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The Role of Social Networking Between Knowledge Donating and Productivity Among Service Sector Employees

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ABSTRACT

Purpose: The purpose of this study is to examine the direct impact of knowledge donating behaviour on employees' productivity and an indirect effect through social networking technologies. Social networking technologies play a vital role in the growth and learning of individuals and organizations in today's competitive business environment. Recently, advancement in social networking technologies has brought a paradigm shift in the overall business environment and specific operational requirements. This study aimed to investigate the role of social networking (SN) between knowledge donating behaviour (KD) and employees' productivity (EP).

Methodology: For this purpose, data were gathered from targeted respondents belonged to the Universities and Banks located in the Northern Punjab region of Pakistan. Structural Equation Modelling technique using the SmartPLS was carried to statistically analyse the responses.

Findings: The results showed that the hypothesized relationship between knowledge sharing behaviour (KSB) and employee's productivity was significant and positively related, while social networking played a significant mediating role between this relationship.

Implications: The findings provided useful insight to the managers and policymakers for planning effective use of social networking technologies to craft knowledge sharing behaviour among employees to create efficiencies and intended outcomes.

Originality: The study has uniquely focused merging phenomenon of knowledge sharing behaviour in the service sector of Pakistan, specifically among academic and financial sector by exploring the impact of social networking technologies and provide valuable future direction for researchers to further extend the underlined idea in the wake of current Covid-19 Pandemic.

Keywords: Knowledge Donating, Social Networking, Employee Productivity
Paper Type: Research Paper

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1. INTRODUCTION

In this competitive era, knowledge management has become the most important aspect of gaining profits which are shared via computer-related networking (Ashouraie and Navimipour, 2015). Most of the researchers realize that competitive advantage relies on developing new information and publicized it all over the organization which exemplifies in their systems, services, and products (Alvesson, 2011). The ability of knowledge donating is related to the performance and success of the organization (Mueller, 2014, Navimipour, 2015, Navimipour et al., 2015, Navimipour et al., 2014). All organizations cannot get innovative and multifaceted work except they know the skill of integrating operative knowledge sharing (Zhang et al., 2013). To incline people for sharing their information and experiences rest on social capital. The question is how personnel can be motivated to develop their information distributing behavior which is a common problem in the field of database management (Zhang et al., 2013).

The meaning of knowledge donating is when people start sharing and gaining information (Chen et al., 2013, Hung and Cheng, 2013, Okumus, 2013). It is also defined as the sharing of information from a place where individuals can learn that knowledge and can practically use it (Ma and Chan, 2014). The research conducted before has shown that employees should act as a team and share their knowledge instead of exhibiting or holding it (Husted et al., 2012). To be more realistic or practical, knowledge should not only be managed, but an organization should also change its culture in which sharing information is valued (Chakravorti, 2011). It is very difficult for an organization to develop, encourage, and facilitate people for sharing knowledge (Wong and Aspinwall, 2004). Nowadays, organizations efficiency and competitiveness depend on physical sources like transferring information and knowledge (Zareie and Navimipour, 2016).

Researchers of management inducted and introduced technical and methodical management methods to grow the efficiency of physical workers in relation to a job or work efficacy or productivity (Drucker, 1999, Fernandez, 2013, Iazzolino and Laise, 2016, Joo et al., 2016, Moussa et al., 2017, Palvalin et al., 2017). In the twenty-first century, organizations primarily working in the service sector are focusing on the digital economy and information. Currently, the focus of the organizations is on providing quality services and output. As a result, the salient encounter for the policymakers and researchers of management is to enhance the output of employees who have rich knowledge for the shapeless academic and knowledgeable jobs or assignments in the 21st century (Drucker, 1999, Iazzolino and Laise, 2016, Iazzolino et al., 2017, Moussa et al., 2017, Ramírez and Nembhard, 2004, Turriago-Hoyos et al., 2016, Shujahat et al., 2019).

The current era service sector is growing rapidly, scholars are examining the implication of knowledge and the outcomes of service innovation and creativity (Rahman, 2020). Social networking offers organizations a dynamic and new opening to mobilize their workforce in enhancing their creativity and innovation, leaving behind traditional research and development methods (Abhari et al., 2021). According to (Ghabban et al., 2018) valuable information enhances employee's work performance. They also specified that computer-intervened communication through social networking technologies improves employee's efficiency. According to the Pakistan Economic Survey, the total growth of the service sector in Pakistan for the year 2018-19 showed a 4.71 percent increase.

Education, information technology, health, and social work contributed to the positive progress of 7.05 percent. Banks, finance, and insurance divisions showcased 5.14 percent total advancement, whereas, non-scheduled, scheduled banks, and insurance sub-divisions displayed a positive inclination of 24.6, 5.3, and 12.8 percent, respectively. The positive contribution of airborne operation "3.38%", railways "38.93%", transportation "3.85%", storage, communication, and transport division recorded 3.34 percent uplift. Growth is also seen in Executive authorities' departments up to 7.99% whereas housing services are increased to 4.0 percent. Value is added by the bulk growth of wholesale, retail, and livestock sectors of the country (2018-2019). Since a major contribution of the service sector can be observed, therefore, knowledge donating behaviour through social networking of employees in this sector is an important variable to determine employee's productivity.

The meaning of productivity states as a mediocre output of every employee working in an organization (Carter et al., 2013). Measuring organizational success by productivity is a difficult task, it cannot be measured while viewing the financial aspects (Webber et al., 2015). Employee's quality and characteristics are the main dynamics of the workplace that affect the productivity of the workforce (Webber et al., 2015).

Theoretically, the proposed relationship has been supported by the social network theory which provisions knowledge donating behaviour through social networking amongst people, groups, and teams within the organization and outside. Social Networking is a platform where people connect and interact with those who have the same interests. It has been infused in people's daily life as computers intervene in communication (Lin & Lu, 2011). Social Network theory is considered as an overarching theory for the present study, which completely supports the whole research model of the current study.

The objective of this study is to empirically examine the effect of knowledge donating behaviour on employee productivity and the role of social networking in establishing this relationship. In support of the management concern, the behaviour of knowledge donating through social networking produces an impression on employee's efficiency. Thus this study is intended to answer the research question of whether knowledge donating behaviour significantly impacts employee's productivity and whether social networking significantly intervenes between these two factors to establish a significant relationship?

2. LITERATURE REVIEW

2.1 Knowledge Donating and Employee's Productivity

There are many systems for delivering knowledge that is distributed computing (Navimipour et al., 2014, Souri and Navimipour, 2014), Wireless network (Navimipour et al., 2012) and Expert Cloud (Navimipour et al., 2015) which assist in transferring of data (Navimipour and Milani, 2015, Navimipour and Zareie, 2015). In different fields of knowledge management, sharing knowledge has been considered the most important field to organizations, people are encouraged to gain knowledge from the main owner of that knowledge and use it for enhancing their performance at the workplace and in return give profit to their organization (Wang and Ko, 2012).

Regardless of the size and structure of the organization, the main calculating factor of a company's efficiency depends on the employee's productivity (Carter et al., 2013). Previously, it is reported that there is a link between working hours, task completion, and employee productivity (Moselhi and Khan, 2012). An employee's efficiency is also identified as the percentage between the inputs utilized during the production time and the outcomes (Hwang and Soh, 2013, Yi and Chan, 2014). The benefits of employee productivity are to make the best use of employee's efficiency to achieve the organizations competitiveness (Taleghani et al., 2011).

Promoting the transfer of knowledge may lead employees in their work gratification which is associated with higher efficiency and productivity (Kianto et al., 2016). The employees who are positively inclined enroot for donating knowledge behaviour, that positive behaviour affects their job efficiency (Henttonen et al., 2016). The act of transferring knowledge amongst employees may optimize the productivity of an organization, for instance, creativity, engagement capability, and employment (Akbari and Ghaffari, 2017, Liu and Liu, 2011). Sharing of knowledge is an ongoing action that interchange information amongst employees (Aksoy et al., 2016). Rendering Kim and Park (2017) explain knowledge sharing as a process of interchanging work-related information, and responses of people about the product that creates new knowledge different techniques and methods, solve problems, and accomplish mutual objectives. Transfer of knowledge refers to an operative method of upholding the effectiveness of an organization (Haak-Saheem et al., 2017). Nevertheless, many employees do not transfer their expert knowledge according to the organization's prerequisites. Organizations can influence personnel for sharing their skills and experiences by offering virtual and concrete rewards (Geri et al., 2017). For the organization, knowledge sharing is the basis of the invention not only the method of transferring information (Al Saifi et al., 2016).

Furthermore, from the employer's point of view, transferring information is a typical behaviour. The consequences of sharing knowledge have been communicating with the surroundings, the system of transferring information has been applied through a proper method, in which multifaceted aspects and procedures were interlinked (Siemsen et al., 2007). Therefore, in this environment and circumstances handling and dealing with the sharing of knowledge at academic institutions is the foundation of proficiency and improved efficiency (Arsenijević et al., 2011, Wu et al., 2019). Consequently, the current research recognized the necessity and intended to examine the subsequent hypothesis:

H1: *There is a positive effect of knowledge donating (KD) on employee's productivity (EP)*

2.2 Knowledge Donating and Social Networking

Donating knowledge is defined as "persons' own wish to convey and transmit amongst people its scholarly wealth (Van Den Hooff & De Ridder, 2004a). To achieve fruitful results, project-based organizations focus on operative knowledge sharing and encourage individuals to donate their useful knowledge (Mueller, 2014). Innovation in social networking technology has proved that the way of communication, dissemination of information, collaboration, and interaction with people has been far changed today. The usage of online communication apps like the podium of social networking to connect, find, and associate with people who

have the same interests. Social networking is the tool that spreads or pervades the daily activities of individuals and in mediating between computers and communication (Lin & Lu, 2011). Social networking has become a valuable podium for organizations and people for communication and sharing of skills and expertise. Institutes of higher education are implementing social networking technologies for learning activities (Balakrishnan and Gan, 2016, Kulakli and Mahony, 2014). Many health-related organizations are using this platform for sharing knowledge for efficient workflow internally between their employees (Li et al., 2018, Yan et al., 2016). This inclination has attracted professionals from different organizations especially those belongs to academic backgrounds. Regardless of, significance and growth in this field, a limited review has been conducted by previous scholars (Ahmed et al., 2019). Therefore, the current research will assess the following hypothesis:

H2: *There is a positive effect of knowledge donating (KD) on social networking (SN)*

2.3 Social Networking and Employee's Productivity

Social networking decreases friction that links employees in two ways: Firstly, social networking encourages people to communicate with each other, know them, and watch their different activities online (Leonardi and Meyer, 2015). Through social networking, the individual can also learn by watching their colleagues what type of communication, knowledge, and documents they are sharing (Leonardi, 2014). Secondly, social networking provides people a platform to interact with each other very easily. The conversations on social networking with time led to discussion forums that people can return to them whenever they want (Ellison et al., 2015). This perseverance has its significant aspect for promoting networking amongst individuals as knowledge sharing is not a distinct action. Social networking allows the user to post, edit, and review the items and engage more people in different discussions. These practices are not dependent on a time-bound system, it allows people to interact or contribute to the exercise of sharing their knowledge (Treem and Leonardi, 2013). By expanding effective social networking within the organization add to the overall growth of personnel that leads to an increase the contribution, participation, commitment, job satisfaction, and productivity (Grant, 2016).

The researcher examines that the linkages of people amongst other individuals within the social circle lead to the enhancement of social networking (Grant, 2016). Many popular social networking sights favoured by employees highlight the growth of specialized expertise of individuals, many opposed the idea that this social network benefits incomplete participation in the system (Scott, 2012). The social network provides a platform for the employees to recognize dynamic and vibrant business methods that are influential or help in the professional growth of employees. The past studies have shown that inside and outside associations in sharing knowledge increase the productivity and decision-making competence of employees (Kanawattanachai and Yoo, 2007, Kim, 2011). Illustrating the theory of knowledge sharing, the researcher executed a social networking examination of chronicle statistics prepared by four thousand five hundred and sixty-eight enterprise system operators. They originated employees having a broad social network and knowledge is more productive (Deng and Chi, 2015).

Researchers examined the usage of social networking sites has an encouraging effect on the output and efficiency of work, social networking provides the user a mode to acquire or learn more about the organization, share their skills, experiences, expertise/know-how and become social asset/capital for the organization. When employee's productivity is increased automatically their work performance will be enhanced (Thom-Santelli et al., 2011). The scholar further added and defined to these results that internal and external users of the social networking platform have a substantial impact on job performance. Based on previous arguments, people should believe that using the stage of social networking for inter and intra-organization knowledge sharing will surely encourage productivity and efficiency of employees (Kuegler et al., 2015). Hence, the following hypotheses can be delineated:

H3: *There is a positive effect of social networking (SN) on employee's productivity (EP)*

2.4 Social Networking as Mediator Between Knowledge Donating and Employee's Productivity

Scholars commonly view knowledge sharing behaviour as bidirectional or unidirectional, depends on their viewpoint (Dutta et al., 2015). Considering the unidirectional view, it is the disseminating of information in one path from the supplier to the receiver (Yi, 2009). On the contrary, in a bidirectional viewpoint, knowledge sharing comprises collecting and donating information (Van Den Hooff and De Ridder, 2004). Those aspects were presented by (Van der Rijt, 2002), who considered information and knowledge sharing as the demand and supply of novel information. It is also reinforced by various researchers (Karkoulian et al., 2010, Svetlik et al., 2007, Tohidinia and Mosakhani, 2010).

The researcher in his paper has considered knowledge sharing behaviour as bidirectional, which includes collecting and donating knowledge. The effect of information sharing behaviour has an optimistic outcome on different aspects which includes: economical advantage (Peters, Snowden, Lin, & Chen, 2008), organizations efficacy (Yang, 2007), improvement in output (Noaman and Fouad, 2014), modernization competence (Yeşil and Dereli, 2013), group or team production (Cheng and Li, 2011), job fulfilment (Zumrah, 2013) and economic presentation (Wang et al., 2014). The researcher has analysed two aspects of knowledge sharing facilitators: 1) the institute and 2) individual and their output.

Scholars have explored the character of information obedience and statutory authorities on the usage of the social network. They examined that social network sites allow users for knowledge sharing. Internet and social networking work parallel to provide the platform for the exchange of knowledge and broadcasting information amongst individuals. People should understand the threats, benefits, magnitudes, and compulsions of knowledge sharing on social networks. For example, the online environment and conduct have the prospective to augment or demoralize the operators (Williams et al., 2013).

The researcher scrutinized the acute aspects of retaining, anticipating knowledge, and inclination of employees to share their knowledge in the organization. This research was the follow up of his earlier study, in which he established an organizations prototype to investigate that social connection is disturbing the transfer of knowledge or information in the association (Smith et al., 2003). Later, Smith examined that the difficulties linked with knowledge management systems

are that they are established in segregation from the societal system in the institute. In his opinion, if social networks will be ignored, the dissemination programs of knowledge sharing will not boom. Accepting and recognizing these systems will create a tradition that will reassure sharing knowledge and develops a favourable environment for the transmission of information within the organization (Smith, 2009).

It has been reviewed several times empirically and theoretically that the uninterrupted effect of managing human resource applications on information-sharing behaviour, which is generally acknowledged in the current works at diverse perspectives and environment like at high tech industry of Taiwan (Hsu et al., 2007, Liu and Liu, 2011), non-profit organizations of US (Flinchbaugh et al., 2016), service and manufacturing industry of Malaysia (Nielsen et al., 2011) and financial sector of Netherland (Slagter, 2009). To enhance the quality of team services, HRM applications encourage knowledge transfer behaviour amongst workers (Flinchbaugh et al., 2016), it also enhances the processes (Liu and Liu, 2011) and worker's creativity deeds (Slagter, 2009). For the organizations, knowledge sharing has to turn out to be a fundamental aspect to maintain and endure their economic benefit. Therefore, organizations should execute and enforce suitable or applicable HRM applications for boosting the knowledge-sharing environment between their workforce (Cabrera et al., 2006, Cabrera and Cabrera, 2005, Collins and Smith, 2006). Hence, the resulting hypothesis is articulated:

H4: *Social Networking (SN) mediates the effect between knowledge donating (KD) and employee's productivity (EP)*

Figure 1. *Hypotnesized Research Model*

3. METHODOLOGY

3.1 Population and Sampling

The population of the research is composed of faculty members and operational staff associated with the education and financial sector located in Islamabad, Rawalpindi, Wah Cantt, and surrounding areas of Pakistan. The data is composed via a self-administered questionnaire collected after describing the size. Furthermore, the study implemented and adopted a convenience sampling technique to define the sample size. Overall, 500 questionnaires were circulated amongst the respondents. 403 were resumed, therefore, the response rate was 80 percent in the survey. The calculating design by (Krejcie & Morgan, 1970) and G Power software are used to determine the optimal sample size accordingly. G Power is a new method that is used to determine the sample size. It is software for examining the power and calculating the sample size of the respondents that is vital for the study. This software suggests power analysis for different tests applied that are F test, t-test, chi-square, exact test, and z test (Faul et al., 2007). A 403-sample size was considered suitable for attaining proper results. Figure-2 presents the calculations of the sample size via G power.

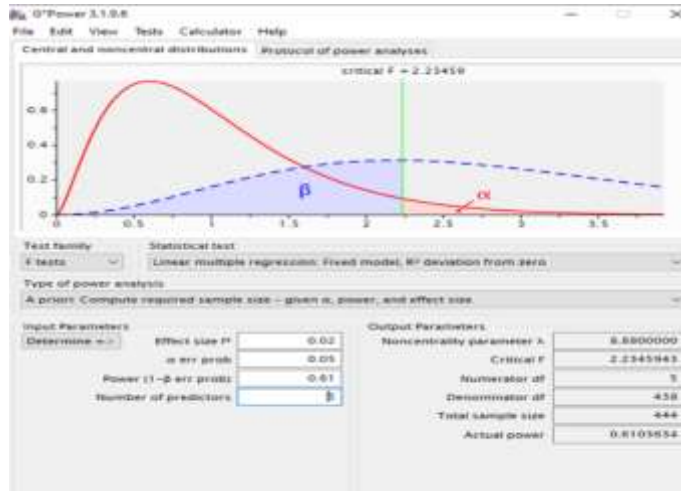

Figure 2.
Sample Size Determined by G Power

The survey is conducted through a self-administrative questionnaire to gather data from the respondents. As the target respondent are well educated and the working language of Pakistan is English, therefore, the questionnaire is in the English language, it is not translated into Urdu. The questionnaire is in two segments, the first segment is covering demographic information which contained personal information for instance experience, education level, gender, and age.

3.2 Respondent's Profile

Demographic information of the respondents for instance sector, designation, gender, age group, experience, and qualification is shown in Table 3.1. Respondent's classification based on gender was 66% percent males and 34% percent, females. Most respondents were aged between 60%-25% there is no respondent in the age group of >61. Concerning education, nearly all the respondents possessed a master's and graduate education that is 40% to 30% and the majority of respondents (40%) possess 6-12 years of experience.

3.3 Research Instruments

The next segment includes three variables named knowledge donating through social networking, and employee's productivity. The feedback from the respondent is asked for all the questions added to the instrument. The targeted respondent opinions/information are gathered for all the variables using a five-point Likert Scale (1 for strongly agree to 5 for strongly disagree). The questionnaire is taken from the original questionnaire.

4. DATA ANALYSIS

4.1 Statistical Analysis

Statistical analysis of the data is performed in two stages i.e., Structural Equation Modelling (SEM) and Preliminary Data Analysis.

4.2 Preliminary Data Analysis

Structural equation modelling (SEM). To evaluate multifaceted relations among perceived and hidden variables, the most used tool is the partial least squares structural equation modelling (PLS-SEM).

4.2.1. Internal consistency. Determining the reliability of the scale in a research instrument, internal consistency amongst items is used. In this context, mostly

Demographic Variables		Valid Responses %
Gender	Male	66
	Female	34
Age Group	21-30	60
	31-40	25
	41-50	13
	51-60	03
	61 and above	0
Education	Undergraduate	20
	Masters	40
	Graduate	30
	PhD	10
Experience	0.5-05	30
	06-12	40
	13-20	23
	21-30	7
	31-45	0
	46 and above	0

Table 3.1
Demographic Statistics

Cronbach's alpha is used for measuring and establishing internal consistency that decides the reliability of a scale (Hair Jr et al., 2014).

S. No	Variables	Items	Sources
1.	**Knowledge Donating**	03	Van Den Hoof and De Ridder (2004)
3.	**Social Networking**	06	Kuegler et al., (2015)
4.	**Employee's Productivity**	06	Than-Santelli et al., (2011)

Table 3.2
Distribution of Instrument Variables

The values estimated for internal consistency Composite Reliability and Cronbach Alpha are applied to determine data reliability for further analysis of the proposed research model in the advance phases. Thus, the estimated values of 0.60 or higher for both Cronbach Alpha and Composite Reliability determine the acceptable level of data reliability. On the contrary, the values which are less than 0.60 show low or little reliability. Higher composite reliability (CR) value shows a higher consistency of items or substances. In the current research, Cronbach alpha (CA) and composite reliability (CR) values, respectively are in the acceptable ranges of '0.60' to '0.80', as presented in Table 4.2. The values represent a good or upright degree of construct reliability and disclosed the items used in the current research instrument with high-level internal consistency. The items used as the research instrument for the current study produced satisfactory results for reliability measures as projected in Table 4.1.

Items	EP	KD	SN
Q-10_EP	0.729		
Q-11_EP	0.841		
Q-12_EP	0.816		
Q-13_EP	0.804		
Q-14_EP	0.836		
Q-15_EP	0.788		
Q-16_KD		0.869	
Q-17_KD		0.653	
Q-18_KD		0.665	
Q-19_SN			0.674
Q-20_SN			0.735
Q-21_SN			0.789
Q-22_SN			0.725
Q-23_SN			0.710

Table 4.1
Indicator Outer Loadings

Variables	Composite Reliability (CR)	Cronbach's Alpha (CA)
KD	0.78	0.60
SN	0.85	0.78
EP	0.92	0.89

Note. KD=Knowledge Donating, SN=Social Networking, EP=Employees Productivity

Table 4.2
Internal Consistency Measures

4.2.2. Path coefficients. The path coefficient is also used to evaluate or measure the structural model of the current research. Path coefficient values are used to examine the significance and strength of a relationship amongst two new variables. "Bootstrapping" is a method in SmartPLS to attain values for evaluating relationships (paths) among dependent and independent variables. Furthermore, p-values and t-statistics are evaluated to validate the worth or significance of every path present amongst these variables. As per the previous scholar, the statistical t-value is higher than the critical value when measured empirically, the coefficient is measured significant at the explicit confidence level. 0.95 t-value is cast out at a significance level of '0.05' of the current research (Hair Jr et al., 2014).

Measuring the significance of the estimated path coefficient, a test named nonparametric statistical also known as bootstrapping is carried out by "PLS-SEM" (Hair Jr et al., 2014). It is also explained that the ranges of coefficient values are in-between -1 and +1. Hence, path coefficient values that exist near +1 show a stronger relationship, whereas coefficient values near -1 present weak or low relationships. Table 4.3 shows the p-value, t-value, and path coefficient amongst variables empirically of the current research. Based on path valuations, rejection, and acceptance of the hypothesis depends on it. According to the results of the current study, all hypotheses are supported at a significance level of 0.05.

Path	Path Coefficient	Mean	Standard Deviation	t-Statistics	p-Values
KD -> EP	0.109	0.12	0.065	1.686	0.046
KD->SN	0.142	0.147	0.044	3.225	0.001
SN -> EP	0.498	0.502	0.045	11.007	0.000

Table 4.3
Path Coefficients

Note. *KD=Knowledge Donating, SN=Social Networking, EP=Employees Productivity*

4.3 Hypothesis Testing

Based on the results attained from PLS-SEM, the current study hypothesis was tested through the structural model. To test the hypothesis, t-values, p-values, and values of path coefficients were assessed at a significance level of 0.05. Each hypothesis of the current research was accepted based on these values. Four hypotheses are presented in this study to assess the indirect and direct relationships between projected variables.

The projected hypothesis of the current study is as under:

H1: There is a positive effect of knowledge donating on employee's productivity. The results present that the path coefficient among KD and EP is 0.109. The t-value that is 1.686 is significant and is higher than the critical value which is "1.96". P-value is also significant and lesser than the threshold value of "0.05". Therefore, there is sufficient empirical evidence that H1 hypothesis, and the current research determines a significant positive effect of KD on EP.

H2: There is a positive effect of knowledge donating on social networking. The results display that the path coefficient between KD and SN is 0.142. The t-value is 3.225 which is significant and is higher than the critical value which is "1.96" and the p-value is 0.001 which is also significant and lesser than the threshold value of "0.05". Hence, sufficient empirical evidence that the hypothesis H2 and the current research determines a significant positive effect of KD on SN.

H3: There is a positive effect of social networking on employee's productivity. As per the outcomes, the path coefficient is between values amongst SN and EP and is calculated as "0.498". The t-value of 11.007 measured the significance of this path as it is larger than the critical value of "1.96" and the p-value of "0.000" also showed the significance of the path coefficient. Based on empirical evidence, hypothesis H3 is accepted and the current research builds a significant positive effect of SN on EP.

4.4 Mediating Analysis (KD-SN-EP)

By applying the bootstrapping method through PLS-SEM, results were attained, which are shown in Table 4.4 and Figure 4.3. As the first step for testing the mediating effect, the direct path coefficient of KD→EP (0.332, t = 5.997, p=0.000) was found significant. As a second step, the indirect path coefficient (KD→SN→EP) was calculated as "0.068" and found significant (t=2.794, p-value=0.003).

Variance Accounted for (VAF) value is measured to establish the strength of mediation effect (e.g. full, partial, or no mediation) by dividing the indirect effect over total effect. The estimated VAF value of =>0.80 indicates full mediation while <0.80 and =>0.20 indicates partial mediation and <0.20 as no mediation. Thus in this study, by calculating indirect effect/total effect (0.068/0.149), the VAF value is estimated as 0.457 which indicated that social networking partially but significantly mediated between knowledge donating and employee productivity. Thus Hypothesis (H4) is accepted.

Table 4.4
Indirect Paths

Path	Path Coefficient	t-Statistics	P-Values
KD -> SN -> EP (Indirect)	0.068	2.794	0.003

Note. *Knowledge Donating=KD, Social Networking=SN, Employees Productivity=EP*

5. DISCUSSION

The outcomes of the current study disclosed that knowledge donating is significantly and positively (ß=0.109, t=1.686, p=0.046) associated with employee's productivity. Generally, these findings are directly supported by the previous study of (Singh & Mohanty, 2012) who found the concept of employee productivity and efficiency as the net income for each worker. Previously, Li, Zhang, Zhang, & Zhou, (2017) provided relatively generalized findings by empirically examining the role of Knowledge donating as an important aspect of sustaining competition and using competencies of employees in different organizations.

The present research anticipated that there is a positive (ß=0.142, t=3.225, p=0.001) effect of knowledge donating on social networking in different academic sectors and financial institutes of Pakistan. According to the previous researcher, most of the companies' limited research and development in-house and do not try to absorb innovative capabilities, these organizations require to establish links with other allies to get advanced technical inputs and scientific advice (Dezi, Cillo, et al. 2018). Therefore, nowadays, social networking technologies play a pivotal role in transferring or sharing knowledge, data, and information. Organizations are using this platform in advancing their businesses (Lin 2007, Bontis, Pee 2018).

The current study hypothesized and projected that there is a positive (ß=0.498, t=11.007, p=0.000) link between social networking and employee's productivity in different financial institutes and universities of Pakistan. The outcomes of this study discovered that social networking is significantly and positively associated with employee's productivity. These results of the research are in favour of previous studies. Previously, researcher empirically analyzed that social networking was used for the sharing of external and internal knowledge which showed a positive effect on employee's productivity and efficiency (Aboelmaged, 2018).

5.1 Implications of The Study

The work on the topic of employee productivity has grown into a multidimensional concept for the last two decades. The present study findings provide empirically conclusive or convincing evidence and insight to the universities and financial sector that management should give particular importance to the use of social networking technologies to improve employees' efficiencies. Secondly, this study finding will help or support the management of the contemporary organizations to design their related procedures and communication-related operations to encourage highly qualified employees to disseminate their professional skills, expertise, experiences, and know-how innovatively through social networking with other co-workers so that they can collect and utilize the new knowledge for their advancement. Thirdly, management yields procedures to establish a system of exchange channels or use the tool of social networking. Exchanging information through highly advanced technology resources will create convenience for fellow employees. Organizations need to build a central management system for continuous training and updating of the electronic libraries.

This will offer the employees an excellent opportunity to retrieve the latest and most innovative professional knowledge from the database available in the electronic libraries for enhancing their abilities, skills, expertise, and outputs. Finally, the present research recommends the policymakers, key stakeholders, and regulators in the academics and financial sector to examine and inculcate a supple organizational culture where employees' readiness should be fostered to implement knowledge sharing behaviour through the use of social networking.

5.2 Limitations of The Study

The current study is only focusing on academics and the financial sector of Pakistan with a total of 403 respondents. To take a broader view and test the findings, a larger sample size should opt. The respondents from other services, corporate sectors, and industries should also be evaluated in future research. Secondly, the present study is evaluated and restricted in a specific region, consequently, in future studies, these findings may fluctuate or change in other regions and countries where universities and banks are operating. Thirdly, in this study for all the variables (KD, SN, EP) research instruments and scales were used. The study was empirically validated and tested via validity and reliability measures. Hence, in this study, for empirical findings, from targeted respondents, self-reported responses were used. Therefore, every response from the targeted respondents depended on the fact of how accurately and properly they have answered the questions. Finally, the current research has used a cross-sectional study for collecting at one time the responses of the targeted respondents. In future studies, the mode of longitudinal study may be used for better generalizability and comprehension of the findings.

5.3 Future Recommendation

The present research has underlined the concept of developing and enhancing employee's productivity while using a social networking tool for donating knowledge at an organizational level. The present research targeted manpower employed at the operational level in banks and faculty members in universities of Pakistan. Nevertheless, in future research, staff, and managerial level both may also be considered to forecast envisioned outcomes. By including both level responses or replies in a proportional or relative study will present a critical understanding of the differences grade or rank-wise. Future investigations may also examine the longitudinal mode of research in place of cross-sectional. The longitudinal study will support in comprehending outcomes variations in targeted respondent's intentional reflections and perceptions at different periods of time. It will add strength to the empirical and theoretical footings of the proposed research framework. Moreover, the projected model of the presented studies may also be tested in different service sector domains such as tourism, transportation, and telecommunication and the industries to generalize or to take a broader view of the findings, as these domains are the important pillars amongst different service sectors in enhancing any countries per capita income. Furthermore, recently in the wake of Covid-19 Pandemic, the concept of 'School's Out, But Classes On', further investigation can provide valuable insight for accelerating the integration of social networking technology for knowledge sharing and reforming the teaching methods to enhance skills and proficiency of the academic faculty.

6. CONCLUSION

The present studies have mostly strengthened the findings of the recent studies in the academic and financial sector of Pakistan. Previously, some studies suggested that using social network systems for sharing external and internal information, their impact on employee's productivity (Aboelmaged, 2018). Recently researcher has examined that social networking applications suggested new opportunities for organizations to equipped employees for promoting creativity and innovation beyond traditional research and development functions (Abhari et al., 2021). It is logical to conclude that when employees donate their knowledge while using social networking technologies, employee's efficiency and productivity are enhanced. The current research added significantly to the existing literature related to knowledge donating behaviour, social networking, and its outcomes on employee's productivity. Importantly, this research contributed by investigating the mediating role of social networking.

The main or primary data was collected via a self-administrative survey from 403 faculty members and operational staff working in universities and banks of Pakistan located in Rawalpindi, Wah Cantonment, and Islamabad. An empirical analysis of the structural model of the research discovered that direct relationships of knowledge donating behaviour are significantly positively related to employee's productivity. The path analysis confirmed the partial mediating role of social networking between knowledge donating behaviour and employee's productivity. The current research was a novel approach to the problem to inquire about the mediating role of social networking amongst universities and banking employees working in Pakistan.

Based on the discussion stipulated above, it can be proposed that knowledge donating is a significant idea for the management of academics, and the financial sector which can substantially inspire the working culture by affecting employee's efficiency and output. Subsequently, universities and banks are the service sector, this employee's productivity in terms of efficiency and outcomes has become more critical as the quality of service depends on social networking used for knowledge donating behaviour. The current study has proved empirically that knowledge donating behaviour is a significant feature to boost the academics and financial sector employee's productivity by using the tool of social networking. The aspect of knowledge sharing behaviour is also important to employee's productivity.

The present study has accomplished all its objectives since the hypothesized relationships have been justified with the findings and support from recent and distant studies in the literature. The concept of the present research provides an innovative podium for upcoming research to outspread the projected framework with more comprehensive findings that can be further observed in various organizations and employee's efficacy or efficiency and output at different levels and grades.

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