Information and Communication Technology as a Moderator of the Relationship between Organisational Clarity and Knowledge Sharing Behaviour

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The current study aimed to examine the relationship between four dimensions of organisational clarity (role clarity, strategic clarity, organisational structure clarity, processes clarity) and knowledge sharing behaviour. It also aimed to explore the moderate effect of information and communication technology (ICT) on the relationship between the dimensions of organisational clarity and knowledge sharing behaviour. A quantitative method was employed, and data was collected from 101 of the academicians at Duhok polytechnic university (DPU) in the Kurdistan Region of Iraq. Results support the moderating role of ICT of the organisational clarity dimensions and knowledge sharing behaviour relationships. The originality of this study stems from the scarcity of studies that investigate the relationships between organisational clarity and knowledge sharing behaviour, and the role of ICT as a moderator on this relationship is unprecedented.

Introduction

Higher educational institutions engage in a significant level of knowledge management activities that cover various phases such as knowledge identification, creation, organisation, storage, sharing, use, and maintenance. Among these phases, knowledge sharing has been claimed to be the most important part of knowledge management (Bock & Kim, 2002).

The practice of knowledge sharing is important to preserve knowledge apart from being a source of reference for the purposes of teaching and learning, research, and collaboration (Iqbal et al., 2011). As such, ICT is needed to encourage knowledge-sharing behaviour, particularly among academicians (Muda and Yusof, 2015).

While extant literature demonstrates that sustainability of competitive advantage for any organisation is achieved through the effects of knowledge sharing between employees, the mere existence of an organisational process to share knowledge does not guarantee the occurrence of knowledge sharing (Cleveland, and Ellis, 2015). In fact, while 62% of organisations report having a formal process for documenting experiential knowledge, 89% of their employees never engage in knowledge sharing (Williams, 2008). Cheng, et al, (2009) acknowledged that knowledge hoarding instead of knowledge sharing could be more prevalent in academic institutions though this is a dilemma that happens in all organisations.

Inspiring people to share knowledge and experience at workplaces has gained attention among the researchers to determine the ways of motivating employees to engage in knowledge sharing behaviour. In order to promote knowledge-sharing behaviour, people need to understand the influences and the mechanism that drives individuals to contribute their valuable knowledge with others (Norfadzilah, et al., 2016). Various studies provided evidence to suggest that organisational contexts can influence social interaction and knowledge sharing behaviour (De long and Fahey 2000; Gray and Densten 2005). But organisational clarity has received little attention in management research in general, and almost none in the knowledge management domain (Parnell, 2010; Liyanage and Weerasinghe, 2018). On the other hand, numerous studies have examined the positive role of ICT in enhancing knowledge sharing behaviour (Ghavifekr, et al, 2013; Muda and Yusof 2015; Muhammad and Misbah, 2018; Jain, 2020), but there are no studies that focus on the moderating effect of ICT on the relationship between organisational clarity and knowledge sharing behaviour.

Based on the above, the motivations for conducting this study are to address the gap in the research on the relationship between the organisational clarity and knowledge sharing behaviour relationship, and the moderate role of ICT in this relationship. Hence, the research question this study sought to address is:

Does ICT play a moderator role in the relationship between organisational clarity and knowledge sharing behaviour among the academics in DPU?

Theoretical Framework

Organisational clarity

One of the first definitions of clarity was given by the philosopher René Descartes when he said "Clear means evident and distinct from other things". To make something clear is

equivalent to making it understood and to reduce what is unwanted from it, in turn, a lack of clarity can make documented insights or practices difficult to understand or apply (Bischof and Eppler, 2010).

Organisational clarity is the comprehension an employee has about the organisation's vision, purpose, mission, strategy, opportunities, challenges, priorities, and competitive reality. In other words, organisational clarity is about employee alignment: the degree to which employees recognise a line-of-sight between their job and the marketplace they operate in, against the backdrop of the company's strategy (IPR, 2016). It is the feeling of the members that the activities are well organised, and that the objectives are clearly defined to avoid disorganisation and confusion (Supriadi & Pheng, 2018). According to Sajitha Parvin and Dawood (2019), organisational clarity is defined as the comprehension an employee has about the organisation's vision, purpose, mission, strategy, opportunities, challenges, priorities, and competitive reality. Organisational clarity is also considered as a means of action and motivation in organisations, as it guides the behaviour of leaders on how to achieve their goals. It is also a tool for directing and coordinating work activities, and making sure that subordinates know what they want to do, directing their efforts towards the performance of duties and responsibilities, and encourages the search for effective ways to do the work. It facilitates performance evaluation by providing a benchmark for comparison, and then it contributes to raising the level of job satisfaction and reducing the turnover of work (Hassan, 2013).

Regarding the dimensions of organisational clarity, and based on the review of the literature, the most common dimensions are role clarity, strategic clarity, organisational structure clarity, and process clarity (Bantel, 1993; Ritchie-Dunham et al., 2001; Jeary, 2009; Ritchie-Dunham & Puente, 2008; IPR, 2016; SajithaParvin and Dawood, 2019). Accordingly, these four dimensions were adopted as dimensions of organisational clarity for the purposes of the current study.

• Role clarity: Role is a set of activities or behaviours that are expected by relevant organisation constituents from a person holding a particular position in an organisation (Hassan, 2013). According to Yadav and Rangnekar (2015), role clarity means the extent to which an individual receives and understands information required to do the job. Role clarity is one of the important issues which should get clear for staff when they are employed. In other words, what responsibilities the employees will have should be clear for them at the outset. In fact, it helps employees analyse the conditions to see whether it is possible for them to start the job or not (Samie et al., 2015).

• Strategic Clarity: Strategy is about choosing to be different by making the right choices or trade-offs (Porter, 1985). Strategic clarity can be visualised as the extent to which an organisation can focus its production efforts on support of a single comprehensive strategy (Parnell, 2010). Brenegar (2015) also emphasised in his concept of strategic clarity that it is

the product of strategic thinking and comes from clarity of values and capabilities in the organisation, and what the outcome should be.

Organisational structure clarity: The organisational structure determines how to formally divide, group and coordinate functional tasks (Robbins and Judge (2017). A clear organisational structure is characterised by being printed, each individual follows a precise structure, it allows everyone to participate in important decisions, employees have a great deal of freedom in making decisions about their work without clarifying those decisions with people at the higher levels of the company, clearly defining powers and responsibilities, and it is flexible enough for teamwork and cooperation among employees (Kim, 2005).

Process clarity: Process clarity was defined as the extent to which the individual is certain about how to perform his or her job (Sawyer, 1992). Kim et al., (2020) defined process clarity as the extent to which members clearly understand the processes required in performing tasks related to their duties. Hu and Liden (2001) argued that process clarity is positively related to employee and team performance. Process clarity is very important for employee and team performance because it provides clearer and more active plans and visible strategies to achieve the goal (Knight et al., 2001).

Knowledge sharing behaviour

Knowledge is defined by Allameh & Moghtadaie (2010) as a dynamic combination of experiences, values, subjects, information, and professional information which provides a framework for evaluating and acquiring new experiences and information in a coherent and integrated manner. Knowledge can be tacit or explicit. The former refers to the intangible knowledge, which typically resides in an individual's mind in the form of the individual's experiences, insights, and values. While the latter refers to the knowledge in a tangible form, which can be easily stored, transferred, and communicated across individuals and organisations (Nonaka, 1994).

Knowledge sharing is part of the broader field of knowledge management (KM) encompassing how organisations create, process, retain, share, and make the best use of knowledge (Uriarte, 2008). According to Sharma, et al. (2012) knowledge sharing is the foundation stone of knowledge management. If knowledge is not shared, then it is meaningless to manage knowledge. Knowledge sharing is an important process in knowledge management to improve performance, save time and operating costs, encourage employees to be creative, and increase the level of knowledge application, especially in the teaching and learning process (Hafiza & Dang, 2012).

Knowledge sharing behaviour is defined as a process whereby tacit or explicit knowledge is exchanged and communicated to other individuals (Bulan & Sensuse, 2013). In this exchange, one party communicates knowledge and the other assimilates it and vice versa (Jacobson,

2006). According to Yun et al., (2007) Knowledge sharing behaviour is related to the employee's willingness to share their knowledge with the others in the business. It is a set of individual behaviours involving sharing one's work-related knowledge and expertise with other members within one's organisation, which can contribute to the ultimate effectiveness of the organisation (Yi, 2009). In the context of higher educational institutions, knowledge sharing behaviour refers to the behaviour by which academicians share their work-related knowledge and expertise with other colleges within the university (Li, 2013).

Vivienne and Tanya (2004) stated that academicians see knowledge as something benefited through individual experience, and it is the academician's responsibility to access, collect, and distribute knowledge used for teaching and learning. Kim and Ju (2008) stated that it is common for academics not to efficiently share knowledge with other academicians who teach the same semester or following semester. Notoriously, academicians focus only on individual academic goals rather than working together to achieve university goals, so their desire to share knowledge is pretty weak. Li (2013) asserts that academicians must change their way of thinking about knowledge sharing, since university achievement and development depends on how academicians can understand, use and assign knowledge and social communication, which brings advantages to the university.

ICT

ICT appeared as a combination of information technology (IT) and communication technology (CT). IC is everything that relates to a process, manipulation and information management, while CT is everything related to the use of tools to process and transfer data from one device to another (Parwanto and Wulansari, 2020). Within universities, ICT is closely associated with computers, the internet and all electronic devices that help academicians to prepare teaching materials using Microsoft Office (Word, Excel, and PowerPoint), communication that can be done through e-mail facilities, video conferences, live streaming etc. (Zainally, 2008). According to Williams (2015), some general forms of ICT usage within universities includes lesson preparation, researching information on various topics, printing documents, gathering ideas from colleagues, counsellors and trainers, word processing, and preparing multimedia presentations.

Issa and Haddad (2008) state that universities are investing in ICT to capture and store knowledge so that when a person leaves the university, knowledge will remain stored in the University for Future Reuse. Al-Hawamdeh (2003) asserts that leaders in the universities believe that ICT is an important enabler of knowledge sharing because it supports communications, collaboration, individual relations management, and provides access to large depositories of knowledge. Jashapara (2010) agrees that ICT tools are widely used by universities to facilitate communications and sharing knowledge using modern ICT is inevitable, it stores and presents knowledge easily wherever needed. Good ICT infrastructure is amongst the significant tools which the university needs to consider for supporting

knowledge sharing. Ryan et al (2010) suggest that the universities must develop a comprehensive ICT infrastructure to facilitate the sharing and exchange of knowledge within and outside the universities. According to Chong, et al., (2014), the use of ICT has helped academicians to communicate, obtain and reuse the knowledge created in learning, teaching, and research which in turn creates new knowledge.

Literature Review and Hypotheses Development

During the course of this research, the authors of this study were unable to find any field study that focused on investigating the relationship between organisational clarity and knowledge sharing behaviour. Various organisational factors have been identified as impediments for knowledge sharing behaviour, including organisational culture (Janz and Prasarnphanich 2003; Newell et al. 2014; Razmerita, et al. 2016), training and reward systems (Paroutis and Al Saleh, 2009;), management support, (Kirchner et al. 2008; Matschke et al. 2014), organisational values (Michailova and Minbaeva 2012), organisational structure (Ismail and Yusof 2008; Chen, et al., 2010) and information systems (Thierno and Pierre-Emmanuel,2014).

On the other hand, there are a limited number of field studies that have examined the relationship between one of the dimensions of organisational clarity individually with knowledge sharing. For instance, the finding of this study (Enrique et al., 2007) showed that the adoption of a flexible organisational structure can facilitate knowledge-sharing behaviour. Hen and Huang (2007) argue that centralisation in the organisational structure is negatively linked to knowledge sharing. While formalisation in organisational structure may encourage knowledge sharing (Raziq et al., 2020). A study by Mukamala and Razmerita (2014) has emphasised that an unclear strategy acts as a barrier to knowledge sharing behaviour. The finding of this study (Cleveland and Ellis, 2015) showed that role clarity is a factor by which knowledge sharing behaviours via ICT can be predicted.

Regarding the relationship between ICT and knowledge sharing behaviour, numerous studies have examined the positive role of ICT in enhancing knowledge sharing in an academic environment. For instance, the finding of this study (Gururajan and Fink, 2010) showed that the use of ICT, and in particular the internet, is generally regarded to improve the efficiency of knowledge sharing among academics. Wangpipatwong (2009) found that ICT availability positively influenced knowledge sharing. The study conducted by Mtega et al, (2013) established that ICTs were being used for sharing both explicit and tacit knowledge among academics in the universities. The results of a study by Hamad (2018) manifested that ICT has proven to be a most important tool to enhance and advance knowledge management process including knowledge sharing, as well, all the same, it simplifies the choice and opportunity of such operations

As per the above, the authors of this study expect that a high level of organisational clarity dimensions (role clarity, strategic clarity, organisational structure clarity, and process clarity)

can increase the level of knowledge sharing behaviour among academicians, as well as ICT acting as individual motivation for knowledge sharing behaviour of academicians. The question that now concerns us is whether ICT moderates the relationship between organisational clarity and knowledge sharing behaviour. The following is evident through the above literature:

First, the above literature showed a clear positive impact of ICT on knowledge sharing behaviour. Second according to Al-Busaidi and Olfman (2005); Jones & Linderman (2014); and Hamad (2018), ICT is an effective tool for sharing knowledge with collaboration tools that allow for lowering at least some barriers involved in knowledge sharing temporal distance, physical distance, time, and social distance. Third, the results of a previous empirical study assert that ICT tools are moderate factors that relate the university activities such as communications, collaboration, individual relations management, and the KM processes including knowledge sharing (Al-Hawamdeh;2003) Sulisworo,2012 ;). Therefore, the authors agree that ICT will enhance the strength of the effect of organisational clarity dimensions on knowledge sharing behaviour. Thus, the following hypotheses are suggested.

H1: ICT moderates the relationship between role clarity and knowledge sharing behaviour of the academicians at DPU.

H2: ICT moderates the relationship between strategic clarity and knowledge sharing behaviour of the academicians at DPU.

H3: ICT moderates the relationship between organisational structure clarity and knowledge sharing behaviour of the academicians at DPU.

H4: ICT moderates the relationship between process clarity and knowledge sharing behaviour of the academicians at DPU.

Method

A self-administered questionnaire was carried out in order to collect data. The study population is represented by academicians at the DPU in the Kurdistan region of Iraq. The number of academics reached 291 during the second semester of the academic year 2019/2020. A total of 101 complete and usable questionnaires were included in the data analyses, with a response rate of 35%. The sample comprised of 72 (71.3%) men and 29 (28.7%) women. The average age was 40.9 years. As for academic qualifications of the respondents 86 (81.1%) were master holders and 15 (14.9%) had a Ph.D. The average of their years of working at the Duhok polytechnic university was 9.6 years.

All the measures (other than the control variables) have used a five-point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Data analysis occurred using SPSS version 22. Table 1 presents the division of items by variables.

Table 1: Division of Item by variables

Variables	Number of items	Sample of items	Source
RC	3	I know exactly what I am supposed to do on my job.	Hassan (2013)
SC	3	Our university has a clear strategy that includes developing its staff and activities.	IPR (2016)
OSC	3	The organisational structure is designed to allow all employees to participate in decision-making.	Kim (2005)
PC	3	The process I use to do my job is correct and proper.	Sawyer (1992)
ICT	15	I have sufficient skills to use ICT.	Quadri & Garaba (2019)
KSB	15	I discuss with colleagues teaching experience and method.	LI (2013)

Note RC = role clarity, SC = strategic clarity, OSC = organisational structure clarity, PC= process clarity, KSB=Knowledge sharing behaviour

Results

Results of Descriptive analysis

Table 2 presents the mean & standard deviation (SD) of the variables and the Pearson correlation coefficient (r) between the variables. The mean values are showing from neutral to agree on responses (the mean values were in the range of 3.14 to 3.63). Furthermore, the standard deviation values are exhibiting the normal deviation and closer to the mean (standard deviation values were in the range 0.48 to 0.67). The correlation values showed that the dimensions of organisational clarity were positively and correlated with knowledge sharing, role clarity (r = 0.308, P < 0.01), strategic clarity (r = 0.338, P < 0.01), organisational structure clarity (r=0.363, p<0.01) and process clarity (r=0.286, p<0.01). Table 2 also clarified that ICT was positively and significantly correlated with knowledge sharing (r = 0.527, P < 0.01).

Table 2: Descriptive analysis and Correlation matrix

Variables	Mean	SD	RC	SC	OSC	PC	ICT	KS
RC	3.41	.67	1					
SC	3.32	.54	.484**	1				
OSC	3.16	.71	.726**	.350**	1			
PC	3.14	.65	.502**	.275**	.876**	1		
ICT	3.63	.48	.155	.235*	.174	.143	1	
KSB	3.50	.56	.308**	.338**	.363**	.286**	.527**	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Results of normality distribution and reliability test

A normality distribution test was carried out to ensure the data collected met the conditions for normal distribution. Table 3 shows the results of the normality distribution and reliability test. The skewness and kurtosis values were between -1 and 1. According to Kline (2011) in most studies, the acceptable values of kurtosis are 7 or below, and the accepted values of skewness range between -3 and 3. This means the data distribution in this study was at normal levels. Meanwhile, the reliability test was conducted to assess the internal consistency of each item for the constructs. According to Sekaran (2005), Cronbach alpha coefficients above 0.7 are reliable and acceptable. The summary of the reliability analysis found that all variables are consistent and reliable, as all values of Cronbach's alpha were over 0.70.

Table 3: Results of normality distribution and reliability test

Variables	Data normality		Reliability
	Skewness	Kurtosis	Cronbach's Alpha
RC	-.271	-.942	0.828
SC	-.449	.142	0.787
OSC	.353	.896	0.719
PC	.030	-.307	0.766
ICT	-.282	-.851	0.964
KSB	-.279	-.142	0.885

Results of hierarchical regression analysis

Four separate hierarchical multiple regression analyses were conducted to test the hypotheses of the study. The technique performed using the process procedure suggested by Cohen and Cohen (1983). The four dimensions of organisational clarity (role clarity, strategic clarity, organisational clarity, and process clarity) served as independent variables and knowledge sharing behaviour served as a dependent variable in each regression analysis, while ICT served as the moderator variable. We first entered gender and age as control variables due to their impacts on knowledge sharing behaviour (Boateng et al., 2015; Heisig & Kannan, 2020). In the second step, each of the four dimensions of organisational clarity were entered into four separate regression analyses. Lastly, the interaction term, which was generated by multiplying the independent variables and the moderator, was entered in the final in the regression analyses. In order to minimise multi collinearity problems, the independent variables and moderating variables were centred before putting them in the regression analyses.

The first purpose of the current study was to examine the relationship between the four dimensions of organisational clarity and knowledge sharing behaviour among teaching staff at DPU. Results for this purpose were provided in step 2 of the four separate hierarchical

regression analyses presented in Table 4. These results indicated that the relationship between the four dimensions of organisational clarity and knowledge sharing behaviour after controlling for age and gender is positively significant: β = .31, .37, .36, and .28 for role clarity, strategic clarity, organisational clarity, and process clarity respectively. The results also indicate that beyond the variance contributed by gender and age according to the values of $\Delta R2$, role clarity, strategic clarity, organisational structure clarity, and process explained 10%, 13%, 13%, and 7% of the variance in knowledge sharing behaviour respectively.

Results of the moderating effect of ICT on the relationship between organisational clarity and knowledge sharing behaviour were provided in step 3 of the four separate hierarchical regression analyses and are presented in Table 4. These results indicated the interactions between each of the dimensions of organisational clarity (role clarity, strategic clarity, organisational structure clarity, process clarity) and ICT were significantly and positively associated with knowledge sharing behaviour (β = .88, .82, .94, and .96 respectively). More specifically, the change in R^2 values (ΔR^2) due to the interaction variables (role clarity x ICT, strategic clarity x ICT, organisational structure clarity x ICT, and process clarity x ICT), were 21%, 20%, 17%, and 21% respectively, and the amount of changes were statistically significant (P< = 0.01). Therefore, these results support the existence of a significant moderating effect of ICT on the relationship between organisational clarity and knowledge sharing behaviour, and thus, support the validity of the four hypotheses of the study.

Table 4: Hierarchal multiple regression results for knowledge sharing behaviour

Steps	Model Variables	RC	SC	OSC	PC								
		B	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	β	R^2	ΔR^2
Step 1	Gender	.09	.01	.01	.09	.01	.01	.09	.01	.01	.09	.01	.01
	Age	.01			.01			.01			.01		
Step 2	Gender	.10			.17			.05			.04		
	Age	.01			-.00			-.02			-.01		
	Independent variable	.31**	.11**	0.10**	.37**	.14**	.13**	.36**	.14**	.13**	.28**	.08**	.07**
Step 3	Gender	.07			.12			.03			.02		
	Age	.06			.01			-.01			.00		
	Independent variable	-.44**	.32**	0.21**	-.33**	.34**	.20**	-.48**	.31**	.17**	-.56**	.29**	.21**
	Interaction (Independent variable x moderator variable)	.88**			.82**			.94**			.96**		

*p<.05, **p<.01

Discussion

This study explored whether ICT moderates the relationship between organisational clarity dimensions (role clarity, strategic clarity, organisational structure clarity, and process clarity) and knowledge sharing behaviour of the academics in DPU.

The result of the correlation analysis revealed that positive significant relationships exist between organisational clarity dimensions and knowledge sharing behaviour. In other words, when the level of role clarity, strategic clarity, organisational structure clarity, and process clarity increase, the level of knowledge sharing behaviour of the academics will also increase. Among the four dimensions of organisational clarity, organisational structure clarity was found to be the most important predictor of knowledge sharing behaviour ($r=0.363$). This result is in line with the point of view of Enrique et al., (2007) in that it is necessary for most organisations to adopt an organisational structure that allows them to maximise knowledge creation and sharing. The correlation results also revealed that there was a significant positive relationship between ICT and knowledge sharing behaviour ($r=0.527$), and this value is higher than all the values of the correlation coefficient between the dimensions of organisational clarity and knowledge sharing behaviour. This result reflects that ICT has a greater role in achieving knowledge sharing than organisational clarity. Therefore, if the university administration wants to achieve effective participation in knowledge sharing behaviour, it must invest in modern ITC. Based on the result, academics are urged to continue updating their ICT skills regularly through seminars, workshops, conferences and remedial courses in ICT, as this will facilitate knowledge sharing behaviour. This point of view is in line with that of Jain (2020) in that adequate application of ICT tools will help employees who are working in different organisations to share their knowledge and experiences with colleagues effectively.

The most important result of the empirical analysis is that ICT moderates the relationship between the dimensions of organisational clarity and the knowledge-sharing behaviour of academics. This result was a unique contribution to the study as no previous field study had analysed this relationship. One of the possible explanations for this result might be that the availability of ICT for academics made them more willing to share their personal knowledge because this technology provides close and frequent interaction between academics, and achieves speed and ease in sharing knowledge, as well as increases confidence among academics and creates positive feelings towards the university as a result of their feeling of perceived support by the university administration

From the results of this study, the implications for the administration of the DPU are: First, the university should provide ICT tools for staff utilisation since it will promote ICT usage for knowledge sharing behaviour. Second, compulsory ICT training should be organised for all academicians. Third, it should be made a pre-requisite requirement for all academicians to possess a basic ICT certificate qualification.

This study also helps to understand the importance of organisational clarity on the team level that contributes to the knowledge sharing behaviour among academics. The development of a university is depending on how academicians can understand, socialise, use and assign the knowledge which brings advantages to the university. The study will also help other scholars and researchers to complete their research process properly by taking reference from the current study.

Conclusion and Limitations

This study is unique because it has investigated the moderating role of ICT in the relationship between organisational clarity and knowledge sharing behaviour of the academicians. After the empirical analysis, a rich set of results were obtained. Firstly, the results indicated that organisational clarity dimensions (role clarity, strategic clarity, organisational structure clarity, and process clarity) were positively associated with knowledge sharing practice. Secondly, ICT facilities and support were positively associated with knowledge sharing. Thirdly, the results showed that all organisational dimensions had a significant influence on knowledge sharing behaviour. The most important result of this study is that ICT moderates the relationship between organisational clarity dimensions and knowledge sharing behaviour. Overall, the results have been very positive and in line with previous studies.

This study was limited to 101 respondents (response rate= 35%), so the sample size was small and it would be better to distribute questionnaires to academics of other universities to get a more representative sample. One of the future studies should look into carrying a comparative study between the public university and private university in the Kurdistan Region of Iraq in order to determine any differences existing in a relationship between organisational clarity, ICT, and knowledge sharing behaviour among academicians.

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