Mobile Phone Internet Usage and Students' Achievements in Tanzania Higher Learning Institutions

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Abstract: This study sought to determine the effects of mobile phone internet usage on students' achievements in selected Tanzanian higher learning institutions. Cross sectional survey design was adopted in collecting data from 204 conveniently selected respondents from the population of students who were studying at the National Institute of Transport and the University of Dar es Salaam. Data was collected by using a questionnaire whereby analysis involved both descriptive and inferential statistics. The descriptive statistics revealed that academic uses of mobile phone internet are more dominant, followed by social uses and economic uses. The inferential statistics revealed that social and academic uses variables make significant unique contributions to the prediction of the dependent variable, students' achievements with economic uses having insignificant contribution to the variable. The study recommended that given uncontrollable uses of mobile phone internet among students, some initiatives are essential as a proactive measure for enhancing students' academic excellence and minimizing serious vulnerabilities associated with irresponsible internet usage.

Introduction

Usage of the internet is a common trend in recent years in almost every corner of the world. During the last two decades, the way students lived and the way they study have changed due to developments in information and communication technologies (ICTs). As of April 2022, there were five billion internet users worldwide, which is 63 percent of the global population. Of this total, 4.65 billion are social media users (Johnson, 2022). The usage of desktop and laptop computers for accessing internet is only limited to a few hours in a day. But the usage of mobile phone internet is throughout the day and night and is very convenient to students. Mobile phone internet refers to the internet connectivity accessed on mobile phones from wireless access point and cellular networks (Berry & Schleser, 2014). Mobile devices drove 61% of visits to U.S. websites in 2020, up from 57% in 2019 and the situation is not different in many countries of the world. Desktops were responsible for 35.7% of all visits in 2020 and tablets drove the remaining 3.3% of visitors (Enge, 2021).

As of December 2021, Tanzania Communication Regulatory Authority (TCRA) reported 29,858,759 internet users in Tanzania, an increase from 28,470,506 in 2020 (Tanzania Communication Regulatory Authority, 2021). One of groups which use mobile phone internet extensively is students in Higher Learning Institutions (HLIs). A study by Tayo et al. (2019) found that undergraduate students spend an average of two to three hours daily on social media platforms. According to Pattermann et al. (2022), while many students mainly use laptops for course-related activities, they take out their smartphones to engage in non-course-related activities, such as checking social media, texting and reading or writing emails. A study by Hashemi et al. (2022) found that Social Networking Sites (SNSs) have various influences among students, where the most significant uses belonged to the social group (positively), the academic and informative group (negatively) and the recreational group (positively). Studying uses of social media among students, Siddhartha et al. (2020) found the top uses of social media among students being entertainment, followed by communication, education and finally business usage. Pfeiffer et al. (2014) found social media as an important tool in sharing sexual and reproductive health information. Sedek et al. (2012) categorized the uses of ubiquitous technology as ranging from inquiry and general use, followed by communication use, expression use and construction use.

Among the reasons for higher mobile internet usage is due to availability of free internet access in almost every HLI as supported by Hossain and Rahman (2017). A study by Islam, et al. (2018) highlights that higher learning institutions must have a provision for wireless internet for students, implying a growing demand and pressure to increase internet accessibility among students. Other reasons are associated with personal motives such as entertainment where students use mobile internet for streaming/downloading audio, videos and playing/downloading online games (Hossain, 2019). Studying the use of mobile phone internet, Wali and Omaid (2020) realized that it is used for work, entertainment, learning and teaching among other uses. Basically, the dominant fruitful use of the internet among students is unclear supporting the position of Siew et al. (2017) and Kukulska-Hulme (2007) that the impact of mobile devices usage is still blurred and requires further research. Siddhartha et al. (2020) declared that based on the proverb "Too Much Anything is Good for Nothing", social media usage must be utilized in proper and rightful manner when needed. Youssef et al. (2022) recognizes the danger of unsupervised use of ICTs among university students as a potential source of negative effects in terms of reducing or at least not improving student performance. Oueder and Abousaber (2018) argued against the use of social media during the lecture time to minimize the associated negative impacts.

Despite existence of multiple studies that focused on internet usage among students, there is scant evidence on the impacts of actual uses of mobile phone internet among students in Tanzania. Considering that many of those studies were carried out in other countries other than Tanzania, it is difficult to generalize any findings arrived. This study will be of great value to HLIs on planning internet accessibility and usage among students. The study will also add value to students' well-being while in the HLIs environment and their post-graduation life. The study is also of great importance to parents who commit large amounts of resources

to finance their child's studies. Therefore, this study sought to determine how uses of mobile phone internet influence students' achievements.

Literature Review

This section presents what is going on in the body of knowledge regarding the relationship between mobile phone internet usage and students' achievements.

Academic Uses of Mobile Phone Internet

Mobile phone internet can be used for various activities by students of HLIs. One of the uses is in the academic context. Siew et. al. (2017) found that students used mobile phone internet to check reference materials, solve mathematical problems, download lecture slides and access online quizzes and other activities that support their academic life. Similar observation was made by Chan et. al. (2021) who revealed that students use mobile phone internet for accessing books, music, social media, games and other applications. Darko-Adjei (2019) stated that mobile phone internet facilitates access to online learning portals and course resources for students especially those participating in distance education, though the author highlighted factors such as screen size and internet connectivity as hindrance to the use of mobile phone internet for academic uses. Investigating the usefulness of mobile phone internet for e-learning and educational applications, Kuri and Om (2016) found that among other uses, students used mobile phone internet to access e-journals and e-books and further recommended that students should consider specifications of the mobile phone so as to obtain ones that are best equipped for academic uses. To what extent students use mobile phone internet for academic purposes in different parts of the world, it is difficult to conclude.

Students have also associated academic uses of mobile phone internet with social media. Studying internet usage on social media pages among university students, Hussain (2012) found that students use social media especially Facebook for various purposes, the top one being getting enjoyment (92%), followed by obtaining latest information related with their studies' educational developments/ opportunities and current affairs (92%) and academic networking at national and international level (87%). Others are using social media for killing time without any academic or social purpose (80%), sharing learning experiences and research findings (76%), searching and making

friends (73%) and sharing academic events (59%). Whether these are the social media uses of internet over their mobile phone among all students, it is something worth researching given technological, economic and cultural differences across countries. Although the study focused on internet usage on social media pages, nothing was said on the consequences of such usage.

A study by Youssef et al. (2022) found that ICT-supported activities, digital skills and digitization of teaching material are important factors influencing students' academic performance. The study further found that the work/leisure balance enabled by ICTs and mobile internet is improving students' exam success significantly due to the possibility for teachers to offer timely help. These findings are in line with those by Oueder and Abousaber (2018) who found that online social media had improved the communication between the faculty members, staff and the students which facilitated the communication of the correct information and improved the understanding and the development of the ideas and the courses. Though these studies spell the positive effects of social media on academic affairs, it is difficult to generalize the findings in all higher learning institutions.

Assessing academic usage of social networking sites by the university students, Subramani (2015) found low usage by students for social media on academic related activities such as downloading softwares from social networking sites for academic purposes, downloading video files for academic excellence, downloading electronic books for academic purposes, engaging in accessing e-journals and downloading e-dissertations and Power Point Templates (PPT). The researcher viewed this as being improper behavior among students calling for the need to educate students on the potential use of social media.

Social Uses of Mobile Phone Internet among Students

Chukwuere (2021) did a study on the impact of social media on students' social interaction. The study established that social media improves students' social interaction, such as communication and information sharing with peers and friends, organizing meetings, promoting cyberbullying, data privacy, and personal information infringement. In overall terms, the study found that there is no relationship between the usage of social media and improving students' social interaction as it could be

harmful and it negatively impacted their quality time with loved ones and friends. The study recommended researchers to study how the usage impacts students' academic performance and progress in the future as well as how social interaction affects adequate learning progress.

Hashemi et al. (2022) explored purposes of internet use among Iranian university students. The study found that the most common purposes for using the internet were online social networking and information seeking, followed by listening to music or watching movies, relaxing, using email for educational needs and reading socio-political news. In the comparison between categories of purposes for internet usage, the most prevalent group of purposes were academic and informative, recreational, social, and economic categories. Moreover, the most significant influences belonged to the social group (positively), the academic and informative group (negatively) and the recreational group (positively) on social networking site (SNS) addiction. The economic group of purposes did not have a significant influence on SNS addiction.

In the course of examining social media usage among undergraduates students, Tayo et al. (2019) found that on average of 2 to 3 hours daily are spent on social media, and that socialization is the top usage (83%), followed by information (74%), academics (73%), business (68%) and entertainment (61%). The results highlighted challenges of social media usage among students including internet addiction, distraction, anti-social behavior, cyberbullying and writing and spelling skills deficiency. The findings relate to those by Pattermann et al. (2022) who found that digital interruptions such as social media, emails and instant messaging easily steal the students' attention from what is happening during class sessions, hence an issue in both webinars and on-campus sessions, things which can impact students' academic achievements.

Economic Uses of Mobile Phone Internet among Students
Exploring mobile phone internet usage among university students, Siddhartha et al. (2020) found that the purpose of mobile phone internet usage being entertainment followed by communication, helps in doing projects with online group discussions and helps to release stress. In addition, mobile phone internet usage helps students economically by doing business and making money, getting latest news and encouraging people to be confident and expressive. Chmielarz and Parys (2017) found that mobile phone internet was used to access financial sites and systems via browser and mobile applications whereby 91% of the sample accessed e-commerce sites via browser and 9% used mobile applications. Rathod (2020) emphasized that mobile phone usage has become important for the growth of e-commerce. The author stated that the use of e-commerce through mobile phone internet grows the business as it has become easy for both customers and sellers to reach out at any time by using mobile phones. Users who act as sellers access platforms on their mobile phones and advertise products and services by posting them to these platforms. Likewise, customers access similar platforms on their phone to view these products. The platforms act as catalogue or a mall that is found on the phone that can be accessed by both parties for their specific purposes by using mobile phone internet.

Other authors went on to investigate how college students use mobile phone internet for economic purposes. Tamizhkumaran et al. (2016) discovered that students used mobile phone internet for shopping and money transfer whereby they send and receive money over mobile phone internet using banking applications. The author further elaborated that even those who did not participate in these economic activities used mobile phone internet to compare prices of products from one site to another. Economic uses have also been reported by Kavuta (2018) whereby mobile phone internet among other things can be used to pay for products and service.

Theoretical Foundation of the Study
The foundation of this study is based on the work of Dewey (1943) and Bruce and Levin (2001) who found varying uses of technology ranging from inquiry, communication, construction and expression as well as for general use. These uses can be grouped into several parts but this study aimed to establish how specifically social, economic and academic uses fit in mobile phone internet technology as there is a rise in the adoption of mobile phone internet especially in youths. Mobile phone internet usage can contribute to students' achievement socially, academically and economically. Socially, students' achievements are through social interactions, information sharing, online meetings and news. Academic contribution can be through learning resources (example e-

books, e-journals and lecture slides) and learning portals (example portals for checking references, online classes and solving academic problems). Finally mobile phone internet can contribute economically through financial news, e-business, shopping, banking, products and services advertisement (Chan et. al., 2021; Chukwuere, 2021; Darko-Adjei, 2019; Siddhartha et al., 2020). From this study, the social, economic, and academic uses are independent variables that can contribute to students' achievements (dependent variable) as presented in Figure 1. The contribution of each variable is presented under the analysis section.
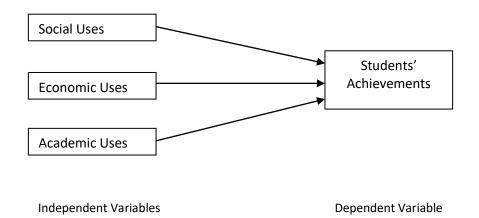

Figure 1: Conceptual Framework

Methodology

This section describes the study's design, population and sampling procedures, instruments used in data collection, validity and reliability, statistical treatment of data and ethical considerations.

Design

The study adopted the cross-sectional survey design to enable the collection of data from two HLIs while taking into account that the study was time constrained, hence data was collected conveniently and inexpensively. Another reason for adopting the cross sectional design was to obtain reliable data that makes possible to generate robust conclusions (Raimundo, et al. 2018).

Population and Sampling

Data was collected from respondents who were conveniently selected from the population of 41,841 students studying at the National Institute of Transport and the University of Dar es Salaam, obtained from admission offices and an admission handbook (University of Dar es Salaam, 2022). Based on the population, a sample size of 380 students was selected by using Yamane's formula (Singh & Masuku, 2014). Two HLIs were selected as they were among those that provide free internet to students who were often seen busy on their mobile phone. The HLIs were also easily accessed by the researchers, allowing data collection within a short period. The sampling technique is suggested as the best method for selecting students as they are usually in large numbers (Taherdoost, 2016). Practically, the researchers visited each selected HLI and contacted students who were present. The researchers then introduced to them the purpose of the study. Thereafter, the researchers asked the students to participate willingly. The basis of their selection was their convenience time and willingness. Therefore, all students who were conveniently approachable and were willing to participate in this study were selected and included.

Instruments Used

Data was collected by using a questionnaire which contained four demographic related questions, 16 items for social uses of mobile phone internet uses, 12 items for economic uses, 10 items for academic uses of internet and three questions measuring students social, academic and economic achievements. All those were measured at the five points Likert scale (1=strongly disagree; 5=strongly agree).

Validity and Reliability

The researchers proved the validity of the research instruments through clear wording of questions using terms, which are familiar and understood by the respondents (Saunders et al., 2007). Furthermore, questions were systematically

developed as per each specific objective. The validity of data was also enhanced by conducting a pre-test where 30 respondents were asked to respond to the questions on the questionnaire. This pre-testing enabled the researchers to adjust a number of observed weaknesses in the data collection tools such as the use of abbreviations, the number of indicators for each construct, wording of questions and some minor issues on the questions related to demographic characteristics of the respondents. Reliability was ensured through calculation of the Cronbach Alpha, where the score of 0.906 was obtained implying high reliability (Cronbach, 1951).

Statistical Treatment of Data

Data was analyzed in a form of descriptive statistics by using the IBM SPSS Statistics 20 to produce mean score values which helped to rank the level of internet usage among students. In order to establish the extent of mobile phone internet uses, prior decision criteria were set whereby mean value scores of 4.01-5.00 implied High Uses, 3.01-4.00 implied Medium High Uses, 2.01-3.00 implied Medium Low Uses and 1.00 -2.00 implied Low Uses (Nunnally & Berstein, 1994). To find the relationship between various types of usage and students'

academic achievement, multiple regression technique was used for data analysis at 0.05 level of significant.

Ethical Considerations

Before the collection of data, permission was sought the two HLIs. Informed consent was elicited from each respondent. Anonymity of participants was ensured by not requiring them to indicate their names and they were ensured that their responses would be kept confidential. Proper citation of all material obtained from other sources and paraphrasing were done to avoid plagiarism.

Results and Discussion

The study aimed to determine the influence of mobile phone internet on students' achievements, particularly socially, academically and economically. The findings are guided by three research questions.

Demographics of Respondents

Demographics are presented in table 1. During the study, 250 questionnaires were distributed to respondents as the researchers failed to reach all targeted 381 students due to limited time of the research period. Out of these, 204 (81.6%) filled and returned the questionnaire.

Table 1: Demographic Characteristics of the Respondents

Demographics		Frequency	Percent
Age	Below 20	5	2.5
	21-30	199	97.5
Marital status	Married	25	12.3
	Single	179	87.8
Gender	Male	119	58.3
	Female	84	41.2
	Missing	1	.5
	Certificate	19	9.3
	Diploma	20	9.8
Level of study	Bachelor's degree year 1	44	21.6
	Bachelor's degree year 2	53	26.0
	Bachelor's degree year 3	58	28.4
	Bachelor's degree year 4	10	4.9

Among the questionnaire pieces, which were not included in the study, 20 revealed signs of nonresponse bias while 26 were incompletely filled and the researchers decided not to include them in the analysis. Regarding the demographics characteristics of the respondents, 97.5% were aged between 21 and 30 which is the popular age group in Tanzania HLIs and the major users of the mobile phone internet. Majority of them were single. Regarding gender, 58.3% were males and the remaining 41.2% were females. The level of study

ranged from those who were pursuing certificates to those who were in the fourth year of their studies.

Research Question 1: What is the extent of social uses of internet among students?

Respondents were requested to rate their agreement or disagreement on 16 social related uses of the internet while using their mobile phones. Many students revealed that they used their phone internet for sharing videos (MSV=5.0),

followed by taking and sharing pictures (MSV=4.0), followed by three uses (watching music videos, chatting with relatives and watching broadcasts) which attained MSV=3.9. Other top uses were finding location with friends and family MSV=3.7, watching religious material (MSV= 3.7), studying different social news (MSV=3.6) and chatting with boyfriend/girlfriend/spouse (MSV=3.5). These findings corroborate those by Hussain (2012) who found that the top uses of the internet on social media is enjoyment. Similar findings on the dominance of non-economical and non-academic uses of the internet was also highlighted in a study by Hashemi et al. (2022), posing dangers to other beneficial uses of the internet among the youths.

The least social uses were watching movies with sexual content-pornography (MSV=1.6), finding boyfriend /girlfriend (MSV=2.0) play online game (MSV=3.0), and posting comment online (MSV=3.1). The social uses of mobile phone internet among students are underscored in a number of studies including Chukwuere (2021) and Hashemi et al. (2022) on social interaction and networking respectively, Hussain (2012) especially on enjoyment and Tayo et al. (2019) who found socialization as the top uses. The overall score attained by Social Uses of Internet was MSV=3.41 which implied Medium High Uses. All these details are presented in Table 2.

Table 2. Extent of Social Uses of Internet among Students

SN	Uses	Mean	Interpretation
1	Sharing videos	5.0	High
2	Taking and sharing picture	4.0	Medium High
3	Watch music videos	3.9	Medium High
4	Chatting with relatives	3.9	Medium High
5	Watch broadcast	3.9	Medium High
6	Find location with friend and family	3.7	Medium High
7	Watch religious material	3.7	Medium High
8	Study difference social news	3.6	Medium High
9	Chatting with my boyfriend /girlfriend /spouse	3.5	Medium High
10	Follow trends on football leagues	3.3	Medium High
11	Express feeling on blogs	3.2	Medium High
12	Watch sport content	3.2	Medium High
13	Post comment online	3.1	Medium High
14	Play online game	3.0	Medium Low
15	Find boyfriend /girlfriend /spouse	2.0	Low
16	Watch movies with sexual content-pornography	1.6	Low
	Overall Mean Score Values	**3.41**	**Medium High Uses**

Research Question 2: What is the extent of economic uses of internet among students?

Respondents were requested to rate their agreement or disagreement on 12 economic related uses of the internet while on their mobile phones. Many students revealed that they used their phone internet for obtaining information about new products arrivals (MSV=4.0), followed by advertising their product and buying goods online (MSV=3.5).

The least economic uses of phone internet were selling services (MSV=1.4), selling goods (MSV=2.2), creating new innovation (MSV=2.4), posting products and sending information on new arrivals and reading economic news (MSV=2.7). The economic uses of mobile phone internet among students is underscored in a number of studies including Chmielarz and Parys (2017) and Kavuta (2018) on accessing financial services, Tamizhkumaran et al. (2016) for shopping and

money transfer and Rathod (2020) on e-commerce usage. The overall score attained for Economic Uses of Internet was MSV=2.86 which implies Medium Low Uses. All these details are presented in Table 3.

Table 3: Extent of Economic Uses of Internet among Students

SN	Uses	Mean	Interpretation
1	Obtain information about new arrival	4.0	Medium High
2	Advertising my product	3.5	Medium High
3	Buying goods online	3.5	Medium High
4	Buying services online	3.4	Medium High
5	Online betting	2.9	Medium Low
6	Online shopping	2.9	Medium Low
7	Post my product	2.7	Medium Low
8	Sending new arrival	2.7	Medium Low
9	Read economic news	2.7	Medium Low
10	Create new innovation	2.4	Medium Low
11	Selling goods	2.2	Medium Low
12	Selling services	1.4	Low
Overall Mean Score Values		**2.86**	**Medium Low Uses**

Table 4. Extent Academic Uses of Internet among Students

SN	Uses	Mean	Interpretation
1	General information	5.0	High
2	Access material provided in the classroom	5.0	High
3	Group discussion with the student within the campus	4.8	High
4	Search material online	4.4	High
5	Lecture information	4.0	High
6	Communication with Lecturer	3.6	Medium High
7	Read material online	3.6	Medium High
8	Submitting assignment	2.9	Medium Low
9	Media to save file	2.8	Medium Low
10	Sharing my work	1.3	Low Uses
Overall Mean Score Values		**3.74**	**Medium High Uses**

Research Question 3: What is the extent of academic uses of internet among students?

Respondents were requested to rate their agreement or disagreement on ten academic related uses of the internet while on their mobile phones. Many students revealed that they used their mobile phone internet for obtaining general information about academic matters and accessing materials provided in the classroom (MSV=5.0). Other top uses were searching for material online (MSV=4.4), obtaining lecture information (MSV=4.0), communication with lecture via WhatsApp and reading materials online (MSV=3.6). The academic uses of mobile phone internet among students are underscored in a number of studies including Chan et. al. (2021) and Siew et al. (2017) for accessing learning materials as well as Oueder and Abousaber (2018) and Darko-Adjei (2019) for communicating with lecturers and distance learning, respectively. The overall score attained by Academic Uses of Internet was MSV=3.74 which implied

Medium High Uses. All these details are presented in Table 4.

Results from table 2 to 4 reveal that academic uses of mobile phone internet are the most dominant (MSV=3.7), followed by social uses (MSV=3.4) and the least use is for economic purpose (MSV=2.9). These findings are in line with those by Fatema et al. (2020) who found internet for educational purposes as the top use among students followed by social uses. These findings are contrary to those by Tayo et al. (2019) who found social uses as the major consumer of students' time while on the internet. Subramani (2015) found low usage of internet among students in academic activities.

Research Question 4: Is there a significant relationship between mobile phone internet uses and students' academic achievements?

This research question intended to measure the contribution of the independent variable, mobile phone internet uses (academic, social and economic uses) on the dependent variable students'

achievements by conducting regression analysis. The R Square results in table 5 revealed that academic, social, and economic uses of internet among students only explain students' achievements by 11% implying that large percentage of students' achievement (89%) is dependent on other factors. These results reveal the danger that intensive, unmonitored and uncontrolled internet usage can have among students.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.325[a]	.106	.092	.40808

a. Predictors: (Constant), Academic, Social, Economic

Table 6: Anova[a]

Model		Sum of squares	Df	Mean square	F	Sig.
	Regression	3.922	3	1.307	7.850	.000[b]
1	Residual	33.139	199	.167		
	Total	37.061	202			

a. Dependent Variable: Achievement

b. Predictors: (Constant), Academic, Social, Economic

Table 7: Regression Results

Model		Unstandardized coefficients		Standardized coefficients	T	
			Std. Error	Beta		
	(Constant)	2.484	.542		4.579	.000
1	Social	.489	.131	.251	3.730	.000
	Economic	-.123	.090	-.099	-1.367	.173
	Academic	-.197	.082	-.174	-2.397	.017

a. Dependent Variable: Achievement

The ANOVA in table 6 shows that the computed F statistic is 7.85, with an observed significance level of less than 0.05. Thus, the hypothesis that there is no significant relationship between the predictors (Academic, Social, Economic uses) and dependent variable (students' achievements) is rejected.

The Coefficients values in Table 7 presents the standardized Beta coefficients between the predictor variables Academic, Social, and Economic uses of Internet and the dependent variable Students Achievements. The Beta coefficient is shown to be positive and statistically significant at the 0.05 level for social uses implying the higher the students' social usage of internet, the higher their achievements scores (Beta = 0.489, t = 3.78, p < .05). These findings are supported by Oueder and Abousaber (2018) and Youssef et al. (2022) who found the positive effects of internet usage on students achievements. These findings are however different from those by Chukwuere (2021) who feel that internet uses on social media may negatively influence students' social achievements.

Furthermore, the Beta coefficient is shown to be negative and statistically insignificant at the 0.05 level for economic uses of internet implying the higher the students' economic usage of internet, the lower their achievement scores (Beta =-.123, t =-1.37, p>.05). The findings collaborate to those that Pattermann et al. (2022) found that digital interruptions steal students' attention, hence impacting students' achievements. These findings however differ with those by Kavuta (2018), Ma et al. (2020), and Tamizhkumaran et al. (2016) who underscored the economic uses of internet. The findings are also contrary to those by OECD (2016) which found the benefits of internet openness on international trade, innovation and entrepreneurship and macroeconomic performance. According to Delloite (2014), the internet has many potentials for economic growth through providing access to information, connecting people to business everywhere and opening up new markets.

Finally, the Beta coefficient is shown to be negative and statistically significant at the 0.05 level for academic uses of internet implying the higher the students' academic usage of internet, the lower their achievement scores, Beta =-.197, t = -2.40, p <.05. This means that as the uses of the internet increase, students' academic achievements

decrease. The findings are supported by Youssef et al. (2022) who recognized the danger of unsupervised use of ICTs among university students as a potential source of negative effects in terms of reducing or at least, not improving student performance. Pattermann et al. (2022) found that digital interruptions steal the students' attention from what is happening during class, hence impacting students' academic achievements. Deniz and Geyik (2015) found that students do not use the internet for course related readings and research needs posing a danger for their academic achievements. Subramani (2015) found low usage of internet by students on academic related activities, something which can impact their academic achievements as the dominant goal while in a learning environment. This can be the reason that Oueder and Abousaber (2018) argued against the use of social media during the lecture time. These results are contrary with studies which underscored the role of internet usage on academic achievements including Siddhartha et al. (2020) and Soegoto and Tjokroadiponto (2018) who found the positive role of social media usage on academic affairs. These results are presented in Table 7.

Conclusions and Recommendations

Conclusion
This study investigated mobile phone internet uses and its relationship with students' achievements by looking at social, academic and economic uses. The study found a medium high usage of social activities through mobile phone internet, medium low economic usage and medium high academic usage through mobile phone internet. Students used mobile phone internet mostly for academic purposes, followed by social purposes and finally economic purposes. Social and academic uses of mobile phone internet were significant predictors of students' achievements while economic uses were not. This means that students who used mobile phone internet more for social and academic purposes tended to have higher academic achievements than those who used it more for economic purposes.

Recommendations
Based on these findings, it is recommended that students should be educated about the potential risks and benefits of using mobile phone internet for different purposes. They should also be helped to develop critical and responsible digital literacy skills. It is also recommended that HLIs management and

policymakers should promote and support students' use of mobile phone internet for social and academic purposes as they may enhance their learning motivation and outcomes. They should also provide adequate infrastructure and resources to enable students to access mobile phone internet for educational purposes. In addition, they should monitor and regulate students' use of mobile phone internet and prevent excessive or inappropriate use that may interfere with their academic achievements or overall well-being. Future research should explore the underlying mechanisms and factors that mediate or moderate the relationship between students' achievements and their uses of mobile phone internet for different purposes and examine the effects of mobile phone internet use on other aspects of students' development such as social, emotional, cognitive and physical, things which were not covered in this study.

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