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A Study of Commonly Shared Knowledge among Postgraduate Students in Obafemi Awolowo University, Ile-Ife, Nigeria

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ABSTRACT

This study assessed knowledge commonly shared by postgraduate students in Obafemi Awolowo University. The study also investigated factors that influence postgraduate students' knowledge sharing. The study was a descriptive survey design which involved the design of questionnaire which was validated by means of Cronbach's coefficient alpha of (0.70). The questionnaires were administered on (503) postgraduate students. The findings revealed that knowledge in the areas of individual studies was the most commonly shared knowledge among the majority (92.8%). The study further revealed that of the three identified factors (individual, institution and technology factors) influencing knowledge sharing among the postgraduate students, only individual factor ($\beta = .085$, $p < 0.05$) was shown to significantly influence students' knowledge sharing bahaviours. The study suggests further research in such areas as: the construction of shared knowledge in collaborative problem solving and computer-supported collaborative learning among postgraduate student in Nigeria.

Introduction

Universities are foremost players in the knowledge industry. They benefit from knowledge sharing practices and solutions. In fact, the existence of the universities is based on knowledge generation and sharing. Universities engage in an unending process of inquiry (Humboldt, 1970). As universities thrive to stay relevant in a knowledge society characterised by the emergence of new knowledge markets and the entrance of new market players, knowledge sharing in the universities is becoming a vital competitive weapon. Besides the application of knowledge sharing practices and institutional processes and strategy, the university's research process represents a key area, which can be enhanced through the application of knowledge sharing practices.

The knowledge management approach supports a culture of inquiry and continuous improvement, which can provide the appropriate mechanisms for institutions to deal with a climate of increasing accountability and students' academic performance (Ewell, 1994 and Zumeta, 1998). According to Lisa (2004:3):A KM approach is the integration of the people, processes and technology involved in designing, capturing and implementing the intellectual infrastructure of an organisation that encompasses not only the design and implementation of information systems but also the necessary changes in management attitudes, organisational behaviour and policy.

In the view of Rashmi (2009),to share knowledge means to learn, understand, extend and repeat the information, the ideas, the views and the resources with each other, connected with (on a specific ground) an activity through which knowledge (i.e. information, skills, or expertise) is exchanged among people, friends, or members of a family, a community, an organisation or collaborative parties. Further, Heng-Li *et al.* (2006) opined that knowledge sharing is 'an activity through which knowledge from one person, group or organisation transfers or spreads to another person, group or organisation'. According to Chua (2003), knowledge sharing is the process by which individuals collectively and socially refine a thought, an idea or a suggestion in the light of experience. Bircham-Connoly*et al.* (2005) similarly described knowledge sharing as 'the process of capturing knowledge or moving knowledge from a source unit to a recipient unit'- implying that knowledge-sharing presumes at least two kinds of people to engage in, one who possesses knowledge and the other who requests for acquired knowledge (Hendriks, 1999).

Rowley (1999) proposed four objective economy namely: creating and maintaining knowledge repositories; improving knowledge access; enhancing the knowledge environment and valuing knowledge. Educational institutions play a significant role in promoting knowledge sharing with a view to improve students' learning opportunities and enhance their academic goal orientation and performance (Kumar, 2005). Learning opportunities can allow students to acquire new knowledge and skills. Such opportunities may take place outside the classroom and among different calibres of people ranging from students to scholars. Learning opportunities makes knowledge sharing process to be unique in that not only does the knowledge recipient benefit from the acquisition of knowledge, but the act of sharing can stimulate learning on the part of the knowledge provider (Elliot and McGregor, 2001; Swift, David and Matusik, 2010).

According to Nonaka and Teece (2001), 'knowledge sharing formed a collaborative synergy, which predicted higher performance and stakeholder satisfaction.' Various forms of learning, ranging from simple to complex have been identified. Simple learning involves the use of the sense organs such as sight, sound, smell, touch or taste, while complex forms of learning include learning languages, concepts and motor driving skills. Scholars such as Jennifer (2001), Valle and Avella

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(2003)reported that learning and knowledge are closely linked and that effective knowledge sharing needs to embrace and develop the achievements that have been associated with the implementation of the concept of learning. Experts in education such as (Bloom and Krathwohl, 1956) established that the generally accepted taxonomy of learning consists of three domains: cognitive, affective and kinesthetic.

The advent of the Internet has contributed enormously to the way people share knowledge particularly among postgraduate students in the universities (Jashapara, 2004). The Internet has greatly promoted knowledge sharing among teachers and students. It has influenced knowledge acquisition, timely information processing, storage, transfer of knowledge and information. Internet technologies such as emails, blackboards, blogs, wikis, instant messaging systems, face book and twitter have been greatly recognised as valuable tools in knowledge sharing practice among people (Farkhondeh and Vimala 2011).

Knowledge sharing involves the creation and exchange of expertise, happenings, opinions or understanding of ideas and hands-on applications, thereby improving learning and expertise. Riege (2005), and Chen, *et al. (*2007) identified factors that influence knowledge sharing to include individual, classroom and technological factors. They stressed that, individual factor is dependent on willingness and ability to share; classroom factors could be justified based on instructor's support and the degree of competition among students, while technological factor is dependent on the technological availability and support.

Objectives

This study investigated the knowledge commonly shared by the students of Obafemi Awolowo University, Ile-Ife,. It also assessed the factors that influence knowledge sharing among postgraduate students in the same university.

Literature Review

Knowledge sharing is the most commonly discussed of all knowledge management activities. It is the process where individuals mutually exchange their knowledge and jointly create new knowledge. It has been described as 'shared practices and activities, the sharing of information and exchanges of best practices'. At the individual level, knowledge sharing involves talking to colleagues in getting things done better, more quickly or more efficiently. At the institutional level, knowledge sharing involves capturing, organising and transferring experience-based knowledge that resides within the organisation and making it available to others not only in business strategies, but also in changing employees' attitudes and behaviours to promote willingness and consistent knowledge sharing (Cordoba and Isabel, 2004).

Like any other initiative, obstacles to knowledge sharing success are enormous because in most cases people naturally tend to hoard knowledge for several reasons known to them. Nevertheless, experts have further identified cross-functional decision making, robust information systems infrastructure, rewards and incentives based on using data to monitor programs and provide feedback on change and increased responsiveness to individuals' needs as indicators for knowledge sharing practices. Other factors used in measuring knowledge sharing practices include leadership support, organisational culture, processes, organisational structure and strategy (Lisa, 2004); (Hariharan, 2005);Wong, 2005; (Riege, 2005); (Artail, 2006). Kimberly *et al*. (2001) documented that measuring knowledge sharing (KS) practice in any environment is not a simple process but a practice that is apparent over time.

Riege (2005), and Chen, et *al., (*2007) identified factors that influences knowledge sharing to include individual, classroom and technological factors. They stressed that, individual factor is dependent on willingness and ability to share; classroom factor could be justified based on instructor's support and the degree of competition among students, while technological factor is dependent on the technological availability and support. Nonaka and Konno (1998) expounded that the knowledge sharing process includes socialisation (sharing experiences), externalisation (articulating implicit knowledge into explicit concepts), combination (synthesising and systematising fragments of explicit knowledge) and internalisation (turning explicit knowledge into tacit knowledge by applying it in real situations).

Scholars such as Riege, (2005) identified series of knowledge sharing obstacles which include: lack of time, fear of lost job security, lack of social network, education, fear of loss of ownership etc. Sharratt and Usoro (2003) cited in Farhondeh and Vimala (2011) identified factors such as the university structure and culture, technical aspect, sense of community, rewards motivation, attitudes, and intention to share knowledge, trust, lecturer's computer skill, benefit and privacy to have direct links with knowledge sharing. Ojha (2005) documented that knowledge sharing can be impacted by the mother tongue of individuals or groups. There is also ease of technology, cultural, individual, social barriers, reciprocity, personal gain, altruism, commitment to group and external goals (Khe and Noriko, 2007).

Methodology

The research design was basically descriptive survey design which involved the administration of well-thought-out questionnaire and personal observation to the respondents. The questionnaires which comprised six main sections with a total of 32 items (Table 1) were administered to five hundred and three (503) Masters (MSc) and Doctorate (PhD) students. This technique was considered appropriate since it allowed research questions to be addressed in a logical order. The questionnaires were validated using Cronbach's coefficient alpha of (0.70).

The researcher made personal observation on the various facilities put in place across faculties and halls of residents as well as the library that could encourage knowledge sharing behaviour among the students, this was with a view to corroborate the results of the survey with the personal observations to be able to empirically document this behaviour as it occurs among the postgraduate students. Data analysis involved both descriptive and inferential statistics such as the simple frequency counts, percentage distribution, mean, standard deviation and regression analysis. The regression analysis was carried out to be able to establish the influence of specific factors on knowledge sharing behaviours of the postdate students.

Results and Discussion

Table 1 provides some basic demographic information on age, sex, religion, marital status and faculties of study. The table presents several important measures of students' reactions to completing the research instrument. The table shows the mean age of the respondents was (32.4 years) with majority 59.7 percent in the age group of 26-35 years. Besides, 65.6 percent male while female was 34.4 percent. In addition, 86.2 percent were Christians and Muslims 13.4 percent while others 0.4 percent. Also, 54.8 percent singles while married 45.0% and divorced 0.2 percent. Finally, 59.4 percent were in Science & Technology faculties while 40.6 percent in Art & Humanities.

Table 1. Distribution of Respondents' by Socio-demographic Characteristics

Parameters	Classification (n = 503)	Percentage (%)
Age	< 26	13.4
	26-35	59.7
Mean age (32.37)	36-45	21.5
	46-55	4.1
	>55	1.4
Sex	Male	65.6
	Female	34.4
Religion	Islam	13.4
	Christianity	86.2
	Others	.4
Marital Status	Single	54.8
	Married	45.0
	Divorced	.2
Faculty of Study	Art & Humanity	40.6
	Science & Technology	59.4

Table 2. Knowledge Commonly Shared Among Postgraduate Students In Nigerian Universities

Types of knowledge	N	Not important	Somewhat important	Important	Crucial	Mean	SD
Knowledgein area of my studies	496	10(2.0)	26(5.2)	285(57.5)	175(35.3)	3.26	.647
sport news	441	129(29.3)	168(38.1)	128(29.0)	16(3.6)	2.07	.851
Social news	489	36(7.4)	142(29.1)	289(59.1)	22(4.5)	2.61	.690
Campus News	482	33(6.8)	152(31.5)	279(57.9)	18(3.7)	2.59	.675
library experience	483	61(12.6)	89(18.4)	290(60.0)	43(8.9)	2.65	.812
Religious news	477	38(8.0)	111(23.3)	276(57.9)	52(10.9)	2.72	.763
Political news	482	35(7.3)	99(20.5)	276(57.3)	72(14.9)	2.80	.778

Table 3. Regression Analysis of Factors Influencing Knowledge Sharing Bahaviours of Postgraduate Students in Nigerian Universities

Parameters	(β)	Std. Error (β)	Beta in	t	Sig (p)
(Constant)	2.812	.103		27.199	.000
Individual factors	.085	.039	.129	2.160	.031
Institution factors	-.013	.047	-.020	-.268	.789
Technology factors	-.036	.045	-.056	-.790	.430

Table 4. Factors Influencing Knowledge Sharing among PG Students in OAU

Individual Factors	N	NI	SI	I	C	Mean*	SD
Students' unwillingness/intention to share knowledge with others	486	2(.4)	34(7.0)	331(68.1)	119(24.5)	3.17	.551
Students' cognitive inability to Share knowledge with others	482	5(1.0)	33(6.8)	300(62.2)	144(29.9)	3.21	.605
Students' inability to communicate easily with others	480	2(.4)	24(5.0)	251(52.3)	203(42.3)	3.36	.598
Lack of Trust	483	9(1.9)	45(9.3)	293(60.7)	136(28.2)	3.15	.654
In ability to belonging to a discussion group	503	41(8.6)	92(19.4)	255(53.8)	86(18.1)	3.25	.614
Individual's Attitude	474	4(.9)	32(6.8)	275(58.5)	159(33.8)	2.81	.830
Individual personality	471	12(2.5)	37(7.9)	208(44.2)	214(45.4)	3.32	.728
Institutional Factors	N	NI	SI	I	C	Mean	SD
Inadequate provision of sufficient books and other non-books resources in School Library	483	9(1.9)	25(5.2)	305(63.1)	144(28.6)	3.21	.618
Lack of reward and motivation for knowledge sharing	479	36(7.5)	56(11.7)	266(55.5)	121(25.3)	2.99	.819
Inadequate provision of basic infrastructure; e.g. electricity	481	0	14(2.9)	137(28.5)	330(68.6)	3.66	.533
Insufficient PG reading/seminar facilities in each faculty	476	2(0.4)	18(3.8)	335(70.4)	121(25.4)	3.21	.516
Poor university structure and culture for knowledge sharing	477	12(2.5)	29(6.1)	335(70.2)	101(21.2)	3.10	.603
Technology Factors	N	NI	SI	I	C	Mean	SD.
Unavailability of internet facilities across the campus	484	5(1.0)	19(3.9)	272(56.2)	188(38.8)	3.33	.602
Lack of provision of intercom technology for knowledge sharing	484	27(5.6)	38(7.9)	325(67.1)	94(19.4)	3.00	.705
Poor access to internet either on campus or in the PG halls of resident	484	3(0.6)	10(2.1)	305(63.3)	164(34.0)	3.31	.541
Limited wireless internet services for students' use	480	4(0.8)	23(4.8)	309(64.4)	144(30.0)	3.24	.571
unavailability of e-library for students use	480	5(1.0)	11(2.3)	286(59.6)	178(37.1)	3.33	.574

*Mean of 1= Not important, 2= Somewhat important, 3= Important and 4= Crucial

Table 2, revealed that the commonly shared knowledge among the postgraduate students is knowledge in their areas of studies (92.8%) with a mean of (3.26). Other commonly shared knowledge include sport news (32.6%) with mean of (2.07), social news (63.6%) with mean of (2.61), campus news (61.6%) with mean of (2.59), library experience (68.9%) with mean of (2.65), religious news (68.8%) with mean of (2.72) and political news (72.2%) with mean of (2.80) respectively. The study identified three broad factors influencing knowledge sharing practices as shown in Table 3, of the three identified factors, only individual factor ($\beta = .085$, $p < 0.05$) was shown to significantly influence students' knowledge sharing bahaviours.

Table 3 showed that PG students in OAU shared knowledge more in the areas of their studies. This was reflected as majority (92.8%) with a mean of 3.26 shared more knowledge in their areas of studies. This indicates a strong attachment to knowledge that has primarily brought the students to the university, which also has the potential to enhance students' academic goal orientation. Aside from knowledge in the students' areas of study, other knowledge types that were commonly shared include sport news (32.6%) with mean of 2.07, social news (63.6%) with mean of 2.61, campus news (61.6%) with mean of 2.59, library experience (68.9%) with mean of 2.65, religious news (68.8%) with mean of 2.72 and political news (72.2%) with mean of 2.80 respectively. These findings are expected, as students would normally be interested in sharing knowledge in the areas of their studies. Political news got the second position in terms of most commonly shared knowledge. This showed that PG students at OAU were not only interested in academics but also in politics. It was further observed from the analyses that sport news scored the least of all the commonly shared knowledge among PG students in the university. This is not expected as most of the students were under the ages of 35 years and they are expected to have some level of affection for popular activities such as sports. Additionally, from the observations made by the researchers, the university has a sport complex where people go to engage in different kinds of sporting activities. Nevertheless, the analysis suggests either that not much was going on in the campus or that the students were more academic inclined than other activities.

Table 4.present three main factors influencing knolwdge sharing were identified (individual, institutional and technology factors). Of these three factors, technological factors tends to be more pronouced followed by institutional factors while individual factors scored the least in terms of the mean scores. Furthermore, the analysis showed that all the five technology factors had mean scores of 3 points and above. In a similar vein, four out of the five institutional factors had means of 3 points while only lack of reward and motivation for knowledge sharing had the least mean score of 2.99. Regarding the individual factors, only individual's attitude had the mean of 2.81, while the other six factors had minimum mean scores of 3 points. When it comes to degree of importance, inadequate provision of basic infrastructure 68.6% was the most crucial institutional factor influencing knowledge sharing among postgraduate students in Obafemi Awolowo University.

Summary Statistics

R Square	= .010
Adjusted R Square	= .004
Std. Error of the Estimate	= .48617
Durbin-Watson	= 1.933

At 0.05 level of significant

The table revealed that only individual factor ($\beta = .085$, $p < 0.05$) significantly influenced knowledge sharing and academic goal orientation of Postgraduate Students in Obafemi Awolowo University.

Conclusion and direction for future studies

This study is concerned with examining the knowledge sharing behaviour of Master's and Doctoral students in higher institutions. It highlights the differences in knowledge sharing behaviour of graduate students. This is necessary for the government, educators and other stakeholders to plan the graduate research process of the Nigerian institutions with these special factors taken into consideration. This study also found out that the motivating factors for knowledge sharing among postgraduate students differ from what is found in the corporate world, due to the difference in goals of students. Factors such as extrinsic rewards and monetary gains had no impact on the knowledge sharing behaviour of the respondents. In addition, infrastructure and institutional resources, including the library in the university were inadequate as an organisational tool to facilitate the exchange and dissemination of knowledge. Within the context of this article, these institutional structures and educational resource were found to be insufficient for carrying out knowledge sharing and effective research activities. The study therefore suggests further research in such areas as: the construction of shared knowledge in collaborative problem solving and computer-supported collaborative learning among postgraduate student in Nigeria.

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