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Social media usage and employee's job performance

The moderating role of social media rules

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Abstract

Purpose – This era is an era of social media (SM); thus, it is an essential tool for communication among individuals and organizations. The excessive use of SM by employees has raised many questions about their job performance. Therefore, there is a dire need to investigate the effects of SM use on an employee's job performance mediated by knowledge exchange. Furthermore, the purpose of this paper is to examine how the organization's SM rules can moderate the relationship between personal and work-related use of SM with information sharing and obtaining information.

Design/methodology/approach – Quantitative methodology was used and randomly 1,200 questionnaires data were collected physically from the employees of the public and private sectors in Pakistan. To examine the hypothesized relationships, partial least squares (PLS), rather than covariance-based structural equation modeling, was used to analyze the data. For this reason, multivariate technique, Smart PLS-3.2.1, was used for data analysis.

Findings – The findings of this study demonstrated that personal and work-related use of SM could enhance employees' job performance through knowledge exchange, and SM rules have adverse impacts on the relationships between SM use and knowledge exchange.

Originality/value – This study provides a novel model for the investigation of whether SM use affects employees' job performance. Furthermore, it will help the policy makers and researchers regarding the management of SM use at work.

Keywords Information sharing, Social media, Obtaining information, Social media rules, Employee's performance

Paper type Research paper

1. Introduction

Social media (SM) is a tool that provides a facility for social and commercial communication (Parveen *et al.*, 2015) that was built on the technological foundations of Web 2.0 (Habibi *et al.*, 2016). Recently, SM sites such as WeChat, Facebook, Twitter, Instagram and YouTube have become popular around the globe for sharing and obtaining information (Berthon *et al.*, 2012). Individuals and organizations are using SM for their social and commercial purposes by creating, sharing and exchanging information with their friends, family, colleagues and customers (Shi *et al.*, 2013). Organizations can take the advantage of the potential of SM to effectively engage with their employees, customers and other patrons for business value creation and collaboration (Naudé *et al.*, 2014).

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Therefore, the effective use of SM can enhance employees' capabilities associated with employees' job performance and organizations (Nisar and Prabhakar, 2018). SM platforms are becoming more collaborative and interactive for users because of the increasing trends of use. Therefore, these applications can be accessed on the web and through mobile technology (Siamagka *et al.*, 2015).

Nowadays, individuals can share their experiences and check other posts, and these processes can be performed with minimal effort and time (Osatuyi, 2013). Usually, employees share and obtain information from friends and colleagues to maintain a sense of social relationship, and this is how knowledge sharing or obtaining phenomenon positively influences job performance and learning capabilities (Eid and Al-Jabri, 2016). The first important measure of an employee's progress in the workplace is work performance, that is, whether an employee is working efficiently. Similar to other emerging technologies, SM use has also been contentious in the workplace. Studies (Tajvidi and Karami, 2017; Bennett *et al.*, 2010) have claimed that SM use in the workplace improves employee work performance. In contrast, other studies (Meshi *et al.*, 2013; Shepherd, 2011) have reported that SM use is a waste of time and reduces employee's productivity because of personal messaging. However, most studies have focused on the impact of using enterprise SM to measure the overall work performance, and these studies have been conducted using college and university students' data (Clark and Roberts, 2010); thus, their results might not be generalizable to business firms and organizations.

Keeping the existing research in mind, we found significant research gaps in the literature that most studies explored the general perspective of SM use or just focused on work-related use of SM that did not demonstrate the mechanism for employee's performance. Notably, there has been little knowledge regarding the belongings of SM use in organizations about employees' job performance. Additionally, there is also a lack of research that describes the mediating and moderating factors that influence the motivations of employee's SM use and their job performance. Specifically, existing literature has not considered how SM use can intensify employee's job performance via knowledge exchange behaviors and how such causal relationships are moderated by the perceptions of employees about SM rules. Based on these research gaps identified, we assert that an investigation of the underlying mechanisms for the effects of SM use on employees' job performance and potential moderators for such effects is necessary. Recently, organizational implementation of SM policy has been increasing (O'Connor *et al.*, 2016), and one fundamental question is how well do employees know and appreciate their employer's rules, and how this knowledge can be useful for organizations. Therefore, the key objectives of this study are to investigate the underlying knowledge exchange mechanisms that mediate the relationship between employee's personal and work-related use of SM and job performance. Additionally, this study investigates the moderating role of SM rules, that is, how it influences the relationships between employee's SM use and knowledge exchange behaviors.

In summary, to address the research question regarding what factors influence employees' performance when using SM in organizations, we put forward an innovative approach that integrates social exchange theory (David Gefen, 2002). Based on how SM applications or social networking sites (SNS) are used, this study proposes two categories of SM use (i.e. personal and work-related) and two types of knowledge exchange (i.e. information sharing and obtaining information). We then examined how the two categories of SM use affect employee's job performance through the two types of knowledge exchange, and how such effects are moderated by employees' perception of organizational SM rules. To sum up, this study aims to answer the following questions:

RQ1. How do the personal use of SM and work-related use of SM affect employee's performance via knowledge exchange behaviors?

RQ2. How do the perceptions of organizational SM rules moderate the effects?

The paper is organized as follows: first, we extensively review the literature on SM use, information sharing, obtaining information and employees' job performance. Second, we discuss the theoretical foundations of this study on the bases of the social exchange theory that helped us to perform hypotheses development. Third, we describe the methodology and data analysis results of the study. Finally, the implications, limitations and visions for future research are discussed.

2. Theoretical background

In Sections 2 and 3, we comprehensively review the past studies and describe the theoretical foundations of this study. For the development of our research model, we used a widely acknowledged social exchange theory.

2.1 SM use and job performance

Employee performance can be affected by conditions such as job satisfaction, working environment, motivation and stress (Kakkos *et al.*, 2010). Koo *et al.* (2011) asserted that social communication technologies influenced employees' job performance and social factors moderate the degree of such relationships. Social technologies can enhance an employee's job performance. Employee's effective use of such SM technologies is positively linked to task performance and building and maintaining social ties with colleagues and friends over SM platforms (Parveen *et al.*, 2015). Moreover, Ali-Hassan *et al.* (2015) indicated that the use of SNS strengthens employees' skills to create, share and obtain knowledge that conclusively increases job performance. Therefore, Sujatha and Krishnaveni (2018) advocated the importance of knowledge contribution to work performance. It is essential for an organization to enhance internal consistency and to smoothen the communication process among the employees by taking advantage of SM.

A recent study on the advancement of artificial intelligence describes that the rapid growth of artificial intelligence and robots revolution will significantly replace the labor force in the organizations (Berg *et al.*, 2018). Alternatively, new technologies open up more opportunities for technically skilled workers (Van Roy *et al.*, 2018). Technological innovations are labor friendly and have positive and significant impact over high-tech and medium-tech manufacturing sectors.

Similarly, Frey and Osborne's (2017) findings showed that non-technical staff will be diverted to assignments that are not susceptible to computerization. The organizational staff will need to acquire creative and social intelligence skills in order to save their jobs. Moreover, Decanio (2016) described that artificial intelligence technologies will cause decline in the aggregate wages of industrial workers as robots proliferate. Hence, employees should be conscious and update their skills with the rapid advancement of new technologies.

2.2 SM use and organization's rules

Many organizations have implemented an SM use policy for their employees (Hodzic *et al.*, 2018). SM policy should be clear and collectively cover all the aspects of employees; SM use intentions to provide them with a friendly and cooperative working environment. Patterson *et al.* (2005) defined working environment as a representation of employees' perceptions regarding organizational policies, practices and procedures as well as successive patterns of interactions and behaviors that support creativity, innovation, safety or service in the organization. O'Connor *et al.* (2016) suggested that organizations should provide sufficient training to employees before the implementation of newer policies or rules; otherwise, such regulations create distress among the employees and lower their job performance. Subsequently, blocking SNS in the workplace is not a suitable option for organizations to prevent employees from using SM because this would decrease employees' productivity and performance (Tulu, 2017).

Therefore, most of the studies have recommended that organizations should provide adequate training and guidance to employees for the appropriate use of SM.

2.3 Social exchange theory

Social exchange theory deals with the knowledge exchange process among individuals, groups (Kankanhalli *et al.*, 2005) and online communities (Wasko and Faraj, 2005). Social exchange theory defines the behaviors of individuals that can maximize their benefits from social interaction (David Gefen, 2002). The individual's capability to develop and maintain social connections with others is necessary for social exchange (He *et al.*, 2009). Moreover, individuals like to share their knowledge when they aim to establish a professional identity and reputation in relevant communities (Hsu and Lin, 2008).

2.4 Knowledge exchange

SM provides benefits to business organizations by connecting them to end-consumers directly and facilitating various areas of marketing and public relations (Kaplan and Haenlein, 2010). The findings of Nisar and Prabhakar (2018) provided evidence regarding the effects of SM knowledge management discussion groups on organizational performance through knowledge exchange and social communication. Parveen *et al.* (2015) revealed that SM use has improved information sharing and accessibility for organizations. Besides, Eid and Al-Jabri (2016) suggested that educational institutions should contemplate the use of SM tools in their design of courses to promote knowledge sharing and learning. Osatuyi (2013) explored information sharing among individuals and concluded that the behavioral act of sharing information is commonly supposed to be benefit oriented. Kuzu and Özilhan (2014) asserted that knowledge sharing is a significant activity that enriches an individual's competency regarding learning, problem solving and self-improvement. Companies must create open environments and incentive–reward systems to motivate members to share their knowledge positively and voluntarily (Kankanhalli *et al.*, 2005). Aldieri and Vinci's (2018) study describes that knowledge diffusion plays a vital role in the employment effects of sustainable development investments for large worldwide businesses.

All the studies have emphasized the importance of knowledge contributions because valid information sharing and obtaining information are linked to the success of employees and organizations.

3. Research model and hypotheses

After analyzing the literature, we proposed a conceptual model of the study. In the research model, we divided employee's SM use into two components, i.e., "personal use of SM" and "work-related use of SM." Similarly, knowledge exchange has been categorized into "information sharing" and "obtaining information" that are subsequently associated with employee's job performance. Additionally, SM rules are used as a moderator among SM use and knowledge exchange. According to Pi *et al.* (2013), multiple factors are attached to the use of SM that can promote employees' knowledge exchange and job performance (Leftheriotis and Giannakos, 2014). Table I provides the formal definitions of all the constructs.

3.1 SM use

3.1.1 Personal use of SM. The personal use of SM describes the individual's interest and purpose regarding using SM tools: when an individual wants to share, seek and contact friends, colleagues or family because of a personal need and no external factors are the impetus for this action. Cheng *et al.* (2017) asserted that interpersonal communication is point-to-point interactions between two separate individuals.

Construct (abbreviation)	Definitions
Personal use of SM (PUSM)	Use of SM to contact friends, colleagues and family or for entertainment purposes
Work-related use of SM (WRSM)	An activity to maintain and strengthen professional links with friends, colleagues and customers for the purpose of information sharing and obtaining information (Cao *et al.*, 2012a; Skeels and Grudin, 2009)
Information sharing (IS)	The extent of an individual's share of useful information on SM to help other members of the SM community (Ma and Agarwal, 2007)
Obtaining information (IO)	The individual's ability to obtain knowledge from the SM community to enhance work performance (Ma and Agarwal, 2007; Dholakia *et al.*, 2004)
Employee job performance (EJP)	The degree to which employees meet their job requirements or level of satisfaction according to their manager (Groen *et al.*, 2017)
SM rules	The degree to which an organization has implemented specific policies regarding SM use (Demek *et al.*, 2018)

Table I. Formal definitions of constructs

Sociological scholars have advocated that an individual's frequent online interpersonal communication transforms weedy connections into durable connections. Every user has different objectives for SM use: some are sharing information with their coworkers, friends and online community, and others are seeking information for themselves (Leidner *et al.*, 2010). Personal use of SM by employees helps them share various information or feelings with their workmates as well as obtaining various types of information from their peers, which could potentially be beneficial to their jobs. Based on this understanding, we hypothesize the following:

H1a. Personal use of SM positively affects information sharing.

H1b. Personal use of SM positively affects obtaining information.

3.1.2 Work-related use of SM. As aforementioned, work-related use of SM increases external professional links that can be helpful when experts share knowledge about managing customers' feedback and other stakeholders (Skeels and Grudin, 2009). According to Pi *et al.* (2013), numerous factors influence the attitude toward knowledge sharing in the SM group, for example, reputation, expected relationship, sense of self-worth and subjective norm. Alternatively, employees choose to meet new individuals instead of only connecting with those they already know. Hence, work-related use of SM strengthens existing ties and provides opportunities to form new social relationships. In addition, Yardi *et al.* (2009) demonstrated that employees expected to receive attention when they contributed to blogs. Many companies have launched internal SM sites to encourage employees to share professional and personal information, for example, "IBM, Microsoft, and HP" (Leftheriotis and Giannakos, 2014). Work-related use of SM by employees allow them to connect with their workmates or customers, thereby facilitating the sharing and gaining of useful information for performance enhancement. Based on this understanding, we hypothesize the following:

H2a. Work-related use of SM positively influences information sharing.

H2b. Work-related use of SM positively influences obtaining information.

3.2 Knowledge exchange

3.2.1 Information sharing. In organizations, employees work as a team and learn from their team members' experiences. Therefore, positive information sharing and collaboration helps employees form social relationships with their team members and improves the performance of individuals and organizations (Kim *et al.*, 2012). Information sharing with

SM enhances the coordination and trust among organization staff, which positively influences team performance and helps improve decision making (Srivastava *et al.*, 2006). In an analysis of local government officials, Cross and Cummings (2004) specified that knowledge sharing increases the job performance of an organization's members. Thus, we conclude that knowledge-sharing activities with the use of SM improve job performance. Based on these considerations, we introduce the following hypothesis:

H3. Information sharing positively influences employee job performance.

3.2.2 Obtaining information. Obtaining information is an individual's attitude or desire to fulfill the mindful needs of acquiring knowledge (Dholakia *et al.*, 2004). Obtaining information helps individuals develop a sense of understanding the opinion of others in online SM communities (Flanagin and Metzger, 2001). According to social exchange theory, if individuals perceive meaningful information from knowledge communities, they regard the knowledge community as positive (Ma and Agarwal, 2007). When individuals' desire for information is fulfilled, they are pleased with the community and their job performance improves. Thus, we proposed the following:

H4. Obtaining information positively influences employee job performance.

3.3 Employee job performance

Employee job or work performance is a concern for organizations. Several studies have been conducted to understand the relationship between knowledge exchange and employee performance (Zack *et al.*, 2009; Akroush and Al-Mohammad, 2010). Basically, job performance is the measurement of an employee's behaviors, in other words, how well employees fulfill their job tasks in organizations (Groen *et al.*, 2017). Factors that affect employee performance include job satisfaction, working environment, motivation and stress (Kakkos *et al.*, 2010). Alternatively, Du *et al.* (2018) indicated that job strain drains an employee's mental and physical ability to perform in their workplace. Thus, an assessment of the effects of the use of SNS on job performance would help organizations understand the relationship between SM and employee performance.

3.4 Organizational SM use rules

Demek *et al.* (2018) proposed that SM policy reflects the degree to which an organization has implemented appropriate strategies regarding the use of SM. Several organizations have implemented an SM use policy that restricts the employees' use of SM in the workplace. Some organizations have even banned the use of SM websites at work. An SM policy outlines how an organization and its employees should interact through online platforms. Therefore, Haimes (2012) suggested that organizations should establish new policies regarding employee use of SM. The analysis of Adzovie *et al.* (2017) revealed that SM use by employees increases their productivity. In this study, we applied SM use policies and rules of organizations as a moderator because organizational regulations can affect the usage intensity of the SM users regarding intentions to exchange knowledge with their peers. When an organization has strict rules against the use of SM at the workplace, employees cannot get access to SM, which would adversely influence their knowledge exchange behaviors. Therefore, we hypothesize the following:

H5a. Organizational rules for SM use negatively moderates the relationship between personal use of SM and information sharing.

H5b. Organizational rules for SM use negatively moderates the relationship between personal use of SM and obtaining information.

H5c. Organizational rules for SM use negatively moderates the relationship between work-related use of SM and information sharing.

H5d. Organizational rules for SM use negatively moderates the relationship between work-related use of SM and obtaining information.

Based on the above discussion, this paper puts forward the research model as shown in Figure 1.

4. Research design

4.1 Instruments development

To develop the instrument, first, the survey was pilot tested by some skilled staff of the Shenzhen University in China. The questionnaires were circulated to seven candidates. Pilot participators filled up the instruments and provided their expert opinions regarding length, wording and instructions. Three of the participants cross-examined the survey against the feedback attained from the others, and they suggested minor modifications to the survey design. Most of the constructs in our theoretical model were latent variables, which are the best choice for this type of survey approach (Nunnally and Bernstein, 1994). We modified the instruments of Kankanhalli *et al.*'s (2005) for work-related use of SM and Zhang *et al.*'s (2018) instruments for personal use of SM. The measures of Ye *et al.*'s (2015) are used for obtaining information and Deng *et al.*'s (2017) for sharing information. In addition, we borrowed the instruments for job performance from Pitafi *et al.* (2018), and self-developed instruments measured SM rules. A five-point Likert scale was used to measure the instruments and was anchored from "strongly disagree" to "strongly agree."

4.2 Sample and data collection

The data were collected by personal physical survey, and we approached the employees of banks, hospitals, hotels, digital media (TV) channels, colleges and universities, and telecommunication companies in Pakistan who have SM use involvement as our samples. The motivation for the data collection was to represent individuals who are usually active users of SM (Lavrakas, 2008). The survey questionnaire was divided into two sections. In the first section, we asked the employee about their gender, age, education, experience, income, position and SM use. If the employee did not use any type of SM or did not have knowledge of SM use, we requested them to stop the interview. Otherwise, they could complete the survey.

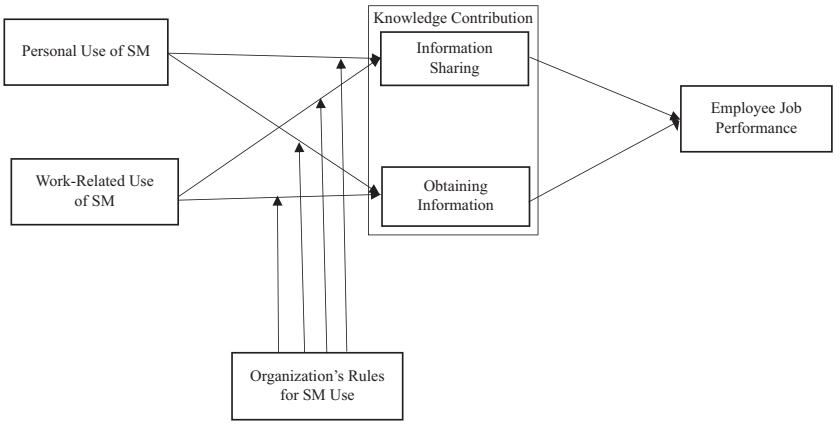


Figure 1.
Conceptual model

We randomly distributed 1,400 questionnaires to the employees of the indicated organizations; the duration of the data collection process was one month. We collected 1,002 completed questionnaires from the organizations. Based on our survey requirements, 833 were valid completed questionnaires, and all the reported organization's employees had a strong focus on SM regarding work-related and personal use. The ratio of SM uses is reported in Table II from highest to lowest among all organizations.

Moreover, we also included age, gender, education, income, use and purpose of using SM for the online knowledge sharing and obtaining knowledge in the conceptual model as control variables that may influence employee job performance. Table III shows the respondents' demographic details.

Table II. Organizations that participated in the survey

S.No.	Organizations	No. of surveys distributed	No. of respondents	Percentage
1	Banks	200	157	15.65
2	Colleges and universities	300	221	22.03
3	IT and telecommunication companies	300	218	21.73
4	Hospitals	200	190	18.94
5	Media channels	200	113	11.26
6	Hotels	200	104	10.36

Table III. Respondents' demographic profile for SM use

Total numbers of respondents ($n = 1{,}002$)	Frequency	Percentage
Gender		
Male	488	48.7
Female	514	51.3
Age (in years)		
18–30	449	44.8
31–40	492	49.1
41–50	42	4.2
51 and above	19	1.9
Education		
Primary education or lower	20	2.0
Middle school Education	190	19.0
High school education	279	27.8
Bachelor's degree	329	32.8
Diploma/ Certificate	164	16.4
Postgraduate degree	20	2.0
Income		
Rs0–15,000	163	16.3
Rs15,0001–30,000	561	56.0
Rs30,001–50,000	220	22.0
Rs50,001–80,000	34	3.4
Rs80,001–100,000	14	1.4
More than Rs100,000	10	1.0
Use of SM		
No	169	16.9
Yes	833	83.1
Purpose		
Personal	391	46.9
work-related	235	28.2
Commercial	207	24.8

To check for the non-response bias, we conducted the analysis of variance test, and no significant differences among all respondents were found in the conceptual model. This indicates that non-response bias was not a serious concern in this study. Furthermore, we compared the demographics of the study sample with the evidence delivered by the six groups' respondents. The resultant *F*-statistics were not significant; thus, the data can be pooled.

5. Data analysis and results

5.1 Techniques

For the data analysis, we used partial least square (PLS) because it is superior over other types of structural equation modeling. Moreover, it can measure complex models with multiple relationships (Ma and Agarwal, 2007), because it involves no assumptions regarding the population or score measurement (Fornell and Bookstein, 1982). PLS comprises two models: the inner model and outer model. The inner model describes the relations among latent variables, and the outer model defines the relationship between latent variables and their observed indicators (Henseler and Sarstedt, 2013). Additionally, PLS involves the slightest loads on variable distributions. Hence, PLS reduces bias caused by depending on factor-based covariance techniques through software, for example, LISREL and AMOS (Chin, 1998). In this study, we also performed the bootstrapping facility to test the statistical significance of path coefficients. In the tested model, all constructs were demonstrated as reflective because their measurement items are manifestations of these constructs. We used SmartPLS (version 3.2.1) for data analysis.

5.2 Measurement model

The most important aspects of the appraisal of the reflective measurement model are its internal consistency and validity. Both Cronbach's α (CA) and composite reliability (CR) values exceeding 0.7 indicate acceptable reliability (Nunnally and Bernstein, 1994), and average variance extracted (AVE) value should exceed 0.5 (Falk and Kosfeld, 2006). Table IV presents the factors loading, CA, Dillon–Goldstein's ρ (rho_A), CR and AVE for all the reflective constructs. All CA, CR and AVE scores were higher than the recommended values of 0.70 and 0.5, respectively, indicating that all constructs possessed excellent reliability and AVE. Table IV describes the loadings of each item that fulfill its criterion. All the attained values of internal consistency (reliability), CR scores and CA scores for every construct are well above 0.70, which is the suggested benchmark for acceptable reliability (Hair *et al.*, 2017). Our study results are supported by social science studies (Kankanhalli *et al.*, 2005; Ma and Agarwal, 2007; Wasko and Faraj, 2005).

According to Hair *et al.* (2017), all the items should load highly on their respective latent variables. The AVE score for all constructs ranged from 0.51 to 0.65, and factor loadings exceeded 0.70, which satisfies this requirement. Hair *et al.* (2006) recommended a factor loading exceeding of 0.6 as a good indicator for validity at the item level. After applying the PLS method, we observed that some of the variable's signs received a bit lower loadings than 0.70, such as, WRSM3, WRSM6, WRSM7, WRSM8, IS3, IO1, IO2 and IO5 (Table VI), and all are considered acceptable (Shujahat *et al.*, 2019; Henseler and Sarstedt, 2013).

5.3 Discriminant validity

The primary objective of a discriminant validity assessment is to ensure that a reflective construct has the strongest relationships with its indicators in the PLS path model (Hair *et al.*, 2017). Table IV demonstrates that all indicators load more strongly on their corresponding constructs than another construct in the model. The HTMT standard value should be below 0.90, and as shown in Table V, all constructs have values lower than 0.90.

Items	Loadings	CA	rho_A	CR	AVE
EJP1	0.795	0.846	0.846	0.846	0.647
EJP2	0.815				
EJP3	0.804				
IO1	0.687	0.865	0.867	0.865	0.518
IO2	0.691				
IO3	0.782				
IO4	0.723				
IO5	0.682				
IO6	0.747				
IS1	0.719	0.871	0.873	0.872	0.531
IS2	0.781				
IS3	0.675				
IS4	0.719				
IS5	0.735				
IS6	0.741				
PUSM1	0.697	0.907	0.910	0.907	0.551
PUSM2	0.816				
PUSM3	0.715				
PUSM4	0.674				
PUSM5	0.695				
PUSM6	0.796				
PUSM7	0.801				
PUSM8	0.731				
SMR1	0.798	0.885	0.886	0.885	0.562
SMR2	0.730				
SMR3	0.732				
SMR4	0.760				
SMR5	0.738				
SMR6	0.737				
WRSM1	0.846	0.921	0.926	0.921	0.542
WRSM2	0.801				
WRSM3	0.648				
WRSM4	0.703				
WRSM5	0.727				
WRSM6	0.629				
WRSM7	0.683				
WRSM8	0.685				
WRSM9	0.856				
WRSM10	0.748				

Table IV.
Factor loadings, AVE, CA and CR

Notes: EJP, employee job performance; IO, obtaining information; IS, information sharing; PUSM, personal use of SM; WRSM, work-related use of SM; SMR, SM rules

	1	2	3	4	5	6	7	8	9	10
1. EJP	–									
2. IO	*0.444*									
3. IS	0.522	*0.626*								
4. PUSM	0.520	0.397	*0.428*							
5. PUSM × moderator SMRio	0.033	0.202	0.225	*0.047*						
6. PUSM × moderator SMRis	0.033	0.202	0.225	0.047	*0.057*					
7. WUSM	0.568	0.388	0.427	0.305	0.030	*0.030*				
8. WUSM × moderator SMRio	0.054	0.238	0.183	0.021	0.261	0.261	*0.063*			
9. WUSM × moderator SMRis	0.054	0.238	0.183	0.021	0.261	0.261	0.063	*0.057*		
moderator SMR	0.250	0.363	0.341	0.281	0.021	0.021	0.252	0.038	*0.038*	

Table V.
Heterotrait–monotrait ratio (HTMT)

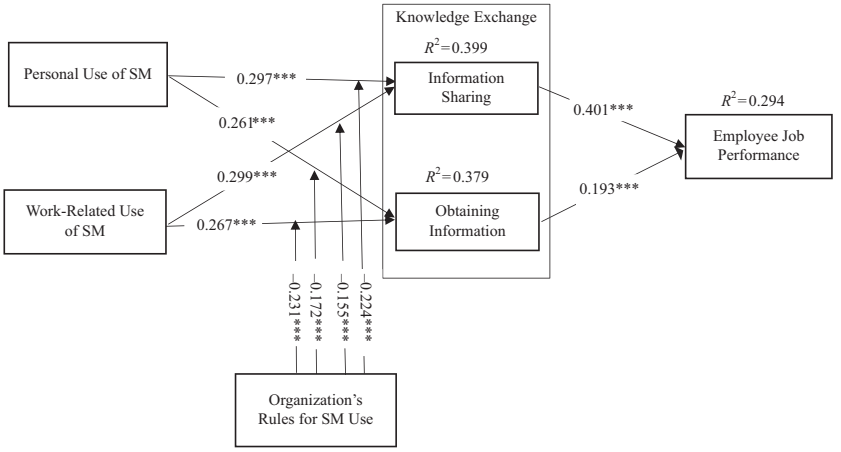
Overall, the constructs demonstrate strong discriminant validity. Furthermore, preliminary tests, including checking the unidimensionality of constructs, were achieved by the results contained in the outer model.

5.4 Structural model

Figure 2 demonstrates the path coefficients and explicated variances for the structural model. We maintain the demographic variables (i.e. gender, age, education) and the income variable as controls for employee job performance in the analysis. None of the control variables was significant.

All the main hypotheses of the study were supported. Additionally, moderator SM use rules (SMR) had an adverse impact on PUSM and WRSM with respect to IS and OI. Consistent with our hypotheses, Table VI summarizes the results of each corresponding hypothesis tests.

Similar to Preacher and Hayes (2008), a 97.5% confidence interval of the indirect effects was obtained with 1,000 bootstrap re-samples. Results of the mediation analysis established the full mediating role of information sharing and obtaining information in the relationship between personal and work-related use of SM and an employee's job performance. Table VII describes the PLS bootstrapping results.



Note: ***$p<0.05$

Figure 2.
Results of the PLS analysis

Hypothesis	Proposed paths	Path estimates	p-levels	Hypothesis tests
H1a	PUSM → IS	0.297	< 0.01	Supported
H1b	PUSM → IO	0.261	< 0.01	Supported
H2a	WRSM → IS	0.299	< 0.01	Supported
H2b	WRSM → IO	0.267	< 0.01	Supported
H3	IS → EJP	0.401	< 0.01	Supported
H4	IO → EJP	0.193	< 0.01	Supported
H5a	SMR → PUM → IS	−0.224	< 0.01	Supported
H5b	SMR→PUSM→IO	−0.172	< 0.01	Supported
H5c	SMR → WRSM → IS	−0.155	< 0.01	Supported
H5d	SMR → WRSM → IO	−0.231	< 0.01	Supported

Table VI.
Tests of the research hypotheses

	Original sample (O)	Sample mean (*M*)	SD	*t*-statistics (|O/SD|)	*p*-values	Confidence interval 2.5%	Confidence interval 97.5%	Mediation existence
Direct effect								
PUSM → EJP	0.169	0.170	0.019	9.019***	0.000	0.130	0.203	
IO → EJP	0.193	0.191	0.046	4.165***	0.000	0.098	0.281	
IS → EJP	0.401	0.403	0.047	8.457***	0.000	0.310	0.492	
PUSM → IO	0.261	0.261	0.032	8.194***	0.000	0.200	0.323	
PUSM → IS	0.297	0.296	0.032	9.253***	0.000	0.233	0.361	
WRSM → EJP	0.171	0.173	0.021	8.209***	0.000	0.128	0.211	
WRSM → IO	0.267	0.268	0.034	7.748***	0.001	0.203	0.334	
WRSM → IS	0.299	0.301	0.031	9.516***	0.001	0.242	0.361	
Indirect effect								
PUSM → IO → EJP	0.050	0.050	0.014	3.475***	0.001	0.025	0.082	Full
WRSM → IO → EJP	0.052	0.051	0.015	3.381***	0.001	0.026	0.085	Full
PUSM → IS → EJP	0.119	0.120	0.021	5.721***	0.000	0.079	0.159	Full
WRSM → IS → EJP	0.120	0.121	0.021	5.699***	0.000	0.083	0.164	Full

Note: ***$p < 0.05$

Table VII.
PLS bootstrapping results

6. Discussion and implications

The findings in this study enrich the theory of social exchange. An investigation of the SM use among the employees of the public and private sectors of Pakistan was the objective of this research. Currently, SM platforms support many features for interactive communication that are easily enumerated at the individual and organizational levels (Hua and Haughton, 2012). This study aimed to obtain a complete understanding of the antecedents of information sharing and obtaining information. SM has become a popular platform for individuals to contribute knowledge and gain knowledge (Wasko and Faraj, 2000; Ma and Agarwal, 2007). Taking this information into consideration, we aimed to improve the understanding of employees' SM use relationship with their job performance through knowledge exchange. The results support our hypotheses: information sharing and obtaining information provide exclusive contributions to the explanation of an employee's job performance.

The study findings show that the personal use of SM and work-related use of SM have a positive and significant effect on information sharing and obtaining information. Additionally, SM rules have adverse moderation effects on personal and work-related use of SM for information sharing and obtaining information. Information sharing and obtaining information have a positive and significant impact on an employee's job performance. Therefore, if organizations facilitate SM use at work, employees can get benefits of knowledge exchange that would be better for their job as well as organizational performance.

Therefore, the mediating role of knowledge exchange between SM use and job performance is positive and significant. Similarly, when employees face restrictions against SM use they feel stressed and deprived from knowledge exchange process which ultimately declines information sharing and obtaining information. Hence, SM rules negatively moderate the relationship among SM use (i.e. personal and work-related use of SM) and knowledge exchange (i.e. information sharing and obtaining information). Hence, we can say that an employee's social behavior motivates them to use SM for information sharing and obtaining information that can provide benefits related to their job or organizations.

6.1 Theoretical implications

This research has resulted in substantial theoretical contributions. First, the findings strongly advocate for the social exchange theory, which asserts that individuals perform in a manner that can enhance their benefits (Molm, 1997). Second, this study is unique compared with the literature (Leftheriotis and Giannakos, 2014) because of its exclusive and innovative approach regarding variable selection, data collection and methods. For the comprehensive analysis of SM use, we proposed a unique conceptual model for this study and we separated SM use into two types, i.e., personal use of SM and work-related use of SM. The past studies explored the direct effects of SM use, which have not differentiated SM usage as we did in our study.

Third, our research model used knowledge exchange as a mediator between SM use and job performance. Existing studies have not focused on this perspective that how SM use can enhance the job performance through knowledge exchange behaviors. Therefore, we used knowledge exchange as a mediator and it has been further isolated into two dimensions, e.g. information sharing and obtaining information. Our study results affirm the literature regarding SM, knowledge exchange and employee job performance akin to several past studies (Leftheriotis and Giannakos, 2014; Shujahat *et al.*, 2019; Ali-Hassan *et al.*, 2015; Nisar and Prabhakar, 2018) by finding that personal and work-related use of SM contribute to knowledge exchange that can enhance an employee's job performance.

Last but not least, to analyze the impact of organizational SM rules, we introduced the SM rules as a moderator between SM use and knowledge exchange. SM rules negatively moderate the relationship between SM use and knowledge exchange behaviors. Some of the organizations implemented an SM use policy to control their employees. Similarly, Wu and Wang's (2006) study findings support our results that SM rules in organizations have adverse impacts on employee's job performance. The information exchanging increases an employee's feelings of connection with their company and creates a sense of trust and confidence that leads to improved performance. Conversely, when employees face restriction against the use of SM they missed a lot of valuable information from friends and colleagues who could help them enhance their job satisfaction and performance.

The findings from this study suggest that SM use can enhance knowledge exchange and help employees improve workstation performance. Our study contributed to the literature related to knowledge exchange and explored whether the antecedent of information sharing and obtaining information improve employees' performance.

6.2 Practical implications

This study has significant practical implications for employees and organizations. Both the personal use and work-related use of SM motivate employees to share information related to their work experience, collect and provide feedback to customers and their colleagues. Such types of information sharing and obtaining information help them to be up-to-date with the company's performance and policies. Therefore, knowledge sharing and obtaining knowledge helps them improve job performance. Employees of all these sectors (i.e. industry and services) must be up-to-date regarding the situations of markets and products because, to some extent, customers rely on their knowledge. Therefore, information plays a vital role in an employee's job performance. Because SM allows for information exchange, they help employees improve knowledge transfer and enhance their knowledge regarding products and services. As aforementioned, information sharing and obtaining information are ultimate factors that affect employees' work performance through SM technologies (Leftheriotis and Giannakos, 2014). Therefore, organizations should promote both the personal and work-related use of SM, especially for exchanging information regarding the job.

The moderator SM rules demonstrate an adverse impact on the relationship between SM and knowledge contributions. The adverse effect is only because of the poor policies of

organizations that are not significantly beneficial for users and organizations. SM use motivates employees to share and obtain information. Hence, this knowledge exchange behavior improves workplace performance. Alternatively, in a constrained environment, employees cannot perform well at the workplace. Thus, we assert that there is a dire need for employee training regarding SM use instead of restricting SM use. In conclusion, to evade potential legitimate issues, employers should educate and train workers regarding company SM use regulations. Today, work life and online life are inextricably linked; thus, organizations must build and communicate such strategies to ensure employees understand. Last but not least, the findings of this research contribute to the literature on online knowledge sharing, obtaining knowledge and employee job performance.

6.3 Conclusion, limitations, and further directions

To perform a clear and comprehensive investigation of SM use by employees, this study divided SM into two categories: personal and work-related use of SM. Additionally, this study aimed to fill the following gaps in the literature: at what intensity can employees use SM toward knowledge exchange and how can knowledge exchange influence their job performance. According to the social exchange theory, if an employee's motivations are fulfilled, they feel a sense of satisfaction at work; hence, they improve their workplace performance. Thus, based on this phenomenon, organizations should provide a flexible environment to their employees instead of restricting the use of SM because organizations can benefit from considering employees' needs and interests associated with SM use.

Like all studies, this study has limitations. First, organizations remain confused as to whether they should ban SM. Our findings only provide clues for organizations that strict SM rules will harm employees' knowledge exchange and job performance. However, how strict the SM rules should be and how to devise SM rules to facilitate knowledge exchange while protecting security information and intellectual properties remain unknown. Future research could work on these issues by adopting different research methods (e.g. Modeling or simulation). Second, we examined individuals' personal and work-related use of SM and knowledge exchange behaviors. However, this study used a sample only from Pakistan. Thus, the results of this research would be more robust if questionnaires were gathered from a variety of countries because of the differences in SM use by country. Therefore, we plan to investigate this option to perform larger-scale research in cooperation with other institutions or organizations. Finally, this study investigated the impacts of SM use on employee job performance. We assert that we should have examined the other perspectives of SM use on an employee's job, such as employee well-being, organizational commitment and social capital. Therefore, future studies should focus on these directions and explore how SM can help an employee improve organizational citizenship behavior and organization performance. Our findings clearly assert that the adaptation of the social exchange theory is essential to improve the understanding of SM use and knowledge exchange in relation to employee job performance. We are confident that our proposed conceptual model can serve as a solid foundation for future work.

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