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The Effect of Social Influence and Facilitating Conditions on Electronic Textbooks Adoption in Tanzanian Secondary Schools: The Moderating Role of School Type

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Abstract
This paper addressed the Social Influence and Facilitating Conditions as key determinants that influence the adoption of electronic textbooks for advanced-level students learning purposes in Dar es Salaam region-Tanzania. The study employed survey research designs and strategies to collect data and test research hypotheses. Simple random sampling was employed in the selection of respondents. Questionnaires were used to obtain needed data from 370 students from public and private secondary schools in Dar es Salaam region. The data were analyzed through multi-regression analysis where descriptive and inferential statistics were done with the aid of SPSS version 26. Validity was attained by consulting experts in the field of publishing and research while reliability was tested by piloting the research instruments and calculating the Cronbach Alpha. A Cronbach value of 0.77 for Social Influence and 0.85 for Facilitating Conditions was obtained and thus the instruments were considered reliable. The findings revealed that advanced-level students' intention to adopt e-textbooks in Tanzania schools requires the availability of facilitating conditions such as infrastructures, expertise and human resources. Further, the paper results posited that facilitating conditions, moderated by school type, have shown significant negative effects between private scholars and public scholars on adoption of e-textbooks. On the other hand, when moderated by school type, the paper found that Social Influence had a significant positive effect between private scholars and public scholars. In particular, this paper's results are of importance to publishers, students, teachers, application developers and school management. Finally, the paper recommends policy change on the use of mobile devices and its contents for building students' behavioural intention to e- adopt textbook in Tanzania secondary schools.
Keywords: Behavioural Intention, UTAUT Model, BITETA, Social Influence, Facilitating Conditions, Private secondary schools, Public secondary schools
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1.0 Introduction

The innovations and changes of Information, Communication and Technology (ICT) in the world has made tremendous change even in the ways of teaching and learning in developed and developing countries. With new ICT innovations, teaching and learning have been made easier and simple. ICT has made education stakeholders develop electronic textbooks for students' use anywhere, anytime. Electronic textbooks are the electronic version of a printed one that can be read in dedicated e-readers or other handheld devices (Abuloum, Farah, Kaskaloglu, & Yaakub, 2019). The development of electronic textbooks is the results of ICT developments in the world (Chiu, 2016). It is evident that with the well-developed ICT infrastructures, the well the e-textbook applications will be developed, then the students' behavioural intention to adopt e-textbooks will be built. With e-textbooks development and use worldwide, the long-time textbook shortages in the education sector have been reduced (Stankovic, Elesini & Tomažin, 2018). E-textbook has made learning to be more flexible and dynamic different from when printed textbooks were the only in use. In the context of learning, e-textbooks applications have risen students' morale and improved performance (Musheer 2018).

Electronic textbook in developed world has promoted, strengthened and enhanced learning ability without much difficulties. It has offered anytime accessibility, availability, utility, and enabled full-text search capability (Al Saadi *et al,* 2017). In developed world, such as the United States of America (USA) and Europe (United Kingdom and Sweden), teaching and learning using mobile devices have become a common phenomenon (Grönlund, *et al* 2018). In these countries, E-textbooks are conveniently available and accessible in teaching and learning through mobile devices (Gaigher (2014). Publishing companies such as Amazon, Pearson, Cengage, McGraw Hill, and Wiley are believed to be selling more e-books and e-textbooks than their corresponding printed editions (Errera, 2022). In developed countries, mobile devices with e-textbook applications and services

are provided for students' use on school campuses. This has been possible due to conducive environment including low cost of mobile devices and internet (DeNoyelles *et al*., 2017). In Asian countries, such as India, Saudi Arabia, and China, studies show that students have higher adoption rates of e-textbooks platforms in their learning (Lim, 2018). In these countries, students are getting electronic readers and contents at low prices due to many companies manufacturing e-readers with free e-contents (Enright, 2014). In these countries, students positively adopt e-textbooks because of the influence of others who use them, availability, accessibility, expecting to perform in their exams, environmental consciousness, compatibility, convenience, self-efficacy, low costs, benevolence trust, price value, and habit (Poon, 2014; Hsu *et al.* 2017; Gengfu & Chotiyaputta, 2019; Rehman *et al.,* 2020) These adoption determinants result leads the student's develop to behavioural intention to use the e-textbooks with greater satisfaction in day to day use. In African schools, electronic textbooks availability, accessibility and use have been a great challenge (Crabbe and Nyingi 2014). The challenges to e-textbooks adoption include not only lack or slow internet connectivity, lack of know-how- knowledge to use mobile devices with e-contents, limited e-readers, but also the infancy of e-textbooks use. Despite these challenges in Africa, e-textbooks adoption is still growing up although at low rate when compared to the total e-textbooks users in the world (Makwanya & Oni, 2019)

In Tanzania, with the establishment of 2014 education policy, National Information Communication and Technology (NICT) Policy of 2016, while considering National Development Vision of 2025, Tanzania Institute of Education (TIE) has become the sole authorized contents developer and distributor of online and printed course books for school use from primary to advanced level (2014 education policy). Other publishers have to develop and distribute the reference textbooks and other books. Those reference books by private publishers are to be evaluated and certified before being distributed for students' consumption. Tanzania Institute of Education (TIE) has successfully developed and distributed the printed textbooks to school although the students'-textbooks ratio is far away from to 1:1 (TAMISEMI, 2022).

To fill the gap of student-textbook ratio, the Tanzania Institute of Education and other education stakeholders have established the electronic textbooks platform called E-library (Maktaba Matandao) to be used by students anywhere, anytime. Several other application and platforms have been also developed to accommodate e-textbooks contents from private publishers and individual stakeholders. To date, there is over 50 applications containing e-materials for school use in Tanzania. Among those are that of TESEA, Class Live Apps, TETEA Apps, TZshule Apps, AVoL Apps, tHL Apps, Maktaba Inc., Msomi Bora-Apps, Maktaba Offline Apps, Elimutube Apps, Darasani Apps, Elimu mobile Apps, Shule Direct Apps, only to mention a few.

Despite the initiatives and remarkable increase of the e-textbooks application and platforms through mobile devices such as smartphones, laptops, tablets, iPad, and other e-readers, advanced level students in Tanzania are still facing considerably challenges from school environment to home in using e-textbooks (Kisanga & Ireson, 2015). Therefore, these challenges have motivated the researcher to carry out a study on what could be the influencing determinants of students' Behavioural Intention To E-Textbooks Adoption (BITETA) in advanced-level secondary schools in Tanzania. Therefore, the choice of e-textbook as the focus of this paper was very significant in understanding what forces influence students at this level of education build behavioural intention to adopt electronic textbooks in developing countries, Tanzania in particular.

This paper is guided by the variables from the Universal Theory of Acceptance and Use of Technology (UTAUT). From the literature, the UTAUT predictor variables (Performance Expectancy (PE), Efforts Expectancy (EE), Social influence (SI) and Facilitating Conditions (FC)) and criterion variables (behavioural intention (BI) and behaviour Use (BU)) with their moderating variables (gender, experience, age, and voluntariness of use), have been used as the key determinants of students' intention to adoption e-textbooks in learning. These UTAUT model variables have been significantly confirmed by various scholars to influence other technology adoption in education sector, but have not yet been used e-textbooks in Tanzania context especially in advanced level secondary schools. Although many studies have attempted to show facilitating conditions and social influence to motivate behavioural intention to technology adoption that is appropriate for e-learning, very few studies are available on the effects of school type on the relationship between FC or SI on BITETA in advanced-level secondary schools in Tanzania. Different studies have come with different results on the adoption of technology between private and public schools while considering the school environment and administration. Therefore, this study respondents from private and public schools were sought to determine how the type of school influences the adoption of technology in the education sector. According to de Araujo Guerra Grangeia *et al*. (2015), the impact of technologies in schools can be possible if the necessary conditions for their use are sufficiently and readily available in those schools. This means the adoption of technology in schools will depend on the adequacy of training for the users, availability, accessibility and utility of equipment, and the readiness of students and school administration in adopting technology.

Given these circumstances, this paper specifically investigated the social influence and facilitating conditions variables on students' behavioural intention in e-textbooks adoption (BITETA) in Tanzanian context. These two variables from the UTAUT MODEL, moderated by school type, were analysed to examine how they

motivate students' behavioural intention towards to e-textbooks adoption in Tanzania schools. School type as a moderator, has been extracted from the demographic section of this study questions where students from public and private schools have been used as respondents. Answers from these respondents were analysed in relation to the type of school they belong to. According to Malero *et al.* (2015), the school environment and administrations (private/public) are considered to be determinants and influencers of technology adoption, including e-textbook adoption. Therefore, this paper used the social influence and facilitating conditions from UTAUT model as guiding variables, to examine the students' behavioural intention on adoption of e-textbooks while moderated by school type.

1.2 Research Objectives and Hypotheses

This paper aims to investigate the influence of social influence and facilitating conditions as UTAUT model variables on adoption of e-textbooks in private and public schools in Tanzania. The following research objectives and hypotheses guided this study:

1.2.1 Research Objectives

i. Social influence, moderated by school type, affects students' behavioural intention to e-textbooks adoption in advanced-level secondary schools
ii. Facilitating conditions, moderated by school type, influence students' behavioural intention to e-textbooks adoption in advanced-level secondary schools.

1.2. 2 Research Hypothesis

Each research objective has been sub-divided into two hypotheses. One hypothesis with direct relationship with dependent (Hypothesis (H1 and H3) variable and the other with interaction terms (H2 and H4)

H1: Social influence, has a significant positive effect on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

H2: Social influence, moderated by school type, has a significant positive influence on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

H3: Facilitating conditions, has a significant positive influence on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

H4: Facilitating conditions, moderated by school type, has a significant positive influence on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

2. Study model

Venkatesh, Morris, Davis, & Davis, (2003) propounded the Unified Theory of Acceptance and Use of Technology (UTAUT), then modified the UTAUT model in 2012. Venkatesh (2012) suggested that the intention to adopt the technology depends on the direct influence of four key variables, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. These variables are moderated by age, gender, experience and voluntariness of use. The UTAUT model has been proven to be better than the eight previous models in explaining the behavioural intention and the actual usage of an information system. Some among the eight models include Theory of Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB), combined TAM and TPB, Model of PC Utilisation (MPCU), Social Cognitive Theory (SCT), Diffusion of Innovation Theory (DOI) and others (Martins, Farias, Albuquerque, & Pereira, 2018). Aoocrding to Venkatesh, et al., (2012), the UTAUT model is capable of explaining as higher as 70% of the user behavioural intention of an information system and as higher as 50% of actual usage.

Based on Venkatesh's (2012) model, this paper was expected to examine how parents, teachers and peers motivate students' behavioural intention to adopt e-textbooks in advanced-level secondary schools in Dar es Salaam Region (Social Influence). Social influence is defined as, "the degree to which an individual perceives that important others believe he or she should use the new system" (Venkatesh *et al.,* 2003 p. 451). Again, it was presumed that school administration would provide appropriate facilitating conditions including resources, guidance, and school-based training on new devices, applications and platforms (Facilitating Conditions). Facilitating Conditions is defined as, define facilitating conditions as, "the degree to which an individual believes that an organisational and technical infrastructure exists to support the use of the system" (Venkatesh *et al.* 2003 p. 453). Using these two constructs (FC and SI) from UTAUT MODEL, this paper would therefore, provide a general understanding of e-textbooks' adoption determinants that necessitates effective learning in relation to school type.

Apart from the UTAUT model which addressed an individual adoption of technology, it ws likely to modify the model by attaching the 'school type' as a moderating variable extracted from the demographic section of this study questions where students from public and private schools have been used as respondents. School type moderated the FC and SI determinants and revealed the way students from private or public school are motivated to adopt e-textbooks in their school environments, administrations or other people around them. In this regard, the FC and SI variables from UTAUT Model and School Type (ST) from demographic characteristics provided

insights for a proper understanding of how e-textbooks could be adopted in learning.

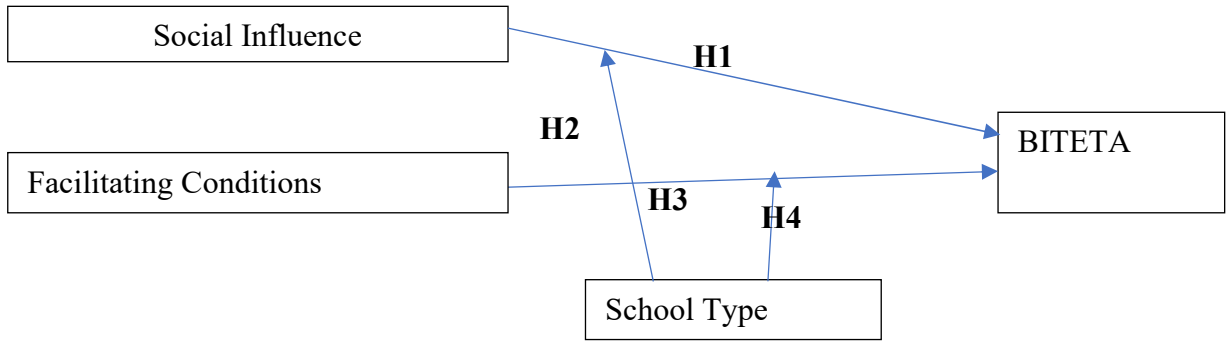

Figure 2.1 Proposed study model

3. Methods

This study was conducted in the Dar es Salaam region. The study adopted a quantitative research approach which examined the relationships between numerically measured independent and dependent variables (Saunders *et al*., 2012). It enabled the researchers to collects data through closed ended questionnaires and investigated a research problem based on theory testing (Kambatla *et al.,* 2014).

The target population of the study included form five and six students who were in session during data collection in Dar es Salaam region. A sample size of 378 students out of 6800 registered students in the office of regional education office, was attained through the use of Sample size determination formula by Yamane (1967). The formula is given as;

$$n = \frac{N}{(1 + N(e^2))}$$

Where n = Sample size; N = Targeted study population (6,800); e = Level of precision (0.05)
0.05 × 0.05 = 0.0025. Then, .0025 ×6,800 = 17. Then, 1 + 17 = 18
The 6,800 divides into 18 = **377.77**. The sample size of this study was **378** respondents

Proportionate and Simple random sampling were employed in the selection of sampled schools per municipality so that, every individual in the target population could have an equal chance of being included in the sample (Al-Omari & Al-Nasser 2011). This sampling technique was employed to obtain 22 selected secondary schools out of 79 advanced secondary schools in Dar es Salam region. Closed-ended questionnaires were administered using 5-point Likert scales for obtaining relevant information. The researcher distributed self-completed questionnaires by hand delivery and collection method in the targeted schools to quicken the response rate from respondents (Tambwe, 2021). The quantitative data obtained were analysed by using Statistical Packages for Social Sciences (SPSS) version 26 software to determine the frequency and percentages of the extent of students' adoption of electronic textbooks in advanced level secondary schools.

3.1 Reliability and Validity

To test the validity of the research instrument, research hypotheses were formulated in line with the objectives of the study and in addition, research experts in the field of publishing, research, ICT and blended learning were consulted. The reliability of the research instruments was tested by pilot testing the research instruments using 10 respondents from each municipality making a total of 50 students. Dar es Salaam region has 5 municipalities. In this study, Cronbach's alpha was used to measure the internal consistency of the research instruments. A Cronbach value of 0.77 for social influence and 0.85 for Facilitating Conditions was obtained and thus the instruments were considered reliable as per Taber, (2018).

4. Results and Discussion

4.1. Results

The aim of this paper was to investigate the influencing behavioural intention of advanced level students on adoption of electronic textbooks in their studies. The results of the study are presented in the light of the demographic characteristics, research hypotheses and Pearson Correlation Coefficient (simply, r).

4.1.1 Profile of Respondents

The respondents were 59.2% (219) form V and 40.8% (157) form VI students who were in session during data collection. Since school type has an influence on technological adoption, the school type of the respondents was analyzed. Out of 370 respondents who returned the questionnaires, 213 (53%) respondents were from public

schools and 157 (47%) were from private schools.

Table 4.1 Demographic characteristics

Variable	Frequency	Percent
School type		
Public	213	57.6
Private	157	42.4
Education level		
Form V	219	59.2%
Form VI	151	40.8%

4.1.2 Pearson correlation among variables

Pearson Correlation Coefficient was employed to measure the extent to which two or more variables were related (Creswell, 2014). Samithambe (2019) indicated that the strength and direction of correlation varies based on the following levels:

Table:4.1 The strength and direction of correlation

SN	STRENGTH	LEVEL
1	Little Correlation	+-0.00 +-0.30
2	Low Correlation	+-0.30 +-0.50
3	Moderate Correlation	+-0.50 +-0.70
4	High Correlation	+-0.70 +-0.90
5	Extremely High Correlation	+-0.90 1.00

Adapted and modified from Samithambe (2019)

In this study, the bivariate correlations were computed to determine the correlation between variables (Table 4.2).

Table 4.2 Bivariate correlation between variables.

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

VARIABLES	VARIABLES		
	BITETA	**FC**	**SI**
BITETA	1		
FC	0.534**	1	
SI	0.462**	O.416**	1

Source*: *data analysis (2021)

4.2 Coefficients of Multiple Linear Regression Analysis

Multiple Linear Regression Analysis was undertaken in order to test the hypothesis of the studied objectives.

Table 4.3 Coefficients of multiple linear regression analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound
1	(Constant)	.368	.189		1.952	.052		.739
	FC_score	.311	.055	.323	5.671	.000	.203	.418
	SI_score	.040	.051	.042	.781	.436	-.061	.141
	Schooltype recoded	.251	.299	.131	.840	.402	-.336	.838
	EE_score	.503	.051	.480	9.855	.000	.403	.604
	SchooltypeXFC	-.317	.084	-.622	-3.794	.000	-.482	-.153
	SchooltypeXSI	.236	.079	.433	2.972	.003	.080	.392

a. Dependent Variable: BITETA_score

Source: data analysis (2021)

4.2.1 The Effect of FC, moderated by ST, on BITETA

This objective had two hypotheses. The first hypothesis stated that:

H1: Facilitating conditions, has a significant positive influence on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

The coefficients in Table 4.3 indicates the relationship between independent variables (FC) and dependent

variable (BITETA). Controlling for other variables in the model, the study revealed that for each unit score increase in FC, BITETA increased by .311 (95% CI: .203, .418). The simple linear regression model determined that FC had a strong significant positive relationship with BITETA. The findings revealed that FC has direct significant influence with students' behavioural intention to adopt E-textbooks in education sector. Therefore, the alternative hypothesis, that FC significantly influence adoption of e-textbooks was supported. The second hypothesis stated that:

H2: Facilitating conditions, moderated by school type, has a significant positive influence on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

Based on the effect of FC on BITETA across school types, the study revealed that for each unit score increase in FC, BITETA decreased by --.317 (95% CI: -.482, -.153) among scholars in private schools as compared to scholars in public schools. The observed difference was statistically significant at 5% (p=0.001) level of significance (Table 4.3). These results show that the type of school makes a significant difference between public and private schools in the adoption of e-textbooks. It reveals that there is a difference in the behavioural intention for private and public-school students towards the facilitating conditions available for e-textbook adoption, depending on the type of schools. Therefore, the alternative hypothesis, that FC significantly influence adoption of e-textbooks was supported.

4.2.2 The Effect of SI, moderated by ST, on BITETA

On the other hand, objective two had two hypotheses too. The first hypothesis stated that:

H3: Social influence, has a significant positive effect on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

On this hypothesis, keeping EE, FC, SI, School type (ST), and ST *FC held constant, the multiple linear regression model revealed that, for each unit increase in SI, BITETA increased by .040 (95% CI: -.061, .141). The findings from Table 4.3 indicated that social influence has insignificant effects on the adoption of e-textbooks at p=0.436 (95% CI; -0.061, 0.141). The simple linear regression model revealed that SI had an insignificant positive relationship with BITETA. The findings revealed that social influence has insignificant influence on students' behavioural intention to adopt E-textbooks in advanced level secondary schools in Tanzania. Therefore, the alternative hypothesis, that SI significantly influence adoption of e-textbooks is rejected. Hypothesis four stated that:

H4: Social influence, moderated by school type, has a significant positive influence on students' behavioural intention to adopt e-textbooks in advanced-level secondary schools

Grounded on the effect of SI on BITETA across school types, the study revealed that for each unit score increase in SI, BITETA increased by .236 (95% CI: .080 to .392) among scholars in private schools as compared to scholars in public schools. The observed difference was statistically significant at 5% (p=0.001) level of significance (Table 4.3). These results show that the type of school makes a significant difference between public and private schools in the adoption of e-textbooks. It reveals that there is a difference in the behavioural intention for private and public-school students depending on other people's opinions (the social influences) for e-textbook adoption, depending on the type of schools.

Table 4.4: The model summary on the influence of SI and FC on BITETA, moderated by ST.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.719[a]	.517	.508	.66195	.517	62.674	6	352	.000	1.112

a. Predictors: (Constant), SchooltypeXSI, EE_score, SI_score, FC_score, Schooltype - recoded, SchooltypeXFC

b. Dependent Variable: BITETA_score

As indicated in Table 4.4, the R-squared was 0.517 and the adjusted R was 0.508, which indicated that all variables explained 51% percent of the behavioural intentions for e-textbooks adoption. This shows that all independent variables have a significant relationship with the adoption of BITETA in the Tanzanian education sector.

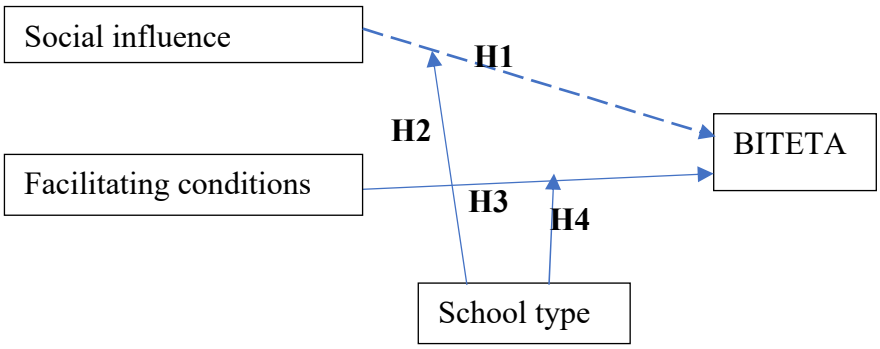

Figure 4.1: The final model results

5. DISCUSSION

This paper's findings have established the significance of the adoption of e-textbooks in the education sector, concerning the effects of SI and FC moderated by school type. Regarding the direct relationship between and BITETA, the findings revealed that Social Influence has insignificant effects on students' behavioural intention to adopt E-textbooks in advanced-level secondary schools in Tanzania. This study is consistent with the study by Lin & Lin (2019), which assessed the SI on students' adoption of e-books in Fujian, China. The study revealed that social influence has no direct effect on the user's intention to use the e-book. Likewise, the statistical insignificance of SI is consistent with the study by Srirahayu, Nurpratama, Handriana, & Hartini, (2022) who highlighted that the social influence tendency of using printed books cou;d be a barrier to e-textbook use.

The insignificance of this study results on SI could be attributed by the gap between Generations. Tosun (2014) categorized technology users into three categories of generations: digital immigrants (born before 1970), digital hybrids (born between 1970 and 1999), and digital natives (born after 1999). In this study, our respondents fall under the "digital natives" category (born after 1999), while a good number of teachers and parents, whose opinions are considered important for adoption, are considered "digital hybrids" (born from 1970 to 1999). A digital hybrid group is deemed incompetent to take advantage of new technologies (Lin & Lin, 2019). Therefore, it is not easy for digital natives to believe digital hybrids' opinions related to technology adoption (Srirahayu.*et al*., 2022).. Therefore, the SI did not appear to influence SI on BITETA. This had been indicated by respondents that they may use the e-textbooks platforms, if the platforms are used by the people whom they believe and see them as their role model. As it has been noted, the user does rely only on people around them who believe their opinion to be important to them in social influence perspectives (Venkatesh et al.,2003, Hsu et al., 2017). Therefore, it is difficult to immediately change the form V and VI students' behavioural intention of adopting e-textbooks if their parents, peers and teachers mostly use printed textbooks than digital ones. This implies that e-textbooks providers and researchers should keep in mind the power of those around the student for the best results. Otherwise, stakeholders have to keep emphasizing the need of students to adhere to the use of e-textbooks materials, platforms and devices even though the people around them are not using e-textbooks e.g., teachers.

Similarly, the insignificance of SI findings on BITETA is in inconsistent with the study by Foluke, (2020) and Hsu et al. (2017), which indicated that SI influences the adoption of e-books at tertiary level. The insignificance of SI in this paper could also be attributed by the infancy of e-textbooks in Tanzania contents and the power of printed textbooks as mentioned before.

At the same time, the observed differences in effect, of SI on BITETA across school types were statistically significant at $p<0.05$ (hypothesis 3). This means the school type had a moderating effect in the relationship between social influence and behavioural intention to e-textbook adoption (BITETA). This study is consistent with the study by Ogwu, Emelogu, Azor, 2023. Therefore, for better adoption of e-textbooks, school management, parents, and other stakeholders should be the role models in using the e-textbooks in order to influence students to do the same.

Regarding the FC, the study findings are consistent with the study by Martins et al. 2018; Zhou et al. 2019 and Hsu et al. 2017 that FC positively influenced the adoption of e-books. This had been indicated by respondents that they may use the e-textbooks platforms in Tanzania if there are abundant resources for facilitating the technology adoption. As it has been noted, the user does rely only on the resources, knowledge and assistance found at the area (Ejiaku, 2014). Therefore, there is a need for the e-textbook developer and distributors to take into consideration the school infrastructures, knowledge and teachers' assistance for the best

results in Tanzania. This implies that e-textbooks providers and researchers should keep emphasizing the needs of students.

Similarly, the statistical analysis of these hypothesis-related questions revealed that there was a statistically significant influence of FC on BITETA across school type (ST) at a 5% level of significance. Thus, alternative hypothesis 4 was accepted, and the null hypothesis was rejected. Therefore, the facilitating conditions with ST as a moderator significantly influenced students' adoption of e-textbooks in the education sector in Tanzania. Accordingly, these findings were consistent with the study done by Martins et al. (2018) on how e-books are adopted in Brazil. The study tested the Unified Theory of Acceptance and Use of Technology 2 model (UTAUT 2) on the adoption of e-books. The findings indicated that facilitating conditions have a significant for students' adoption of e-book services. The study indicated that students will adopt e-books provided they have the required facilities, knowledge, and resources. The findings of this paper again concur with the study done by Zhou et al. (2019), which revealed that facilitating conditions were correlated with nurses' adoption of hospital electronic information management systems (HEIMS) in Ghana. They insisted on the importance of accessing required resources, gaining needed knowledge, and having the necessary support to use information technology infrastructures to enhance the better adoption of HEIMS in hospitals. Similarly, the paper is consistent with the research by Hsu et al. (2017) on electronic book adoption using an extended UTAUT model, which, among other variables, showed that facilitating conditions influence the adoption of e-books in Taipei- Taiwan.

Since this study dealt with secondary-level students' adoption of e-textbooks in the education sector in Tanzania as far as students' adoption is concerned, the result has indicated a positive effect of facilitating conditions on behavioural intention to e-textbooks in Tanzania. The reason could be the ICT policy factors, which at the secondary level insist on the adoption of ICT-related technologies for learning. The findings also conform to the various studies that extended the UTAUT theory and insisted that there is a relationship between FC and BITETA.

This means that educational institutions have to ensure the availability of the infrastructure for students to adopt electronic textbooks in Tanzania. Students in secondary schools in Tanzania need a conducive learning environment, guidance on how to use mobile devices, e-textbook contents, and knowledge on using the application to adopt e-textbooks. That will trigger their interest in the use of e-textbooks, applications, and platforms in relation to school type.

6.0 Conclusion and Recommendations

The findings of this study conform to the UTAUT model on assessing the effects of SI and FC on the adoption of e-textbooks in Tanzania. SI and FC, moderated by ST showed a positive influence on the adoption of e-textbooks in advanced-level secondary schools in Tanzania. The study managed to include the demographic variable of school type as a moderator to examine the adoption of e-textbooks depending on the type of school (private and public). FC with or without school type as a moderator, influenced the behavioural intentions to e-textbook adoption in Tanzania. However, SI did not influence the direct relation with BITETA, except when moderated by ST. Therefore, in theoretical understandings, these findings give vital knowledge on the important determinants in users' adoption of e-textbooks in the education sector in Tanzania, particularly the importance of SI and FC moderated by ST as the key determinant of Behavioural Intention to E-Textbooks adoption in advanced level secondary schools in Tanzania.

The study recommends that e-textbooks developers and distributors with the collaboration of publishers to make sure that they develop and distribute mobile devices, platforms, e-contents and make them readily available in private and public schools' environments. Notwithstanding, their distribution approach should ensure the availability of guidance, good infrastructure and experts according to the type of school. The digital hybrids should change accordingly to reflect the technology change in the world. This can only be done by changing the education policy including permitting mobile devices use by students in school environment. From this paper, it is evident that there is a significant difference between public and private schools in the adoption of e-textbooks in Tanzania's advanced level secondary schools. Therefore, all stakeholders should consider students' wants while designing, developing and distributing e-textbooks to schools.

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