vleuten, 2015). The organization fails to retain competency when an organization does not provide career opportunity to its employees and organization face negative output from their employees (Kregel et al., 2019). The organization fails to retain competency as the project managers face time pressure, stress, and conflict, such environment results in loss of competency (Turner & Huemann, 2008). Many organizations fail to retain their project managers (Holzle, 2010). Project manager faces stress and time and work burden which positively linked with quitting the job (Aitken & Crawford, 2007) and that the time when they seek for the support of the organization (Allen & Bryant, 2010; Cao & Hirschi, 2014).

H6: There is a mediating impact of PMCR between Development Perspective of HRM and Project Success.

Knowledge sharing is one of the factors which help the organization in gaining a competitive advantage (Gemunden et al., 2018). Goals and objective of the organization can be achieved in a matchless way when the learning in the organization is on a regular basis, KM is considered as one of the most important factors for the success of a project and performance of the organization. Knowledge is an important source which is transferred to organization from the ability of its employees and it is an important source of getting a competitive advantage (Davies, & Brady, 2016). Methods of KM should be followed at the start of the project, and at the end of the project, all the lesson learned from that project should be collected. Value of the organization increases when knowledge is shared and distributed among the employees. Knowledge will be useless when it is not utilized effectively and efficiently (Yusof & Bakar, 2012).

Adoption of KM strategies add value to the organization outputs, and this strategy has been extensively adopted by many organizations, and it has enhanced the performance of adopted organizations reported by numerous scholars (Duffield, & Whitty, 2016; Tseng, 2014). Learning is crucial and beneficial for the newness of the project in the project based organization as learning improve skill of the employees and enable organization to present their project in a better form (Sammarra & Biggiero, 2008) their performance enhancement and learning to enable them to move with the market (Davies, & Brady, 2016). lesson learned system are seen very useful in a project-based organization and by adopting a lesson learned system the performance would not be affected even when the employee leaves the organization. Competency needed by project managers varies and depend on the nature of the project (Muller & Turner, 2007) therefore it is an imperative work for the project manager to tackle with the different situation effectively and efficiently.

The primary task of project managers is to use their competency to collaborate with members and perform a task according to the project management schedule and within a specific time. To perform the task, a project manager should have a competency to fulfill the work efficiently and effectively. Project managers are required to combine their entire competence to collaborate and communicate with team members to perform the given task and to get desired results. Organizations deals with project and number of projects are being failed, therefore

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H7: There is a mediating impact of PMCR between Development Perspective of HRM and Project Success.

Figure 1: Conceptual Model
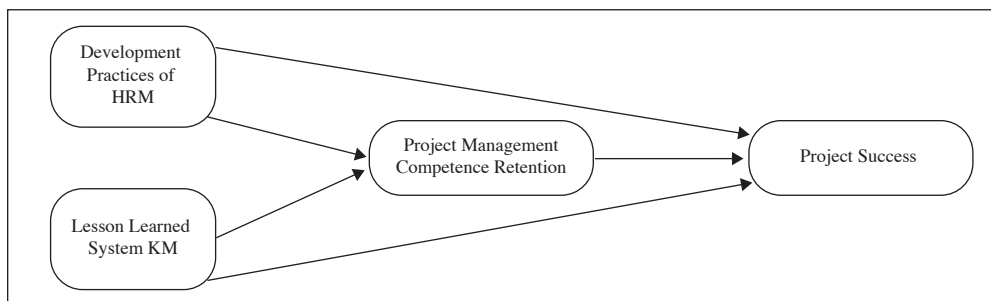
RESEARCH METHODOLOGY

Sample and Data Collection

Data is collected from the employees of the telecommunication sector. There are five telecommunication companies existed in Lahore, out of which two were selected at random. 400 questionnaires were distributed but respondents returned 321 questionnaires, and the study gained an actual response rate of 80%. This high response rate is owing to the adoption of personal administered questionnaire technique. Some questionnaires were excluded because of missing values by using list-wise deletion method which includes appropriate statistical analysis and after that 310 complete questionnaires were selected for further proceeding which is an appropriate sample according to the rule of thumb of Hair, Hollingsworth, Randolph, and Chong (2017).

Data is collected through a self-administered questionnaire that contains five items for PMCR to investigate whether the targeted sectors can retain their competency in project management or not. These items were taken from Smith and Oczkowski (2011) and were adapted to the project management context. Nine items for project success were taken from Ekrot et al., (2016). These items were used to measure project success in the context of the time, budget, quality, and customer satisfaction. The questionnaire items for Development Perspective of HRM are ten taken from Bredin and Soderlund (2013) that investigate the extent of employee satisfaction with the development perspective of HRM in retaining the competency. Seven questions for the lesson learned the system of KM are employed were extracted from Turner and Keegan, (2008) to examine whether the targeted sectors have a useful lesson learned the system or not and its impact on competency retention. The type of scale that is used for the questionnaire as an instrument is "Five Point Likert Scale" with commentators as 1 to 5 from

strongly disagree to strongly agree. Respondents respond to the point at which they satisfied with the items. The questionnaire items are initially assembled in English.

Sample Description

Demographic details of respondents show that 57.7% (n = 179) are male, and 42.3% (n = 131) are female. Respondents whose age are 20 or less are 5.5%(n=17), age between 21-24 are 22.9% (n=71),25-29 are 27.7%(n=86), 30-39 are 22.9%(n=71), 40-49 are 15.5%(n=48) and 50-59 are 5.5% (n=17). The majority (55.2%, n = 171) of the participants are single and 44.8% (n=139) are married. About 0.6% (n = 2) have Matriculation,6.8%(n=21) are intermediate, 52.3(n=162) have bachelor's degree and 40.3% (n=125) have master's degree as the highest educational qualification. The frequency of the participant has less than one-year job tenure in the specific organization is 11.6%(n=36), participant having 1-2 years 14.5%(n=45), participants having 3-4 years are 23.5%(n=73), 5-6 years job tenure are 10.6%(n=33), 7-10 years job tenure 28.1%(n=87 and the participant having more than ten years job tenure in the specific organization are 11.6%(n=36).

Table 1: Descriptive Statistics

Characteristics	Frequency	Present	Cumulative Percent
Gender			
Male	179	57.7	57.7
Female	131	42.3	100.0
Total	310	100.0	
Age			
20 or less	17	5.5	5.5
21-24	71	22.9	28.4
25-29	86	27.7	56.1
30-39	71	22.9	79.0
40-49	48	15.5	94.5
50-59	17	5.5	100.0
Total	310	100.0	
Marital Status			
Married	139	44.8	44.8
Single	171	55.2	100.0
Total	310	100.0	
Education			
Matriculation	2	.6	.6
Intermediate	21	6.8	7.4
Graduation	162	52.3	59.7
Post-Graduation	125	40.3	100.0
Total	310	100.0	
Job Tenure in Current Organization			
Less than one year	36	11.6	11.6
1-2 years	45	14.5	26.1
3-4 years	73	23.5	49.7
5-6 years	33	10.6	60.3
7-10 years	87	28.1	88.4
More than 10 years	36	11.6	100.0
Total	310	100.0	

RESULTS AND DISCUSSION

Descriptive Statistics, Reliability and Validity of Constructs

In the present study, SPSS 23 is used to impute the data. Table 2 provides a detailed description of the sample participants along with the correlation among the variables. The reliability of all the scales is measured with Cronbach's Alpha which is a more suitable technique for measuring the internal consistency of items. The results reveal that all the scales are reliable as their Alpha values are higher than (0.70) minimum acceptable limit. The mean, standard deviation, and correlations among variables are presented in this table. The values of standard deviations for all four variables are less than one which means that the properties of all variables are normally distributed. To check the consistency of responses or feedback from the respondents "Reliability Analysis" is performed. To investigate the reliability of the survey "Cronbach's Alpha" is measured as shown in table 8. The range that is acceptable for Cronbach' alpha is .70 or higher (Bell, Bryman, & Harley, 2018).

Table 2: Descriptive Statistics, Reliability, and Validity

Constructs	Means	SD	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Project Success	3.72	0.698	0.817	0.854	0.650
Development Perspectives of HRM	3.90	0.601	0.792	0.754	0.553
Lesson Learned System of KM	3.48	0.559	0.846	0.798	0.693
PMCR	4.10	0.662	0.821	0.760	0.578

Discriminant Validity

Discriminant validity test is required to check the correlation of variables used in the conceptual model. Fornell-Larcker criterion is used to confirm discriminant validity. The square root of AVE shown in the parenthesis of each variable is compared with the correlation of other variables. The higher value of the square root of AVE than the correlation values of other variables is the indication of discriminant validity (Hair et al., 2017), presented in Table 3.

Table 3: Discriminant Validity

Variables	1	2	3	4
Project Success	(0.806)			
Development Perspectives of HRM	0.759	(0.744)		
Lesson Learned of System KM	0.762	0.635	(0.832)	
PMCR	0.694	0.523	0.723	(0.760)

Note: The value in the parentheses is the square root of AVE

Structural Equation Modeling

In this study path analysis has been shown by using structural equation modeling (SEM) through Smart PLS. Table 4 represents the findings of a direct and indirect relationship between the study hypotheses. This study shows a significant relationship between development perspective of HRM and PMCR (β-value=0.150; p=0.021), which confirms that when

organization satisfied their employee's needs, provide a career path and better working environment for them then retention rate would be increased. This notion is also supported by Kwenin et al., (2013). On the other hand, it does not solely depend on HR system to retain competency, even if the organization provides better training to its employees, that enhance their skills and abilities then there may be a chance that it creates more and better opportunity for them in the market (Smith & Oczkowski, 2011).

Table 4: Standardized Estimate of Path Analysis

Hypotheses	β	P Values	Decision
Direct Effect			
Developmental Perspectives of HRM – PMCR	0.150	**	Rejected
Developmental Perspectives of HRM - Project Success	0.017	*	Accepted
Lessons Learned Systems of KM – PMCR	0.221	***	Accepted
Lessons Learned Systems of KM - Project Success	0.242	***	Accepted
PMCR - Project Success	0.157	***	Accepted
Indirect Effect			
Developmental Perspectives of HRM - PMCR - Project Success	0.008	0.107	Rejected
Lessons Learned Systems of KM - PMCR - Project Success	0.157	***	Accepted

Note: N = 310. *p < .05. **p < .01. ***p < .00

A significant relationship between development perspective of HRM and project success has found in this study that indicates that although most of the Pakistani organization retain their project managers for an extended period due to their improvement in HR system still there is a room for improvement in HR system and policies. Project managers usually do not have long-term future perspectives on a particular position in an organization due to the time-bound nature of the project for which their services are hired by an organization which, by its very nature, itself is not a permanent entity (El-Sabaa, 2001). Therefore, the results show weak support for the relationship between development perspective of HRM and project success (β-value=0.017; p=0.081). The hypothesis 3 and 4 are also supported that explains most of the organizations relocate their project managers with retaining lesson learned in the previous project to be used in the future projects that can help them to enhanced competency during the project (Stosic et al., 2017).

This can help them to attach to the organization and contribute to the project success. The significant relationship between a lesson learned the system of KM and project success also explain that employees share their knowledge with others in the organization. Knowledge sharing is the process by which one department of the company is distressed from other (Gemunden et al., 2018), one department gain experience from other department and start to work more efficiently from that department from which it gains experience. Table 4 indicates the significant positive relationship between PMCR and project success (P<.05) that support hypothesis 5. In this study, the mediating impact of PMCR between development perspective of HRM with project success is not supported that opens a new avenue for research. However, hypothesis 7 which explains the mediating role of PMCR between a lesson learned the system of KM and project success is supported (β-value=.0.157; p=0.000).

CONCLUSION

The contribution of this study is imperative in existing knowledge of development perspective of HRM; lesson learned the system of KM, PMCR and project success. The relationship of the development perspective of HRM, lesson learned the system of KM and project success with the mediation of PMCR. The findings confirmed that the development perspective of HRM and lesson learned the system of KM has a significant positive relationship with PMCR and project success. PMCR plays a mediating role between lesson learned system of KM and project success. A significant positive relationship has been proved between PMCR and project success. The results of this study suggested that it is important for the organizations to retain competency to achieve project success and this study were supposed to help for management to maintain competency for achieving project success.

Practical Implications

Recent research has considerable practical implications. Organizations should try to adopt strategies which help them to achieve project success. Organizations should eliminate those factors that fail to regain competency. They should understand that every employee has some desire which should be satisfied with keeping the employees in the organization and to increase their productivity. One can do so by observing the duties and responsibilities of the managers at the workplace by questioning them about their competency need to perform their work efficiently and by adopting techniques like interviewing and questionnaire. By applying these techniques organization would be able to retain its competency and would be able to achieve success in the projects.

Limitation and Future Directions

This study has some limitations which provide directions for future research. Firstly, the current research has examined the effects of only two independent variables that are development perspective of HRM; lesson learned the system of KM. There are many other variables like organizational environment, market conditions, perceived organization support that have an impact on PMCR and project success. Secondly, the mediating role of PMCR between development perspective of HRM and project success is not proved in this study. This may have happened due to some cultural factors so in future researchers may also consider the cultural impact on PMCR. Thirdly, the sample is taken from the telecommunication industry of Lahore, Pakistan. The future researchers can testify the model in other areas of Punjab as well as other provinces of Pakistan.

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