

# Factors Of Knowledge Sharing Among Faculty Members In Higher Educational Institutions: An Empirical Study Of The Public Sector

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## Abstract

Knowledge sharing (KS) is a culture that has been encouraged and supported by higher educational institutions (HEIs) in Sindh. This study applies Planned Behavior Theory (TPB) and Social Capital Theory (SCT). Identifying factors related to the KS intentions of a faculty member in the public sector. This study examined the factors organizational, individual, and technological variables among faculty members' knowledge-sharing behavior. The method of the study was quantitative. A convenience sampling technique was used to distribute the questionnaire using Google Forms through email addresses. The 550 questionnaires were sent to the respondents, 335 were returned and used for analysis. PLS-SEM was used to evaluate the data for the structural equation model. According to the study results, organizational and technological aspects are crucial predictors of information sharing among faculty members of Sindh's higher education institutions.

**Keywords:** Knowledge sharing, Higher Education Institutions, Individual factors, Organizational factors, and Faculty members.

## Introduction

In order to improve information, the concept of knowledge has been upgraded nowadays. The knowledge assessment approach has therefore been enhanced. According to Lin, (2007) asserted that knowledge is one of the tactical sources, thus businesses should focus more on their strategic resources if they want to aspirationally achieve high levels of performance while retaining their competitiveness (Al-Delawi, 2019; Raewf and

Thabit, 2015). Moreover, one of the fundamental organizing talents is knowledge (Elogie, 2010).

In world Information is a valuable resource that can be leveraged to obtain a competitive edge, and it is crucial for semi-permanent businesses in both the public and commercial sectors (Zahari et al., 2014). Accurate outcomes can be obtained by using the knowledge after it has been understood. Also, vital tools that allow people to learn about intelligence include observation, comprehension, and significant human skills (Omotayo, 2015). The focus of the financial world has also shifted

from work to supplementary information (Ngah and Patriarca, 2010). It is difficult to govern knowledge activities when information is spread and incorporated into people, things, or processes, and knowledge cannot be appropriately communicated within an organization. The talents that individuals within the organization gather and spread are less likely to be transferred to the organization without an active exchange of knowledge. Without sharing and exchanging it with employees who need to know, information gathered within a facility, business, or organization is meaningless (Raewf & Mahmood, 2021).

The study conclusions drawn from This investigation reveal that Each of the participants exhibited a tendency towards a particular behavior pattern. This study's results provide evidence that there exists a relationship, albeit significant, between individuals' personality traits and their predisposition to engage In certain actions. Therefore, it is apparent that the collection of data acquired from This research suggests potential implications for the development of policies and interventions aimed at modifying particular behaviors among specific groups of individuals. In conclusion, this study's outcomes offer a foundation for future research endeavors, particularly those concerned with the evaluation of personality traits and behavior pattern (Rahoo, et al., 2022). The aim of this study was to create a framework and identify the variables influencing the knowledge sharing among faculty member's higher education institutions at public sector of Sindh province of Pakistan. In the research personal factors, organizational factors and technological factors impact of knowledge sharing variables were used in the study.

### **Review of Literature**

Knowledge is characterized as the observation of data based on comprehension. It typically focuses on comprehending, considering, and providing a

suitable response to the topic. Knowledge is contained in people's memories, thoughts, attitudes, and behaviors. The knowledge is imperceptible in the human mind (Ahmad et al., 2021). But knowledge can be recorded. The literature defines explicit knowledge and implicit knowledge. Based on behavioral patterns learned via training and job experience, tacit knowledge is unintentionally acquired knowledge that can be transmitted through observation and application (Jain et al., 2007).

There isn't complete agreement among academics regarding the significance of the concept of knowledge sharing because there is a strong occurrence of many various viewpoints, like wise information interaction, knowledge market perspective, learning perspective, and communication perspective. Within an organization, this is referred to as the transfer or dissemination of personal knowledge. Moreover, new information will be created by utilizing and imparting this knowledge (Al-Delawi and Ramo, 2020). According to Grunfelder and Hartner (2013) discovered that there are two distinct ways for organizations to convey knowledge: through written materials and knowledge transfers between units at the different stages of organizations.

The analysis of the literature revealed that the notion of knowledge sharing is not well understood. Knowledge exchange is defined differently depending on the researcher's scientific field. That scientists and academics take information sharing into account from a variety of angles, including networking, education, knowledge market, and knowledge sharing (Zakhari et al, 2014).

Knowledge sharing as a social networking culture that encourages the exchange of knowledge between departments and the entire organization. Knowledge sharing can be seen in employees' eagerness to work together efficiently, share information, and actively include their peers in learning from them. Methods of knowledge

sharing are also taken into account at the individual and organizational levels. It is shared with coworkers individually to assist them in doing something unique, approachable, or efficient, while at the organizational level, knowledge is gathered, organized, reused, and disseminated. experience-based knowledge that already exists in the organization and is shared with others there (Lin, 2007).

Organizations must enable staff to work more effectively together and exchange organizational knowledge so that work gets done more successfully in order to create a culture of knowledge sharing (Jain et al., 2007). Increasing individual knowledge sharing has become a strategic goal for companies. Hence, encouraging knowledge sharing among staff members aids the company in achieving its objectives. Few studies have examined information sharing from the standpoint of interpersonal interactions within an organization, therefore more work has to be done to pay attention to this area. This study is helpful for determining the effects of particular variables on knowledge sharing in organizations and again underscores the need for a more comprehensive understanding of knowledge sharing from an engagement viewpoint (Cheng et al., 2009).

The analysis of knowledge management and knowledge sharing primarily focuses on business organizations. Knowledge management systems were first utilized in for-profit firms. Information sharing has become a prominent theme in academic institutions as a result of knowledge management techniques being lately applied to educational institutions and other information-based enterprises. Scientists advise, conduct research, and teach (Jolaei et al., 2014).

It is expected of academics to share their expertise in order to improve individual knowledge, produce new knowledge, and boost the university's overall success. Sharing knowledge is essential in academics, especially in universities where every staff frequently shares knowledge (Trehan & Kushwaha, 2012).

Compared to for-profit firms, educational institutions are less likely or ready to exchange knowledge in order to attain shared objectives (Kong, 1999). Sharing of written material is more frequent than sharing of knowledge in academic institutions, according to Cheng's (2009) research. The sharing of scientific knowledge is thought to be restricted to particular fields or focused on individuals with similar scientific specialties. Academic biologists exchanged knowledge with other members of their faculty as well as with researchers from other faculties of life sciences, such as chemistry, physics, and medicine (Harjan et al., 2016).

The factors that affect knowledge sharing in various organizational situations are described using a variety of social and behavioural theories. According to Fishbein and Ajzen's reasoned action theory (TRA) and a fresh iteration of the theory of planned behavior (Jolaei et al., 2014; Krok, 2013; Jameel and Ahmad, 2020) are two behavioural models used to examine information sharing. The TRA claims that the majority of human activities are described by distinct beliefs and behaviors (Lin, 2007). The TRA theory contends that people are moral agents who are shaped by three variables: behavioural attitudes, social expectations, and behavioral intentions (Jolaei et al., 2014). According to the idea of purposeful actions, action is accompanied by a conscious intention to do something, which is impacted by the person's motivation to act, cultural norms, and the desired behavioral consequence (Mahmood & Raewf, 2019). TRA and CBT, however, are employed to represent human behaviour and expectations, not arbitrary behaviors brought on by an unknowable variable (Krok, 2013).

According to Bousari and Hassanzadeh (2012), anticipated behaviour theory can be used to test the variables influencing knowledge-sharing behaviour. These aspects and variables must be described and taken into account in addition to the theory's factors in order to determine the

standard of successful behaviour. Additionally, due to inadequate operational, cultural, and economic infrastructure and resources, people may desire to share their expertise but be unable to do so (Bousari & Hassanzadeh, 2012). The study of information-sharing behaviour and motivations in organizations has greatly benefited from the contributions made by these ideas. However, using all ideas to explain the value of knowledge sharing would undoubtedly be insufficient. It is challenging to pinpoint a paradigm that addresses this issue from various angles, including operational, commercial, sociological, psychological, and technical, due to the multiplicity of contributing elements (Krok, 2013). When employing the same theory, different investigations choose to use different variables to fit a hypothesis (Liang et al., 2008).

### Hypothesis Development

They are more basic and individual. These are the elements that result from internal motives. After all, everything starts with the person. Individual traits include things like intelligence, self-efficacy, self-confidence, relationships with others, personal goals, and openness to communication (Cheng et al., 2009). Outside of the worker, there are organizational considerations. These are non-human reasons that are probably triggered by the environment or by someone else to promote information exchange (Cheng et al., 2009). Organizational philosophy, incentive programs, managerial support, policies, and tactics are some categories for organizational considerations (Massoudi & Hamdi, 2017). These factors play a crucial role in the dissemination of knowledge, which must occur via media and networks. Social media usage and computer literacy are two technological variables (Massoudi & Hamdi, 2019; Bousari & Hassanzadeh, 2012).

In this study proposed computational model for academic researchers on different factor of knowledge sharing among faculty members were

illustrated. It is based on identified factors that were taken from the literature and updated to fit the research. The following hypothesis are used in the study.

### Hypothesis

- H1: There is significant impact of Individual factors on knowledge sharing among faculty members of HEIs.
- H2: There is significant impact of Organizational factors on knowledge sharing among faculty members of HEIs•
- H3: There is a significant impact of Technology factors on knowledge sharing among faculty members of HEIs.

### Research Methodology

The faculty members of public sector higher educational institutes of Sindh province were target population of this study. Using convince sampling techniques used for data collection. The method was quantitative; a convenience sampling technique was used to distribute the questionnaire using Google Forms. The 1000 questionnaires were sent to the respondents, and 335 were returned and used for analysis. The data were evaluated with the use of PLS-SEM for the structural equation model. To collect the data, the researchers used a two-part questionnaire. The first part collects demographic information from the participants, while the second part consists of 16 items on a five-point Likert scale related to four factors.

### Discussion of Findings

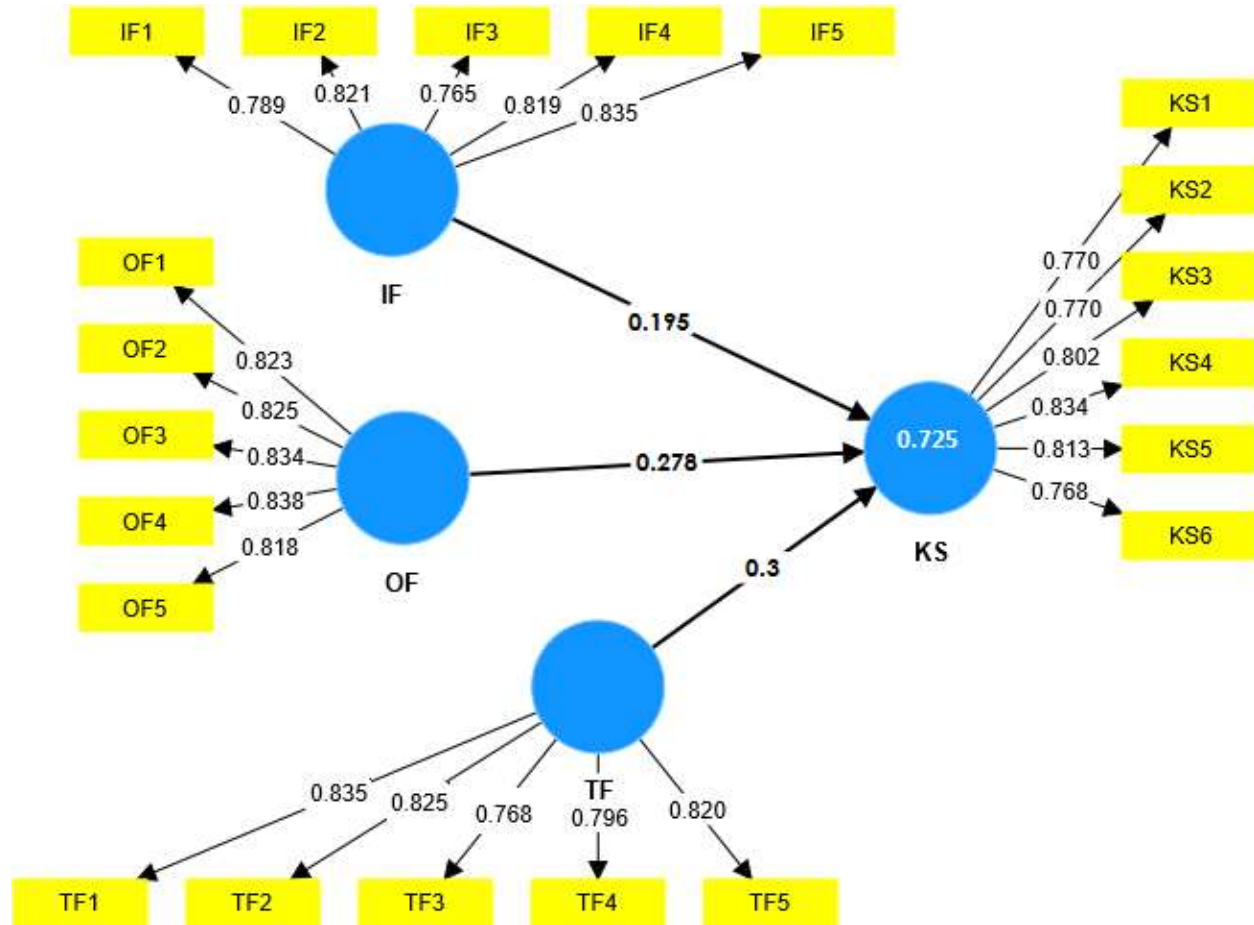
#### A. Measurement Model

The relationship between the variables and their related indicators is described by the measuring model (outer model). Prior to assessing the measurement model, reliability, convergent, and discriminant validity should all be validated. Cronbach's Alpha and composite reliability (CR)

were used to evaluate the internal consistency reliability (Hair et al., 2017). Due to higher than 0.7 values for Cronbach's Alpha and CR, Table I demonstrates that the dependability is proven. For determining convergent validity, factor loadings and Average Variance Extracted (AVE)

are proposed tests (Hair et al., 2017). The results demonstrated that both measures were ascertained since, as indicated in Table I, the factor loadings and AVE values were all above the necessary value of 0.7.

**Figure: 1 Path coefficient results**



Construct	Items	Factor Loading	Cronbach's alpha	Composite Reliability	AVE
Individual Factors	IF1	0.789	0.716	0.833	0.645
	IF2	0.821			
	IF3	0.765			
	IF4	0.819			
	IF5	0.835			
Organizational Factor	OF1	0.823	0.763	0.876	0.578
	OF2	0.725			
	OF3	0.834			

	OF4	0.838			
	OF5	0.818			
Technology Factor	TF1	0.835	0.865	0.846	0.682
	TF2	0.825			
	TF3	0.768			
	TF4	0.796			
	TF5	0.820			
Knowledge Sharing	KS1	0.770	0.762	0.882	0.589
	KS2	0.770			
	KS3	0.802			
	KS4	0.834			
	KS5	0.813			
	KS6	0.768			

**Table 1: Measurement Model Table**

	IF	KS	OF	TF
IF				
KS	0.970			
OF	0.921	0.984		
TF	0.946	1.009	0.979	
IF= Individual Factors, KS= Knowledge Sharing, OF= Organizational Factors, TF=Technological Factors.				

**Table 2: Heterotrait-Monotrait Ratio (HTMT)**

All values exceed 0.5. The (Heterotrait-Monotrait) Ratio ((HTMT)) is a noted metric for the evaluation of discriminant validity, as posited by Henseler and colleagues in 2015. The present study has validated the (HTMT) ((Heterotrait-Monotrait)) Ratio, whereby All findings have yielded values that fall below the critical threshold of 0.85, as presented in Table II. The substantiation of this outcome has thereby established the test's discriminant validity. Consequently, upon successful validation of the measurement model, we are able to proceed with the appraisal of the structural model in this study.

### **B. Structural Model**

In this study the structural model tells us exactly how the hidden variables are connected to each other. Two ways to measure the structural model

are 1, is hypothesis testing and second is coefficient of determination (R<sup>2</sup>). They are both very important. The results are displayed in a table. We studied some data and found out that hypothesis was H2 and H3 supported by evidence, but hypothesis H1 was not supported. The results of the study indicated that organizational ( $\beta=0.278$ ,  $t=2.694$ ,  $P=0.008$ ) and technological ( $\beta=0.3$ ,  $t=2$ ) factors had a significant impact on knowledge sharing.563,  $p=0.011$ ); Confirmation of hypotheses H2 and H3. Results also showed that individual factors did not affect knowledge sharing ( $\beta = 0.195$ ,  $t = 1.766$ ,  $P = 0.073$ ); therefore, in the study hypothesis H1 was rejected.

The R-squared value is a commonly utilized method for evaluating the prognostic capability

of a structural model. The Figure 1 shows that the model is predictive and explains 0.382% of the variability in willingness to share knowledge.

	$\beta$	Sample mean	Standard deviation	T Statistics	P value	Decision
IF→KS	0.195	0.202	0.111	1.766	0.073	R
OF→KS	0.278	0.294	0.105	2.646	0.008	A
TF→KS	0.3	0.294	0.117	2.563	0.011	A
IF= Individual Factors, KS= Knowledge Sharing, OF= Organizational Factors, TF=Technological Factors.						

**Table 3: Hypotheses Testing Results**

### Conclusion of Research

The goal of the study was to investigate the factors that can affect knowledge sharing among faculty members of higher education institutions of Sindh province of Pakistan. The study provided factual information on the knowledge-sharing practices of academics at Public sector higher education institutions. The proposed model was validated using the PLS-SEM technique in this study.

The empirical results showed that organizational and technical factors have a significant impact on knowledge sharing among faculty members. These results showed the importance of organizational and technological aspects in creating a knowledge sharing environment in educational institutions. Decision-makers must therefore focus on the key factors affecting knowledge sharing in educational institutions in order to potentially improve employee performance. The results might not be relevant to other higher education institutions in Sindh province of Pakistan as a result. To determine the similarities and differences between public and private higher education institutions in terms of the proposed model, more research must be conducted at additional level of comparative study between public and private higher education institutions.

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