

# Enhancing Knowledge Sharing among Academic Staff in Malaysian Research Universities: The Roles of Organizational Citizenship Behavior and Organizational Commitment

Yaser Mohammed Ahmed Mutahar

<sup>1</sup>Faculty of Finance and Administrative Science, Al Madinah International University,  
Taman Desa Petaling, 57100 Kuala Lumpur, Malaysia  
yasermotahar@gmail.com

Mazen Mohammed Farea

<sup>2</sup>Faculty of Finance and Administrative Science, Al Madinah International University,  
Taman Desa Petaling, 57100 Kuala Lumpur, Malaysia  
mazen.farea@mediu.edu.my

## Abstract

There is an overwhelming requirement placed on organizations to assist in the process of information exchange, as it would be effectively done through voluntary encouragement and support instead of making it a rule of compulsion. This study investigates the interrelationships between organizational citizenship behavior (OCB), organizational commitment (OC), and knowledge sharing among academics in Malaysian research universities (MRUs). Utilizing a quantitative research design, the study deploys a questionnaire based on a five-point Likert scale. It collected data from a scientifically determined sample size of 371 academic staff across five recognized MRUs. The findings robustly indicate that both OCB and OC significantly impact the propensity for knowledge sharing among academic staff, thereby suggesting practical strategies for leadership and management within MRUs to foster a culture that promotes and facilitates knowledge sharing. This research contributes to the theoretical understanding of the mechanisms through which OCB and OC influence knowledge sharing in the academic context. Additionally, it offers practical insights for university leaders to harness these behaviors to enhance organizational effectiveness, team cohesion, and academic performance. The study underscores the necessity for MRUs to implement leadership styles and management practices that not only encourage knowledge sharing but also bolster psychological empowerment and organizational citizenship behaviors among academic staff.

**Keywords:** *Knowledge sharing, organizational citizenship behavior, organizational commitment.*

## 1. Introduction

Organizations have a responsibility to support the process of information sharing since voluntary encouragement actively, and help may be more successful in achieving this aim than compulsory regulations (Z. Wang & Wang, 2012). It is common practice in management to make use of modern technology to speed up the process of establishing an inspiring mechanism to encourage employees to share their abilities and expertise. This is being done in order to motivate employees to contribute to the organization (Asrar-ul-Haq & Anwar, 2016). Communication through mobile devices and information and communications technology (ICT) are the most cutting-edge examples of

contemporary technology. In the context of a "culture of learning," any company that encourages social contact and communication is likely to promote knowledge sharing among its employees (Al-Kurdi, El-Haddadeh, & Eldabi, 2018). The need for productive social connections is the primary impetus behind the sharing of information inside an organization between workers with and without specialized knowledge (Asrar-ul-Haq & Anwar, 2016). Establish a setting that encourages open dialogue among all the participants and knowledge exchange. Regardless of the sector in which it operates or the kind of company it is, making efficient use of information is one of the most

important factors contributing to that organization's overall success.

Though there are several important benefits highlighted by knowledge sharing, many Malaysian academics continue to hoard their knowledge (Goh & Sandhu, 2012). Some Malaysian research associates this behavior with negative competitiveness and fear of being criticized. HEIs are required to recruit aspiring academics who have a track record of participation in activities that promote the exchange of knowledge. HEIs and the Education Ministry should earnestly consider the adoption of effective mechanisms to boost and ease the exchange of knowledge among academics. This could be achieved by incorporating knowledge-sharing contributions into the criteria for promotions and evaluations of annual performance. To enhance activities related to knowledge sharing, institutions must cultivate an environment that supports sharing opportunities and fosters a positive working culture, ultimately leading to improved performance outcomes (Shabrina & Silvianita, 2015). However, a noticeable deficiency in knowledge exchange persists within academic circles in HEIs. Addressing this deficiency requires a strategy to encourage and valorize knowledge-sharing practices among faculty members. University leadership must initiate more measures to support this goal (Kumar & Shekhar, 2017).

Regarding the challenges and importance of knowledge sharing within higher education institutions, particularly focusing on the role of incentives, the environment fostered by university authorities, and the critical nature of trust among faculty members. It highlights the significance of understanding the purpose and benefits of knowledge sharing for professional development and the success of HEIs. The literature suggests that effective knowledge sharing contributes to the progress of society and the achievement of academic goals, with specific reference to Malaysia's vision for 2020. The authors emphasize the need for strategies that encourage and support the sharing of experiences among academic staff, which in turn improves performance, engagement, and outcomes in higher education. The references include studies by (Al-Busaidi & Olfman, 2017; Annansingh, Howell, Liu, & Baptista Nunes, 2018; Bibi & Ali, 2017; Elrehail, 2018; Mansor & Saparudin, 2015; Rahman, Mannan, Hossain, Zaman, & Hassan, 2018), underscoring the collective view that management's role in fostering a positive attitude towards knowledge sharing is crucial for the advancement of HEIs and their contribution to the community and country.

Consequently, this current research aims to investigate the relationship between Organizational Citizenship Behavior, Organizational Commitment, and sharing knowledge among Academics in Malaysian Research Universities. The present study will bring significant change to academic practitioners by identifying factors that must be instituted to build trust among academics to enable their commitment to their research institutions and facilitate knowledge sharing. The study also allows academic stakeholders, such as ranking institutions, to view guidelines instituted by research institutions to promote a good image of the institutions and motivate academic staff.

## **2. Literature review**

### **2.1 Knowledge Sharing**

According to J.-N. Lee (2001), knowledge sharing is the process through which knowledge is disseminated or transferred between individuals, groups, or organizations. This encompasses both implicit and explicit forms of knowledge. There are two types of knowledge tacit knowledge, being personal, requires formal articulation or transmission, while explicit knowledge is characterized as information that can be officially shared, for instance, through written or visual means (Farooq, 2023). Thus, J.-N. Lee (2001) summarized that knowledge sharing involves the dissemination of knowledge, whether through verbal, symbolic, or written means. Within the realm of knowledge management, knowledge sharing is recognized as a pivotal element. Ravikumar et al. (2022) highlighted the necessity of exchange between the provider and receiver of knowledge for sharing to occur.

There is an overwhelming requirement placed on organizations to assist in the process of information exchange, as it would be effectively done through voluntary encouragement and support instead of making it a rule of compulsion (Z. Wang & Wang, 2012). Most management approaches to creating an inspiring mechanism to encourage employees may continue to focus on more recent technology in order to simplify the process of knowledge sharing and experience exchange between individuals (Asrar-ul-Haq & Anwar, 2016). ICT and mobile communication are the most recent technologies used. In a learning culture, any establishment that encourages the use of social interaction and communication easily promotes knowledge sharing among its workforce (Al-Kurdi et al., 2018).

## 2.2 Organizational Citizenship Behavior

There are many behaviors as examples of extra-role behavior. These behaviors include being punctual, making new recommendations for better work procedures, volunteering to complete jobs that no one picks an employee to do, etc (Schnake, 1991).

Organ, Podsakoff, and MacKenzie (2005) identified organizational citizenship behavior as a type of discrete personal behavior that is not recognized either directly or openly by the formal reward system. This type of behavior is referred to as "organizational citizenship behavior." This sort of behavior tends to improve the efficiency of the organization. According to Organ et al. (2005), there have been five unique dimensions of organizational citizenship behavior discovered in previous studies. These measurements are as follows: Virtues such as altruism (helping specific persons), civic virtue (keeping current on the most significant issues inside the organization), conscientiousness (observing rules), civility (consulting others before acting), and sportsmanship (playing by the rules) are examples of these qualities (not whining about insignificant issues).

## 2.3 Organizational Commitment

Mowday, Steers, and Porter (1979) described "organizational commitment" as the strength of an individual's identification with and involvement in a particular organization. Meyer, Allen, and Gellatly (1990) further elaborated on commitment as the degree to which an employee feels attached to their organization and has an ongoing desire to remain part of it. This form of commitment, when aligned with the organization's goals, typically results in a longer tenure within the company. Employees with a high level of commitment are not only more likely to stay but also tend to influence their colleagues, leading to increased overall productivity positively (Slack, Orife, & Anderson, 2010).

Additionally, Slack observed that employees demonstrating a higher degree of affective commitment exhibit more positive attitudes and a consistent willingness to assist others, which in turn boosts organizational performance.

## 2.4 Relationship Between Organizational Citizenship Behaviour and Knowledge Sharing

Organizational citizenship is a voluntary behavior not included among the employees' official duties, and such behavior is done voluntarily beyond the job descriptions of

the employees (Khadivi, Talebi, & Jabbari, 2013); however, the behavior of sharing knowledge is also voluntary. W. L. Lee, Chong, and Ramayah (2018) considerable research has been conducted on the effects of organizational culture and behavior (OCB) on knowledge sharing in a variety of settings, including the Taiwanese context. Accordingly, Hsien, Pei, Yung, and Sheng (2014) revealed that attitudes, perceived behavioral control, and subjective norms affect the behavior of sharing knowledge, while OCB mediates the relationship between the constructs and has a positive direct impact on the behavior. Consequently, Jo and Joo (2011) established a research work to examine the antecedents of knowledge sharing, which included organizational commitment, organizational buy-in, and learning organization culture. The outcomes revealed a correlation between the aim of sharing knowledge and OCB, organizational commitment, and the culture of learning within learning organizations. In the same setting, respectively, Tourigny, Han, Baba, and Pan (2019) regarded OCB as the primary factor that affects knowledge-sharing behavior. The study findings confirmed the importance of OCB as an essential factor for sharing knowledge among employees.

OCB is a strong predictor of knowledge-sharing behavior (Mutahar et al., 2022). Similarly, in the Malaysian context, Both OCB and subjective name were found to have a positive association with people's willingness to share their knowledge, as the findings of the study showed (P.-L. Teh & Yong, 2011). Moreover, P. L. Teh and Sun (2012) demonstrated that job satisfaction, involvement, and organizational citizenship behaviors were discovered to be positively and directly connected with the behavior of sharing knowledge among IT employees. Additionally, Han and Hovav (2016) argued that increasing OCB can improve knowledge sharing. The researchers concluded, however, that not all dimensions of OCB had the same influence on knowledge sharing. Furthermore, Mehrabi, Alemzade, Jadidi, and Gasemi (2014) conducted their study within the Iranian setting; the results obtained from the analysis indicated that OCB had an immediate and positive relationship with the sharing of knowledge.

Sadegh, Khani, and Modaresi (2018) recently studied the effects of employees' OCB on knowledge sharing. The researchers applied a two-wave study. The participants were professional staff members from 20 hospitals located in the province of Fars, Iran. The findings indicated that OCB had a direct impact on knowledge-sharing behavior.

In a nutshell, the studies that were discussed earlier proved that there is a positive and substantive relationship existing between the OCB and the act of knowledge sharing. On the other hand, there is an insufficient amount of evidence to support such a relationship in the sense of higher education. According to this assertion, the authors of this study anticipate that OCB will have a positive effect on the information sharing that occurs between academics, and they have put forward the following hypothesis regarding this study:

*H1: Organizational Citizenship Behavior significantly affects Knowledge sharing among Academics in Malaysian Research Universities.*

### **2.5 Relationship Between Organizational Commitment and Knowledge-Sharing**

OC plays a pivotal role in both predicting and fostering knowledge-sharing (Donate & de Pablo, 2015). Similarly, Park and Kim (2015) regarded OC as a potent facilitator of employee communication, enabling the smooth exchange of knowledge. Employees empowered to engage in decision-making processes are inclined towards knowledge sharing, reflecting a form of organizational commitment. According to Curado and Vieira (2019) organizational commitment catalyzes encouraging and enhancing knowledge sharing within a company.

Numerous studies within literature have investigated the relationship between organizational commitment and knowledge sharing. For instance, Fatima, Imran, Shahab, and Zulfiqar (2015) delved into the impact of organizational commitment on knowledge sharing, revealing a significant correlation between affective and normative commitment and the sharing of knowledge. Similarly, Tsai and Cheng (2012) found that organizational commitment heightens individuals' propensity to share their knowledge.

Moreover, Chiang, Han, and Chuang (2011) explored the interplay between perceived organizational support, trust, organizational commitment, and knowledge sharing, involving employees from diverse Taiwanese firms. Through structural equation modeling, the study demonstrated that organizational commitment positively influences the exchange of information and knowledge.

In a different context, H. Wang and Zhang (2012) examined the dearth of organizational commitment and motivation as primary factors contributing to the limited sharing of tacit knowledge, particularly within a Chinese IT company setting. Likewise, Borges (2012) investigated organizational factors influencing knowledge sharing in the US context. Their findings underscored that employees with

robust organizational commitment are inclined to share their tacit knowledge.

Similarly, Curtis and Taylor (2018) undertook a study involving employees of accounting firms in the United States, aiming to investigate the relationship between organizational commitment and knowledge sharing. The findings indicated a positive correlation between organizational commitment and the propensity to share knowledge. Drawing from the Cambodian context, Vong, Zo, and Ciganek (2016) posited that knowledge sharing stands as a pivotal characteristic for modern organizational success. Their study underscored the significant impact of top management and organizational commitment on knowledge sharing, particularly within the public sector compared to the private sector.

Furthermore, within the Indonesian hotel sector Sihombing, Supartha, Subudi, and Dewi (2017) argued that fostering knowledge-sharing among employees can enhance innovation. Their findings highlighted a link between job satisfaction, organizational commitment, and the willingness to share knowledge. More recently, in the Canadian context, Ouakouak and Ouedraogo (2019) conducted an empirical quantitative study involving staff from various organizations. Their findings suggested that faith and commitment play a positive role in promoting the sharing and application of knowledge.

The literature review indicates that the relationship between organizational commitment and knowledge sharing has been extensively explored in various non-educational sectors such as the IT sector, private companies, the hotel industry, and even among schoolteachers. However, there is a notable absence of studies, particularly within the higher education sector, particularly in research universities. Therefore, there is a significant gap in understanding this relationship in the context of universities. Investigating the correlation between organizational commitment and knowledge sharing in this setting could offer valuable insights.

Given the premise that academics who exhibit high levels of commitment to their universities are likely to be more inclined to share knowledge, the current study proposes the following research hypothesis:

*H2: There is a significant impact of Organizational Commitment on Knowledge sharing among Academics in Malaysian Research Universities.*

To complement the argument presented, the study has developed a conceptual framework, as depicted in Figure 1.

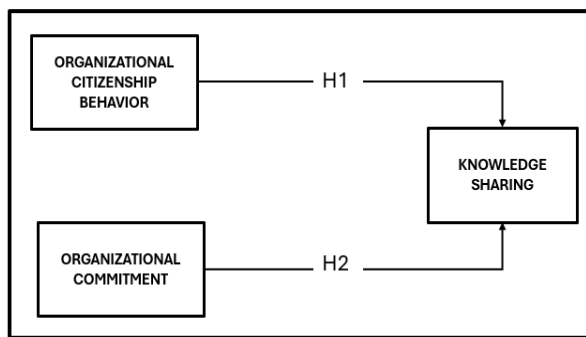


Figure 1: conceptual framework

### 3. Method

This study used a quantitative research design using a questionnaire instrument that will be constructed on five Likert scales. This type of research design will help in providing condensed statistical data and testing the relationship between the variables of the study (Sukamolson, 2007). Hence, this study will be quantitative; quantitative data will be collected on the study's variables, namely, organizational commitment, organizational citizenship behavior, and sharing knowledge in the context of academic and research universities in Malaysia. Due to time constraints, this study will employ a cross-sectional design.

#### 3.1 Sampling and Population

The study's population was the academics working at Malaysian Research Universities (MRU). As per the QS World University Rankings (2023), five public universities are recognized as research universities in Malaysia, including UTM (Universiti Teknologi Malaysia), USM (Universiti Sains Malaysia), UPM (Universiti Putra Malaysia), UM (Universiti Malaya), and UKM (Universiti Kebangsaan Malaysia). These universities have a total of 11,368 academic staff, according to Statistics of Higher Education Malaysia.

As stated by Sekaran and Bougie (2016), the sample size is a real number of subjects chosen to reflect the characteristics of the population. This study used the table prepared by Krejcie and Morgan (1970) for determining the sample size since it is considered a scientific guideline that offers a certain sample size based on the size of a certain population. Therefore, as long as the population size of this study is 11,368; thus, Krejcie and Morgan's table suggests that the targeted sample size should be 371.

In this study, the population consisted of academic staff at Malaysian research universities. This study followed the stratified sampling technique (Al-Mekhlafi, Isha, Abdulrab, Ajmal, & Kanwal, 2022). After compiling a list of all academic staff from university directories, we organized it by the chosen stratification. The sample size was determined based on research objectives, and for proportionate stratification, then we calculated the necessary participants from each stratum relative to their overall population share. Finally, we selected participants using simple random sampling within each stratum, ensuring equal representation, and minimizing bias.

### 3.2 Research Instruments

#### 3.2.1 Knowledge sharing

Twenty-five items were included to gauge knowledge-sharing behavior, with responses ranging from "1" (indicating never) to "5" (indicating always). The knowledge-sharing survey items covered four dimensions of focus. Personal Contacts (six), Contributions in Writing (four), Organizational Messages (seven), Professional Networks (six), and Communities of Practice (six) (Chuymanee & Sorod, 2018); (Kularajasingam, Kaur, & Subramaniam, 2018); (Posada-Arias, Avendaño-Ramírez, & Arias-Pérez, 2018); (Ramayah, Yeap, & Ignatius, 2013); (Razi & Habibullah, 2017); (Supermanee & Mohd Tahir, 2018).

#### 3.2.2 Organizational Commitment

Organizational commitment will be measured using 17 items developed by Meyer et al. (1990) Organizational Commitment has three dimensions: affective commitment (ten items), continuing commitment (four items), and normative commitment (three items). Each dimension is measured using a five-point Likert scale ranging from "1" (strongly disagree) to "5" (strongly agree).

#### 3.2.3 Organizational Citizenship Behaviour

OCB, or Organizational Citizenship Behavior, refers to actions or behaviors considered beyond the scope of formal job requirements, often discretionary and not explicitly outlined in an individual's role description (Organ et al., 2005). It is broken down into two categories: OCB directed at the organization (OCBO) and OCB directed towards coworkers (OCBI) (Williams & Anderson, 1991). In the current research, the two dimensions were used to measure OCB using the 16-item adapted by K. Lee and Allen (2002). Each item is rated on a five-point scale, ranging from that ranges from "1" for "never" to "5" for "always." The instrument has been used in the Malaysian context by (Abdulrab et al., 2018; Hamid, Nordin, Adnan, & Sirun, 2013; Mohammad, Quoquab Habib, & Alias, 2011).

#### 4. Results

##### 4.1 Structure Equation Modelling (SEM)

Structural Equation Modeling (SEM) is a comprehensive statistical approach used for testing hypotheses about relationships among observed and latent variables. It combines aspects of factor analysis and multiple regression analysis, allowing researchers to examine complex causal relationships and account for measurement error (J. Hair, Hollingsworth, Randolph, & Chong, 2017). SEM is widely used in social sciences and management studies (Alnehabi & Al-Mekhlafi, 2023), information system (AL-Ashmori, Thangarasu, Dominic, & Al-Mekhlafi, 2023), education (Al-Mekhlafi, Othman, Kineber, Mousa, & Zamil, 2022), construction management (Alawag et al., 2023) and road safety (Al-Mekhlafi et al., 2023; Al-Mekhlafi et al., 2024).

##### 4.2 Model Assessment (Measurement model)

###### 4.2.1 Construct Reliability

Cronbach's alpha coefficients and composite reliability were assessed to test the reliability with which the variables in the study could be relied upon to produce accurate results. According to the information presented in Table 1, the values of Cronbach's alpha coefficients were greater than 0.7 (Kannan & Tan, 2005). In addition, composite reliability, also known as CR, was assessed to determine the reliability of the internal consistency. According to Gefen, Rigdon, and Straub (2011), the composite reliability value ought to be greater than 0.7. In this study, the result of the composite reliability of each variable was more than the target value of 0.7. This result indicated that the measures used in the study had sufficient internal reliability.

Table 1: Construct Reliability

First-order Constructs	Second order	Cronbach's alpha	Composite Reliability
Affective Commitment (AC)		0.982	0.984
Continues Commitment (CC)		0.933	0.952
Normative Commitment (NC)		0.943	0.964
	Organizational Commitment (OC)	0.987	0.9888
Organizational Citizenship Behavior (Individual) (OCBI)		0.981	0.981
Organizational Citizenship Behavior (Organization) (OCBO)		0.976	0.977

	Organizational Citizenship Behavior (OCB)	0.988	0.989
Written contribution-(WC)		0.921	0.941
Organizational communication-(KOC)		0.924	0.928
Community of Practice-(PC)		0.972	0.972
Personal Interaction-(PI)		0.955	0.955
	Knowledge sharing (KS)	0.968	0.969

###### 4.2.2 Convergent Validity

The degree to which a set of variables converges on a particular idea during its calculation is referred to as "convergent validity" (Hair, F, Anderson, Babin, & Black, 2010). Convergent validity is the situation that arises when the metrics of one definition either converge or share a greater variance proportion. The infringement of convergent validity has a deleterious effect on the result. The convergent validity of a model can be ensured by evaluating the factor loadings as well as the average variance that was calculated from the data (Hair et al., 2010). When this was done, the loading of the items was assessed, and the items showed that every item had a loading greater than 0.7, which is appropriate according to the research on multivariate analysis (J. Hair et al., 2017). The fact that the factor loadings are statistically significant indicates that they are converging on the latent concept. As Table 2 shows, the loadings for the items in question were higher than the value of 0.7 advised by Hair, F, Sarstedt, Hopkins, and Kuppelwieser (2014).

Table 2: Factor loading.

First-order Constructs	Indicators	Loading (> 0.7)
Affective Commitment (AC)	AC1	0.932
	AC2	0.916
	AC3	0.920
	AC4	0.919
	AC5	0.941
	AC6	0.939
	AC7	0.924
	AC8	0.944
	AC9	0.906
	AC10	0.935
Continues Commitment (CC)	CC1	0.928
	CC2	0.947
	CC3	0.909
	CC4	0.866

Normative Commitment (NC)	NC1	0.971
	NC2	0.906
	NC3	0.966
Organizational Citizenship Behavior - Individual (OCBI)	OCBI1	0.931
	OCBI2	0.947
	OCBI3	0.938
	OCBI4	0.894
	OCBI5	0.898
	OCBI6	0.933
	OCBI7	0.943
	OCBI8	0.946
Organizational Citizenship Behavior - Organization (OCBO)	OCBO1	0.925
	OCBO2	0.954
	OCBO3	0.885
	OCBO4	0.897
	OCBO5	0.922
	OCBO6	0.928
	OCBO7	0.940
	OCBO8	0.950
Written contribution (WC)	WC1	0.912
	WC2	0.919
	WC3	0.886
	WC4	0.895
	WC5	0.750
Organizational communication (KOC)	KOC1	0.702
	KOC2	0.794
	KOC3	0.819
	KOC4	0.747
	KOC5	0.893
	KOC6	0.901
	KOC7	0.835
	KOC8	0.779
Community of Practice (CP)	CP1	0.925
	CP2	0.919
	CP3	0.903
	CP4	0.923
	CP5	0.941
	CP6	0.927
	CP7	0.943
Personal Interaction (PI)	PI1	0.901
	PI2	0.861
	PI3	0.909
	PI4	0.881
	PI5	0.887
	PI6	0.853
	PI7	0.888
	PI8	0.800

The extracted average variances (AVE) are the second component of convergent validity. Average Variance Extracted, or AVE, was given its name by Hair et al. (2017), who described it as the degree to which a latent concept represents the differences between its indicators. Convergent validity is considered acceptable if the AVE

value is at least 0.50 (Hair et al., 2010). The AVE values for the constructs range from 0.541 to 0.899, respectively. After that, it built a convergent validity measurement model that was acceptable, as you can see in Table 3.

Table 3: Convergent validity

First-order Constructs	Second-order	AVE (> 0.5)
Affective Commitment (AC)		0.860
Continues Commitment (CC)		0.833
Normative Commitment (NC)		0.899
	Organizational Commitment (OC)	0.828
Organizational Citizenship Behavior (Individual) (OCBI)		0.884
Organizational Citizenship Behavior (Organization) (OCBO)		0.857
	Organizational Citizenship Behavior (OCB)	0.849
Written contribution (WC)		0.764
Organizational communication (KOC)		0.658
Community of Practice (CP)		0.857
Personal Interaction (PI)		0.762
	Knowledge sharing (KS)	0.541

#### 4.2.3 Discriminant Validity

Researchers in human resource management are advised to assess discriminant validity (Ringle, Da Silva, & Bido, 2015). The measure's discriminant validity indicates how well items distinguish across constructs. In other words, it reveals how many items signify only one construct (Hair et al. 2017). This study used the cross-loadings of the measures, the Fornell-Larcker criterion, to examine the instruments' discriminant validity. These methods were chosen because they were recommended by Hair et al. (2017).

When using the cross-loading method, the loading applied to each indication needs to be significantly greater than the sum of its cross-loadings. According to Table 4, the overall standardized loadings were adequate on the constructs that they were supposed to be loading on, and there were no cross-loadings on the other latent variables. Thus, the measuring model utilized in this research achieved levels of discriminant validity that were considered to be good.

Table 4: Results of discriminant validity by the cross-loading

	AC	CC	CP	KO C	NC	OCB I	OCB O	PI	WC

AC1	0.932	0.896	0.617	0.653	0.852	0.716	0.730	0.552	0.520
AC10	0.932	0.889	0.631	0.661	0.865	0.700	0.725	0.566	0.490
AC2	0.916	0.875	0.596	0.613	0.817	0.754	0.770	0.538	0.561
AC3	0.920	0.873	0.617	0.634	0.825	0.715	0.728	0.540	0.519
AC4	0.919	0.875	0.606	0.617	0.821	0.762	0.776	0.552	0.568
AC5	0.941	0.888	0.667	0.675	0.883	0.704	0.725	0.572	0.535
AC6	0.939	0.898	0.643	0.663	0.861	0.713	0.736	0.578	0.498
AC7	0.924	0.901	0.632	0.606	0.866	0.771	0.788	0.556	0.510
AC8	0.944	0.893	0.670	0.687	0.878	0.702	0.718	0.579	0.539
AC9	0.906	0.883	0.622	0.609	0.830	0.658	0.698	0.550	0.500
CC1	0.883	0.928	0.614	0.626	0.838	0.734	0.742	0.570	0.499
CC2	0.919	0.947	0.654	0.669	0.879	0.740	0.756	0.611	0.541
CC3	0.877	0.909	0.614	0.649	0.796	0.740	0.752	0.599	0.525
CC4	0.811	0.866	0.558	0.597	0.812	0.588	0.606	0.505	0.534
CP1	0.613	0.596	0.925	0.609	0.542	0.611	0.637	0.533	0.481
CP2	0.607	0.584	0.919	0.593	0.529	0.589	0.634	0.514	0.496
CP3	0.602	0.593	0.903	0.707	0.519	0.613	0.633	0.486	0.563
CP4	0.652	0.643	0.923	0.656	0.583	0.606	0.646	0.542	0.471
CP5	0.640	0.638	0.941	0.633	0.558	0.636	0.648	0.544	0.512
CP6	0.643	0.649	0.927	0.646	0.563	0.618	0.642	0.543	0.500
CP7	0.648	0.633	0.943	0.638	0.582	0.617	0.658	0.507	0.472
KOC1	0.490	0.501	0.441	0.702	0.474	0.606	0.552	0.546	0.693
KOC2	0.597	0.602	0.460	0.794	0.551	0.673	0.639	0.648	0.693
KOC3	0.638	0.656	0.555	0.819	0.594	0.701	0.672	0.770	0.703
KOC4	0.461	0.453	0.526	0.747	0.409	0.443	0.466	0.402	0.380
KOC5	0.597	0.580	0.610	0.893	0.541	0.581	0.578	0.524	0.497
KOC6	0.591	0.576	0.602	0.900	0.541	0.575	0.577	0.534	0.494
KOC7	0.514	0.542	0.594	0.835	0.459	0.509	0.516	0.473	0.483
KOC8	0.571	0.573	0.729	0.779	0.517	0.587	0.608	0.466	0.545
NC1	0.900	0.882	0.590	0.637	0.971	0.727	0.742	0.567	0.562
NC2	0.844	0.850	0.583	0.583	0.906	0.637	0.657	0.526	0.480
NC3	0.862	0.851	0.529	0.584	0.966	0.674	0.682	0.534	0.506
OCBI1	0.723	0.713	0.597	0.679	0.658	0.958	0.885	0.624	0.584
OCBI2	0.722	0.715	0.596	0.678	0.645	0.964	0.906	0.653	0.601
OCBI3	0.733	0.727	0.634	0.689	0.662	0.957	0.896	0.629	0.607
OCBI4	0.741	0.754	0.637	0.681	0.699	0.902	0.863	0.633	0.568
OCBI5	0.714	0.714	0.637	0.667	0.678	0.909	0.864	0.640	0.574
OCBI6	0.749	0.748	0.642	0.688	0.707	0.945	0.897	0.644	0.621
OCBI7	0.721	0.715	0.630	0.690	0.667	0.956	0.906	0.649	0.605
OCBI8	0.733	0.723	0.609	0.694	0.679	0.934	0.936	0.625	0.657
OCBO1	0.730	0.718	0.587	0.641	0.674	0.912	0.925	0.629	0.601
OCBO2	0.752	0.742	0.660	0.659	0.682	0.881	0.954	0.593	0.602

OCBO3	0.741	0.722	0.660	0.647	0.688	0.775	0.885	0.550	0.624
OCBO4	0.710	0.690	0.653	0.613	0.665	0.802	0.897	0.571	0.601
OCBO5	0.766	0.763	0.664	0.702	0.705	0.910	0.922	0.639	0.630
OCBO6	0.731	0.725	0.636	0.693	0.673	0.940	0.928	0.645	0.620
OCBO7	0.739	0.725	0.627	0.686	0.679	0.939	0.940	0.642	0.660
OCBO8	0.736	0.724	0.658	0.655	0.660	0.872	0.950	0.597	0.597
PI1	0.491	0.519	0.446	0.586	0.453	0.582	0.561	0.900	0.434
PI2	0.543	0.551	0.504	0.573	0.516	0.579	0.572	0.861	0.406
PI3	0.527	0.551	0.504	0.582	0.490	0.598	0.569	0.909	0.428
PI4	0.511	0.534	0.484	0.579	0.499	0.585	0.560	0.881	0.396
PI5	0.541	0.581	0.487	0.584	0.520	0.602	0.571	0.887	0.434
PI6	0.507	0.527	0.483	0.645	0.478	0.608	0.588	0.853	0.496
PI7	0.534	0.554	0.533	0.568	0.501	0.608	0.610	0.888	0.466
PI8	0.553	0.560	0.510	0.635	0.539	0.567	0.561	0.800	0.457
WC1	0.519	0.520	0.477	0.597	0.504	0.554	0.589	0.407	0.912
WC2	0.497	0.505	0.484	0.608	0.485	0.550	0.584	0.424	0.919
WC3	0.472	0.478	0.473	0.596	0.470	0.557	0.598	0.405	0.886
WC4	0.496	0.500	0.430	0.590	0.476	0.579	0.615	0.468	0.895
WC5	0.479	0.503	0.488	0.651	0.440	0.554	0.521	0.492	0.750

In the study by Fornell and Larcker (1981), the authors placed the square root of the Average Variance Extracted (AVE) for each construct on the diagonal elements within the correlation matrix. This approach was employed because these diagonal elements exceeded the values of the other elements in their respective rows and columns, thus affirming the discriminant validity of the external model. The presence of discriminant validity in the external model indicates that the constructs are distinct and measure different concepts. When the construct validity of the outer model is confirmed, it suggests that the findings related to hypothesis testing are likely to be accurate and reliable. Table 5 illustrates this by showing that the square root of the AVE for each variable in the study is higher than the correlations among the variables, indicating adequate discriminant validity (Chin, 1998; Fornell & Larcker, 1981).

Table 5: Results of discriminant validity by Fornell-Larcker criterion

	AC	CC	CP	KO C	NC	OC BI	OCB O	PI	W C
AC	0.927								
CC	0.857	0.913							
CP	0.680	0.669	0.926						
KO C	0.693	0.696	0.698	0.811					



NC	0.817	0.8	0.5	0.6	0.9				
OC	0.776	0.7	0.6	0.7	0.7	0.94			
BI	0.776	72	62	27	17	0			
OC	0.797	0.7	0.6	0.7	0.7	0.75	0.92		
BO	0.797	84	94	16	32	2	5		
PI	0.602	0.6	0.5	0.6	0.5	0.67	0.65	0.8	
W	0.602	27	66	81	72	8	8	73	
C	0.565	0.5	0.5	0.6	0.5	0.64	0.66	0.5	0.8
		75	40	98	45	1	6	04	74

**4.3 Structural Model Assessment**

A stable and accurate structural model makes evaluating the predictions made by the inner path model possible. The researcher can examine the consistency of the structural model and test the hypothesis based on the results obtained from studying its findings (Hair et al., 2014). Path coefficient, R2 value, and size of the effect (f2) were stated.

**4.3.1 Path coefficients**

During the structural evaluation, the first thing that was looked at was the path coefficients and the R2 values. To put it another way, in order to determine the statistical significance of the path coefficients, a bootstrap analysis was carried out after the structural model's path estimates had been generated. Path coefficients are used to depict the relationship that is hypothesized to exist between the many constructs that are investigated in this study. According to Hair et al. (2014) if the standardized values of the path coefficients approach one, this denotes a strong positive relationship that is nearly statistically significant. As a direct result of this, the path coefficients for this research were calculated, and the results are shown in Figure 2 and Table 6, respectively.

Table 6: Structural assessment results

Relation ship	Original sample (O)	(STD EV)	T statistics	P values	Decision
OC -> KS	0.308	0.046	6.742	0.000	Supported
OCB -> KS	0.569	0.043	13.373	0.000	Supported

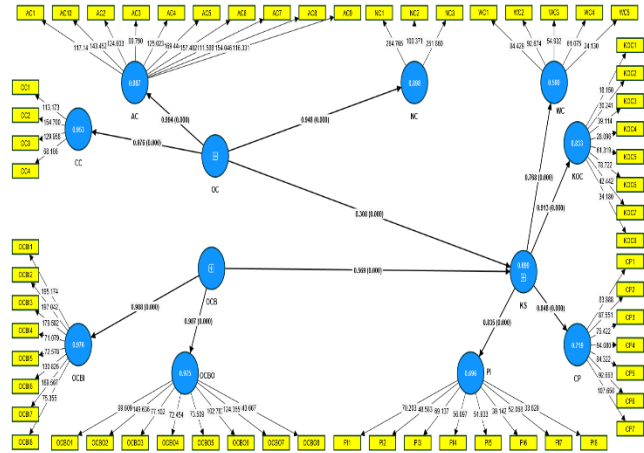


Figure 2: Structural model

The evaluation of the hypothesis testing is represented through the assessment of the structural model, as illustrated in Figure 2 and detailed in Table 6, which presents two direct hypotheses. The first hypothesis (H1) posited that Organizational Commitment (OC) significantly influences Knowledge Sharing (KS), and the findings supported this hypothesis with a path coefficient (B) of 0.308, a t-value of 6.742, and a p-value of less than 0.000. Therefore, H1 is supported. Furthermore, the second hypothesis (H2) suggested that Organizational Citizenship Behavior (OCB) significantly affects Knowledge Sharing (KS). This was also supported by the results, showing a path coefficient (B) of 0.569, a t-value of 13.373, and a p-value of less than 0.000. Hence, H2 is supported.

**4.3.2 Power explanatory**

Looking at that, the outcome of the coefficient determination (R2) was examined. The R2 reflects how effectively the exogenous variables (also known as independent variables) explain the variation in the endogenous variable (also known as the dependent variable), and the R2 of the major goal construct should be high (Hair et al., 2014).

In the structural evaluation, the initial focus was on testing the path coefficients and the R2 values. Specifically, after calculating the path estimates within the structural model, a bootstrap analysis was performed to determine the statistical significance of these path coefficients. Path coefficients delineate the hypothesized relationships between constructs within the analysis, serving as indicators of the strength and direction of these relationships. When the standardized values of these path coefficients are close to 1, it indicates a strong positive relationship that verges on being statistically significant (Hair et al., 2014). Thus, as shown in Table 7, the path coefficients were created for this

analysis. In addition, the outcome showed that OCB and OC clarified 69.9% of the variation in KS. As suggested by Cohen (1988), and Chin (1998) The attained R2 values have an appropriate degree of explanatory power, which indicates a significant model. Chin (1998) It states that for endogenous latent variables in the inner path model, R2 values of 0.67, 0.32, or 0.19 are regarded as large, moderate, or modest, respectively.

Table 7: R2 of endogenous latent variables

DV Construct	R <sup>2</sup>	Result
Knowledge sharing	0.699	large

#### 4.3.3 Effect Size

The effect size ( $f^2$ ) serves as a measure to assess the impact of a predictor construct on a dependent (endogenous) construct, as detailed by Hair et al. (2017). According to Cohen (1988), the effect size can be classified as small, medium, or large, corresponding to ( $f^2$ ) values of 0.02, 0.15, or 0.35, respectively. This categorization helps in understanding the magnitude of the influence that a predictor latent variable exerts on an outcome variable.

As presented in Table 8, the effect size ( $f^2$ ) for the relationship between Organizational Commitment (OC) and Knowledge Sharing (KS) is 0.115, indicating a small effect size. In contrast, the relationship between Organizational Citizenship Behavior (OCB) and Knowledge Sharing (KS) demonstrates a high effect size ( $f^2= 0.392$ ), as detailed in Table 8. These results highlight the varying degrees of influence that different organizational factors have on knowledge sharing within the studied context.

Table 8: Effect size ( $f^2$ )

Relationship	F <sup>2</sup>	Results
OC→KS	0.115	Small
OCB → KS	0.392	High

## 5. Discussion

This research examines the factors influencing faculty members' willingness to collaborate and share their expertise within Malaysian universities. Knowledge-sharing problems were traced back to academics' lack of confidence in their institution's leadership; therefore, it stands to reason that in such an environment, university staff would be less likely to share data designed to foster collaboration. The present study adopted three research

variables and tested them via two hypotheses. These variables have contributed to the overall improvement of the research model aimed at elevating knowledge sharing within research institutions in Malaysia.

Hypothesis One examined the relationship between organizational commitment and knowledge sharing among the academic staff in Malaysian universities. Based on the results, there is a significant relationship between organizational commitment and knowledge sharing ( $B = 0.308$ ,  $t = 6.742$ ,  $p 0.000$ ). This result was in line with previous studies such as (Borges, 2012; Fatima et al., 2015; Tsai & Cheng, 2012; H. Wang & Zhang, 2012). When faculty members feel committed to their institution, they are more likely to engage in knowledge sharing, fostering a collaborative environment where ideas and expertise are freely exchanged. High levels of organizational commitment promote trust, cooperation, and a sense of belonging, which are essential for effective knowledge sharing. Conversely, low commitment levels may hinder knowledge-sharing efforts. Therefore, cultivating organizational commitment through effective leadership and supportive policies can positively impact knowledge-sharing initiatives, leading to improved research, teaching quality, and overall institutional performance.

Hypothesis two examined the relationship between organizational citizenship behavior and knowledge-sharing with ( $B = 0.569$ ,  $t = 13.373$ ,  $p 0.000$ ). This result is consistent with previous studies (Amin, Hassan, & Ariffin, 2010; Hsien et al., 2014; Mohammad Mosadegh Rad, 2006; Tourigny et al., 2019). Organizational citizenship behavior (OCB) plays a crucial role in fostering knowledge-sharing within organizations by creating a supportive environment where employees willingly offer insights and expertise to their colleagues. This behavior builds trust, enhances collective learning, and ultimately improves performance by leveraging the collective knowledge of employees for better decision-making and adaptation. OCB, related to knowledge-sharing, cultivates a culture of collaboration and continuous learning, which are vital for organizational success in today's dynamic business landscape.

## 6. Conclusion

This study delves into the vital relationships between two crucial independent variables - organizational citizenship behavior and organizational commitment, and their impact on knowledge sharing among academic staff in Malaysian universities. The results of this research strongly support both hypotheses, which undoubtedly offer valuable contributions to the theoretical and practical implications of

the study. This research provides critical insights for universities to promote a positive work culture that maximizes the sharing of knowledge among academic staff, which can significantly benefit the educational community and beyond.

In terms of theoretical contributions, this study contributes to the existing body of knowledge because it investigates the connection between organizational citizenship behavior, organizational commitment, and knowledge sharing in academic universities in Malaysia. As a result, sharing knowledge increases an employee's self-worth and sense of contribution to the organization. These feelings are translated into voluntary actions by employees, defining an employee's organizational citizenship behavior. The practical implications of this study could significantly aid leaders of Malaysian research universities in pursuing higher growth and transformation. By adopting leadership and management styles that foster knowledge sharing, these leaders can positively impact the psychological empowerment and organizational citizenship behaviors of their academic staff. Such initiatives are likely to fortify working teams, enhance work engagement, promote citizenship behavior, improve working relationships, and bridge the information divide among academics. Collectively, these improvements could boost the performance and effectiveness of universities across Malaysia, contributing to a more collaborative, innovative, and productive academic environment. As recommendations for future researchers to address this problem from different perspectives considering the moderating and mediating variables.

## References

- [1] Abdulrab, M., Zumrah, A. R., Almaamari, Q., Al-Tahitah, A. N., Isaac, O., & Ameen, A. (2018). The role of psychological empowerment as a mediating variable between perceived organizational support and organizational citizenship behaviour in Malaysian higher education institutions. *International Journal of Management and Human Science*.
- [2] AL-Ashmori, A., Thangarasu, G., Dominic, P., & Al-Mekhlafi, A.-B. A. (2023). A Readiness Model and Factors Influencing Blockchain Adoption in Malaysia's Software Sector: A Survey Study. *Sustainability*, 15(16), 12139.
- [3] Al-Busaidi, K. A., & Olfman, L. (2017). Knowledge sharing through inter-organizational knowledge sharing systems. *VINE Journal of Information and Knowledge Management Systems*, 47(1), 110-136.
- [4] Al-Kurdi, O., El-Haddadeh, R., & Eldabi, T. (2018). Knowledge sharing in higher education institutions: a systematic review. *Journal of Enterprise Information Management*, 31(2), 226-246.
- [5] Al-Mekhlafi, A.-B. A., Isha, A. S. N., Abdulrab, M., Ajmal, M., & Kanwal, N. (2022). Moderating effect of safety culture on the association inter work schedule and driving performance using the theory of situation awareness. *Heliyon*, 8(11), e11289.
- [6] Al-Mekhlafi, A.-B. A., Isha, A. S. N., Al-Tahitah, A. N., Kineber, A. F., Al-Dhawi, B. N. S., & Ajmal, M. (2023). Modelling the Impact of Driver Work Environment on Driving Performance among Oil and Gas Heavy Vehicles: SEM-PLS. *Safety*, 9(3), 48.
- [7] Al-Mekhlafi, A.-B. A., Isha, A. S. N., Chileshe, N., Kineber, A. F., Ajmal, M., Baarimah, A. O., & Al-Aidrous, A.-H. M. (2024). Risk assessment of driver performance in the oil and gas transportation industry: Analyzing the relationship between driver vigilance, attention, reaction time, and safe driving practices. *Heliyon*, 10(6).
- [8] Al-Mekhlafi, A.-B. A., Othman, I., Kineber, A. F., Mousa, A. A., & Zamil, A. (2022). Modeling the Impact of Massive Open Online Courses (MOOC) Implementation Factors on Continuance Intention of Students: PLS-SEM Approach. *Sustainability*, 14(9), 5342.
- [9] Alawag, A. M., Alaloul, W. S., Liew, M., Baarimah, A. O., Musarat, M. A., & Al-Mekhlafi, A.-B. A. (2023). The Role of the Total-Quality-Management (TQM) Drivers in Overcoming the Challenges of Implementing TQM in Industrialized-Building-System (IBS) Projects in Malaysia: Experts' Perspectives. *Sustainability*, 15(8), 6607.
- [10] Alnehabi, M., & Al-Mekhlafi, A.-B. A. (2023). The Association between Corporate Social Responsibility, Employee Performance, and Turnover Intention Moderated by Organizational Identification and Commitment. *Sustainability*, 15(19), 14202.
- [11] Amin, A., Hassan, M. F. B., & Ariffin, M. B. M. (2010). *Framework of intrinsic and extrinsic motivators of knowledge sharing: A case of training institutes of an oil and gas company in Malaysia*. Paper presented at the 2010 International Symposium on Information Technology.
- [12] Annansingh, F., Howell, K. E., Liu, S., & Baptista Nunes, M. (2018). Academics' perception of

- knowledge sharing in higher education. *International Journal of Educational Management*, 32(6), 1001-1015.
- [13] Asrar-ul-Haq, M., & Anwar, S. (2016). A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. *Cogent Business & Management*, 3(1), 1127744.
- [14] Bibi, S., & Ali, A. (2017). Knowledge sharing behavior of academics in higher education. *Journal of Applied Research in Higher Education*, 9(4), 550-564.
- [15] Borges, R. (2012). Tacit knowledge sharing between IT workers: The role of organizational culture, personality, and social environment. *Management Research Review*, 36(1), 89-108.
- [16] Chiang, H. H., Han, T. S., & Chuang, J. S. (2011). The relationship between high-commitment HRM and knowledge-sharing behavior and its mediators. *International Journal of Manpower*, 32(5/6), 604-622.
- [17] Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- [18] Chuymanee, K., & Sorod, B.-o. (2018). The Development of a Knowledge Sharing Behavior Scale in the Thai Context. *Journal of Community Development Research (Humanities and Social Sciences)*, 11(3), 27-38.
- [19] Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Lawrence Erlbaum Associates. *Hillsdale, NJ*, 20-26.
- [20] Curado, C., & Vieira, S. (2019). Trust, knowledge sharing and organizational commitment in SMEs. *Personnel Review*, 48(6), 1449-1468.
- [21] Curtis, M. B., & Taylor, E. Z. (2018). Developmental mentoring, affective organizational commitment, and knowledge sharing in public accounting firms. *Journal of Knowledge Management*, 22(1), 142-161.
- [22] Donate, M. J., & de Pablo, J. D. S. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68(2), 360-370.
- [23] Elrehail, H. (2018). The relationship among leadership, innovation and knowledge sharing: A guidance for analysis. *Data in brief*, 19, 128-133.
- [24] Farooq, R. (2023). Knowledge management and performance: a bibliometric analysis based on Scopus and WOS data (1988–2021). *Journal of Knowledge Management*, 27(7), 1948-1991.
- [25] Fatima, A., Imran, R., Shahab, H., & Zulfiqar, S. (2015). Knowledge sharing among Pakistani IT professionals: Examining the role of procedural justice, pay satisfaction and organizational commitment. *Advanced Science Letters*, 21(5), 1189-1192.
- [26] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- [27] Gefen, D., Rigdon, E. E., & Straub, D. J. M. Q. (2011). Editor's comments: an update and extension to SEM guidelines for administrative and social science research. iii-xiv.
- [28] Goh, S. K., & Sandhu, M. S. (2012). *The Influence of Affective Commitment and Trust on Knowledge Sharing in Malaysian Universities: A Comparison between Public and Private Universities*. Paper presented at the ECKM 2015 Proceedings of the 16th European Conference on Knowledge Management: ECKM2015.
- [29] Hair, F. J., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). Multivariate data analysis: A global perspective (Vol. 7). In: Upper Saddle River, NJ: Pearson.
- [30] Hair, F. J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. J. E. b. r. (2014). Partial least squares structural equation modeling (PLS-SEM).
- [31] Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial management & data systems*, 117(3), 442-458.
- [32] Hamid, S. F., Nordin, N., Adnan, A. A., & Sirun, N. (2013). A study on primary school teachers' organizational commitment and psychological empowerment in the district of Klang. *Procedia-Social and Behavioral Sciences*, 90, 782-787.
- [33] Han, J., & Hovav, A. (2016). Dimensionality of social capital and organizational citizenship behavior in information systems project teams. *Journal of Computer Information Systems*, 56(3), 218-227.
- [34] Hsien, L. C., Pei, N. F., Yung, P. C., & Sheng, C. T. (2014). A study on the correlations between knowledge sharing behavior and organizational citizenship behavior in catering industry: the viewpoint of theory of planned behavior. *The Anthropologist*, 17(3), 873-881.
- [35] Jo, S. J., & Joo, B.-K. (2011). Knowledge sharing: The influences of learning organization culture, organizational commitment, and organizational citizenship behaviors. *Journal of leadership & organizational studies*, 18(3), 353-364.
- [36] Kannan, V. R., & Tan, K. C. J. O. (2005). Just in time, total quality management, and supply chain management: understanding their linkages and impact on business performance. 33(2), 153-162.

- [37] Khadivi, A., Talebi, B., & Jabbari, M. G. (2013). Explaining the organizational citizenship behavior of elementary school teachers based on their organizational trust. *Advances in Environmental Biology*, 7(10 S1), 3137-3145.
- [38] Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- [39] Kularajasingam, J., Kaur, D., & Subramaniam, A. (2018). Influence Of Social Intelligence On Knowledge Sharing Behaviour, Competency & Teaching And Learning Performance: Evidence From Malaysian Private Universities. *Sci. Int (Lahore)*, 30(5).
- [40] Kumar, A. A., & Shekhar, V. (2017). Invigorating knowledge sharing in higher education: Indian initiatives. *Prabandhan: Indian Journal of Management*, 10(9), 7-15.
- [41] Lee, J.-N. (2001). The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. *Information & Management*, 38(5), 323-335.
- [42] Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of applied psychology*, 87(1), 131.
- [43] Lee, W. L., Chong, A. L., & Ramayah, T. (2018). *Organizational culture and performance of Malaysian manufacturing firms*.
- [44] Mansor, Z., & Saparudin, I. (2015). Motivational factors for academicians in private universities to participate in knowledge-sharing activities. *Pertanika Journal of Social Science and Humanities*, 23, 101-116.
- [45] Mehrabi, J., Alemzade, M., Jadidi, M., & Gasemi, H. (2014). Examining the relationship of Organizational Citizenship Behavior and sharing the knowledge. *Adv. Environ. Biol*, 8, 248-258.
- [46] Meyer, J. P., Allen, N. J., & Gellatly, I. R. (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations. *Journal of Applied Psychology*, 75(6), 710.
- [47] Mohammad, J., Quoquab Habib, F., & Alias, M. A. (2011). Job Satisfaction And Organisational Citizenship Behaviour: An Empirical Study At Higher Learning Institutions. *Asian Academy of Management Journal*, 16(2).
- [48] Mohammad Mosadegh Rad, A. (2006). The impact of organizational culture on the successful implementation of total quality management. *The TQM magazine*, 18(6), 606-625.
- [49] Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247.
- [50] Mutahar, Y., Farea, M. M., Abdulrab, M., Al-Mamary, Y. H., Alfalah, A. A., & Grada, M. (2022). The contribution of trust to academic knowledge sharing among academics in the Malaysian research institutions. *Cogent Business & Management*, 9(1), 2038762.
- [51] Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2005). *Organizational citizenship behavior: Its nature, antecedents, and consequences*: Sage Publications.
- [52] Ouakouak, M. L., & Ouedraogo, N. (2019). Fostering knowledge sharing and knowledge utilization: The impact of organizational commitment and trust. *Business Process Management Journal*, 25(4), 757-779.
- [53] Park, S., & Kim, E.-J. (2015). Revisiting knowledge sharing from the organizational change perspective. *European Journal of Training and Development*, 39(9), 769-797.
- [54] Posada-Arias, O., Avendaño-Ramírez, J., & Arias-Pérez, J. (2018). Intellectual capital management and university research group performance: mediating effects of machiavellianism and organisational narcissism. *Journal of Information & Knowledge Management*, 17(04), 1850047.
- [55] QS World University Rankings. (2023). *QS World University Rankings report 2023*. Retrieved from <https://www.topuniversities.com/universities/>:
- [56] Rahman, M. S., Mannan, M., Hossain, M. A., Zaman, M. H., & Hassan, H. (2018). Tacit knowledge-sharing behavior among the academic staff: Trust, self-efficacy, motivation and Big Five personality traits embedded model. *International Journal of Educational Management*, 32(5), 761-782.
- [57] Ramayah, T., Yeap, J. A., & Ignatius, J. (2013). An empirical inquiry on knowledge sharing among academicians in higher learning institutions. *Minerva*, 51, 131-154.
- [58] Ravikumar, R., Kitana, A., Taamneh, A., Aburayya, A., Shwedeh, F., Salloum, S., & Shaalan, K. (2022). Impact of knowledge sharing on knowledge Acquisition among Higher Education Employees. *Comput. Integr. Manuf. Syst*, 28(12), 827-845.
- [59] Razi, M. J. M., & Habibullah, M. (2017). *Determinants of knowledge management behavior among academics*. Paper presented at the 2017 8th International Conference on Information Technology (ICIT).
- [60] Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS. *Bido, D., da Silva, D., & Ringle, C.(2014)*.

- Structural Equation Modeling with the Smartpls. Brazilian Journal Of Marketing, 13(2).*
- [61] Sadegh, T., Khani, R. M., & Modaresi, F. (2018). Introducing a model of relationship between knowledge sharing behavior and organizational citizenship behavior and positively orientated organizational behavior: A two-wave study. *International Journal of Knowledge Management (IJKM), 14(3), 21-36.*
- [62] Schnake, M. (1991). Organizational citizenship: A review, proposed model, and research agenda. *Human Relations, 44(7), 735-759.*
- [63] Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach:* John Wiley & Sons.
- [64] Shabrina, V., & Silvianita, A. (2015). Factors analysis on knowledge sharing at telkom economic and business school (tebs) telkom university bandung. *Procedia-Social and Behavioral Sciences, 169, 198-206.*
- [65] Sihombing, I. H. H., Supartha, I. W., Subudi, M., & Dewi, I. (2017). The role of organizational commitment mediating job satisfaction and work motivation with knowledge-sharing behavior in 4 star hotels in badung regency, Bali. *Global Business & Finance Review (GBFR), 22(3), 61-76.*
- [66] Slack, F. J., Orife, J. N., & Anderson, F. P. (2010). Effects of commitment to corporate vision on employee satisfaction with their organization: An empirical study in the United States. *International Journal of Management, 27(3), 421.*
- [67] Sukamolson, S. (2007). Fundamentals of quantitative research. *Language Institute Chulalongkorn University, 1, 2-3.*
- [68] Supermane, S., & Mohd Tahir, L. (2018). An overview of knowledge management practice among teachers. *Global Knowledge, Memory and Communication, 67(8/9), 616-631.*
- [69] Teh, P.-L., & Yong, C.-C. (2011). Knowledge sharing in IS personnel: Organizational behavior's perspective. *Journal of Computer Information Systems, 51(4), 11-21.*
- [70] Teh, P. L., & Sun, H. (2012). Knowledge sharing, job attitudes and organisational citizenship behaviour. *Industrial management & data systems, 112(1), 64-82.*
- [71] Tourigny, L., Han, J., Baba, V. V., & Pan, P. (2019). Ethical leadership and corporate social responsibility in China: A multilevel study of their effects on trust and organizational citizenship behavior. *Journal of business ethics, 158, 427-440.*
- [72] Tsai, M.-T., & Cheng, N.-C. (2012). Understanding knowledge sharing between IT professionals—an integration of social cognitive and social exchange theory. *Behaviour & information technology, 31(11), 1069-1080.*
- [73] Vong, S., Zo, H., & Ciganek, A. P. (2016). Knowledge sharing in the public sector: Empirical evidence from Cambodia. *Information Development, 32(3), 409-423.*
- [74] Wang, H., & Zhang, Y. (2012). Tacit knowledge sharing in software companies: The psychological contract perspective. *Journal of Convergence Information Technology, 7(17).*
- [75] Wang, Z., & Wang, N. (2012). Knowledge sharing, innovation and firm performance. *Expert Systems with Applications, 39(10), 8899-8908.*
- [76] Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management, 17(3), 601-617.*