Social Influence as Determinant of Awareness and Use of Electronic Databases by Academic Staff in University

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Abstract
The purpose of this study is to analyse the affect of the social influence construct on awareness and use of electronic databases by academic staff in Umaru Musa Yar'adua University, Katsina. Quantitative method and survey research design were adopted for this study. The study was guided by the Unified Theory of Technology Acceptance and Usage (UTAUT). The study targeted 110 respondents selected through simple random sampling from a population of 523 academic staff at seven Faculties and the University Library. The data was collected using closed-ended questionnaire with Likert scaling technique. The data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 23. The findings revealed that awareness and use of electronic databases is significantly associated with social influence construct. Additionally, influence of colleagues, librarians, behavioural intention and surfing through the internet were found to have significant impact on the awareness and use of the electronic databases. Furthermore, social media, e-mail and mimetic were found to be less influencing. These findings have significant implications for practitioners and library management. This study recommended that the university library management and the e-librarians should embrace many strategies to increase awareness and use of electronic databases. These strategies include leveraging on social media platforms and e-mail to reach out to the members of the university community.

Keywords: Awareness, Electronic databases, Academic staff, Unified Theory of Acceptance and Use of Technology (UTAUT), Social Influence

Introduction
Electronic databases (refer after as e-databases) are the most used technological innovations that provide access to current, relevant, and up-to-date information to a community of users (Adam, 2018). E-databases are playing significant roles towards teaching, learning and research. However, research has noted that e-databases often remain under used by academic staff. Studies (Faletar, Dragija & Cupar, 2017; Togia & Tsigilis, 2009) have reported that the use of e-databases is fraught with many issues. These issues include lack of awareness, inadequate searching skills, lack of access to e-databases outside the university campus, lack of assistance from librarians, lack of time to spend on searching among others. Aina

(2014) concluded that lack of awareness constitute the key factor against the effective use of electronic databases. In addition, Ankrah and Atuase (2018) noted that users can only access and utilize e-databases when they are aware of their availability. Hence, it would be highly difficult to access and use resources that you are not aware of even if they are available in the library. To that end, awareness of subscribed e-databases by academic staff cannot be over-emphasized.

Accordingly, Suleiman and Joshua (2019) stated that there are inverse and weak relationships between awareness and utilization of e-databases among academic staff of tertiary institutions in Nigeria. Therefore, this study, applied the Unified Theory of Acceptance and Use of Technology (UTAUT) model to analyse the general perceptions of academic staff on the affect of social influence on awareness and use of e-databases at Umaru Musa Yar'adua University, Katsina.

Technology acceptance models/theories are used in studies predicting and explaining individual's behaviours towards the acceptance and usage of new technologies. The UTAUT explains user intentions for using an information system (IS) and subsequent usage behaviour. The theory holds that four key constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) are direct determinants of usage intention and behavior (Venkatesh, Morris, Davis, & Davis, 2003). In this study, the social influence construct is applied to address the objective of this study.

According to Venkatesh et al. (2003), Zhang, Zou, Miao, Zhang, Hwang, and Zhu (2019), social influence is the degree to which an individual perceives that using a system might be due to the influence of individuals around him/her. This point out that social influence is significant for the awareness and use of the systems. Baruchson-Arbib (2007) states that a potential user of new technology can only become aware of that technology through the influence of individuals around him/her. Based on these facts, this study aims to:

1. Determine how social influence construct affect awareness and use of electronic databases by academic staff in Umaru Musa Yar'adua University, Katsina

Literature review/Theoretical foundation

The Unified Theory of Acceptance and Use of Technology (UTAUT) were developed by Viswanath Venkatesh, Michael Morris, Gordon Davis, and Fred Davis in 2003. These scholars proposed and validated the model based on a social cognitive theory with a combination of eight prominent IT acceptance research models. These IT acceptance models are the Theory of Reason Action (TRA) (Fishbein and Ajzen 1975); Social Cognitive Theory (SCT) (Bandura 1986); Technology Acceptance Model (TAM) (Davis 1989); Theory of Planned Behaviour (TPB) (Ajzen 1991); Model of Personal Computer Utilisation (MPCU) (Thompson et al. 1991); Motivational Model (MM) (Davis et al. 1992); Combined TAM and TPB (C-TAM-TPB) (Taylor and Todd 1995); and Diffusion of Innovation Theory (DOI) (Rogers 1995). Venkatesh et al. (2003) examined the predictive validity of the eight models in determining the behavioural intention and usage to allow a fair comparison of the models. As noted by Alatawi, Dwivedi, Williams and Rana (2012), the model was proposed and validated to provide a unified theoretical basis

to facilitate research on information system (IS) and information technology (IT) adoption and diffusion.

The UTAUT integrates issues from the eight different theories/models into four main core determinants: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), and four control variables, which are: Gender, Age, Experience and Voluntariness to Use. Venkatesh et al. (2003) pointed out that the purpose of the UTAUT model is to offer management tools, to weigh the introduction of new technology, and predict and explain the user's behavior in accepting IT. The theory holds the four key constructs (PE, EE, SI, and FC) as direct determinants of usage intention and behaviour as shown in Figure 1. Gender, age, experience, and voluntariness of use are posited to moderate the impact of the four key constructs on usage intention and behavior. Although the UTAUT model was used initially in developed countries, it could also be adopted in the African context as well. Notable African researchers, for example, Alabi (2016), Machimbidza (2015), Attuquayefio and Addo (2014), Dulle and Minishi-Majanja (2011), and Sreenivasarao (2013) have all used the model in their research. Figure 1 below depicts the UTAUT model's constructs or variables and its moderators.
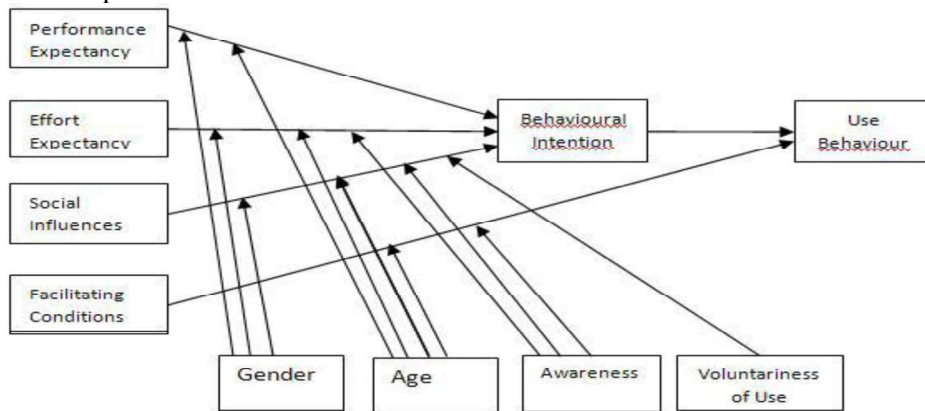

Figure 1: The Unified Theory of Acceptance and Use of Technology model

Social Influence (SI) Context

Social influence is the degree to which the user perceives that using a system might be due to the influence of individuals around him/her (Venkatesh, 2003). This variable has been arranged from the three sub-dimensions from the documents in the past, which are 'subjective norm' (TRA, TAM, TPB/DPTB, C-TAM/TPB), 'social factor' (MPCU), and 'public image' (DOI). This construct was found to be helpful in the current study in determining the general perceptions of the academic staff on the influence of librarians and colleagues around them towards the awareness and use of e-databases. According to Anna and Leelanayagi (2014), awareness is an important factor that affects and builds the right perceptions towards adopting an IT system. Anna and Leelanayagi further stated that the SI construct is specifically meant to communicate the technology via awareness as a moderator over time among the members of a social system. Accordingly, Dulle, and Minishi-Majanja (2011) identified age, awareness, experience, gender, and

position as UTAUT moderator variables. These scholars advanced that system awareness affects PE, and IU of open access resources. Similarly, researchers (Al Awadhi & Morris, 2008; Rogers, 1995; Taylor & Todd, 1995; Venkatesh et al., 2003; Rogers, 2003) have reported that social influence is important in persuading acceptance and use of new technology.

Awareness of the e-databases among library users is essential to their adoption and use in any library. This is because, it would be difficult for a library user to access and use resources that he or she is unaware of, even if the person possesses all the necessary skills (Acheampong, Boakye & Agyekum, 2019). Adam (2017) defined awareness as knowledge, perception of a situation, consciousness, recognition, and familiarity with or knowledge of the subject matter. Basiru and Okwilagwe (2018) emphasised that awareness is the ability of people to realize or know that something exists. This implies that awareness of e-databases by academic staff in institutions of higher learning is important because the ultimate use of the e-databases is for academics to be aware of and use them effectively to contribute to academic achievement.

Therefore, from this perspective, awareness of e-databases is all about informing the users about the subscribed databases available. Awareness could be through various programmes such as promotion and marketing, user education, library bulleting, notice boards, fliers, library websites, training, and orientation. For easy access and effective use, it becomes necessary for users to be aware of the e-databases available to them. Baro, Endouware and Ubogu (2011) and Togia and Tsigilis (2010) have asserted that lack of or low awareness of the existence of information resources constitutes a major impedance to their use. Accordingly, awareness of e-databases among academic staff is a topical issue that has drawn the attention of many scholars not only in developing countries but also in developed countries.

Typical studies in the developed world include for example, Tracy and Searing's (2014) study on the use of electronic databases at the University of Illinois, USA. The study found that slightly over 80% of respondents were aware and used article databases every week or more often. A similar study was conducted by Vakkari (2008) at Carnegie Mellon University, USA, which found that the majority (78%) of users were aware and used university library databases. The situation in the UK indicates that considerable efforts were put into place to raise awareness of Open Access in the research community. Although there have been some successes over the last few years, the general level of knowledge and understanding is still low.

From the developing countries context, Tukey, Atakan, Atilgan, and Arslantekin (2008) reported that academics in all departments in the Ankara University were informed and aware about the electronic databases and majority of them were found to be using them. However, in Pakistan, Ansari (2010) revealed that most of the faculty members at the University of Karachi did not know much about the e-journals and databases available in the university library. Ansari observed that lack of awareness was one of the reasons for the non-use of e-journals. In Sri Lanka, Punchihewa (2014) reported that academic staff at the

University of Moratuwa lack awareness of electronic databases provided by the library.

In Africa, some scholars have indicated that the awareness of e-databases among academic staff is very low. For example, in Ghana, Dukper, Bawa, and Arthur (2018) showed that despite the significance of e-databases; it appears that users of the Tamale Technical University library seemed unaware of the existence of the resources. Similarly, Kwadzo (2015) reported that the level of awareness of e-databases among the academic staff at the University of Ghana, Legon was lower than usage. This was because most of the academic staffs were not aware of the databases subscribed to. Likewise, Dadzie (2005) reported that academic staffs at Ashesi University College, Ghana, were not aware of the databases subscribed to by the library. The study further revealed that patronage of the databases is very low. They attributed the low usage to the lack of awareness among the academic staff.

The situation in Zimbabwe is not different from that in Ghana. For example, Mawere, & Sai (2018) indicated that despite the efforts made by the Great Zimbabwe University to avail e-databases, there was poor use due to a lack of awareness and ignorance of the facilities among the academics. In Tanzania, Angello (2010) found that the rate of awareness of e-databases among livestock researchers in Tanzania was very low. Shija (2009) expressed a similar sentiment, stating that most of the library users in Tanzania are not aware of electronic resources. Shija further stated that PERii electronic databases are not well known among library users of institutions of higher learning. This was because library staff lacked library and marketing skills appropriate for their existing resources, including electronic databases.

In the context of Nigeria, a study conducted by Aina (2014) on awareness, accessibility, and use of electronic databases among academic staff of Babcock University Business School, discovered that the majority of the respondents were aware of electronic databases. On the contrary, Ogaraku (2018) reported that the level of awareness of the e-databases subscribed to by the Federal University of Technology, Owerri (FUTO) is very low. Therefore, given the mixed findings as highlighted above, this paper applies the Unified Theory of Acceptance and Use of Technology (UTAUT) model to determine the sources of information for the awareness and use of electronic databases by academic staff in Umaru Musa Yar'adua University, Katsina.

Methods

This study was conducted at Umaru Musa Yar'adua University, Katsina (UMYU) a conventional institution offering both undergraduate and postgraduate programs in various fields (Social Sciences, Humanities, Natural, and Applied Sciences and Law). The quantitative method and survey research design were adopted for this study primarily because they were suitable and efficient ways of studying a large population and allow a sample population to be used to represent the entire population. The target population consisted of 523 academic staff from the seven (7) Faculties and university libraries in Umaru Musa Yar'adua University.

Sample
They study's samples were identified and recruited using a proportionate stratified random sampling technique and based on the numbers of academic staff from each faculty of the study area to ensure equal representation opportunities. Israel's (2003) Table for determining sample size and its formula were employed to determine the proportionate sample size for academic staff across the faculties. The study adopted simple random sampling across the departments in distributing questionnaires. This is to ensure a justifiable recruitment of the participants from all the departments. Therefore, no department or discipline was overrepresented or underrepresented.

Instrumentation
The main research instrument used for collecting data for the study was a questionnaire. The Unified Theory of Acceptance and Use of Technology (UTAUT) construct (Social Influence) was used to construct the questionnaire items. The data was collected using the Likert scaling technique where the responses were grouped into categories from 1 to 5 (Strongly disagree, disagree, undecided, agree and strongly agree). The key research questions addressed by the study were represented by each category of the questionnaire. The data collected through closed-ended questions in the questionnaires were analysed by the Statistical Package for Social Sciences (SPSS) version 23 using descriptive statistics of frequency counts and tables.

Results
Response Rates
A total of 110 copies of questionnaires were administered to the academic staff from the seven faculties in the university library and 87 copies of the questionnaires were duly filled out and returned on time. This represents a 79% response rate, which is considered adequate and appropriate for the analysis.

Descriptive Statistics
Table 1: Demographic information of the academic staff

Measures	Items	Frequency	Percentage (%)
Gender	Male	73	83.9
	Female	14	16.1
Total		**87**	**100**
Age range of respondents	Below 40	55	23.9
	40-49	17	19.5
	50-59	31	35.6
	60 above	2	2.3
	Total	**87**	**100.0**
Educational qualification of the respondents	First degree	4	4.6
	Masters	23	26.4
	PhD	60	69.0
Total		**87**	**100.0**

(Source: field data, 2022)

The general demographic information of the respondents illustrated in Table 1 above indicated that out of the 87 complete responses received, 73 (83.9%) of the respondents were male and 14 (16.1%) of the respondents were female. This implies that the study was not biased since both males and females were involved in the study. However, the number of males was higher than that of females. In terms of the age range, 31 (35.6%) of the respondents were in the age range of 50–59 years, which made up the largest number of responses, whereas those in the category of 60 years and above constituted the least 2 (2.3%). This is because the university under study is young and hence, most of the staff is middle-aged, with an age range of 50–59 years.

With regards to the educational qualifications, 60 (69.0%) of the respondents have a PhD as their highest educational qualification; those with a Masters degree were 23 (26.4%), and only a very few, 4 (4.6%) have a first degree as their highest educational qualification. The result reflects that most of the academic staffs are still in the middle ranks of the academic ladder. However, the result reflects a very low number of graduate assistants in the university under study. This implies the need for the university management to recruit more young lectures to ensure a balance staffs mix in the system. Furthermore, more female staffs are needed to ensure gender balance and equal opportunities.

Table 2: Social Influence as determinant of awareness and use of e-databases by academic staff

	Questions	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	I become aware and use of electronic databases through the influence of librarians and colleagues around me	5 (5.7%)	20 (23.0%)	10(11.5%)	33(37.9%)	19 (21.8%)
2	Awareness of electronic databases influence my behavioural intention towards their usage	-	6 (6.9%)	14(16.1%)	54(62.1%)	13 (14.9%)
3	Librarians of my university have been helpful in making me aware and use electronic	3 (3.4%)	10 (11.5%)	21(24.1%)	42(48.3%)	11 (12.6%)

	databases					
4	I become aware and use of the electronic databases by surfing the internet	4 (4.6%)	7 (8.0%)	10(11.5%)	49(56.3%)	17 (18.7%)
5	The existence of electronic databases in other institutions motivates me to be aware and use the electronic databases	5 (5.7%)	13 (14.9%)	14(16.1%)	41(47.1%)	14 (19.5%)
6	I become aware and use of the electronic databases through social media	11 (12.6%)	33 (37.9%)	15(17.2%)	22(25.3%)	6 (6.9%)
7	I become aware of the electronic databases through E-mail from the library	16 (18.4%)	27 (31.0%)	12(13.8%)	24(27.6%)	8 (9.2%)

(Source: field data, 2022)

Results in Table 2 indicated that most of the respondents are in agreement that influence of colleagues around them, behavioural intention, influence of librarians, and surfing the Internet have been helpful in making them aware and use of electronic databases with all responses well above 50% respectively. However, e-mail from the library, social media, and existence of electronic databases in other institutions do not influence their awareness and use of the electronic databases in the study area. Here, all the responses cluster above 50% respectively.

Hypothesis Testing

Table: 3: Regression analysis of social influence factors and awareness of E-databases

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	T	Sig.
1	(Constant)	3.485	.331		10.536	.000
	SI	-.107	.050	-.143	-2.151	.033
a. Dependent Variable: AU						

Hypothesis 1: *Social influence will have a significant positive influence on academic staff's awareness and intention to use electronic databases.*

The result of the regression analysis in Table 3 above showed that there is a statistical significant relationship between awareness of electronic databases and social influence. The reason has been that the calculated P value of 0.03 was found to be less than the 0.05 level of significance. The indication of this analysis is that social influence has a significant positive influence on academic staff's awareness and intention to use electronic databases. Therefore, the alternative hypothesis, which States that social influence will have a significant positive influence on academic staff's intention to use electronic databases, is hereby accepted.

Discussion

The result of the study revealed that social influence is perceived to be a strong determinant of academic staff awareness and use of electronic databases in the study area. The study found that academic staffs' sources of awareness about electronic databases were through their friends, colleagues, behavioural intention and librarians. The result concurred with previous results of Venkatesh et al., (2003); Hartwick and Barki, (1994); Schepers and Wetzel, (2007), who reported that social influence is significant in determining awareness and use of new systems. In addition, the result of the research hypothesis is supported by previous studies. However, the result of the hypothesis is contrary to the studies of Hsu et al. (2014), Li et al. (2018), and Chao (2019), who found that social influence has no significant impact on the users' intention to use technology.

Conclusion and Recommendations

This paper examines social influence as a determinant of awareness and use of electronic databases by academic staff in universities. The findings of the study showed a mixed result. The finding identified a significant percentage of the respondents agreed that social influence attributions such as colleagues around them, behavioural intention, influence of librarians, and surfing the Internet determine their awareness and use of electronic databases. On the other hand, e-mail, social media, and mimetic isomorphism were not significant determinants. With this result, it is safe to conclude that academic staffs in the university understudy are aware a colleagues around them, behavioural intention, influence of librarians, and surfing the Internet and use electronic databases as a result of social influence.

Based on these findings, the study sees a need for the university library to create more awareness about the use electronic databases. Leveraging on technologies such as social media and e-mail to reach out the academic staffs is pertinent in this case. The Library should simplify the process of informing users about subscribed electronic databases available in the library through social media handles like WhatsApp, Facebook, Twitter, and Instagram, as well as other social media platforms. Furthermore, the library should create an e-mail alert message in which academic staff and other users can be informed about any purchase or subscription to the electronic databases in the library.

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