

KNOWLEDGE SHARING AMONG ACCOUNTING STUDENTS: EVIDENCE FROM UMM ALGURAH UNIVERSITY

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Summary: This study examines the relations of individual, classroom and technical factors with knowledge sharing behavior among 204 accounting students at Umm Algurah University for the academic year 2013/2014. Using a survey-based methodology, the results show that willingness to share, ability to share and technology support relate positively to knowledge sharing behavior among accounting students. The results of this study should be useful to educational policy makers in Saudi Arabia and elsewhere, as there is a opportunity of enhancing the knowledge sharing in the academic context

Keywords: Knowledge Sharing, accounting students, Saudi Arabia

Jel Classification Codes : A10 ; Q56 .

1. INTRODUCTION :

Today's economy is described as "a knowledge-based economy" (Alavi & Leidner, 1999; Yang, 2007). Knowledge is information presented within a particular context, yielding insight on application in that context (Norris, Mason, Robson, Lefrere & Collier, 2003). Knowledge management refers to the whole process of knowledge acquisition, representation, storage, learning, sharing and innovation in an organization. Knowledge sharing is the most important element in the subject of knowledge management (An Fengjie, Qiao & Chen, 2004). It is one of the knowledge management activities that has been widely discussed by researchers and practitioners because it is documented that there is a positive association between knowledge sharing and organization performance. This, consequently, can increase organization's resources and reduce the time wasted in trial and error (Aamin, Hassan, Ariffin & Rehman, 2009). Knowledge sharing is also described as one element in a single cycle of knowledge creation, sharing and use (Gwin, 2003). Knowledge sharing is a process of creating a mutual stock of knowledge among individuals or groups – the knowledge that someone in the organization already has – through direct or indirect interaction (Yoo, Lyytinen & Heo, 2007). Moreover, Shapira, Youtie, Yogeessvaran and Jaafar (2005) define knowledge sharing as the extent to which knowledge is being shared. In the same line, Bircham-Connolly, Corner and Bowden (2005) define knowledge sharing as the 'process of capturing knowledge or moving knowledge from a source unit to a recipient unit'.

Further, Willem (2003) indicates that knowledge sharing is the exchange of knowledge between at least two parties in a reciprocal process allowing reshape and sense-making of the knowledge in the new context. Sharratt and Usoro (2003) define knowledge sharing as 'a process whereby a resource is given by one part and received by another and for sharing to occur, there must be exchange.' An Fengjie et al. (2004) indicate that knowledge sharing involves individual, team and organization; one of the aims of knowledge sharing is to transfer knowledge from individuals to team or organization. Knowledge sharing could mean a knowledge innovation due to the fact that everybody must add his own understanding when sharing knowledge. Thus, the higher the knowledge is shared, the greater the innovation is increased with a high quality. Furthermore, there is an intuitive appeal to share knowledge throughout an organization. As organization members share valuable information in a free manner, the organization's responsiveness and effectiveness can be greatly increased in a way that those members would avoid the repeat in solving the same problems (Marks, Polak, McCoy & Galletta, 2008 .)

It is well-established by recent studies that knowledge sharing can be affected by the education level. A person with high education can be more inclined to share his knowledge because he can be perceived to have more knowledge (Aamir et al., 2009). In addition, it is reported that organizational culture in education can affect its members' knowledge sharing behavior (Yaghi, Barakat, Alfawer, Shkokani & Nassuora, 2011). Universities as knowledge-based institutions play a vital role in knowledge creation, production and distribution. The accumulated knowledge gained by students during their study period is set in their minds and establishes the storehouse of an

educational institution's intellectual capital that, therefore, can be increased if this knowledge is shared among them. Knowledge sharing issues are neglected in these educational institutions and, instead, much attention has been paid to the organizational context that are profit-motivated institutions (e.g., Ardichvili, Page, & Wentling, 2003; Han & Anantatmula, 2007; Lin, 2007a; Lin, 2007b; Riege, 2005). A few studies have addressed knowledge sharing in a classroom context (Wangpipatwong, 2009; Yaghi, Barakat, Alfawaer, Shkokani & Nassuora, 2011). Therefore, the paucity of research in knowledge sharing in educational institutions derive the motivation for investigating this issue at Umm Algurah university. Accounting students have been chosen for the purpose of this research. In particular, little is known and many questions remain unanswered about knowledge sharing in Saudi Arabia. To the best of the researchers' awareness, no empirical evidence exists that allows conclusive determinations to be made of factors influencing knowledge sharing in a classroom context among accounting students at Umm Algurah university. This paper is an attempted extension to that of Wangpipatwong's (2009) study in the context of Saudi Arabia. It is carried out in a different educational environment .

The remainder of the paper proceeds as follows. The next section briefly discusses the literature review and the hypotheses development. The third section describes the methodology. The empirical results and discussions of the study are reported in the fourth section while in the final section, conclusions and implications are drawn.

2.LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Yuen and Majid (2007) indicate that students have a willingness to share knowledge as they think that this attitude will benefit them when joining the workforce after graduating. Kristina (2006) find that perceived interpersonal trust and shared cognitive ground influence the level of knowledge sharing. Jain et al. (2007) find that academic staff at business schools in Klang Valley have a willingness to share knowledge with their colleagues. And, they rank low verbal and written communication skills as the second barrier to knowledge sharing. Riege (2005) and Cho, Li and Su (2007) indicate that the more the people possessing communication skills, the higher the knowledge they share. In another word, people owning useful knowledge and good verbal and written communication skills are more likely to be motivated to share knowledge. In the same line, Van De Hoof, Elving, Meeuwsen and Dumoulin (2003) point to the suggestion that there is a positive relationship between the ability and willingness in sharing knowledge and the level of knowledge shared. Further, Wangpipatwong (2009) find a positive relationship between the individual's ability to share knowledge and knowledge sharing. The preceding discussion leads to the first two hypotheses that test the assertion that the higher the student's ability and willingness in sharing knowledge, the more the likely the knowledge is shared :

H1: *Ceteris paribus*, there is a positive association between student's willingness to share and knowledge sharing .

H2: *Ceteris paribus*, there is a positive association between student's ability to share and knowledge sharing .

Chen, Koch, Chung and Lee (2007) show that intellectual discussions and the effective way of conducting lectures by instructors in classrooms may enhance the knowledge sharing among students. Wangpipatwong (2009) reports a significantly positive association at a 0.05 significant level between instructor's support and knowledge sharing. Accordingly, it is expected that the more the instructor's support of knowledge sharing, the higher the level the knowledge is shared among students. The above discussion results in the following hypothesis:

H3: *Ceteris paribus*, there is a positive association between instructor's support to share and knowledge sharing .

Technology is a crucial factor facilitating the knowledge sharing among members of a social system in a manner that it becomes easier and more effective. This is because technology enables long distance collaboration that, in turn, enhances the connectivity among people (Wangpipatwong, 2009; Van den Hooff et al., 2003; Riege, 2005; Bhatt, 2001; Kim, Suh & Hwang, 2003). The study of Jain et al. (2007) document that the academic staff rank technology as a second strategy to be implemented by business schools in Klang Valley to encourage knowledge sharing. In the same vein, Han and Anantmula (2007) find that availability and usability of technology have an association with the level of knowledge sharing. Kim and Lee (2005) find that IT applications are one of the key variables affecting knowledge sharing activities. Wangpipatwong (2009) reports that technology support has a significantly positive association with knowledge sharing among students. In light of the above discussion, the following hypotheses are proposed :

H4: *Ceteris paribus*, there is a positive association between technology availability and knowledge sharing .

H5: *Ceteris paribus*, there is a positive association between technology support and knowledge sharing .

.3METHODODOLOGY

Riege (2005) indicates that there is a positive association of individual, organizational, and technological factors with knowledge sharing. Unlike the study of Riege (2005) that has been carried out in an organizational context, Wangpipatwong (2009) adopts and modifies Riege's (2005) study to be applicable for an educational institution as her study examines knowledge sharing among university students. In her study, factors associated with knowledge sharing have been divided into three groups; individual, classroom, and technological factors. Yaghi et al. (2011) examine the Jordanian undergraduate students' perception of knowledge sharing at Applied Science Private University. Their study identifies several dimensions including university culture, university structure, students, and information resources. In addition, at the university level, Cheng, Ho and Lau (2009) examine the knowledge sharing among academics at Multimedia University Malaysia. In their study, factors influencing the level of knowledge sharing are classified into organization,

individual and technological factors. Jain, Sandhu and Sidhu (2007) carry out a study to investigate the knowledge sharing among academic staff at business schools in Klang valley universities. In their study, the respondents are asked to ascertain their views of the significance of knowledge sharing, strategies to encourage knowledge sharing, and strategies to identify the barriers in knowledge sharing .

Based on the theories developed and derived from the prior literature (Cheng et al., 2009; Yaghi et al., 2011; Riege, 2005; Jain et al., 2007; Chen, Koch, Chung & Lee, 2007; Han & Anantamtmula, 2007; Lu, Leung & Koch, 2006; Van Den Hoof & Huysman, 2009; Wangpipatwong, 2009; Cheng et al., 2009), the present study uses a survey-based methodology to obtain data from the respondents. This study adopts and modifies a self-administrative survey questionnaire that has been developed to be applicable for the academic context. The questionnaire was divided into two sections, namely; section A and section B. Section A comprised 17 questions designed to ascertain the views of the accounting students on factors influencing their knowledge sharing among each other. A five-point Likert scale was used in this section and the respondents were required to state the extent to which they agreed or disagreed with the statements in the questionnaire. Section A comprised questions eliciting demographic characteristics. The sample of the study comprised 204 accounting students enrolling for the academic year 2013/2014 at Umm Alqura University in Saudi Arabia. A total of 280 questionnaires were distributed to all accounting students during classroom time using a simple random sampling. Students were asked to return back the questionnaires after two weeks. The response rate for this study was 73%.

Variables included in the model of this study are individual, classroom, and technological factors to identify reasons contributing to knowledge sharing behavior among students. Knowledge sharing is used as the dependent variable in the model. To measure the impact of the individual factors, a 3-item measure was used to examine the willingness to share and a 3-item measure was used to test the ability to share on knowledge sharing behavior. As for classroom factor, a 3-item measure was used to examine the instructor’s support in classrooms on the knowledge sharing behavior. In terms of technological factors, a 3-item measure was used to test the technology availability and a 3-item measure was used to examine the technology support on the knowledge sharing behavior. The dependent variable “knowledge sharing” is measured using a 3-item measure to determine the extent to which knowledge is shared among students. The functional equation of regression model is utilized to determine the extent of the association of each of the independent variable on knowledge sharing as shown in Equation (1)

$$KS = \beta_0 + \beta_1 \text{ Willingness} + \beta_2 \text{ Ability} + \beta_3 \text{ Classroom} + \beta_4 \text{ Tech.Availability} + \beta_5 \text{ Tech.Support} \dots\dots\dots(1)$$

.4EMPIRICAL RESULTS AND DISCUSSIONS

4.1 Respondent’s Profile

Demographic characteristics of students in this study are age, level of study and CGPA as shown in Table 1.

Table 1: Profile of respondents

Demographic characteristics	Frequency (n= 204)	Percent%
Age		
21 >26	12.7	
24> -21	144	70.6
27> -24	28	13.7
30> -27	4	2.0
30and above	2	1.0
Level of study		
Freshmen	11	5.4
Sophomore	40	19.6
Junior	52	25.5
Senior	101	49.5
CGPA		
1> 3	1.5	
2> -1	35	17.2
3> -2	108	52.9
3and above	58	28.4

Based on the demographic information depicted in Table 1, the majority of students (70.6%) were between 21 and less than 24 years. The highest number of students (49.5%) comprise of senior students. In terms of CGPA, the majority of students (52.9%) obtained between 2 and less than 3 cumulative grade point average.

4.2 Reliability Test

The dependent and independent variables examined in this study were tested for their reliability as shown in Table 2. The reliability indicates to the accuracy which concern on stability, dependability and consistency of an instrument. In this study, the Cronbach's alpha coefficient is used, which based on the average correlation of items within a test if the items are standardized. Hari, Anderson, Tatham and Black (1998) document that the lower limit of acceptability may be

.60.

Table 2: Mean scores and analysis of internal consistency

Variables	No. of Items	Mean	SD	Cronbach's Alpha
Willingness to share	3	3.837	678.	726.
Ability to share	3	3.407	751.	626.
Instructor support	3	3.471	1.022	815.
Technology availability	2	4.150	676.	624.
Technology support	3	4.039	907.	882.
Knowledge sharing	3	3.494	818.	704.

As displayed by Table 2 that all the alpha coefficients exceed the recommended minimum cutoff level of .60. In specific, degree of competition factor and one item of technology availability were dropped off because their alpha coefficients were less than .60. Thus, the items measuring the variables are considered acceptable. In another word, the instruments are reasonably accepted for the purpose of reliability.

4.3 Regression Results

Table 3 shows that the coefficient of determination (R²) for the model is equal to 23.9 per cent which means that all the variables accounted for 23.9% of the variance in knowledge sharing. The table also depicts that the model is a statistically significant where the F test statistic = 12.412 with a p-value < 0.000.

Table 3: Summary of the model

R	R square	Adjusted R square	F	Sig.
489.	239.	12.412	000.	

Table 4: The results of the regression

Variables	Expected sign	Coeff.	t	p-value	Tolerance	VIF
(Constant)		.477	1.117	265.		
Individual factors						
Willingness to share	+	262.	3.181	002.	825.	1.213
Ability to share	+	248.	3.402	001.	858.	1.165
Classroom factor						
Instructor support	+	086.	1.676	095.	937.	1.068
Technological factors						
Technology availability	+	050.	623.	534.	872.	1.146
Technology support	+	163.	2.726	007.	872.	1.147

Table 4 shows the beta coefficients for the independent variables. The largest t statistics is -3.402 (p-value < 0.001) which is the ability to share. This indicates that the accounting students' ability to share knowledge has a degree of importance in explaining the knowledge sharing behavior. This result is similar to that found by Wangpipatwong (2009). The second largest t statistics is 3.181 (p-value < 0.001) which is the willingness to share knowledge. This shows that the accounting students' willingness to share knowledge has a significantly positive association with knowledge sharing behavior. The third largest t statistics is 2.726 (p-value < 0.007) which is the technology support. This illustrates that the technology support influences positively knowledge sharing behavior. This result is in line with that found by Wangpipatwong (2009). Thus, hypotheses H1, H2 and H5 were supported.

.5CONCLUSIONS AND IMPLICATIONS

The main objective of this study is to examine the factors influencing the knowledge sharing behavior. A sample of 204 accounting students at Umm Algurah University in Saudi Arabia enrolling for the academic year 2013/2014 is used for distributing out a survey questionnaire as a means of collecting data. Three groups that comprise of five factors; individual factors (willingness to share and ability to share), classroom factor (instructor support) and technological factors (technology availability and technology support), are determined as contributing factors influencing the extent to which knowledge is shared among students. Using the multiple regression, consistent with the previous studies, this study finds that the willingness to share, ability to share and technology support are important factors influencing the level of knowledge sharing among accounting students .

This study suggests that individual characteristics of students such as their willingness and ability to share knowledge and technological support are among the most influential factors determining the extent of knowledge sharing among accounting students in Saudi Arabia. This implies that Saudi government, educational policy makers and universities should motivate educational environment by building up students' knowledge and enhance their confidence in sharing this knowledge. One technique of doing so is by designing short teaching method courses through which university lecturers can learn how to run successful classes and encounter the students' different necessities. In addition, lecturers should encourage students to involve in library activities and assigning library hours in students' schedule. Further, colleges should conduct conferences, seminars and workshops that enhance the students' ability in using IT applications. More so an attempt should be made to update and keep pace with the current developments and issues in academic research and database .

One limitation of this study could be attributed to the self-reporting bias. Filling in the survey questionnaire, students may misreport their opinions to make the surveys look better. Another limitation of this study is the number of factors introduced in the model. The results of this study will be of interest to the educational policy makers, researchers and academic community due to a lack of formal research body addressing the issues of knowledge sharing in Kingdom of Saudi Arabia and, therefore, this study will provide with substantial information about issues in the educational context of Saudi Arabia to count on, in the future, as premise data. Regarding future line of research, efforts should be put at introducing other individual and classroom factors such as individual attitudes, IT applications and library databases. Future line of research may investigate the knowledge sharing behavior among academic and administrative staff. Further research should replicate this model to determine its validity in different contexts of GCC countries, in different time periods, and with different sample size. These limitations may motivate more future research in the GCC setting .

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